



Pact Series

# ComPact NSX & NSXm

INDUSTRIAL AUTOMATION

## Catalog 2019

Molded-case circuit breakers  
and switch-disconnectors  
from 16 to 630 A - up to 690 V



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Electric

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# Innovation that protects

## 60 years of innovative and reliable protection

The Schneider Electric™ ComPact range is built on 60 years of expertise and leadership in industrial circuit breakers.

Schneider Electric is continuously introducing new features and innovations in its range of molded case circuit breakers.

The comprehensive, optimized ComPact NSX range covers your protection needs and now comes in a smaller size, and with integrated earth leakage protection.

The range combines intelligent metering and monitoring, along with advanced protective functions.

This range can be connected to Schneider Electric's open, interoperable, IoT- (Internet of Things) enabled EcoStruxure™ Power architecture. Through this platform we deliver enhanced value in terms of safety, reliability, efficiency, sustainability, and connectivity for our customers.

We leverage technologies in IoT, mobility, sensing, cloud, analytics, and cybersecurity to deliver Innovation at Every Level.

This includes connected products, edge control, apps, analytics and services.

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1952

ComPact NW



1974

ComPact C



1994

ComPact NS



2008

ComPact NSX



2017

ComPact NSXm




2018

ComPact NSX & NSXm with MicroLogic Vigi

# Characteristics and performance

Com**Pact** NSXm circuit breakers from 16 to 160 A up to 690 V

 ComPact™ NSXm molded case circuit breaker (MCCB)



ComPact NSXm.

## Common characteristics

|                           |                                      |                |     |
|---------------------------|--------------------------------------|----------------|-----|
| Rated voltages            | Insulation voltage (V)               | Ui             | 800 |
|                           | Insulation voltage for ELCB [1] (V)  | Ui             | 500 |
|                           | Impulse withstand voltage (kV)       | Uimp           | 8   |
|                           | Operational voltage (V)              | Ue AC 50/60 Hz | 690 |
|                           | Operational voltage for ELCB [1] (V) | Ue AC 50/60 Hz | 440 |
| Suitability for isolation | IEC/EN 60947-2                       |                | yes |
| Utilisation category      |                                      |                | A   |
| Pollution degree          | IEC 60664-1                          |                | 3   |

## Circuit breakers

### Breaking capacity levels

#### Breaking capacity (kA rms)

|     |             |             |
|-----|-------------|-------------|
| Icu | AC 50/60 Hz | 220...240 V |
|     |             | 380...415 V |
|     |             | 440 V       |
|     |             | 500 V       |
|     |             | 525 V       |
|     |             | 660...690 V |

#### Service breaking capacity (kA rms)

|     |             |             |
|-----|-------------|-------------|
| Ics | AC 50/60 Hz | 220...240 V |
|     |             | 380...415 V |
|     |             | 440 V       |
|     |             | 500 V       |
|     |             | 525 V       |
|     |             | 660...690 V |

#### Durability (C-O cycles)

#### Mechanical

#### Electrical

|       |      |
|-------|------|
| 440 V | In/2 |
|       | In   |
| 690 V | In/2 |
|       | In   |

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## Protection and measurements

|                                     |  |
|-------------------------------------|--|
| Overload / short-circuit protection | Thermal magnetic                                 |
|                                     | Electronic with Earth Leakage Protection (ELCB)  |
| Options                             | Device status/control                            |
|                                     | For ELCB [1]: alarming and fault differentiation |

## Installation / connections

### Dimensions and weights

|                 |          |
|-----------------|----------|
| Dimensions (mm) | 3P       |
|                 | 4P       |
| W x H x D       | ELCB [1] |
|                 | 3P       |
|                 | 4P       |
| Weight (kg)     | ELCB [1] |

### Connections

|                                  |                     |
|----------------------------------|---------------------|
| Pitch (mm)                       | Standard            |
|                                  | With spreaders      |
| EverLink lug Cu or Al [2] cables | Cross-section (mm²) |
|                                  | Rigid               |
| Crimp lugs Cu or Al              | Cross-section (mm²) |
|                                  | Flexible            |
|                                  | Rigid               |
|                                  | Flexible            |

## Source changeover system

Manual mechanical interlocking

[1] ELCB: Earth Leakage Circuit Breaker (MicroLogic Vigi 4.1).

[2] Al up to 100 A.

# Characteristics and performance

ComPact NSXm circuit breakers from 16 to 160 A up to 690 V

A

### Common characteristics

|          |        |                                       |                                  |
|----------|--------|---------------------------------------|----------------------------------|
| Control  | Manual | With toggle                           | <input checked="" type="radio"/> |
|          |        | With direct or extended rotary handle | <input checked="" type="radio"/> |
|          |        | With side rotary handle               | <input checked="" type="radio"/> |
| Versions | Fixed  |                                       | <input checked="" type="radio"/> |

| NSXm up to 63 A |    |    |     |     | NSXm from 80 to 160 A and ELCB [1] |    |    |    |     |
|-----------------|----|----|-----|-----|------------------------------------|----|----|----|-----|
| E               | B  | F  | N   | H   | E                                  | B  | F  | N  | H   |
| 25              | 50 | 85 | 90  | 100 | 25                                 | 50 | 85 | 90 | 100 |
| 16              | 25 | 36 | 50  | 70  | 16                                 | 25 | 36 | 50 | 70  |
| 10              | 20 | 35 | 50  | 65  | 10                                 | 20 | 35 | 50 | 65  |
| 8               | 10 | 15 | 25  | 30  | -                                  | -  | -  | -  | -   |
| -               | -  | 10 | 15  | 22  | -                                  | -  | -  | -  | -   |
| -               | -  | -  | 10  | 10  | -                                  | -  | -  | -  | -   |
| 25              | 50 | 85 | 90  | 100 | 25                                 | 50 | 85 | 90 | 100 |
| 16              | 25 | 36 | 50  | 70  | 16                                 | 25 | 36 | 50 | 70  |
| 10              | 20 | 30 | 50  | 65  | 10                                 | 20 | 30 | 50 | 65  |
| 8               | 10 | 10 | 25  | 30  | -                                  | -  | -  | -  | -   |
| -               | -  | 10 | 15  | 22  | -                                  | -  | -  | -  | -   |
| -               | -  | -  | 2.5 | 2.5 | -                                  | -  | -  | -  | -   |
| 20000           |    |    |     |     |                                    |    |    |    |     |
| 20000           |    |    |     |     |                                    |    |    |    |     |
| 10000           |    |    |     |     |                                    |    |    |    |     |
| 10000           |    |    |     |     |                                    |    |    |    |     |
| 5000            |    |    |     |     |                                    |    |    |    |     |

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|                                  |                                  |
|----------------------------------|----------------------------------|
| <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| <input checked="" type="radio"/> |                                  |

|                |
|----------------|
| 81 x 137 x 80  |
| 108 x 137 x 80 |
| 108 x 144 x 80 |
| 1.06           |
| 1.42           |
| 1.63           |

|     |
|-----|
| 27  |
| 35  |
| 95  |
| 70  |
| 120 |
| 95  |

|                                  |                                  |
|----------------------------------|----------------------------------|
| <input checked="" type="radio"/> | <input checked="" type="radio"/> |
|----------------------------------|----------------------------------|



# Characteristics and performance

## ComPact NSX circuit breakers from 100 to 250 A up to 690 V

A



ComPact NSX single-pole.



ComPact NSX two-pole.

### ComPact circuit breakers

|                 |              |  |
|-----------------|--------------|--|
| Number of poles |              |  |
| Control         | manual       | toggle<br>direct or extended rotary handle |
| Connections     | electric     |  |
|                 | fixed        | front connection<br>rear connection        |
|                 | withdrawable | front connection<br>rear connection        |

### Electrical characteristics as per IEC/EN 60947-2

|                                      |             |                   |
|--------------------------------------|-------------|-------------------|
| Rated current (A)                    | <b>In</b>   | 40 °C             |
| Rated insulation voltage (V)         | <b>Ui</b>   |                   |
| Rated impulse withstand voltage (kV) | <b>Uimp</b> |                   |
| Rated operational voltage (V)        | <b>Ue</b>   | AC 50/60 Hz<br>DC |

### Type of circuit breaker

|                                     |            |          |  |
|-------------------------------------|------------|----------|--|
| Ultimate breaking capacity (kA rms) | <b>Icu</b> | AC       | 220/240 V                                    |
|                                     |            | 50/60 Hz | 380/415 V<br>440 V<br>500/525 V<br>660/690 V |
| Service breaking capacity (kA rms)  | <b>Ics</b> | DC       | 250 V (1P)<br>500 V (2P)                     |
|                                     |            | % Icu    |  |

|                           |            |       |            |
|---------------------------|------------|-------|------------|
| Suitability for isolation |            |       |            |
| Utilisation category      |            |       |            |
| Durability (C-O cycles)   | mechanical |       |            |
|                           | electrical | 277 V | In/2<br>In |

### Protection and measurements

|                                     |  |           |   |
|-------------------------------------|--|-----------|---|
| Type of trip units                  |  |           |   |
| Ratings                             |  | <b>In</b> |   |
| Overload protection (thermal)       | long time threshold                        | <b>Ir</b> |   |
| Short-circuit protection (magnetic) | instantaneous pickup                       | <b>Im</b> | value indicated for AC [1]<br>real value for DC |
| Add-on earth-leakage protection     | Vigi add-on combination with Vigirex relay |           |   |

### Additional indication and control auxiliaries

|                     |   |
|---------------------|---|
| Indication contacts |   |
| Voltages releases   | MX shunt release<br>MN undervoltage release |

### Installation

|                 |  |
|-----------------|--|
| Accessories     | terminal extensions and spreaders<br>terminal shields and interphase barriers<br>escutcheons |
| Dimensions (mm) | W x H x D  |
| Weight (kg)     |  |

### Source changeover system

|                                |  |
|--------------------------------|--|
| Manual mechanical interlocking |  |
|--------------------------------|--|

[1] The thresholds for TMD and TMG 1-pole and 2-pole magnetic trip units up to 63 A are indicated for AC. The real DC thresholds are indicated on the following line.

# Characteristics and performance


## ComPact NSX circuit breakers from 100 to 250 A up to 690 V

| NSX100                    |  |                  |  | NSX160                    |  |               |  | NSX250                    |  |  |  |
|---------------------------|--|------------------|--|---------------------------|--|---------------|--|---------------------------|--|--|--|
| 1                         |  | 2                |  | 1                         |  | 2             |  | 1                         |  |  |  |
| ⊙                         |  | ⊙                |  | ⊙                         |  | ⊙             |  | ⊙                         |  |  |  |
| -                         |  | -                |  | -                         |  | -             |  | -                         |  |  |  |
| -                         |  | -                |  | -                         |  | -             |  | -                         |  |  |  |
| ⊙                         |  | ⊙                |  | ⊙                         |  | ⊙             |  | ⊙                         |  |  |  |
| ⊙                         |  | ⊙                |  | ⊙                         |  | ⊙             |  | ⊙                         |  |  |  |
| -                         |  | -                |  | -                         |  | -             |  | -                         |  |  |  |
| -                         |  | -                |  | -                         |  | -             |  | -                         |  |  |  |
| 100                       |  | 100              |  | 160                       |  | 160           |  | 250                       |  |  |  |
| 750                       |  | 750              |  | 750                       |  | 750           |  | 750                       |  |  |  |
| 8                         |  | 8                |  | 8                         |  | 8             |  | 8                         |  |  |  |
| 277                       |  | 690              |  | 277                       |  | 690           |  | 277                       |  |  |  |
| 250                       |  | 500              |  | 250                       |  | 500           |  | -                         |  |  |  |
| F N M                     |  | F M S            |  | F N M                     |  | F M S         |  | N                         |  |  |  |
| 18 25 40                  |  | 36 85 100        |  | 18 25 40                  |  | 36 85 100     |  | 25                        |  |  |  |
| - - -                     |  | 18 25 70         |  | - - -                     |  | 18 25 70      |  | -                         |  |  |  |
| - - -                     |  | 15 25 65         |  | - - -                     |  | 15 25 65      |  | -                         |  |  |  |
| - - -                     |  | 10 18 35         |  | - - -                     |  | 10 18 35      |  | -                         |  |  |  |
| - - -                     |  | 5 8 10           |  | - - -                     |  | 5 8 10        |  | -                         |  |  |  |
| 36 50 85                  |  | 36 85 100        |  | 36 50 85                  |  | 36 85 100     |  | -                         |  |  |  |
| - - -                     |  | 36 85 100        |  | - - -                     |  | 36 85 100     |  | -                         |  |  |  |
| 100 %                     |  | 100 %            |  | 100 %                     |  | 100 %         |  | 100 %                     |  |  |  |
| ⊙                         |  | ⊙                |  | ⊙                         |  | ⊙             |  | ⊙                         |  |  |  |
| A                         |  | A                |  | A                         |  | A             |  | A                         |  |  |  |
| 20000                     |  | 20000            |  | 20000                     |  | 20000         |  | 10000                     |  |  |  |
| 20000                     |  | 20000            |  | 20000                     |  | 20000         |  | 10000                     |  |  |  |
| 10000                     |  | 10000            |  | 10000                     |  | 10000         |  | 5000                      |  |  |  |
| built-in thermal-magnetic |  |                  |  | built-in thermal-magnetic |  |               |  | built-in thermal-magnetic |  |  |  |
| 16 20 25 30 40            |  | 50 63 80 100     |  | 125 160                   |  | 160 200 250   |  | 160 200 250               |  |  |  |
| fixed                     |  | fixed            |  | fixed                     |  | fixed         |  | fixed                     |  |  |  |
| 16 20 25 30 40            |  | 50 63 80 100     |  | 125 160                   |  | 160 200 250   |  | 160 200 250               |  |  |  |
| fixed                     |  | fixed            |  | fixed                     |  | fixed         |  | fixed                     |  |  |  |
| 190 190 300 300 500       |  | 500 500 640 800  |  | 1000 1250                 |  | 850 850 850   |  | 850 850 850               |  |  |  |
| 260 260 400 400 700       |  | 700 700 800 1000 |  | 1200 1250                 |  | - - -         |  | - - -                     |  |  |  |
| -                         |  | -                |  | -                         |  | -             |  | -                         |  |  |  |
| -                         |  | ⊙                |  | -                         |  | ⊙             |  | -                         |  |  |  |
| -                         |  | ⊙                |  | -                         |  | ⊙             |  | -                         |  |  |  |
| -                         |  | ⊙                |  | -                         |  | ⊙             |  | -                         |  |  |  |
| ⊙                         |  | ⊙                |  | ⊙                         |  | ⊙             |  | ⊙                         |  |  |  |
| ⊙                         |  | ⊙                |  | ⊙                         |  | ⊙             |  | ⊙                         |  |  |  |
| ⊙                         |  | ⊙                |  | ⊙                         |  | ⊙             |  | ⊙                         |  |  |  |
| 35 x 161 x 86             |  | 70 x 161 x 86    |  | 35 x 161 x 86             |  | 70 x 161 x 86 |  | 35 x 161 x 86             |  |  |  |
| 0.7                       |  | 1.2              |  | 0.7                       |  | 1.2           |  | 0.7                       |  |  |  |
| ⊙                         |  | ⊙                |  | ⊙                         |  | ⊙             |  | ⊙                         |  |  |  |



# Characteristics and performance

## ComPact NSX circuit breakers from 100 to 250 A up to 690 V

 ComPact NSX" MCCB from "Schneider electric"



ComPact NSX100/160/250.



ComPact NSX250 R.



ComPact NSX250 HB2.

[1] OSN: Over Sized Neutral protection for neutrals carrying high currents (e.g. 3rd harmonics).

[2] ZSI: Zone Selective Interlocking using pilot wires.

[3] Vigi add-on is not available for breaking capacity levels HB1/HB2.

[4] There is no 160 A frame, use 250 A frame with lower rating trip units for R, HB1, HB2.

[5] 2P circuit breaker in 3P case for B and F types, only with thermal-magnetic trip unit.

[6] Earth Leakage Circuit Breaker (MicroLogic Vigi 4.2 and 7.2 E).

### Common characteristics

|                           |                                 |                |                 |
|---------------------------|---------------------------------|----------------|-----------------|
| Rated voltages            | Insulation voltage (V)          | Ui             | 800             |
|                           | Insulation voltage for ELCB [6] | Ui             | 500             |
|                           | Impulse withstand voltage (kV)  | Uimp           | 8               |
|                           | Operational voltage (V)         | Ue             | AC 50/60 Hz 690 |
|                           | Operation voltage for ELCB [6]  | Ue             | AC 50/60 Hz 440 |
| Suitability for isolation |                                 | IEC/EN 60947-2 | yes             |
| Utilisation category      |                                 |                | A               |
| Pollution degree          |                                 | IEC 60664-1    | 3               |

### Circuit breakers

#### Breaking capacity levels

##### Electrical characteristics as per IEC/EN 60947-2

|                   |    |       |
|-------------------|----|-------|
| Rated current (A) | In | 40 °C |
| Number of poles   |    |       |

##### Breaking capacity (kA rms)

|     |             |           |
|-----|-------------|-----------|
| Icu | AC 50/60 Hz | 220/240 V |
|     |             | 380/415 V |
|     |             | 440 V     |
|     |             | 500 V     |
|     |             | 525 V     |
|     |             | 660/690 V |

##### Service breaking capacity (kA rms)

|     |             |           |
|-----|-------------|-----------|
| Ics | AC 50/60 Hz | 220/240 V |
|     |             | 380/415 V |
|     |             | 440 V     |
|     |             | 500 V     |
|     |             | 525 V     |
|     |             | 660/690 V |

##### Durability (C-O cycles)

##### Mechanical

##### Electrical

|       |      |
|-------|------|
| 440 V | In/2 |
|       | In   |
| 690 V | In/2 |
|       | In   |

##### Characteristics as per UL 508

|                            |             |       |
|----------------------------|-------------|-------|
| Breaking capacity (kA rms) | AC 50/60 Hz | 240 V |
|                            |             | 480 V |
|                            |             | 600 V |

#### Protection and measurements

Short-circuit protection Magnetic only

Overload / short-circuit protection Thermal magnetic

Electronic

with neutral protection (Off-0.5-1-OSN) [1]

with ground-fault protection

with zone selective interlocking (ZSI) [2]

Display / I, U, f, P, E, THD measurements / interrupted-current measurement

Options

Power Meter display on door

Operating assistance

Counters

Histories and alarms

Metering Com

Device status/control Com

Earth-leakage protection

By Vigi add-on [3]

By Vigi relay

#### Installation / connections

##### Dimensions and weights

|                 |                          |      |
|-----------------|--------------------------|------|
| Dimensions (mm) | Fixed, front connections | 2/3P |
| W x H x D       |                          | 4P   |
| Weight (kg)     | Fixed, front connections | 2/3P |
|                 |                          | 4P   |

##### Connections

|                       |               |                        |
|-----------------------|---------------|------------------------|
| Connection terminals  | Pitch         | With/without spreaders |
| Large Cu or Al cables | Cross-section | mm <sup>2</sup>        |

#### Source-changeover system

Manual mechanical interlocking

Automatic source-changeover



# Characteristics and performance

## ComPact NSX switch-disconnectors from 100 to 630 A NA

Installation standards require upstream protection. However ComPact NSX100 to 630 NA switch-disconnectors are self-protected by their high-set magnetic release.

A



ComPact NSX100 to 250 NA.



ComPact NSX400 to 630 NA.

> Discover our specific switch-disconnectors offer: ComPact INS/INV



LVPED213024EN

[1] 2P in 3P case.

### Common characteristics

|                           |  |                 |
|---------------------------|--|-----------------|
| Rated voltages            | Insulation voltage (V) $U_i$             | 800             |
|                           | Impulse withstand voltage (kV) $U_{imp}$ | 8               |
|                           | Operational voltage (V) $U_e$            | AC 50/60 Hz 690 |
| Suitability for isolation | IEC/EN 60947-3                           | yes             |
| Utilisation category      | AC 22 A/AC 23 A - DC 22 A/DC 23 A        |                 |
| Pollution degree          | IEC 60664-1                              | 3               |

### Switch-disconnectors

#### Electrical characteristics as per IEC/EN 60947-3

|   |   |                           |         |
|---|---|---------------------------|---------|
| Conventional thermal current (A) $I_{th}$                           | 60 °C   |                           |         |
| Number of poles   |   |                           |         |
| Operational current (A) depending on $I_e$ the utilisation category | AC 50/60 Hz                                   |                           |         |
|   |   | 220/240 V                 |         |
|   |   | 380/415 V                 |         |
|   |   | 440/480 V                 |         |
|   |   | 500/525 V                 |         |
|   |   | 660/690 V                 |         |
|   | DC  |                           |         |
|   |   | 250 V (1 pole)            |         |
|   |   | 500 V (2 poles in series) |         |
|   |   | 750 V (3 poles in series) |         |
| Short-circuit making capacity (kA peak) $I_{cm}$                    | min. (switch-disconnector alone)              |                           |         |
|   | max. (protection by upstream circuit breaker) |                           |         |
| Rated short-time withstand current (A rms) $I_{cw}$                 | for   | 1 s                       |         |
|   |   | 3 s                       |         |
|   |   | 20 s                      |         |
| Durability (C-O cycles)   | mechanical                                    |                           |         |
|   | electrical                                    | AC                        |         |
|   |   | 440 V                     | $I_n/2$ |
|   |   | 690 V                     | $I_n$   |
|   |   |                           | $I_n/2$ |
|   |   |                           | $I_n$   |
|   | DC  | 250 V (1 pole) and        | $I_n/2$ |
|   |   | 500 V (2 poles in series) | $I_n$   |

#### Positive contact indication

Pollution degree

#### Protection

Add-on earth-leakage protection By Vigi add-on  
By Vigirex relay

#### Additional indication and control auxiliaries

Indication contacts

Voltages releases MX shunt release  
MN undervoltage release

Voltage-presence indicator

Current-transformer module

Ammeter module

Insulation monitoring module

#### Remote communication by bus

Device-status indication

Device remote operation

Operation counter

#### Installation / connections

|                 |                          |      |
|-----------------|--------------------------|------|
| Dimensions (mm) | fixed, front connections | 2/3P |
| W x H x D       |                          | 4P   |
| Weight (kg)     | fixed, front connections | 3P   |
|                 |                          | 4P   |

#### Source-changeover systems (see chapter on Source-changeover systems)

Manual mechanical interlocking

Automatic source-changeover

# ComPact NSX special applications

## High performances at 690 V



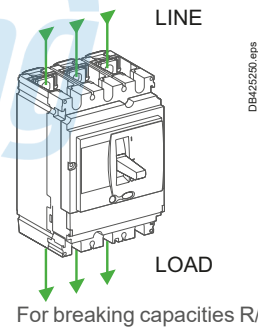
| Circuit breakers                          |             |           | NSX100-250 [1] |     |     | NSX400 |     |     | NSX630     |     |     |            |    |     |
|---|-------------|-----------|----------------|-----|-----|--------|-----|-----|------------|-----|-----|------------|----|-----|
| Breaking capacity levels                  |             |           | R              | HB1 | HB2 | R      | HB1 | HB2 | R          | HB1 | HB2 |            |    |     |
| <b>Electrical characteristics</b>         |             |           |                |     |     |        |     |     |            |     |     |            |    |     |
| <b>Breaking capacity (kA rms)</b>         |             |           |                |     |     |        |     |     | Ir < 500 A |     |     | Ir > 501 A |    |     |
| Icu                                       | AC 50/60 Hz | 220/240 V | 200            | -   | -   | 200    | -   | -   | 200        | -   | -   | 200        | -  | -   |
|   |             | 380/415 V | 200            | -   | -   | 200    | -   | -   | 200        | -   | -   | 200        | -  | -   |
|   |             | 440 V     | 200            | -   | -   | 200    | -   | -   | 200        | -   | -   | 200        | -  | -   |
|   |             | 500 V     | 80             | 85  | 100 | 80     | 85  | 100 | 80         | 85  | 100 | 80         | 85 | 100 |
|   |             | 525 V     | 65             | 80  | 100 | 65     | 80  | 100 | 65         | 80  | 100 | 65         | 80 | 100 |
|   |             | 690 V     | 45             | 75  | 100 | 45     | 75  | 100 | 45         | 75  | 100 | 45         | 75 | 100 |
| <b>Service breaking capacity (kA rms)</b> |             |           |                |     |     |        |     |     | Ir < 500 A |     |     | Ir > 501 A |    |     |
| Ics                                       | AC 50/60 Hz | 220/240 V | 200            | -   | -   | 200    | -   | -   | 200        | -   | -   | 200        | -  | -   |
|   |             | 380/415 V | 200            | -   | -   | 200    | -   | -   | 200        | -   | -   | 200        | -  | -   |
|   |             | 440 V     | 200            | -   | -   | 200    | -   | -   | 200        | -   | -   | 200        | -  | -   |
|   |             | 500 V     | 80             | 85  | 100 | 80     | 85  | 100 | 80         | 85  | 100 | 80         | 85 | 100 |
|   |             | 525 V     | 65             | 80  | 100 | 65     | 80  | 100 | 65         | 80  | 100 | -          | -  | -   |
|   |             | 690 V     | 45             | 75  | 100 | 45     | 75  | 100 | 45         | 75  | 100 | -          | -  | -   |



[1] There is no 160 A frame, use the 250 A frame with lower rating trip units.

### Offer structure

The ComPact NSX HB offer has some differences compared to the standard NSX offer.

- 100 A frame and 250 A frame, there is no 160 A frame. The 125 - 160 A trip units are used in a 250 A frame.
- All R, HB1 and HB2 circuit breakers are restricted for use as line-load connection. They can not have power fed from the bottom of the circuit breaker. They will be marked with Line and Load markings.
- ComPact NSX400-630 R/HB1/HB2, U > 440 V, Icu 20 kA, Line/Load connection possible with insulation screen.
- All trip units will be assembled in the factory.



| Type of protection   | Distribution protection |            | Motor protection   |  |
|--|-------------------------|------------|--|--|
|  | TMD                     | MicroLogic | MA   | MicroLogic   |
| <br>PB110406_40 eps | ComPact NSX100          | 40-100     | 2.2: 40-100<br>5.2 E: 40-100<br>6.2 E: 40-100                      | 12.5-100<br><br>2.2 M: 25, 50, 100<br>6.2 E-M: 25, 50, 100 |
|  | ComPact NSX250          | 125-250    | 2.2: 100, 160, 250<br>5.2 E: 100, 160, 250<br>6.2 E: 100, 160, 250 | 150, 220<br><br>2.2 M: 150, 220<br>6.2 E-M: 150, 220       |
| <br>PB111001 eps    | ComPact NSX400          | -          | 2.3: 250, 400<br>5.3 E: 250, 400<br>6.3 E: 250, 400                | -<br><br>1.3 M: 320<br>2.3 M: 320<br>6.3 M: 320            |
|  | ComPact NSX630          | -          | 2.3: 630<br>5.3 E: 630<br>6.3 E: 630                               | -<br><br>1.3 M: 500<br>2.3 M: 500<br>6.3 M: 500            |

> Substitution and technical guide  
ComPact NSX high performances

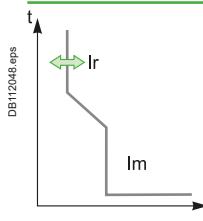


LVPED508025EN

# Protection of distribution systems

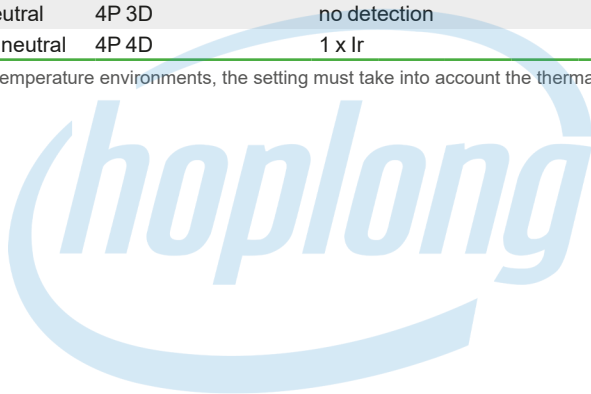
## ComPact NSXm TM thermal-magnetic trip units

**Thermal-magnetic trip units TM16D to 160D**



| Ratings (A)                                   | In at 40 °C [1] | 16                                    | 25                               | 32                               | 40                               | 50                               | 63                               | 80                               | 100                              | 125                              | 160                              |
|---|-----------------|---------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Circuit breaker                               | ComPact NSXm    | <input checked="" type="radio"/>      | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| <b>Thermal protection</b>                     |                 |                                       |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |
| Pick-up (A) tripping between 1.05 and 1.20 Ir | Ir = In x ...   | adjustable in amps from 0.7 to 1 x In |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |
| Time delay (s)                                | tr              | non-adjustable                        |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |
| <b>Magnetic protection</b>                    |                 |                                       |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |
| Pick-up (A)                                   | Im              | fixed                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |
| accuracy ±20 %                                | ComPact NSXm    | 500                                   | 600                              | 600                              | 600                              | 600                              | 800                              | 1000                             | 1250                             | 1250                             | 1250                             |
| Time delay                                    | tm              | fixed                                 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |
| <b>Neutral protection</b>                     |                 |                                       |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |
| Unprotected neutral                           | 4P 3D           | no detection                          |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |
| Fully protected neutral                       | 4P 4D           | 1 x Ir                                |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |

[1] If the circuit breakers are used in high-temperature environments, the setting must take into account the thermal limitations of the circuit breaker. See the temperature derating table.



INDUSTRIAL AUTOMATION



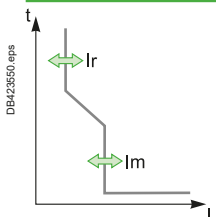


# Protection of distribution systems

## ComPact NSX TM thermal-magnetic and MA magnetic trip units

B

### Thermal-magnetic trip units TM16D to 250D



| Ratings (A)     | In at 40 °C [1] | 16 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 | 160 | 200 | 250 |
|-----------------|-----------------|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|
| Circuit breaker | ComPact NSX100  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●   | -   | -   | -   | -   |
|                 | ComPact NSX160  | -  | -  | ●  | ●  | ●  | ●  | ●  | ●   | ●   | ●   | -   | -   |
|                 | ComPact NSX250  | -  | -  | -  | -  | -  | -  | ●  | ●   | ●   | ●   | ●   | ●   |

| Thermal protection                            |                      |                                       |
|---|----------------------|---------------------------------------|
| Pick-up (A) tripping between 1.05 and 1.20 Ir | <b>Ir</b> = In x ... | adjustable in amps from 0.7 to 1 x In |
| Time delay (s)                                | <b>tr</b>            | non-adjustable                        |
|   | tr at 1.5 x In       | 120 to 400                            |
|   | tr at 6 x Ir         | 15                                    |

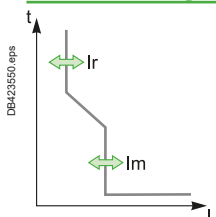
  

| Magnetic protection        |                    |  |
|----------------------------|--------------------|--|
| Pick-up (A) accuracy ±20 % | <b>Im</b>          | fixed  |
|                            | ComPact NSX100     | 190 300 400 500 500 500 640 800                      |
|                            | ComPact NSX160/250 | 190 300 400 500 500 500 640 800 1250 1250 5 to 10xIn |
| Time delay                 | <b>tm</b>          | fixed  |

| Neutral protection      |       |              |
|-------------------------|-------|--------------|
| Unprotected neutral     | 4P 3D | no detection |
| Fully protected neutral | 4P 4D | 1 x Ir       |

### Thermal-magnetic trip units TM16G to 250G



| Ratings (A)     | In at 40 °C [1] | 16 | 25 | 40 | 63 | 80 | 100 | 125 | 160 | 200 | 250 |
|-----------------|-----------------|----|----|----|----|----|-----|-----|-----|-----|-----|
| Circuit breaker | ComPact NSX100  | ●  | ●  | ●  | ●  | ●  | ●   | -   | -   | -   | -   |
|                 | ComPact NSX160  | -  | ●  | ●  | ●  | ●  | ●   | ●   | ●   | -   | -   |
|                 | ComPact NSX250  | -  | -  | -  | -  | -  | -   | -   | ●   | ●   | ●   |

| Thermal protection                            |                      |                                       |
|---|----------------------|---------------------------------------|
| Pick-up (A) tripping between 1.05 and 1.20 Ir | <b>Ir</b> = In x ... | adjustable in amps from 0.7 to 1 x In |
| Time delay (s)                                | <b>tr</b>            | non-adjustable                        |
|   | tr at 1.5 x In       | 120 to 400                            |
|   | tr at 6 x Ir         | -                                     |

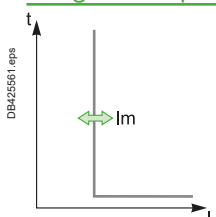
| Magnetic protection        |                |                                 |
|----------------------------|----------------|---------------------------------|
| Pick-up (A) accuracy ±20 % | <b>Im</b>      | fixed                           |
|                            | ComPact NSX100 | 63 80 80 125 200 320 - - - -    |
|                            | ComPact NSX160 | - 80 80 125 200 320 440 440 - - |
|                            | ComPact NSX250 | - - - - - - - 440 440 520       |
| Time delay                 | <b>tm</b>      | fixed                           |

| Neutral protection      |       |        |
|-------------------------|-------|--------|
| Unprotected neutral     | 4P 3D | no     |
| Fully protected neutral | 4P 4D | 1 x Ir |

[1] For temperatures greater than 40 °C, the thermal protection characteristics are modified. See the temperature derating table.

### Magnetic trip units MA 2.5 to 220



| Ratings (A)     | In at 65 °C [1] | 2.5 | 6.3 | 12.5 | 25 | 50 | 100 [1] | 150 | 220 |
|-----------------|-----------------|-----|-----|------|----|----|---------|-----|-----|
| Circuit breaker | ComPact NSX100  | ●   | ●   | ●    | ●  | ●  | ●       | -   | -   |
|                 | ComPact NSX160  | -   | -   | -    | ●  | ●  | ●       | ●   | -   |
|                 | ComPact NSX250  | -   | -   | -    | -  | -  | ●       | ●   | ●   |

| Instantaneous magnetic protection |                      |  |   |
|-----------------------------------|----------------------|--|---|
| Pick-up (A) accuracy ±20 %        | <b>Im</b> = In x ... | Adjustable from 6 to 14 x In (settings 6, 7, 8, 9, 10, 11, 12, 13, 14) | Adjustable from 9 to 14 x In (settings 9, 10, 11, 12, 13, 14) |
| Time delay (ms)                   | <b>tm</b>            | fixed  |   |

[1] MA100 3P adjustable from 6 to 14 x In.  
MA100 4P adjustable from 9 to 14 x In.






**Note:** all the trip units have a transparent lead-sealable cover that protects access to the adjustment dials.

# Protection of distribution systems

## ComPact NSXm + NSX circuit breakers trip units

B

**Understanding the names of MicroLogic electronic trip units**

| Example: MicroLogic 6.3 E-M  | 6   | 3   | E  | M            |
|--|---|---|--|--------------|
|  | Protection  | Frame   | Measurements   | Applications |
|  | ⋮<br>↓  | ⋮<br>↓  | ⋮<br>↓   | ⋮<br>↓       |
| <p>1: I</p> <p>2: LS<sub>0</sub>I</p> <p>4: LS<sub>0</sub>IR</p> <p>5: LSI</p> <p>6: LSIG</p> <p>I: Instantaneous</p> <p>L: Long time</p> <p>R: Residual current</p> <p>S<sub>0</sub>: Short time <sup>[2]</sup><br/>(fixed delay)</p> <p>S: Short time</p> <p>G: Ground fault</p> | <p>1: NSXm 16 to 160</p>  <p>2: NSX 100/160/250</p>  <p>3: NSX 400/630</p>  | <p>A: Ammeter</p>  <p>E: Energy</p>  | <p>Distribution, otherwise</p> <p>G: Generator</p> <p>AB: Public distribution <sup>[1]</sup></p> <p>M: Motors</p> <p>Z: 16 Hz 2/3 <sup>[1]</sup></p> |              |
|  | ⋮<br>↓  | ⋮<br>↓  | ⋮<br>↓   | ⋮<br>↓       |

| Examples                   | 6                  | 3                 | E       | M            |
|----------------------------|--------------------|-------------------|---------|--------------|
| <b>MicroLogic 1.3</b>      | Instantaneous only | 400 or 630 A      | -       | Distribution |
| <b>MicroLogic 2.3</b>      | LS <sub>0</sub> I  | 400 or 630 A      | -       | Distribution |
| <b>MicroLogic Vigi 4.1</b> | LS <sub>0</sub> IR | 16 to 160 A       | -       | Distribution |
| <b>MicroLogic 5.2 A</b>    | LSI                | 100, 160 or 250 A | Ammeter | Distribution |
| <b>MicroLogic 6.3 E-M</b>  | LSIG               | 400 or 630 A      | Energy  | Motor        |

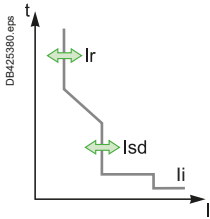
[1] AB-Z: except NSXm and NSX R, HB1, HB2.  
 [2] LS<sub>0</sub>I protection is standard on MicroLogic 2. To ensure selectivity, it offers short-time protection S<sub>0</sub> with a non-adjustable delay and instantaneous protection.

# Protection of distribution systems

## ComPact NSX MicroLogic 2 and 1.3 trip units

B

### MicroLogic 2



| Ratings (A)     |                | In at 40 °C [1] |     |     |     |     |     |  |
|-----------------|----------------|-----------------|-----|-----|-----|-----|-----|--|
|                 |                | 40              | 100 | 160 | 250 | 400 | 630 |  |
| Circuit breaker | ComPact NSX100 | ●               | ●   | -   | -   | -   | -   |  |
|                 | ComPact NSX160 | ●               | ●   | ●   | -   | -   | -   |  |
|                 | ComPact NSX250 | ●               | ●   | ●   | ●   | -   | -   |  |
|                 | ComPact NSX400 | -               | -   | -   | ●   | ●   | -   |  |
|                 | ComPact NSX630 | -               | -   | -   | ●   | ●   | ●   |  |

#### L Long-time protection

|   |                  |  |     |     |     |     |     |     |     |     |
|---|------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|
| Pick-up (A) tripping between 1.05 and 1.20 I <sub>r</sub> | I <sub>o</sub>   | value depending on trip unit rating (I <sub>n</sub> ) and setting on dial  |     |     |     |     |     |     |     |     |
| I <sub>n</sub> = 40 A                                     | I <sub>o</sub> = | 18   | 18  | 20  | 23  | 25  | 28  | 32  | 36  | 40  |
| I <sub>n</sub> = 100 A                                    | I <sub>o</sub> = | 40   | 45  | 50  | 55  | 63  | 70  | 80  | 90  | 100 |
| I <sub>n</sub> = 160 A                                    | I <sub>o</sub> = | 63   | 70  | 80  | 90  | 100 | 110 | 125 | 150 | 160 |
| I <sub>n</sub> = 250 A (NSX250)                           | I <sub>o</sub> = | 100  | 110 | 125 | 140 | 160 | 175 | 200 | 225 | 250 |
| I <sub>n</sub> = 250 A (NSX400)                           | I <sub>o</sub> = | 70   | 100 | 125 | 140 | 160 | 175 | 200 | 225 | 250 |
| I <sub>n</sub> = 400 A                                    | I <sub>o</sub> = | 160  | 180 | 200 | 230 | 250 | 280 | 320 | 360 | 400 |
| I <sub>n</sub> = 630 A                                    | I <sub>o</sub> = | 250  | 280 | 320 | 350 | 400 | 450 | 500 | 570 | 630 |
| I <sub>r</sub> = I <sub>o</sub> x ...                     |                  | 9 fine adjustment settings from 0.9 to 1 (0.9 - 0.92 - 0.93 - 0.94 - 0.95 - 0.96 - 0.97 - 0.98 - 1) for each value of I <sub>o</sub> |     |     |     |     |     |     |     |     |

|                                   |                      |                                      |  |  |  |  |  |  |  |  |
|-----------------------------------|----------------------|--------------------------------------|--|--|--|--|--|--|--|--|
| Time delay (s) accuracy 0 to -20% | t <sub>r</sub>       | non-adjustable                       |  |  |  |  |  |  |  |  |
|                                   | 1.5 x I <sub>r</sub> | 400                                  |  |  |  |  |  |  |  |  |
|                                   | 6 x I <sub>r</sub>   | 16                                   |  |  |  |  |  |  |  |  |
|                                   | 7.2 x I <sub>r</sub> | 11                                   |  |  |  |  |  |  |  |  |
| Thermal memory                    |                      | 20 minutes before and after tripping |  |  |  |  |  |  |  |  |

#### S<sub>n</sub> Short-time protection with fixed time delay

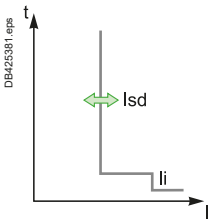
|                            |  |                |   |   |   |   |   |   |   |    |
|----------------------------|--|----------------|---|---|---|---|---|---|---|----|
| Pick-up (A) accuracy ±10 % | I <sub>sd</sub> = I <sub>r</sub> x ... | 1.5            | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 |
| Time delay (ms)            | t <sub>sd</sub>                        | non-adjustable |   |   |   |   |   |   |   |    |
|                            | Non-tripping time                      | 20             |   |   |   |   |   |   |   |    |
|                            | Maximum break time                     | 80             |   |   |   |   |   |   |   |    |

#### I Instantaneous protection

|                            |                                |       |      |      |      |      |      |
|----------------------------|--------------------------------|-------|------|------|------|------|------|
| Pick-up (A) accuracy ±15 % | I <sub>li</sub> non-adjustable | 600   | 1500 | 2400 | 3000 | 4800 | 6900 |
|                            | Non-tripping time              | 10 ms |      |      |      |      |      |
|                            | Maximum break time             | 50 ms |      |      |      |      |      |

[1] If the trip units are used in high-temperature environments, the MicroLogic setting must take into account the thermal limitations of the circuit breaker. See the temperature derating table.

### MicroLogic 1.3 M



| Ratings (A)     |                | In at 65 °C [1] |     |
|-----------------|----------------|-----------------|-----|
|                 |                | 320             | 500 |
| Circuit breaker | ComPact NSX400 | ●               | -   |
|                 | ComPact NSX630 | ●               | ●   |

#### S Short-time protection

|                            |                    |  |  |
|----------------------------|--------------------|--|--|
| Pick-up (A) accuracy ±15 % | I <sub>sd</sub>    | Adjustable directly in amps  |  |
|                            |                    | 9 settings: 1600, 1920, 2240, 2560, 2880, 3200, 3520, 3840, 4160 A | 9 settings: 2500, 3000, 3500, 4000, 4500, 5000, 5500, 6000, 6500 A |
| Time delay (ms)            | t <sub>sd</sub>    | Non-adjustable   |  |
|                            | Non-tripping time  | 10   |  |
|                            | Maximum break time | 60   |  |

#### I Instantaneous protection

|                            |                                |       |      |
|----------------------------|--------------------------------|-------|------|
| Pick-up (A) accuracy ±15 % | I <sub>li</sub> non-adjustable | 4800  | 6500 |
|                            | Non-tripping time              | 0     |      |
|                            | Maximum break time             | 30 ms |      |

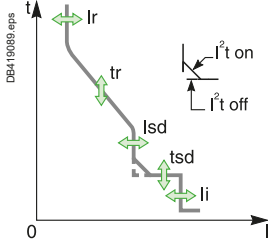
[1] Motor standards require operation at 65 °C. Circuit-breaker ratings are derated to take this requirement into account.



# Protection of distribution systems

## ComPact NSX MicroLogic 5 / 6 A or E trip units

### Protection MicroLogic 5 / 6 A or E trip units



| Ratings (A)     | In at 40 °C [1] | 40 [2] | 100 | 160 | 250 | 400 | 630 |
|-----------------|-----------------|--------|-----|-----|-----|-----|-----|
| Circuit breaker | ComPact NSX100  | ●      | ●   | -   | -   | -   | -   |
|                 | ComPact NSX160  | ●      | ●   | ●   | -   | -   | -   |
|                 | ComPact NSX250  | ●      | ●   | ●   | ●   | -   | -   |
|                 | ComPact NSX400  | -      | -   | -   | -   | ●   | -   |
|                 | ComPact NSX630  | -      | -   | -   | -   | ●   | ●   |

#### L Long-time protection

|   |            |                |  |     |     |     |     |     |     |     |     |  |
|---|------------|----------------|--|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Pick-up (A) tripping between 1.05 and 1.20 Ir | Ir = ...   | dial setting   | value depending on trip unit rating (In) and setting on dial |     |     |     |     |     |     |     |     |  |
|   | In = 40 A  | Io =           | 18   | 18  | 20  | 23  | 25  | 28  | 32  | 36  | 40  |  |
|   | In = 100 A | Io =           | 40   | 45  | 50  | 55  | 63  | 70  | 80  | 90  | 100 |  |
|   | In = 160 A | Io =           | 63   | 70  | 80  | 90  | 100 | 110 | 125 | 150 | 160 |  |
|   | In = 250 A | Io =           | 100  | 110 | 125 | 140 | 160 | 175 | 200 | 225 | 250 |  |
|   | In = 400 A | Io =           | 160  | 180 | 200 | 230 | 250 | 280 | 320 | 360 | 400 |  |
|   | In = 630 A | Io =           | 250  | 280 | 320 | 350 | 400 | 450 | 500 | 570 | 630 |  |
|   |            | keypad setting | Fine adjustment in 1 A steps below maximum value set on dial |     |     |     |     |     |     |     |     |  |
| Time delay (s) accuracy 0 to -20 %            | tr = ...   | keypad setting | 0.5  | 1   | 2   | 4   | 8   | 16  |     |     |     |  |
|   |            | 1.5 x Ir       | 15   | 25  | 50  | 100 | 200 | 400 |     |     |     |  |
|   |            | 6 x Ir         | 0.5  | 1   | 2   | 4   | 8   | 16  |     |     |     |  |
|   |            | 7.2 x Ir       | 0.35   | 0.7 | 1.4 | 2.8 | 5.5 | 11  |     |     |     |  |
| Thermal memory                                |            |                | 20 minutes before and after tripping                         |     |     |     |     |     |     |     |     |  |

#### S Short-time protection with adjustable time delay

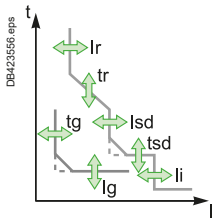
|                            |                |                                  |  |     |     |     |     |   |   |   |    |  |
|----------------------------|----------------|----------------------------------|--|-----|-----|-----|-----|---|---|---|----|--|
| Pick-up (A) accuracy ±10 % | Isd = Ir x ... | dial setting for MicroLogic 5    | 1.5  | 2   | 3   | 4   | 5   | 6 | 7 | 8 | 10 |  |
|                            |                | keypad settings for MicroLogic 6 | Adjustment in steps of 0.5 x Ir over the range 1.5 x Ir to 10 x Ir |     |     |     |     |   |   |   |    |  |
| Time delay (s)             | tsd = ...      | keypad setting                   | 0  | 0.1 | 0.2 | 0.3 | 0.4 |   |   |   |    |  |
|                            |                | I²Off setting                    | -  | 0.1 | 0.2 | 0.3 | 0.4 |   |   |   |    |  |
|                            |                | I²On setting                     | -  | 0.1 | 0.2 | 0.3 | 0.4 |   |   |   |    |  |
|                            |                | Non-tripping time (ms)           | 20   | 80  | 140 | 230 | 350 |   |   |   |    |  |
|                            |                | Maximum break time (ms)          | 80   | 140 | 200 | 320 | 500 |   |   |   |    |  |

#### I Instantaneous protection

|                            |           |                    |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------|--------------------|--|--|--|--|--|--|--|--|--|--|
| Pick-up (A) accuracy ±15 % | li = In x | keypad setting     | Adjustment in steps of 0.5 x In over the range 1.5 x In to: 15 x In (40 to 160 A), 12 x In (250 to 400 A) or 11 x In (630 A) |  |  |  |  |  |  |  |  |  |
|                            |           | Non-tripping time  | 10 ms  |  |  |  |  |  |  |  |  |  |
|                            |           | Maximum break time | 50 ms  |  |  |  |  |  |  |  |  |  |

#### G Ground-fault protection - for MicroLogic 6 A or E

|                            |             |                         |  |     |     |     |     |     |     |   |     |  |
|----------------------------|-------------|-------------------------|--|-----|-----|-----|-----|-----|-----|---|-----|--|
| Pick-up (A) accuracy ±10 % | Ig = In x   | dial setting            | Fine adjustment in 0.05 A steps using the keypad |     |     |     |     |     |     |   |     |  |
|                            | In = 40 A   |                         | 0.4  | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1 | Off |  |
|                            | In > 40 A   |                         | 0.2  | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 1 | Off |  |
| Time delay (s)             | tg = ...    | keypad setting          | 0  | 0.1 | 0.2 | 0.3 | 0.4 |     |     |   |     |  |
|                            |             | I²Off setting           | -  | 0.1 | 0.2 | 0.3 | 0.4 |     |     |   |     |  |
|                            |             | I²On setting            | -  | 0.1 | 0.2 | 0.3 | 0.4 |     |     |   |     |  |
|                            |             | Non-tripping time (ms)  | 20   | 80  | 140 | 230 | 350 |     |     |   |     |  |
|                            |             | Maximum break time (ms) | 80   | 140 | 200 | 320 | 500 |     |     |   |     |  |
| Test                       | Ig function |                         | built-in   |     |     |     |     |     |     |   |     |  |



[1] If the trip units are used in high-temperature environments, the MicroLogic setting must take into account the thermal limitations of the circuit breaker. See the temperature derating table.

[2] For 40 A rating, the neutral N/2 adjustment is not possible.



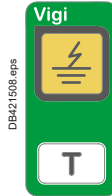
# Protection of distribution systems

## ComPact NSXm MicroLogic Vigi 4.1 trip unit with integrated earth leakage protection

### Indications

#### Front indications

- Green "Ready" LED: flashes slowly when the circuit breaker is ready to trip in the event of an overload or short-circuit fault.
- Orange overload pre-alarm LED: steady on when  $I > 90\% I_r$ .
- Red overload LED: steady on when  $I > 105\% I_r$ .
- Screen that indicate an earth leakage fault trip - reset when product is powered.



#### Alarming and fault differentiation

A side module SDx can be installed to provide alarming and fault differentiation:

- overload alarm ( $I > 105\% I_r$ )
- overload trip indication
- earth leakage alarm ( $I_{\Delta n} > 80\%$  threshold)
- earth leakage trip indication.

This module receives the signal from the MicroLogic electronic trip unit via an optical link and makes it available on the terminal block through NO/NC dry contacts.

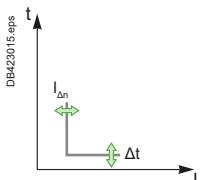
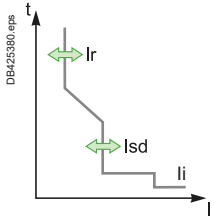
The signal is cleared when the circuit breaker is restarted.

For description, see page C-11.

B

### MicroLogic Vigi 4.1

| Ratings (A)  | $I_n$ at 40 °C [1]   | 25                               | 50                               | 100                              | 160                              |         |          |     |     |     |
|--|--|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---------|----------|-----|-----|-----|
| Circuit breaker  | ComPact NSXm   | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |         |          |     |     |     |
| <b>L Long-time protection</b>                                    |  |                                  |                                  |                                  |                                  |         |          |     |     |     |
| Pick-up (A)  | Ir value depending on trip unit rating ( $I_n$ ) and setting on dial |                                  |                                  |                                  |                                  |         |          |     |     |     |
| tripping between 1.05 and 1.20 Ir                                | $I_n = 25\text{ A}$  | Ir = 10                          | 11                               | 12                               | 14                               | 16      | 18       | 20  | 22  | 25  |
|  | $I_n = 50\text{ A}$  | Ir = 20                          | 22                               | 25                               | 28                               | 32      | 36       | 40  | 45  | 50  |
|  | $I_n = 100\text{ A}$   | Ir = 40                          | 45                               | 50                               | 56                               | 63      | 70       | 80  | 90  | 100 |
|  | $I_n = 160\text{ A}$   | Ir = 63                          | 70                               | 80                               | 90                               | 100     | 115      | 130 | 145 | 160 |
| Time delay (s)   | tr   | non-adjustable                   |                                  |                                  |                                  |         |          |     |     |     |
| accuracy 0 to -20%   |  | 1.5 x Ir                         | 200                              |                                  |                                  |         |          |     |     |     |
|  |  | 6 x Ir                           | 8                                |                                  |                                  |         |          |     |     |     |
|  |  | 7.2 x Ir                         | 5                                |                                  |                                  |         |          |     |     |     |
| <b>S<sub>0</sub> Short-time protection with fixed time delay</b> |  |                                  |                                  |                                  |                                  |         |          |     |     |     |
| Pick-up (A)  | $I_{sd} = I_r \times \dots$  | 1.5                              | 2                                | 3                                | 4                                | 5       | 6        | 7   | 8   | 10  |
| accuracy ±15 %   |  |                                  |                                  |                                  |                                  |         |          |     |     |     |
| Time delay (ms)  | tsd  | non-adjustable                   |                                  |                                  |                                  |         |          |     |     |     |
|  | Non-tripping time  | 20                               |                                  |                                  |                                  |         |          |     |     |     |
|  | Maximum break time   | 80                               |                                  |                                  |                                  |         |          |     |     |     |
| <b>I Instantaneous protection</b>                                |  |                                  |                                  |                                  |                                  |         |          |     |     |     |
| Pick-up (A)  | li non-adjustable  | 375                              | 750                              | 1500                             | 2000                             |         |          |     |     |     |
| accuracy ±15 %   | Non-tripping time  | 10 ms                            |                                  |                                  | 5 ms                             |         |          |     |     |     |
|  | Maximum break time   | 50 ms                            |                                  |                                  |                                  |         |          |     |     |     |
| <b>R Earth leakage protection</b>                                |  |                                  |                                  |                                  |                                  |         |          |     |     |     |
| Sensitivity $I_{\Delta n}$ (A)                                   | Adjustable   | $I_{\Delta n} =$                 | 0.03                             | 0.1                              | 0.3                              | 0.5     | 1        | 3   | 5   |     |
|  | Type   |                                  | A and AC                         |                                  |                                  |         |          |     | AC  |     |
| Time delay $\Delta t$ (ms)                                       | Adjustable   | $\Delta t =$                     | 0                                | 60 [2]                           | 150 [2]                          | 500 [2] | 1000 [2] |     |     |     |
|  | Maximum break time (ms)  |                                  | < 40                             | < 140                            | < 300                            | < 800   | < 1500   |     |     |     |



[1] If the circuit breakers are used in high-temperature environments, the setting must take into account the thermal limitations of the circuit breaker.  
 [2] If the sensitivity is set to 30 mA, there is no time delay, whatever the time-delay setting.

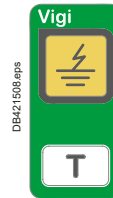
# Protection of distribution systems

## ComPact NSX MicroLogic Vigi 4 trip unit with integrated earth leakage protection

### Indications

#### Front indications

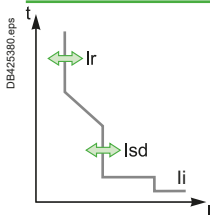
- Green "Ready" LED: flashes slowly when the circuit breaker is ready to trip in case of a fault.
- Orange overload pre-alarm LED: steady ON when  $I > 90\% I_r$ .
- Red overload LED: steady ON when  $I > 105\% I_r$ .
- Yellow Screen: indicates an earth leakage fault (reset when operating OFF/ON for the "trip" or when pressing >3sec the T button for the Alarm).



#### Alarming and fault differentiation

- An overload trip signal can be remotely available by installing an SDx relay module inside the circuit breaker on both "trip" and "alarm" versions.
  - An earth leakage trip signal can be remotely available by installing an SDx module, only on the "trip" version.
  - An earth leakage alarm signal (MicroLogic Vigi 4 AL) can be remotely available on the SDx, for the circuit breaker with MicroLogic Vigi 4 Alarm".
- This module receives the signal from the MicroLogic trip unit via an optical link and makes it available on the terminal block. The signal is reset when the breaker is operated.

### MicroLogic Vigi 4

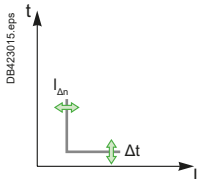


| Ratings (A)     | In at 40 °C [1] | 40 | 100 | 160 | 250 | 400 | 570 |
|-----------------|-----------------|----|-----|-----|-----|-----|-----|
| Circuit breaker | ComPact NSX100  | ●  | ●   |     |     |     |     |
|                 | ComPact NSX160  | ●  | ●   | ●   |     |     |     |
|                 | ComPact NSX250  | ●  | ●   | ●   | ●   |     |     |
|                 | ComPact NSX400  |    |     |     |     | ●   |     |
|                 | ComPact NSX630  |    |     |     |     | ●   | ●   |

| L Long-time protection                        |            | value depending on the rating (In) and the dial setting            |            |     |     |     |     |     |     |     |
|---|------------|--|------------|-----|-----|-----|-----|-----|-----|-----|
| Pick-up (A) tripping between 1.05 and 1.20 Ir | In = 40 A  | lo = 18  | 18         | 20  | 23  | 25  | 28  | 32  | 36  | 40  |
|   | In = 100 A | lo = 40  | 45         | 50  | 55  | 63  | 70  | 80  | 90  | 100 |
|   | In = 160 A | lo = 63  | 70         | 80  | 90  | 100 | 110 | 125 | 150 | 160 |
|   | In = 250 A | lo = 100   | 110        | 125 | 140 | 160 | 175 | 200 | 225 | 250 |
|   | In = 400 A | lo = 160   | 180        | 200 | 230 | 250 | 280 | 320 | 360 | 400 |
|   | In = 570 A | lo = 250   | 280        | 320 | 350 | 400 | 450 | 500 | 570 | 570 |
|   | Ir = lo x  | 9 fine adjustment settings from 0.9 to 1 (0.9 – 0.92 ... 0.98 - 1) |            |     |     |     |     |     |     |     |
| Time delay (s) accuracy 0 to -20%             | tr         | non-adjustable   |            |     |     |     |     |     |     |     |
|   | at         | 1.5 x Ir   | tr = 400 s |     |     |     |     |     |     |     |
|   | at         | 6 x Ir   | tr = 16 s  |     |     |     |     |     |     |     |
|   | at         | 7.2 x Ir   | tr = 11 s  |     |     |     |     |     |     |     |
| Thermal memory                                |            | 20 minutes before and after tripping                               |            |     |     |     |     |     |     |     |

| S <sub>0</sub> Short-time protection with fixed time delay |                    |                |   |   |   |   |   |   |   |    |
|--|--------------------|----------------|---|---|---|---|---|---|---|----|
| Pick-up (A) accuracy ±10%                                  | Isd = Ir x ...     | 1.5            | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 |
| Time delay (ms)  | tsd                | non-adjustable |   |   |   |   |   |   |   |    |
|  | Non-tripping time  | 20             |   |   |   |   |   |   |   |    |
|  | Maximum break time | 80             |   |   |   |   |   |   |   |    |

| I Instantaneous protection |                    |       |      |      |      |      |      |
|----------------------------|--------------------|-------|------|------|------|------|------|
| Pick-up (A) accuracy ±15%  | Ii non-adjustable  | 600   | 1500 | 2400 | 3000 | 4800 | 6900 |
|                            | Non-tripping time  | 10 ms |      |      |      |      |      |
|                            | Maximum break time | 50 ms |      |      |      |      |      |



| R Earth leakage protection / Earth leakage alarm |                                  |            |        |         |         |          |    |    |    |     |
|--|----------------------------------|------------|--------|---------|---------|----------|----|----|----|-----|
| Sensitivity (A)                                  | Type A, adjustable (9 positions) |            |        |         |         |          |    |    |    |     |
|  | In = 40 A                        | ΔIn = 0.03 | 0.03   | 0.1     | 0.3     | 0.5      | 1  | 3  | 5  | OFF |
|  | In = 100 A                       | ΔIn = 0.03 | 0.03   | 0.1     | 0.3     | 0.5      | 1  | 3  | 5  | OFF |
|  | In = 160 A                       | ΔIn = 0.03 | 0.03   | 0.1     | 0.3     | 0.5      | 1  | 3  | 5  | OFF |
|  | In = 250 A                       | ΔIn = 0.03 | 0.03   | 0.1     | 0.3     | 0.5      | 1  | 3  | 5  | OFF |
|  | In = 400 A                       | ΔIn = 0.3  | 0.3    | 0.5     | 1       | 3        | 5  | 10 | 10 | OFF |
|  | In = 570 A                       | ΔIn = 0.3  | 0.3    | 0.5     | 1       | 3        | 5  | 10 | 10 | OFF |
| Time delay Δt (ms)                               | Adjustable                       | Δt = 0     | 60 [2] | 150 [2] | 500 [2] | 1000 [2] |    |    |    |     |
|  | Maximum break time (ms)          | <40        | <140   | <300    | <800    | <1500    | ms |    |    |     |

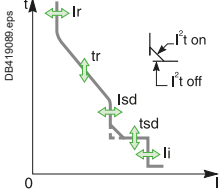
[1] For the use in high temperature environment, take into account the thermal limitation of the breaker.  
 [2] The time delay (Δt) is mandatory and forced to "Δt = 0" when the ΔIn dial is set on 30mA (0.03). The time delay has no effect when the dial ΔIn is set to the "OFF" position.



# Protection of distribution systems

## ComPact NSX MicroLogic Vigi 7 E trip unit with integrated earth leakage protection

### MicroLogic Vigi 7 E



| Ratings (A)     | In at 40 °C [1] | 40 [2] | 100 | 160 | 250 | 400 | 570 |
|-----------------|-----------------|--------|-----|-----|-----|-----|-----|
| Circuit breaker | ComPact NSX100  | ●      | ●   |     |     |     |     |
|                 | ComPact NSX160  | ●      | ●   | ●   |     |     |     |
|                 | ComPact NSX250  | ●      | ●   | ●   | ●   |     |     |
|                 | ComPact NSX400  |        |     |     |     | ●   |     |
|                 | ComPact NSX630  |        |     |     |     | ●   | ●   |

### L Long-time protection

|                                      |                |   |          |     |     |     |     |     |     |     |     |
|--------------------------------------|----------------|---|----------|-----|-----|-----|-----|-----|-----|-----|-----|
| Pick-up (A)                          | Dial setting   | value depending on the rating (In) and the dial setting                       |          |     |     |     |     |     |     |     |     |
| tripping between 1.05 and 1.20 Ir    | Ir             | In = 40 A   | lo = 18  | 18  | 20  | 23  | 25  | 28  | 32  | 36  | 40  |
|                                      |                | In = 100 A  | lo = 40  | 45  | 50  | 55  | 63  | 70  | 80  | 90  | 100 |
|                                      |                | In = 160 A  | lo = 63  | 70  | 80  | 90  | 100 | 110 | 125 | 150 | 160 |
|                                      |                | In = 250 A  | lo = 100 | 110 | 125 | 140 | 160 | 175 | 200 | 225 | 250 |
|                                      |                | In = 400 A  | lo = 160 | 180 | 200 | 230 | 250 | 280 | 320 | 360 | 400 |
|                                      |                | In = 570 A  | lo = 250 | 280 | 320 | 350 | 400 | 450 | 500 | 570 | 570 |
| Time delay (s)<br>accuracy 0 to -20% | tr             | Keypad setting fine adjustment in 1A step below the max value set on the dial |          |     |     |     |     |     |     |     |     |
|                                      | Keypad setting | 0.5   | 1        | 2   | 4   | 8   | 16  |     |     |     |     |
|                                      | at 1.5 x Ir    | 15  | 25       | 50  | 100 | 200 | 400 |     |     |     |     |
|                                      | at 6 x Ir      | 0.5   | 1        | 2   | 4   | 8   | 16  |     |     |     |     |
|                                      | at 7.2 x Ir    | 0.35  | 0.7      | 1.4 | 2.8 | 5.5 | 11  |     |     |     |     |

### S Short-time protection with adjustable time delay

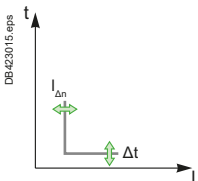
|                               |                                |  |     |     |     |     |     |  |  |  |  |
|-------------------------------|--------------------------------|--|-----|-----|-----|-----|-----|--|--|--|--|
| Pick-up (A)<br>accuracy ±10 % | Isd = Ir x ... keypad settings | Adjustment in steps of 0.5 x Ir over the range 1.5 x Ir to 10 x Ir |     |     |     |     |     |  |  |  |  |
| Time delay (ms)               | tsd                            | I²Of   | 0   | 0.1 | 0.2 | 0.3 | 0.4 |  |  |  |  |
|                               | Keypad                         | I²On   | -   | 0.1 | 0.2 | 0.3 | 0.4 |  |  |  |  |
|                               | Non-tripping time (ms)         |  | 20  | 80  | 140 | 230 | 350 |  |  |  |  |
| Maximum break time            |                                | 80   | 140 | 200 | 320 | 500 |     |  |  |  |  |

### I Instantaneous protection

|                               |                    |  |  |  |  |  |  |  |  |  |
|-------------------------------|--------------------|--|--|--|--|--|--|--|--|--|
| Pick-up (A)<br>accuracy ±15 % | Ii = In x          | Adjustment in steps of 0.5 x In over the range 1.5 x In to:    |  |  |  |  |  |  |  |  |
|                               | Keypad settings    | 15 x In (40 to 160A), 12 x In (250 to 400A), or 12 x In (570A) |  |  |  |  |  |  |  |  |
|                               | Non-tripping time  | 10 ms  |  |  |  |  |  |  |  |  |
|                               | Maximum break time | 50 ms  |  |  |  |  |  |  |  |  |

### R Earth leakage protection / Earth leakage alarm

|                    |                                  |       |      |        |         |         |          |   |    |    |     |
|--------------------|----------------------------------|-------|------|--------|---------|---------|----------|---|----|----|-----|
| Sensitivity (A)    | Type A, adjustable (9 positions) |       |      |        |         |         |          |   |    |    |     |
|                    | In = 40 A                        | IΔn = | 0.03 | 0.03   | 0.1     | 0.3     | 0.5      | 1 | 3  | 5  | OFF |
|                    | In = 100 A                       | IΔn = | 0.03 | 0.03   | 0.1     | 0.3     | 0.5      | 1 | 3  | 5  | OFF |
|                    | In = 160 A                       | IΔn = | 0.03 | 0.03   | 0.1     | 0.3     | 0.5      | 1 | 3  | 5  | OFF |
|                    | In = 250 A                       | IΔn = | 0.03 | 0.03   | 0.1     | 0.3     | 0.5      | 1 | 3  | 5  | OFF |
|                    | In = 400 A                       | IΔn = | 0.3  | 0.3    | 0.5     | 1       | 3        | 5 | 10 | 10 | OFF |
|                    | In = 570 A                       | IΔn = | 0.3  | 0.3    | 0.5     | 1       | 3        | 5 | 10 | 10 | OFF |
| Time delay Δt (ms) | Adjustable keypad                | Δt =  | 0    | 60 [3] | 150 [3] | 500 [3] | 1000 [3] |   |    |    |     |
|                    | Maximum break time (ms)          |       | <40  | <140   | <300    | <800    | <1500    |   |    |    |     |



[1] For the use in high temperature environment, take into account the thermal limitation of the breaker.  
 [2] For the rating 40A, the N/2 adjustment is not possible  
 [3] The time delay (Δt) is mandatory and designed "Δt = 0" when the IΔn dial is set on 30mA (0.03). The time delay has no effect when the dial IΔn is set to the "OFF" position.



# Protection of distribution systems

## ComPact NSX Vigi add-on protection against insulation faults

### ComPact NSX Vigi add-on

Addition of the Vigi add-on does not modify circuit-breaker characteristics:

- compliance with standards
- degree of protection, class II front-face insulation
- positive contact indication
- electrical characteristics
- trip-unit characteristics
- installation and connection modes
- indication, measurement and control auxiliaries
- installation and connection accessories.

| Dimensions and weights |         | NSX100/160/250 | NSX400/630      |
|------------------------|---------|----------------|-----------------|
| Dimensions             | 3 poles | 105 x 236 x 86 | 140 x 355 x 110 |
| W x H x D (mm)         | 4 poles | 140 x 236 x 86 | 185 x 355 x 110 |
| Weight (kg)            | 3 poles | 2.5            | 8.8             |
|                        | 4 poles | 3.2            | 10.8            |

#### Compliance with standards

- IEC 60947-2, annex B.
- IEC 60755, Type A, immunity to DC components up to 6 mA.
- Operation down to -25 °C as per VDE 664.

#### Remote indications

Vigi add-on may be equipped with an auxiliary contact (SDV) to remotely signal tripping due to an earth fault.

#### Use of 4-pole Vigi add-on with a 3-pole ComPact NSX

In a 3-phase installation with an uninterrupted neutral, an accessory makes it possible to use a 4-pole Vigi add-on with connection of the neutral cable.

#### Power supply

Vigi add-on are self-powered internally by the distribution-system voltage and therefore do not require any external source. They continue to function even when supplied by only two phases.

### Vigi add-on selection

| Type            | Vigi ME             | Vigi MH             | Vigi MB             |
|-----------------|---------------------|---------------------|---------------------|
| Number of poles | 3, 4 <sup>[1]</sup> | 3, 4 <sup>[1]</sup> | 3, 4 <sup>[1]</sup> |
| NSX100          | ●                   | ●                   | -                   |
| NXS160          | ●                   | ●                   | -                   |
| NSX250          | -                   | ●                   | -                   |
| NSX400          | -                   | -                   | ●                   |
| NSX630          | -                   | -                   | ●                   |

#### Protection characteristics

|                             |           |   |                        |
|-----------------------------|-----------|---|------------------------|
| Sensitivity                 | fixed     | adjustable  | adjustable             |
| I <sub>Δn</sub> (A)         | 0.3       | 0.03 - 0.3 - 1 - 3 - 10   | 0.3 - 1 - 3 - 10 - 30  |
| Time delay                  | fixed     | adjustable  | adjustable             |
| Intentional delay (ms)      | < 40      | 0 - 60 <sup>[2]</sup> - 150 <sup>[2]</sup> - 310 <sup>[2]</sup> | 0 - 60 - 150 - 310     |
| Max. break time (ms)        | < 40      | < 40 < 140 < 300 < 800  | < 40 < 140 < 300 < 800 |
| Rated voltage V AC 50/60 Hz | 200...440 | 200... 440 - 440...550  | 200...440 - 440...550  |

[1] Vigi 3P add-on may also be used on 3P circuit breakers used for two-phase protection.

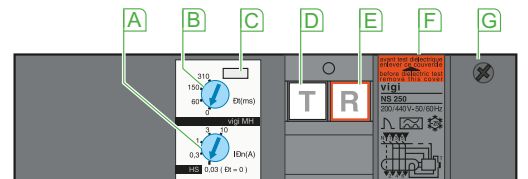
[2] If the sensitivity is set to 30 mA, there is no time delay, whatever the time-delay setting.

### Operating safety

The Vigi add-on is a user safety device. It must be tested at regular intervals (every 6 months) via test button.



PE103560-36.eps



DB42378.eps

- A** Sensitivity setting
- B** Time-delay setting (for selective earth-leakage protection).
- C** Lead-seal fixture for controlled access to settings.
- D** Test button simulating an earth-fault for regular checks on the tripping function
- E** Reset button (reset required after earth-fault tripping).
- F** Rating plate
- G** Housing for SDV auxiliary contact.

#### Plug-in devices

The Vigi add-on can be installed on a plug-in base. Special accessories are required (see catalog number chapter).



# ComPact NSX motor protection

## Motor-feeder characteristics and solutions

The trip class determines the trip curve of the thermal protection device (inverse-time curve) for a motor feeder. Standard IEC 60947-4-1 defines trip classes 5, 10, 20 and 30. These classes are the maximum durations, in seconds, for motor starting with a starting current of 7.2 Ir, where Ir is the thermal setting indicated on the motor rating plate.

Example: In class 20, the motor must have finished starting within 20 seconds (6 to 20 s) for a starting current of 7.2 Ir.

### Trip class of a thermal-protection device

The motor feeder includes thermal protection that may be built into the circuit breaker. The protection must have a trip class suited to motor starting. Depending on the application, the motor starting time varies from a few seconds (no-load start) to a few dozen seconds (high-inertia load). Standard IEC 60947-4-1 defines the trip classes below as a function of current setting Ir for thermal protection.

#### Trip class of thermal relays as a function of their Ir setting

| Class | 1.05 Ir [1] | 1.2 Ir [1] | 1.5 Ir [2] | 7.2 Ir [1]     |
|-------|-------------|------------|------------|----------------|
| 5     | t > 2 h     | t < 2h     | t < 2 mn   | 2 s < t ≤ 5 s  |
| 10    | t > 2 h     | t < 2h     | t < 4 mn   | 4 s < t ≤ 10 s |
| 20    | t > 2 h     | t < 2h     | t < 8 mn   | 6 s < t ≤ 20 s |
| 30    | t > 2 h     | t < 2h     | t < 12 mn  | 9 s < t ≤ 30 s |

[1] Time for a cold motor (motor off and cold).

[2] Time for warm motor (motor running under normal conditions).

### Currents of squirrel-cage motors at full rated load

#### Standardised values in HP

| Rated operational power hp | Indicative values of the rated operational currents Ie (A) for |       |       |             |             |             |             |
|----------------------------|--|-------|-------|-------------|-------------|-------------|-------------|
|                            | 110 - 120 V  | 200 V | 208 V | 220 - 240 V | 380 - 415 V | 440 - 480 V | 550 - 600 V |
| 1/2                        | 4.4  | 2.5   | 2.4   | 2.2         | 1.3         | 1.1         | 0.9         |
| 3/4                        | 6.4  | 3.7   | 3.5   | 3.2         | 1.8         | 1.6         | 1.3         |
| 1                          | 8.4  | 4.8   | 4.6   | 4.2         | 2.3         | 2.1         | 1.7         |
| 1 1/2                      | 12   | 6.9   | 6.6   | 6           | 3.3         | 3           | 2.4         |
| 2                          | 13.6   | 7.8   | 7.5   | 6.8         | 4.3         | 3.4         | 2.7         |
| 3                          | 19.2   | 11    | 10.6  | 9.6         | 6.1         | 4.8         | 3.9         |
| 5                          | 30.4   | 17.5  | 16.7  | 15.2        | 9.7         | 7.6         | 6.1         |
| 7 1/2                      | 44   | 25.3  | 24.2  | 22          | 14          | 11          | 9           |
| 10                         | 56   | 32.2  | 30.8  | 28          | 18          | 14          | 11          |
| 15                         | 84   | 48.3  | 46.2  | 42          | 27          | 21          | 17          |
| 20                         | 108  | 62.1  | 59.4  | 54          | 34          | 27          | 22          |
| 25                         | 136  | 78.2  | 74.8  | 68          | 44          | 34          | 27          |
| 30                         | 160  | 92    | 88    | 80          | 51          | 40          | 32          |
| 40                         | 208  | 120   | 114   | 104         | 66          | 52          | 41          |
| 50                         | 260  | 150   | 143   | 130         | 83          | 65          | 52          |
| 60                         | -  | 177   | 169   | 154         | 103         | 77          | 62          |
| 75                         | -  | 221   | 211   | 192         | 128         | 96          | 77          |
| 100                        | -  | 285   | 273   | 248         | 165         | 124         | 99          |
| 125                        | -  | 359   | 343   | 312         | 208         | 156         | 125         |
| 150                        | -  | 414   | 396   | 360         | 240         | 180         | 144         |
| 200                        | -  | 552   | 528   | 480         | 320         | 240         | 192         |
| 250                        | -  | -     | -     | 604         | 403         | 302         | 242         |
| 300                        | -  | -     | -     | 722         | 482         | 361         | 289         |

Note: 1 hp = 0.7457 kW.

### Asynchronous-motor starting parameters

The main parameters of direct on-line starting of three-phase asynchronous motors (90 % of all applications) are listed below.

■ Ir: rated current

This is the current drawn by the motor at full rated load (e.g. approximately 100 A rms for 55 kW at 400 V).

■ Id: starting current

This is the current drawn by the motor during starting, on average 7.2 Ir for a duration td of 5 to 30 seconds depending on the application (e.g. 720 A rms for 10 seconds). These values determine the trip class and any additional "long-start" protection devices that may be needed.

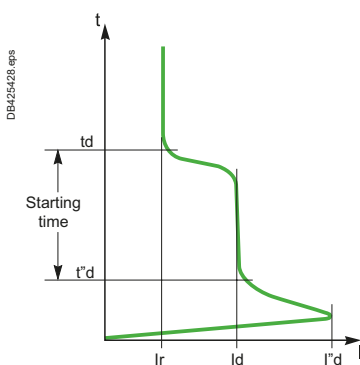
■ I'd: peak starting current

This is the subtransient current during the first two half-waves when the system is energised, on the average 14 Ir for 10 to 15 ms (e.g. 1840 A peak).

The protection settings must effectively protect the motor, notably via a suitable thermal-relay trip class, but let the peak starting current through.

#### Standardised values in kW

| Rated operational power kW | Standardised values in kW currents Ie (A) for: |         |         |         |
|----------------------------|--|---------|---------|---------|
|                            | 230 V A  | 400 V A | 500 V A | 690 V A |
| 0.06                       | 0.35   | 0.32    | 0.16    | 0.12    |
| 0.09                       | 0.52   | 0.3     | 0.24    | 0.17    |
| 0.12                       | 0.7  | 0.44    | 0.32    | 0.23    |
| 0.18                       | 1  | 0.6     | 0.48    | 0.35    |
| 0.25                       | 1.5  | 0.85    | 0.68    | 0.49    |
| 0.37                       | 1.9  | 1.1     | 0.88    | 0.64    |
| 0.55                       | 2.6  | 1.5     | 1.2     | 0.87    |
| 0.75                       | 3.3  | 1.9     | 1.5     | 1.1     |
| 1.1                        | 4.7  | 2.7     | 2.2     | 1.6     |
| 1.5                        | 6.3  | 3.6     | 2.9     | 2.1     |
| 2.2                        | 8.5  | 4.9     | 3.9     | 2.8     |
| 3                          | 11.3   | 6.5     | 5.2     | 3.8     |
| 4                          | 15   | 8.5     | 6.8     | 4.9     |
| 5.5                        | 20   | 11.5    | 9.2     | 6.7     |
| 7.5                        | 27   | 15.5    | 12.4    | 8.9     |
| 11                         | 38   | 22      | 17.6    | 12.8    |
| 15                         | 51   | 29      | 23      | 17      |
| 18.5                       | 61   | 35      | 28      | 21      |
| 22                         | 72   | 41      | 33      | 24      |
| 30                         | 96   | 55      | 44      | 32      |
| 37                         | 115  | 66      | 53      | 39      |
| 45                         | 140  | 80      | 64      | 47      |
| 55                         | 169  | 97      | 78      | 57      |
| 75                         | 230  | 132     | 106     | 77      |
| 90                         | 278  | 160     | 128     | 93      |
| 110                        | 340  | 195     | 156     | 113     |
| 132                        | 400  | 230     | 184     | 134     |
| 160                        | 487  | 280     | 224     | 162     |
| 200                        | 609  | 350     | 280     | 203     |
| 250                        | 748  | 430     | 344     | 250     |
| 315                        | 940  | 540     | 432     | 313     |



Typical motor-starting curve

# ComPact NSX motor protection

## Motor-feeder solutions

ComPact NSX motor circuit breakers are designed for motor-feeder solutions using:

- three devices, including an MA or 1.3 M magnetic-only trip unit
- two devices including a 2 M or 6 E-M electronic trip units.

They are designed for use with contactors in the AC-3 utilisation category (80 % of all cases) and they ensure type 2 coordination with the contactor.

For the AC-4 utilisation category, the difficult conditions generally make it necessary to oversize the protection circuit breaker with respect to the AC-3 category.

### ComPact NSX motor-protection range

ComPact NSX trip units can be used to create motor-feeder solutions comprising two or three devices. The protection devices are designed for continuous duty at 65 °C.

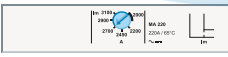



#### Three-device solutions

- 1 NSX circuit breaker with an MA or MicroLogic 1.3 M trip unit.
- 1 contactor.
- 1 thermal relay.

#### Two-device solutions

- 1 ComPact NSX circuit breaker
  - with a MicroLogic 2.2 M or 2.3 M electronic trip unit
  - with a MicroLogic 6 E-M electronic trip unit. This version offers additional protection and Power Meter functions.
- 1 contactor.

B

| Type of motor protection                                   | 3 devices   |  | 2 devices   |  |
|--|---|--|---|--|
| ComPact NSX circuit breaker                                | NSX100/160/250  | NSX400/630   | NSX100 to 630   |  |
| Trip unit<br>Type<br>Technology                            | Contactor + thermal relay<br><b>MA</b><br>Magnetic<br> | <b>MicroLogic 1.3 M</b><br>Electronic<br> | Contactor<br><b>MicroLogic 2 M</b><br>Electronic<br> | <b>MicroLogic 6 E-M</b><br>Electronic<br> |
| Thermal relay<br>Separate                                  | ●   | ●  |   |  |
| Built-in, class  | 5   |  | ●   | ●  |
|  | 10  |  | ●   | ●  |
|  | 20  |  | ●   | ●  |
|  | 30  |  |   | ●  |
| <b>Protection functions of ComPact NSX circuit breaker</b> |   |  |   |  |
| Short-circuits   | ●   | ●  | ●   | ●  |
| Overloads  |   |  | ●   | ●  |
| Insulation faults<br>Ground-fault                          |   |  |   | ●  |
| Special motor functions<br>Phase unbalance                 |   |  | ●   | ●  |
|  |   |  |   | ●  |
|  |   |  |   | ●  |
|  |   |  |   | ●  |
| <b>Built-in Power Meter functions</b>                      |   |  |   |  |
| I, U, energy   |   |  |   | ●  |
| <b>Operating assistance</b>                                |   |  |   |  |
| Counters (cycles, trips, alarms, hours)                    |   |  |   | ●  |
| Contact-wear indicator                                     |   |  |   | ●  |
| Load profile and thermal image                             |   |  |   | ●  |

> Discover our specific Motor Protection Offer:

TeSys GV



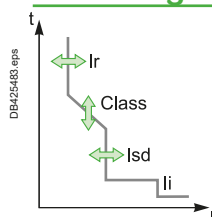
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# ComPact NSX motor protection

## MicroLogic 2.2 / 2.3 M electronic trip units

### MicroLogic 2.2 / 2.3 M



| Ratings (A)     | In at 65 °C [1] | 25 | 50 | 100 | 150 | 220 | 320 | 500 |
|-----------------|-----------------|----|----|-----|-----|-----|-----|-----|
| Circuit breaker | ComPact NSX100  | ●  | ●  | ●   | -   | -   | -   | -   |
|                 | ComPact NSX160  | ●  | ●  | ●   | ●   | -   | -   | -   |
|                 | ComPact NSX250  | ●  | ●  | ●   | ●   | ●   | -   | -   |
|                 | ComPact NSX400  | -  | -  | -   | -   | -   | ●   | -   |
|                 | ComPact NSX630  | -  | -  | -   | -   | -   | ●   | ●   |

#### L Overloads (or thermal protection): Long-time protection and trip class

| Pick-up (A)                       | Ir         | value depending on trip unit rating (In) and setting on dial |     |     |     |     |     |     |     |     |  |
|-----------------------------------|------------|--|-----|-----|-----|-----|-----|-----|-----|-----|--|
| tripping between 1.05 and 1.20 Ir | In = 25 A  | Ir = 12  | 14  | 16  | 18  | 20  | 22  | 23  | 24  | 25  |  |
|                                   | In = 50 A  | Ir = 25  | 30  | 32  | 36  | 40  | 42  | 45  | 47  | 50  |  |
|                                   | In = 100 A | Ir = 50  | 60  | 70  | 75  | 80  | 85  | 90  | 95  | 100 |  |
|                                   | In = 150 A | Ir = 70  | 80  | 90  | 100 | 110 | 120 | 130 | 140 | 150 |  |
|                                   | In = 220 A | Ir = 100   | 120 | 140 | 155 | 170 | 185 | 200 | 210 | 220 |  |
|                                   | In = 320 A | Ir = 160   | 180 | 200 | 220 | 240 | 260 | 280 | 300 | 320 |  |
|                                   | In = 500 A | Ir = 250   | 280 | 320 | 350 | 380 | 400 | 440 | 470 | 500 |  |
| Trip class as per IEC 60947-4-1   |            | 5  | 10  | 20  |     |     |     |     |     |     |  |

| Time delay (s)                   | tr       | 1.5 x Ir | 240  | 480 | for warm motor |  |  |  |  |  |  |
|----------------------------------|----------|----------|------|-----|----------------|--|--|--|--|--|--|
| depending on selected trip class | 6 x Ir   | 6.5      | 13.5 | 26  | for cold motor |  |  |  |  |  |  |
|                                  | 7.2 x Ir | 5        | 10   | 20  | for cold motor |  |  |  |  |  |  |

|                |                                      |  |  |  |  |  |  |  |  |  |
|----------------|--------------------------------------|--|--|--|--|--|--|--|--|--|
| Thermal memory | 20 minutes before and after tripping |  |  |  |  |  |  |  |  |  |
| Cooling fan    | non-adjustable - motor self-cooled   |  |  |  |  |  |  |  |  |  |

#### S<sub>0</sub> Short-circuits: Short-time protection with fixed time delay

|                 |                    |                |   |   |   |   |    |    |    |    |
|-----------------|--------------------|----------------|---|---|---|---|----|----|----|----|
| Pick-up (A)     | Isd = Ir x ...     | 5              | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| accuracy ±15 %  |                    |                |   |   |   |   |    |    |    |    |
| Time delay (ms) | tsd                | non-adjustable |   |   |   |   |    |    |    |    |
|                 | Non-tripping time  | 10             |   |   |   |   |    |    |    |    |
|                 | Maximum break time | 60             |   |   |   |   |    |    |    |    |

#### I Short-circuits: Non-adjustable instantaneous protection

|                 |                    |     |     |      |      |      |      |      |
|-----------------|--------------------|-----|-----|------|------|------|------|------|
| Pick-up (A)     | Ii non-adjustable  | 425 | 750 | 1500 | 2250 | 3300 | 4800 | 6500 |
| accuracy ±15 %  |                    |     |     |      |      |      |      |      |
| Time delay (ms) | Non-tripping time  | 0   |     |      |      |      |      |      |
|                 | Maximum break time | 30  |     |      |      |      |      |      |

#### Phase unbalance or phase loss

|                |                                 |  |
|----------------|---------------------------------|--|
| Pick-up (A)    | Iunbal in % average current [2] | > 30 %   |
| accuracy ±20 % |                                 |  |
| Time delay (s) | non-adjustable                  | 0.7 s during starting<br>4 s during normal operation |

[1] Motor standards require operation at 65 °C. Circuit-breaker ratings are derated to take this requirement into account (see pages E-14 to E-17).

[2] The unbalance measurement takes into account the most unbalanced phase with respect to the average current.



# CÔNG TY CỔ PHẦN CÔNG NGHỆ HỢP LONG your protection

## ComPact NSX motor protection

### MicroLogic 6 E-M electronic trip units

B

### Display of type of fault

On a fault trip, the type of fault (Ir, Isd, li, Ig, lunbal, ljam), the phase concerned and the interrupted current are displayed.

### Indications

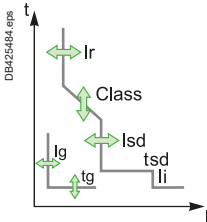
#### Front indications

- Green "Ready" LED: flashes slowly when the circuit breaker is ready to trip in the event of a fault.
- Red alarm LED for motor operation: goes ON when the thermal image of the rotor or stator is greater than 95% of the permissible temperature rise.

#### Remote indications via SDTAM or SDx module

See description on page C-31 for SDTAM and for SDx.

### MicroLogic 6.2 / 6.3 E-M



| Ratings (A)     | In at 65 °C [1] | 25 | 50 | 80 | 150 | 220 | 320 | 500 |
|-----------------|-----------------|----|----|----|-----|-----|-----|-----|
| Circuit breaker | ComPact NSX100  | ●  | ●  | ●  | -   | -   | -   | -   |
|                 | ComPact NSX160  | ●  | ●  | ●  | ●   | -   | -   | -   |
|                 | ComPact NSX250  | ●  | ●  | ●  | ●   | ●   | -   | -   |
|                 | ComPact NSX400  | -  | -  | -  | -   | -   | ●   | -   |
|                 | ComPact NSX630  | -  | -  | -  | -   | -   | ●   | ●   |

#### L Overloads: Long-time protection

| Pick-up (A)                                     | Ir              | Dial setting  | Value depending on trip-unit rating (In) and setting on dial |      |     |     |                |     |     |     |  |  |
|---|-----------------|---|--|------|-----|-----|----------------|-----|-----|-----|--|--|
| Tripping between 1.05 and 1.20 Ir               | In = 25 A Ir =  | 12  | 14   | 16   | 18  | 20  | 22             | 23  | 24  | 25  |  |  |
|   | In = 50 A Ir =  | 25  | 30   | 32   | 36  | 40  | 42             | 45  | 47  | 50  |  |  |
|   | In = 80 A Ir =  | 35  | 42   | 47   | 52  | 57  | 60             | 65  | 72  | 80  |  |  |
|   | In = 150 A Ir = | 70  | 80   | 90   | 100 | 110 | 120            | 130 | 140 | 150 |  |  |
|   | In = 220 A Ir = | 100   | 120  | 140  | 155 | 170 | 185            | 200 | 210 | 220 |  |  |
|   | In = 320 A Ir = | 160   | 180  | 200  | 220 | 240 | 260            | 280 | 300 | 320 |  |  |
|   | In = 500 A Ir = | 250   | 280  | 320  | 350 | 380 | 400            | 440 | 470 | 500 |  |  |
|   | Keypad setting  | Fine adjustments in 1 A steps below maximum value defined by dial setting |  |      |     |     |                |     |     |     |  |  |
| Trip class as per IEC 60947-4-1                 |                 | 5   | 10   | 20   | 30  |     |                |     |     |     |  |  |
| Time delay (s) depending on selected trip class | tr              | 1.5 x Ir  | 120  | 240  | 480 | 720 | for warm motor |     |     |     |  |  |
|   |                 | 6 x Ir  | 6.5  | 13.5 | 26  | 38  | for cold motor |     |     |     |  |  |
|   |                 | 7.2 x Ir  | 5  | 10   | 20  | 30  | for cold motor |     |     |     |  |  |
| Thermal memory                                  |                 | 20 minutes before and after tripping                                      |  |      |     |     |                |     |     |     |  |  |
| Cooling fan                                     |                 | Settings for self-cooled or fan-cooled motors                             |  |      |     |     |                |     |     |     |  |  |

#### S<sub>n</sub> Short-circuits: Short-time protection with fixed time delay

| Pick-up (A) accuracy ±15 % | Isd = Ir x ...     | 5              | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|----------------------------|--------------------|----------------|---|---|---|---|----|----|----|----|
| Time delay                 | tsd                | non-adjustable |   |   |   |   |    |    |    |    |
|                            | Non-tripping time  | 10 ms          |   |   |   |   |    |    |    |    |
|                            | Maximum break time | 60 ms          |   |   |   |   |    |    |    |    |

#### I Short-circuits: Non-adjustable instantaneous protection

| Pick-up (A) accuracy ±15 % | li non-adjustable  | 425   | 750 | 1200 | 2250 | 3300 | 4800 | 6500 |
|----------------------------|--------------------|-------|-----|------|------|------|------|------|
|                            | Non-tripping time  | 0 ms  |     |      |      |      |      |      |
|                            | Maximum break time | 30 ms |     |      |      |      |      |      |

#### G Ground faults

| Pick-up (A) accuracy ±10 % | Ig = In x ...      | Dial setting                        |     |     |     |     |     |     |   |     |  |  |
|----------------------------|--------------------|-------------------------------------|-----|-----|-----|-----|-----|-----|---|-----|--|--|
|                            | In = 25 A Ig =     | 0.6                                 | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 0.9 | 1 | Off |  |  |
|                            | In = 50 A Ig =     | 0.3                                 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1 | Off |  |  |
|                            | In > 50 A Ig =     | 0.2                                 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 1 | Off |  |  |
|                            |                    | fine adjustments in 0.05 x In steps |     |     |     |     |     |     |   |     |  |  |
| Time delay (ms)            | tg                 | 0                                   | 0.1 | 0.2 | 0.3 | 0.4 |     |     |   |     |  |  |
|                            | Non-tripping time  | 20                                  | 80  | 140 | 230 | 350 |     |     |   |     |  |  |
|                            | Maximum break time | 80                                  | 140 | 200 | 320 | 500 |     |     |   |     |  |  |

[1] Motor standards require operation at 65 °C. Circuit-breaker ratings are derated to take this requirement into account (see pages E-14 to E-17).

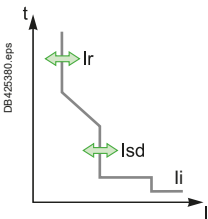
[2] The unbalance measurement takes into account the most unbalanced phase with respect to the average current.

# ComPact NSX special applications

## Protection of public distribution systems with MicroLogic 2-AB

B

MicroLogic 2.2 / 2.3 AB



| Ratings (A)     | In at 40 °C <sup>(1)</sup> | 100 | 160 | 240 | 400 |
|-----------------|----------------------------|-----|-----|-----|-----|
| Circuit breaker | ComPact NSX100             | ●   | -   | -   | -   |
|                 | ComPact NSX160             | ●   | ●   | -   | -   |
|                 | ComPact NSX250             | ●   | ●   | ●   | -   |
|                 | ComPact NSX400             | -   | -   | -   | ●   |
|                 | ComPact NSX630             | -   | -   | -   | ●   |

**L Long-time protection**

|   |            |  |     |     |     |     |     |     |     |
|---|------------|--|-----|-----|-----|-----|-----|-----|-----|
| Pick-up (A) tripping between 1.05 and 1.20 Ir | <b>Ir</b>  | value depending on trip unit rating (In) and setting on dial |     |     |     |     |     |     |     |
|   | In = 100 A | Ir = 40  | 40  | 50  | 60  | 70  | 80  | 90  | 100 |
|   | In = 160 A | Ir = 90  | 100 | 110 | 120 | 130 | 140 | 150 | 160 |
|   | In = 240 A | Ir = 140   | 150 | 160 | 170 | 180 | 200 | 220 | 240 |
|   | In = 400 A | Ir = 260   | 280 | 300 | 320 | 340 | 360 | 380 | 400 |

|                |           |                |  |  |  |  |  |  |  |
|----------------|-----------|----------------|--|--|--|--|--|--|--|
| Time delay (s) | <b>tr</b> | non-adjustable |  |  |  |  |  |  |  |
|                | 1.5 Ir    | 15             |  |  |  |  |  |  |  |
|                | 6 Ir      | 0.5            |  |  |  |  |  |  |  |
|                | 7.2 Ir    | 0.35           |  |  |  |  |  |  |  |

Thermal memory 20 minutes before and after tripping

**S<sub>n</sub> Short-time protection with fixed time delay**

|                            |                       |                    |   |   |   |   |   |   |   |    |
|----------------------------|-----------------------|--------------------|---|---|---|---|---|---|---|----|
| Pick-up (A) accuracy ±10 % | <b>Isd = Ir x ...</b> | 1.5                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 |
| Time delay (ms)            | <b>tsd</b>            | non-adjustable: 20 |   |   |   |   |   |   |   |    |
|                            | Non-tripping time     | 20                 |   |   |   |   |   |   |   |    |
|                            | Maximum break time    | 80                 |   |   |   |   |   |   |   |    |

**I Non-adjustable instantaneous protection**

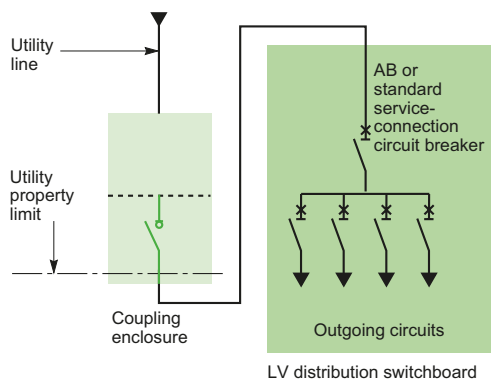
|                            |                          |      |      |      |      |
|----------------------------|--------------------------|------|------|------|------|
| Pick-up (A) accuracy ±15 % | <b>Ii non-adjustable</b> | 1500 | 1600 | 2880 | 4800 |
| Time delay (ms)            | Non-tripping time        | 10   |      |      |      |
|                            | Maximum break time       | 50   |      |      |      |

[1] If the trip units are used in high-temperature environments, the MicroLogic setting must take into account the thermal limitations of the circuit breaker. See the temperature derating table.

**Technical details**

**Advantages of the AB trip unit**

- Controls the power drawn with respect to contractual power levels. If the contractual level is overrun, the circuit breaker opens and the consumer is not billed excess costs.
- If a short-circuit occurs, the circuit breaker opens and the upstream HRC fuses on utility lines are not affected. No expensive utility servicing is billed to the consumer.



Consumer connection diagram.

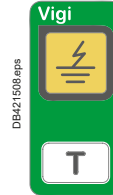
# ComPact NSX special applications

## ComPact NSX MicroLogic Vigi 4-AB trip unit with embedded earth leakage protection

### Indications

#### Front indications

- Green "Ready" LED: flashes slowly when the circuit breaker is ready to trip in case of a fault.
- Orange overload pre-alarm LED: steady ON when  $I > 90\% I_r$ .
- Red overload LED: steady ON when  $I > 105\% I_r$ .
- Yellow Screen: indicates an earth leakage fault (reset when the device is operated OFF/ON).

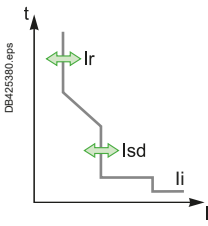


#### Alarming and fault differentiation

- An overload trip signal can be remotely available by installing an SDx relay module inside the circuit breaker.
- An earth leakage pre-alarm can be remotely available by installing an SDx module, only on the ComPact NSX MicroLogic Vigi 4-AB. This module receives the signal from the MicroLogic electronic trip unit via an optical link and makes it available on the terminal block. The signal is reset when the breaker is operated.



### MicroLogic Vigi 4-AB (earth leakage "Trip" version only)



| Ratings (A)     | In at 40 °C [1] | 100 | 160 | 240 | 400 |
|-----------------|-----------------|-----|-----|-----|-----|
| Circuit breaker | ComPact NSX100  | ●   |     |     |     |
|                 | ComPact NSX160  | ●   | ●   |     |     |
|                 | ComPact NSX250  | ●   | ●   | ●   |     |
|                 | ComPact NSX400  |     |     |     | ●   |
|                 | ComPact NSX630  |     |     |     | ●   |

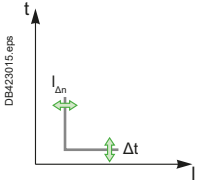
| L Long-time protection               |                      |  |     |     |     |     |     |     |     |     |     |
|--------------------------------------|----------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pick-up (A)                          | $I_r$                | value depending on the rating ( $I_n$ ) and the dial setting (9 positions) |     |     |     |     |     |     |     |     |     |
| tripping between 1.05 and 1.20 $I_r$ | $I_n = 100\text{ A}$ | $I_o = 40$   | 40  | 40  | 40  | 50  | 60  | 70  | 80  | 90  | 100 |
|                                      | $I_n = 160\text{ A}$ | $I_o = 90$   | 90  | 90  | 100 | 110 | 120 | 130 | 140 | 150 | 160 |
|                                      | $I_n = 240\text{ A}$ | $I_o = 140$  | 140 | 140 | 150 | 160 | 170 | 180 | 200 | 220 | 240 |
|                                      | $I_n = 400\text{ A}$ | $I_o = 260$  | 260 | 260 | 280 | 300 | 320 | 340 | 360 | 380 | 400 |

|                    |                     |                       |  |  |  |  |  |  |  |  |  |
|--------------------|---------------------|-----------------------|--|--|--|--|--|--|--|--|--|
| Time delay (s)     | $t_r$               | non-adjustable        |  |  |  |  |  |  |  |  |  |
| accuracy 0 to -20% | at $1.5 \times I_r$ | $t_r = 15\text{ s}$   |  |  |  |  |  |  |  |  |  |
|                    | at $6 \times I_r$   | $t_r = 0.5\text{ s}$  |  |  |  |  |  |  |  |  |  |
|                    | at $7.2 \times I_r$ | $t_r = 0.35\text{ s}$ |  |  |  |  |  |  |  |  |  |

Thermal memory 20 minutes before and after tripping

| S <sub>0</sub> Short-time protection with fixed time delay |                             |                |   |   |   |   |   |   |   |    |
|--|-----------------------------|----------------|---|---|---|---|---|---|---|----|
| Pick-up (A)  | $I_{sd} = I_r \times \dots$ | 1.5            | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 |
| accuracy ±10 %   |                             |                |   |   |   |   |   |   |   |    |
| Time delay (ms)  | $t_{sd}$                    | non-adjustable |   |   |   |   |   |   |   |    |
|  | Non-tripping time           | 20             |   |   |   |   |   |   |   |    |
|  | Maximum break time          | 80             |   |   |   |   |   |   |   |    |

| I Instantaneous protection |                      |       |      |      |      |
|----------------------------|----------------------|-------|------|------|------|
| Pick-up (A)                | $I_i$ non-adjustable | 1500  | 1600 | 2880 | 4800 |
| accuracy ±15 %             | Non-tripping time    | 10 ms |      |      |      |
|                            | Maximum break time   | 50 ms |      |      |      |



| R Earth leakage protection |                                  |                    |        |         |         |          |   |    |    |     |  |
|----------------------------|----------------------------------|--------------------|--------|---------|---------|----------|---|----|----|-----|--|
| Sensitivity (A)            | Type A, adjustable (9 positions) |                    |        |         |         |          |   |    |    |     |  |
|                            | $I_n = 100\text{ A}$             | $I\Delta n = 0.03$ | 0.03   | 0.1     | 0.3     | 0.5      | 1 | 3  | 5  | OFF |  |
|                            | $I_n = 160\text{ A}$             | $I\Delta n = 0.03$ | 0.03   | 0.1     | 0.3     | 0.5      | 1 | 3  | 5  | OFF |  |
|                            | $I_n = 240\text{ A}$             | $I\Delta n = 0.03$ | 0.03   | 0.1     | 0.3     | 0.5      | 1 | 3  | 5  | OFF |  |
|                            | $I_n = 400\text{ A}$             | $I\Delta n = 0.3$  | 0.3    | 0.5     | 1       | 3        | 5 | 10 | 10 | OFF |  |
| Time delay $\Delta t$ (ms) | Adjustable                       | $\Delta t = 0$     | 60 [2] | 150 [2] | 500 [2] | 1000 [2] |   |    |    |     |  |
|                            | Maximum break time (ms)          | <40                | <140   | <300    | <800    | <1500    |   |    |    |     |  |

[1] For the use in high temperature environment, take into account the thermal limitation of the breaker.  
 [2] The time delay ( $\Delta t$ ) is mandatory and designed " $\Delta t = 0$ " when the  $I\Delta n$  dial is set on 30mA (0.03). The time delay has no effect when the dial  $I\Delta n$  is set to the "OFF" position.



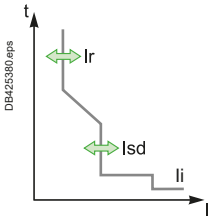
# CÔNG TY CỔ PHẦN CÔNG NGHỆ HỢP LONG Protect your protection

## ComPact NSX special applications

### Generator protection with MicroLogic 2.2 G

B

#### MicroLogic 2.2 G



| Ratings (A)     | In at 40 °C [1] | 40                               | 100                              | 160                              | 250                              |
|-----------------|-----------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Circuit breaker | ComPact NSX100  | <input checked="" type="radio"/> | <input checked="" type="radio"/> | -                                | -                                |
|                 | ComPact NSX160  | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | -                                |
|                 | ComPact NSX250  | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |

#### L Long-time protection

|   |                     |          |     |     |     |     |     |     |     |     |
|---|---------------------|----------|-----|-----|-----|-----|-----|-----|-----|-----|
| Pick-up (A) tripping between 1.05 and 1.20 Ir | In = 40 A           | Io = 18  | 18  | 20  | 23  | 25  | 28  | 32  | 36  | 40  |
|   | In = 100 A          | Io = 40  | 45  | 50  | 55  | 63  | 70  | 80  | 90  | 100 |
|   | In = 160 A          | Io = 63  | 70  | 80  | 90  | 100 | 110 | 125 | 150 | 160 |
|   | In = 250 A (NSX250) | Io = 100 | 110 | 125 | 140 | 150 | 176 | 200 | 225 | 250 |

**Io** value depending on trip unit rating (In) and setting on dial  
**Ir = Io x ...** 9 fine-adjustment settings from 0.9 to 1 for each Io value

|                                    |          |                |
|------------------------------------|----------|----------------|
| Time delay (s) accuracy 0 to -20 % | tr       | non-adjustable |
|                                    | 1.5 x Ir | 15             |
|                                    | 6 x Ir   | 0.5            |
|                                    | 7.2 x Ir | 0.35           |

Thermal memory 20 minutes before and after tripping

#### S<sub>0</sub> Short-time protection with fixed time delay

|                            |                    |                |   |     |   |   |   |   |   |   |   |
|----------------------------|--------------------|----------------|---|-----|---|---|---|---|---|---|---|
| Pick-up (A) accuracy ±10 % | Isd = Ir x ...     | 1.5            | 2 | 2.5 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Time delay (ms)            | tsd                | non-adjustable |   |     |   |   |   |   |   |   |   |
|                            | Non-tripping time  | 140            |   |     |   |   |   |   |   |   |   |
|                            | Maximum break time | 200            |   |     |   |   |   |   |   |   |   |

#### I Non-adjustable instantaneous protection

|                            |                    |       |      |      |      |
|----------------------------|--------------------|-------|------|------|------|
| Pick-up (A) accuracy ±15 % | Ii non-adjustable  | 600   | 1500 | 2400 | 3000 |
|                            | Non-tripping time  | 15 ms |      |      |      |
|                            | Maximum break time | 50 ms |      |      |      |

[1] If the trip units are used in high-temperature environments, the MicroLogic setting must take into account the thermal limitations of the circuit breaker. See the temperature derating table.

# ComPact NSX special applications

Protection of industrial control panels

## Compliance with North American industrial control equipment standards

ComPact NSX devices have received UL508 / CSA 22-2 no. 14 approval for industrial control equipment of the "Manual Motor Controller", "Across the Line Starter", "General Use" and "Disconnecting Means" types.

Type NA devices are switch-disconnectors that must always be protected upstream.

### UL508 approval

| Circuit breakers            | Trip units   | Approvals   |
|-----------------------------|--|---|
| ComPact NSX100 to 630 F/N/H | TMD, MicroLogic 2, 5 and 6   | General Use<br>Motor Disconnecting Means  |
|                             | NA, MA, MicroLogic 1.3 M, 2.2 M, 2.3 M, MicroLogic 6.2 E-M and 6.3 E-M | Manual Motor Controller<br>Across the Line Starter<br>Motor Disconnecting Means |

Table of 3-phase motor ratings in hp (1 hp = 0.7457 kW)

| V AC ratings                             |   | 115 | 230 | 460 | 575 |
|--|---|-----|-----|-----|-----|
| <b>TMD<br/>MicroLogic 2, 5<br/>and 6</b> | <b>NA, MA<br/>MicroLogic 1.3 M, 2.2<br/>M, 2.3 M<br/>MicroLogic 6.2 E-M<br/>and 6.3 E-M</b> |     |     |     |     |
| 25                                       | 25  | 3   | 7.5 | 15  | 20  |
| 50                                       | 50  | 7.5 | 15  | 30  | 40  |
| 100                                      | 100   | 15  | 30  | 75  | 100 |
| 160                                      | 150   | 25  | 50  | 100 | 150 |
| 250                                      | 220   | 40  | 75  | 150 | 200 |
| 400                                      | 320   | -   | 125 | 250 | 300 |
| 550                                      | 500   | -   | 150 | 350 | 500 |

The deratings indicated on pages E-14 to E-17 apply to TMD, MicroLogic 2, 5 and 6 trip units, rated at 40 °C.



# ComPact NSX special applications

## 16 Hz 2/3 network protection - MicroLogic 5 A-Z trip unit

ComPact NSX circuit breakers may be used on 16 Hz 2/3 systems with special thermal-magnetic and electronic (MicroLogic 5 A-Z) trip units.

B

### 16 Hz 2/3 networks

Single-phase distribution networks with a frequency of 16 Hz 2/3 are used for railroad applications in certain European countries.

### Breaking capacity for 16 Hz 2/3 at 250/500 V

ComPact NSX circuit breakers of the 3P 2D or the 3P 3D type protect 16 Hz 2/3 networks at 250 V or 500 V.

They can be equipped with either:

- a TM-D thermal-magnetic trip unit for ComPact NSX100 to 250
- or an electronic MicroLogic 5.2 A-Z trip unit for ComPact NSX100 to 250 or a 5.3 A-Z for ComPact NSX400/630.

The possible breaking-capacity performance levels are B, F, N and H as indicated below.

#### Breaking capacity I<sub>cu</sub>

| Operating voltage | Performance          | TMD and MicroLogic 5 A-Z trip units |    |    |    |
|-------------------|----------------------|-------------------------------------|----|----|----|
|                   |                      | B                                   | F  | N  | H  |
| 250 V / 500 V     | I <sub>cu</sub> (kA) | 25                                  | 36 | 50 | 70 |

### Protection

#### TM-D thermal-magnetic trip units

The 16 Hz 2/3 frequency does not modify the thermal settings with respect to those at 50 Hz (see page B-6). The magnetic pick-ups are modified as shown below.

#### Magnetic protection for ComPact NSX 100/160/250 at 50 Hz and at 16 Hz 2/3

| Rating (A) I <sub>n</sub> at 40 °C     | 16    | 25  | 32  | 40  | 50  | 63  | 80  | 100 | 125  | 160  | 200                     | 250        |
|--|-------|-----|-----|-----|-----|-----|-----|-----|------|------|-------------------------|------------|
| Pick-up (A) I <sub>m</sub> accur. ±20% | Fixed |     |     |     |     |     |     |     |      |      |                         | Adjustable |
| NSX100 50Hz                            | 190   | 300 | 400 | 500 | 500 | 500 | 640 | 800 |      |      |                         |            |
| 16Hz 2/3                               | 170   | 270 | 360 | 450 | 450 | 450 | 580 | 720 |      |      |                         |            |
| NSX160/250 50Hz                        | 190   | 300 | 400 | 500 | 500 | 500 | 640 | 800 | 1250 | 1250 |                         |            |
| 16 Hz 2/3                              | 170   | 270 | 360 | 450 | 450 | 450 | 580 | 720 | 1100 | 1100 | 4.5 to 9 I <sub>n</sub> |            |

#### MicroLogic 5 A-Z trip units

MicroLogic 5.2 A-Z and 5.3 A-Z are dedicated to 16 Hz 2/3 networks.

They use a suitable sampling frequency. The protection settings are identical to those of MicroLogic 5 A (see page B-12). They also offer a current-measurement function for this specific frequency.

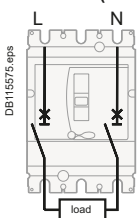
#### Trip-unit selection

| Rating         | 16   | 63   | 100                | 160  | 250 | 400                | 630 |
|----------------|------|------|--------------------|------|-----|--------------------|-----|
| ComPact NSX100 | TM-D |      |                    |      |     |                    |     |
| NSX160         |      | TM-D |                    |      |     |                    |     |
| NSX250         |      |      |                    | TM-D |     |                    |     |
| NSX100 to 250  |      |      | MicroLogic 5.2 A-Z |      |     |                    |     |
| NSX400/630     |      |      |                    |      |     | MicroLogic 5.3 A-Z |     |

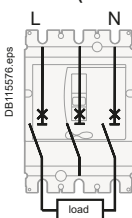
### Wiring for NSX100 to 630 A

#### Phase and isolated neutral interrupted- 250 / 500 V

##### B and F (3P 2D version)

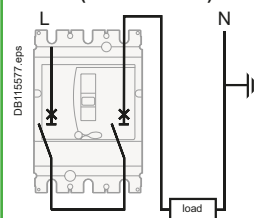


##### N and H (3P 3D version)

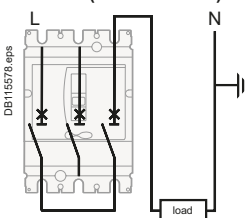


#### 2 poles in series - Earthed neutral - 250 / 500 V

##### B and F (3P 2D version)



##### N and H (3P 3D version)



Remark. For an operating voltage > 250 V, the installation must be designed to eliminate all risk of double earth faults.

# ComCompact NSX accessories and auxiliaries

## Remote tripping

MX or MN voltage releases are used to trip the circuit breaker. They serve primarily for remote, emergency-off commands. It is advised to test the system every six months.

### MN undervoltage release

The MN release opens the circuit breaker when its supply voltage drops to a value below 35 % of its rated voltage  $U_n$ .

Undervoltage tripping, combined with an emergency-off button, provides fail-safe tripping. The MN release is continuously supplied, i.e. if supply is interrupted:

- either voluntarily, by the emergency-off button,
- or accidentally, through loss of power or faulty wiring, the release provokes opening of the circuit breaker.

### Opening conditions

Circuit-breaker tripping by an MN release meets the requirements of standard IEC 60947-2.

- Automatic opening of the circuit breaker is ensured when the continuous voltage supply to the release  $U \leq 0.35 \times U_n$ .
- If the supply voltage is between 0.35 and 0.7  $U_n$ , opening is possible, but not guaranteed. Above 0.7  $U_n$ , opening does not take place.

### Closing conditions

If there is no supply to the MN release, it is impossible to close the circuit breaker, either manually or electrically. Closing is ensured when the voltage supply to the release  $U \geq 0.85 \times U_n$ . Below this threshold, closing is not guaranteed.

### Characteristics

|                       |         |                                       |
|-----------------------|---------|---------------------------------------|
| Power supply          | V AC    | 50/60 Hz: 24 - 48 - 100/130 - 200/240 |
|                       |         | 50 Hz: 380/415    60 Hz: 208/277      |
| Operating threshold   | Opening | 0.35 to 0.7 $U_n$                     |
|                       | Closing | 0.85 $U_n$                            |
| Operating range       |         | 0.85 to 1.1 $U_n$                     |
| Consumption (VA or W) |         | Pick-up: 10 - Hold: 5                 |
| Response time (ms)    |         | 50                                    |

### Time-delay unit for an MN release

A time delay unit for the MN release eliminates the risk of nuisance tripping due to a transient voltage dip. For shorter micro-outages, a system of capacitors provides temporary supply to the MN at  $U > 0.7$  to ensure non tripping. The correspondence between MN releases and time-delay units is shown below.

| Power supply   | Corresponding MN release |
|--|--------------------------|
| <b>Unit with fixed delay 200 ms</b>                        |                          |
| 48 V AC  | 48 V DC                  |
| 220 / 240 V AC   | 250 V DC                 |
| <b>Unit with adjustable delay <math>\geq 200</math> ms</b> |                          |
| 48 - 60 V AC/DC  | 48 V DC                  |
| 100 - 130 V AC/DC  | 125 V DC                 |
| 220 - 250 V AC/DC  | 250 V DC                 |

### MX shunt release

The MX release opens the circuit breaker via an impulse-type ( $\geq 20$  ms) or maintained order.

### Opening conditions

When the MX release is supplied, it automatically opens the circuit breaker. Opening is ensured for a voltage  $U \geq 0.7 \times U_n$ .

### Characteristics

|                       |      |                                       |
|-----------------------|------|---------------------------------------|
| Power supply          | V AC | 50/60 Hz: 24 - 48 - 100/130 - 200/240 |
|                       |      | 50 Hz: 380/415    60 Hz: 208/277      |
| Operating range       | V DC | 12 - 24 - 30 - 48 - 60 - 125 -250     |
|                       |      | 0.7 to 1.1 $U_n$                      |
| Consumption (VA or W) |      | Pick-up: 10                           |
| Response time (ms)    |      | 50                                    |

### Circuit breaker control by MN or MX

When the circuit breaker has been tripped by an MN or MX release, it must be reset before it can be reclosed.

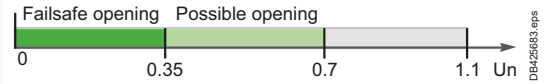
MN or MX tripping takes priority over manual closing.

In the presence of a standing trip order, closing of the contacts, even temporary, is not possible.

Connection using wires up to 1.5 mm<sup>2</sup> to integrated terminal blocks.



MX or MN voltage release.



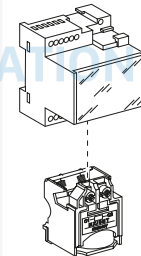
Opening conditions of the MN release.



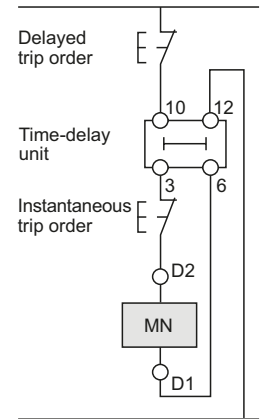
Closing conditions of the MN release.



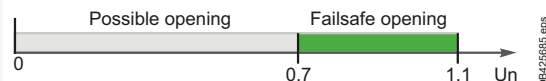
MN voltage release.



MN release with a time-delay unit.



Wiring diagram for emergency-off function with MN + time-delay unit.



Opening conditions of the MX release.

**Note:** circuit breaker opening using an MN or MX release must be reserved for safety functions. This type of tripping increases wear on the opening mechanism. Repeated use reduces the mechanical endurance of the circuit breaker by 50 %.



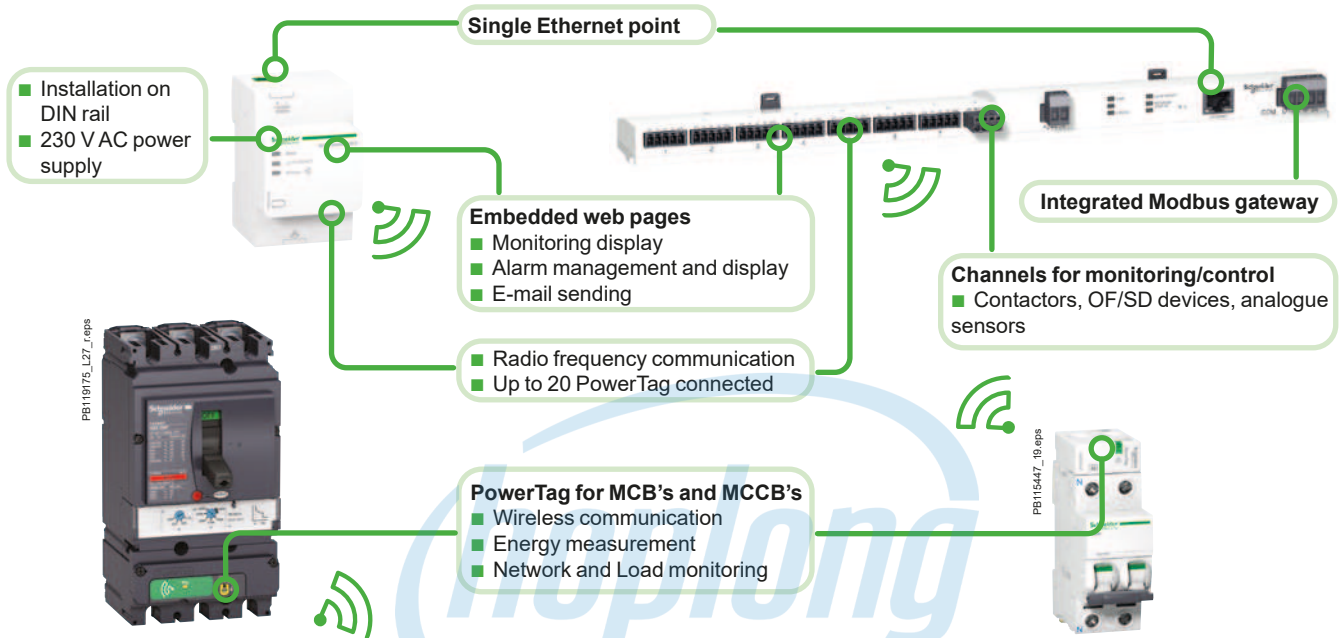
# ComPact NSX accessories and auxiliaries

## Additional measurement module: PowerLogic PowerTag NSX

How to monitor PowerTag NSX sensors in FDM128 local display

**Metering and monitoring**  
PowerTag Link / PowerTag Link HD (Ethernet)

**Metering, monitoring and control**  
Smartlink SI B (Ethernet)



### Technical characteristics

| Main characteristics                      |                 |  |   |
|---|-----------------|--|---|
| Rated voltage                             | Un              | Phase-to-neutral<br>Phase-to-phase         | 230 VAC ± 20 %<br>400 VAC ± 20 %          |
| Frequency                                 |                 |  | 50/60 Hz                                  |
| Operating current                         | In              |  | 250 A / 630 A                             |
| Maximum operating current                 |                 |  | 1.2 x In                                  |
| Saturation current                        |                 |  | 2 x In                                    |
| Maximum consumption                       |                 |  | 3.7 VA                                    |
| Starting current                          | Ist             |  | 160 mA / 400 mA                           |
| Base current                              | Ib              |  | 40 A / 100 A                              |
| Additional characteristics                |                 |  |   |
| Operating temperature                     |                 |  | -25 °C to +70 °C                          |
| Storage temperature                       |                 |  | -50 °C to +85 °C                          |
| Overtoltage category                      |                 | As per IEC 61010-1                         | Cat. IV                                   |
| Measuring category                        |                 | As per IEC 61010-2-30                      | Cat. III                                  |
| Pollution degree                          |                 |  | 3   |
| Altitude                                  |                 |  | Up to 2000 m without derating [1]         |
| Degree of protection device               |                 |  | IP20<br>IK07                              |
| Radio-frequency communication             |                 |  |   |
| ISM band 2.4 GHz                          |                 |  | 2.4 GHz to 2.4835 GHz                     |
| Channels                                  |                 | As per IEEE 802.15.4                       | 11 to 26                                  |
| Isotropic Radiated Power                  |                 | Equivalent (EIRP)                          | 0 dBm                                     |
| Maximum transmission time                 |                 |  | < 5 ms                                    |
| Channel occupancy                         |                 | For 1 device                               | messages sent every 5 seconds             |
| Characteristics of measuring functions    |                 |  |   |
| Function                                  | Symbol          | Performance as per IEC 61557-12            | Measuring range (250 A / 630 A)           |
| Active power (per phase, total)           | P               | Class 1<br>Measuring range (250 A / 630 A) | 88 W to 416 kW / 221 W to 1048 kW         |
| Total reactive power                      | Q <sub>A</sub>  | Class 2                                    | 88 VAR to 416 kVAR / 221 VAR to 1048 kVAR |
| Total apparent power                      | S <sub>A</sub>  | Class 2                                    | 88 VA to 416 kVA / 221 VA to 1048 kVA     |
| Active Energy (per phase, total, partial) | E <sub>a</sub>  | Class 1                                    | 0 to 281.10 <sup>9</sup> kWh              |
| Total reactive Energy                     | E <sub>rA</sub> | Class 2                                    | 0 to 281.10 <sup>9</sup> kVARh            |
| Frequency                                 | f               | Class 1                                    | 45 to 55 Hz                               |
| Phase current                             | I               | Class 1                                    | 8 to 250 A / 20 to 630 A                  |
| Voltages (Line to Line)                   | U               | Class 0.5                                  | Un ± 20 %                                 |
| Power factor (arithmetic)                 | PF <sub>A</sub> | Class 1                                    | From 0.5 inductive to 0.8 capacitive      |
|   |                 |  | -1 to 1                                   |

[1] Above 2000 m, please consult us.

## ComPact NSXm

## Operating and installation conditions

### Derating and correction factor depending of temperature

The overload protection is calibrated at 40 °C in the lab. This means that when the ambient temperature is less or greater than 40 °C, the Ir protection pick-up is slightly modified.

#### Choosing the right rating depending of the temperature:

Over the reference temperature of 40 °C, the circuit breaker has to be derated following the table below:

#### Temperature derating for thermal-magnetic (TM-D) NSXm at In

##### Temperature °C

| 40 | 45 | 50 | 55 | 60 | 65 | 70 |
|----|----|----|----|----|----|----|
|----|----|----|----|----|----|----|

##### Rating (A) In

|     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|
| 16  | 16  | 15  | 15  | 14  | 14  | 13  |
| 25  | 24  | 24  | 23  | 23  | 22  | 21  |
| 32  | 31  | 30  | 30  | 29  | 28  | 27  |
| 40  | 39  | 38  | 37  | 36  | 34  | 33  |
| 50  | 49  | 48  | 46  | 45  | 44  | 42  |
| 63  | 61  | 60  | 58  | 56  | 54  | 53  |
| 80  | 77  | 73  | 70  | 67  | 64  | 60  |
| 100 | 96  | 94  | 90  | 87  | 83  | 80  |
| 125 | 120 | 117 | 113 | 109 | 104 | 100 |
| 160 | 155 | 149 | 144 | 139 | 133 | 126 |

#### Temperature derating for NSXm with MicroLogic Vigi 4.1 at In

##### Temperature °C

| 40 | 45 | 50 | 55 | 60 | 65 | 70 |
|----|----|----|----|----|----|----|
|----|----|----|----|----|----|----|

##### Rating (A) In

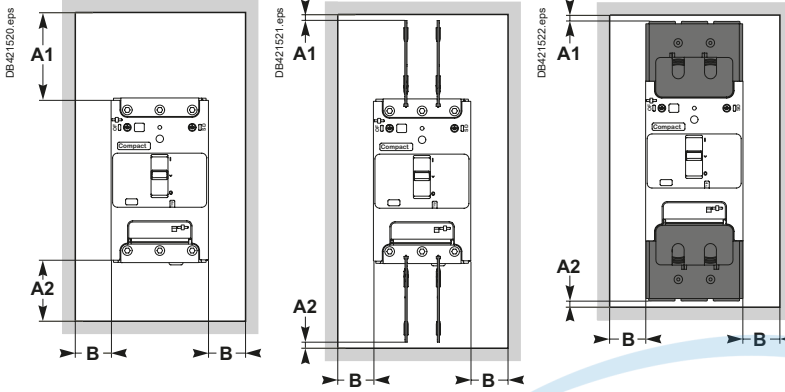
|     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|
| 25  | 25  | 25  | 25  | 25  | 25  | 25  |
| 50  | 50  | 50  | 50  | 50  | 50  | 50  |
| 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 160 | 155 | 150 | 145 | 140 | 135 | 130 |

# ComPact NSXm

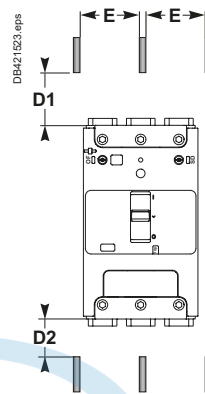
## Safety clearances and minimum distances

### IEC standard

#### Minimum safety clearances



#### Minimum safety clearances to bare busbars



| Operating voltage                            | Clearance (mm)  |                                |      |                  |                  |      |      |
|--|-----------------|--------------------------------|------|------------------|------------------|------|------|
|  | Between devices | Between device and sheet metal |      | Bare sheet metal |                  |      |      |
| $U \leq 690\text{ V}$                        |                 | Painted sheet metal            |      |                  | Bare sheet metal |      |      |
|  |                 | A1                             | A2   | B                | A1               | A2   | B    |
| for devices equipped with:<br>no accessories | 0               | 30 mm                          | 5 mm | 0                | 40 mm            | 5 mm | 5 mm |
| interphase barriers [1]                      | 0               | 0                              | 0    | 0                | 0                | 0    | 5 mm |
| long terminal shields                        | 0               | 0                              | 0    | 0                | 0                | 0    | 5 mm |

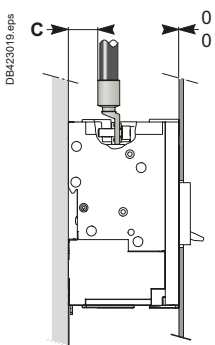
| Operating voltage     | Clearances to live bare busbars [2] |        |                            |       |
|-----------------------|-------------------------------------|--------|----------------------------|-------|
|                       | Spacing $E \leq 60\text{ mm}$       |        | Spacing $E > 60\text{ mm}$ |       |
|                       | D1                                  | D2     | D1                         | D2    |
| $U \leq 690\text{ V}$ | 200 mm                              | 100 mm | 120 mm                     | 60 mm |

[2] These clearances can be reduced for special installations as long as the configuration is checked by tests.

[1] 20 mm clearance when using spreaders and 5mm clearance when using crimp lugs between devices is mandatory.

## INDUSTRIAL AUTOMATION

#### Compression lug safety clearance

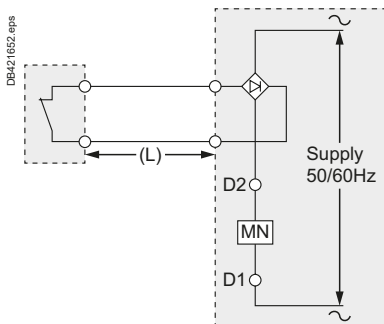
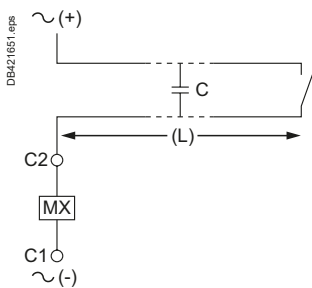
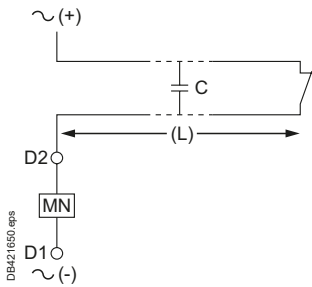


An insulating screen or long terminal shield is required if  $C < 8\text{ mm}$ .



# ComPact NSXm

## Voltage release wiring rules



### Shunt trip (MX) and undervoltage release (MN)

#### Recommended maximum cable lengths

In certain circumstances, high cable capacitance due to an excessive cable length could prevent an undervoltage release MN from dropping out resulting in safety issues. In case of a shunt trip MX, an untimely trip may occur due to capacitive current leak.

To avoid these dysfunction due to cable capacitance C, the maximum cable length (L) is defined by the following table for a 1.5 mm<sup>2</sup> cable.

| Power supply voltage (Un) | Maximum cable length undervoltage trip (MN) [1] | Shunt trip (MX) [1] |
|---------------------------|---|---------------------|
| 24 V AC                   | 1 243 m   | 3 653 m             |
| 24 V DC                   | unlimited                                       | > 3653 m            |
| 48 V AC                   | 583 m   | 1 667 m             |
| 48 V DC                   | unlimited                                       | > 1667 m            |
| 110...130 V AC            | 126 m   | 913 m               |
| 110...130 V DC            | unlimited                                       | > 913 m             |
| 208-240 V AC              | 109 m   | 160 m               |
| 250 V DC                  | unlimited                                       | > 160 m             |
| 277 V AC                  | 98 m  | 120 m               |
| 380-415 V AC              | 86 m  | 80 m                |
| 440-480 V AC              | 56 m  | 67 m                |

[1] Make sure auxiliaries supply voltage is within working range (0.85 Un mini...1.1 Un maxi).

If a longer cable length is required, several solutions are possible to counteract excessive cable capacitance:

- use DC operated auxiliaries
- use lower control voltage (make sure auxiliaries supply voltage is within working range: 0.85 Un minimum...1.1 Un maximum)
- if high voltage and long control cables are required for an AC undervoltage release (MN), add a rectifier bridge (ref LV426899 – DIN rail compatible) in the control circuit. It will prevent drop out problems but increase operating time.

#### Electrical characteristics of MN/MX

| Characteristics    |    |                  | AC  | DC               |
|--------------------|----|------------------|---|------------------|
| Rated voltage (V)  |    |                  | 24, 48, 110...130, 208...240, 277, 380...415, 440...480 | 24, 48, 125, 250 |
| Power requirements | MX | Pickup (< 50 ms) | < 6 VA  | < 10 W           |
|                    |    | Seal-in          | < 4 VA  | < 1 W            |
|                    | MN |                  | < 7 VA  | < 2 W            |
| Clearing time (ms) |    |                  | < 50  | < 50             |
| Operating range    |    |                  | up to 1.1 Un  |                  |

# ComPact NSXm

## Power loss / Resistance

ComPact NSXm thermal power loss values are used to calculate total temperature rise in the switchboard in which the circuit breakers are installed.

The values indicated in the tables below are typical values for a device at full rated load and 50/60 Hz.

### Power loss per pole (P/pole) in Watts (W)

The value indicated is the power loss at  $I_n$ , 50/60 Hz, for a three-pole or four-pole circuit breaker. Measurement and calculation of power loss are carried out in compliance with the recommendations of Annex G of standard IEC 60947-2.

### Resistance per pole (R/pole) in milliohms (mΩ)

The value of the resistance per pole is provided as a general indication for a new device.

The value of the contact resistance is determined on the basis of the measured voltage drop, in accordance with the manufacturer's test procedure.

**Note:** this measurement is not sufficient to determine the quality of the contacts, i.e. the capacity of the circuit breaker to carry its rated current.

### Calculation of total power loss

Total power loss at full rated load and 50/60 Hz is equal to power losses per pole multiplied by the number of poles (3 or 4).

#### ComPact NSXm with TM-D

| Rating (A) | R total / pole (mΩ) | P / Pole (W) |
|------------|---------------------|--------------|
| 16         | 8.87                | 2.3          |
| 25         | 4.50                | 2.8          |
| 32         | 3.10                | 3.3          |
| 40         | 2.30                | 3.8          |
| 50         | 1.85                | 4.6          |
| 63         | 1.44                | 5.7          |
| 80         | 0.90                | 5.8          |
| 100        | 0.75                | 7.5          |
| 125        | 0.59                | 9.3          |
| 160        | 0.53                | 13.7         |

#### ComPact NSXm with MicroLogic Vigi 4.1

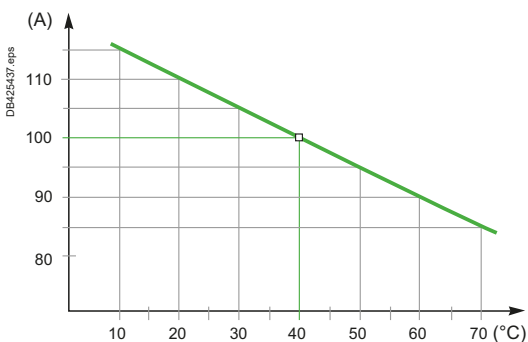
| Rating (A) | R total / pole (mΩ) | P / Pole (W) |
|------------|---------------------|--------------|
| 25         | 2.44                | 1.5          |
| 50         | 0.48                | 1.2          |
| 100        | 0.48                | 4.8          |
| 160        | 0.48                | 12.3         |



# ComPact NSX temperature derating

## Equipped with thermal-magnetic trip units

When thermal-magnetic trip units are used at ambient temperatures other than 40 °C, the Ir pick-up is modified.



Temperature derating curve for ComPact NSX100.

### Derating and correction factor depending of temperature

The overload protection is calibrated at 40 °C in the lab. This means that when the ambient temperature is less or greater than 40 °C, the Ir protection pick-up is slightly modified.

#### Choosing the right rating depending of the temperature:

Over the reference temperature of 40 °C, the circuit breaker has to be derated following the table below:

| Temperature derating for thermal-magnetic (TM-D) NSX at In |      |      |      |      |      |      |
|--|------|------|------|------|------|------|
| Temperature °C   |      |      |      |      |      |      |
| 40   | 45   | 50   | 55   | 60   | 65   | 70   |
| Rating (A) In  |      |      |      |      |      |      |
| 16   | 15.6 | 15.2 | 14.8 | 14.5 | 14   | 13.8 |
| 25   | 24.5 | 24   | 23.5 | 23   | 22   | 21   |
| 32   | 31.3 | 30.5 | 30   | 29.5 | 29   | 28.5 |
| 40   | 39   | 38   | 37   | 36   | 35   | 34   |
| 50   | 49   | 48   | 47   | 46   | 45   | 44   |
| 63   | 61.5 | 60   | 58   | 57   | 55   | 54   |
| 80   | 78   | 76   | 74   | 72   | 70   | 68   |
| 100  | 97.5 | 95   | 92.5 | 90   | 87.5 | 85   |
| 125  | 122  | 119  | 116  | 113  | 109  | 106  |
| 160  | 156  | 152  | 148  | 144  | 140  | 136  |
| 200  | 195  | 190  | 185  | 180  | 175  | 170  |
| 250  | 244  | 238  | 231  | 225  | 219  | 213  |

### INDUSTRIAL AUTOMATION

#### Doing the setting or calculating the tripping time for a given temperature:

After having determine the corrected ratio I/In, the tripping time at 40 °C is defined with the tripping curves (see pages H-5 to H-7).

To obtain the right setting or the tripping time at a different temperature, the ratio I/In has to be corrected with the correction factor below:

| Correction factor table for thermal magnetic (TM-D) NSX to determine setting or tripping time at In |                |       |      |      |      |      |      |      |      |      |      |      |      |
|---|----------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Rating (A) In   | Temperature °C |       |      |      |      |      |      |      |      |      |      |      |      |
|   | 10             | 15    | 20   | 25   | 30   | 35   | 40   | 45   | 50   | 55   | 60   | 65   | 70   |
| 16  | 1.15           | 1.17  | 1.13 | 1.13 | 1.06 | 1.04 | 1.00 | 0.98 | 0.95 | 0.93 | 0.91 | 0.88 | 0.86 |
| 25  | 1.15           | 1.12  | 1.10 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.92 | 0.88 | 0.84 |
| 32  | 1.15           | 1.13  | 1.10 | 1.07 | 1.05 | 1.03 | 1.00 | 0.98 | 0.95 | 0.94 | 0.92 | 0.91 | 0.89 |
| 40  | 1.15           | 1.13  | 1.10 | 1.08 | 1.05 | 1.03 | 1.00 | 0.98 | 0.95 | 0.93 | 0.9  | 0.88 | 0.85 |
| 50  | 1.15           | 1.12  | 1.10 | 1.08 | 1.05 | 1.02 | 1.00 | 0.98 | 0.96 | 0.94 | 0.92 | 0.90 | 0.88 |
| 63  | 1.14           | 1.13  | 1.10 | 1.08 | 1.05 | 1.03 | 1.00 | 0.98 | 0.95 | 0.92 | 0.90 | 0.87 | 0.86 |
| 80  | 1.15           | 1.13  | 1.10 | 1.08 | 1.05 | 1.03 | 1.00 | 0.98 | 0.95 | 0.93 | 0.90 | 0.88 | 0.85 |
| 100   | 1.15           | 1.13  | 1.10 | 1.08 | 1.05 | 1.03 | 1.00 | 0.98 | 0.95 | 0.93 | 0.90 | 0.88 | 0.85 |
| 125   | 1.15           | 1.128 | 1.10 | 1.07 | 1.05 | 1.02 | 1.00 | 0.98 | 0.95 | 0.93 | 0.90 | 0.87 | 0.85 |
| 160   | 1.15           | 1.125 | 1.10 | 1.08 | 1.05 | 1.03 | 1.00 | 0.98 | 0.95 | 0.93 | 0.90 | 0.88 | 0.85 |
| 200   | 1.15           | 1.125 | 1.10 | 1.08 | 1.05 | 1.03 | 1.00 | 0.98 | 0.95 | 0.93 | 0.90 | 0.88 | 0.85 |
| 250   | 1.15           | 1.124 | 1.11 | 1.08 | 1.05 | 1.02 | 1.00 | 1.63 | 0.95 | 0.92 | 0.90 | 0.88 | 0.85 |

For Ir = 0.7 to 0.9 In, additional correction factor need to be applied - please consult us.

# ComPact NSX temperature derating

Equipped with electronic trip units

Changes in temperature do not affect measurements by electronic trip units.

- The built-in CT sensors with Rogowski toroids measure the current.
- The control electronics compare the value of the current to the settings defined for 40 °C.

Because temperature has no effect on the toroid measurements, the tripping thresholds do not need to be modified.

However, the temperature rise caused by the flow of current and the ambient temperature increase the temperature of the device. To avoid reaching the thermal withstand level of the equipment, it is necessary to limit the current flowing through the device, i.e. the maximum Ir setting as a function of the temperature.

## ComPact NSX100/160/250

The table below indicates the maximum long-time (LT) protection setting Ir (A) depending on the ambient temperature.

| Type of device                          | Rating (A) | Temperature (°C) |     |     |     |     |     |     |
|---|------------|------------------|-----|-----|-----|-----|-----|-----|
|   |            | 40               | 45  | 50  | 55  | 60  | 65  | 70  |
| <b>NSX100/160</b>                       |            |                  |     |     |     |     |     |     |
| Fixed, plug-in or withdrawable          | 100        | no derating      |     |     |     |     |     |     |
|   | 160        | no derating      |     |     |     |     |     |     |
| <b>NSX250 + MicroLogic 2.2/5.2/6.2</b>  |            |                  |     |     |     |     |     |     |
| Fixed                                   | 250        | 250              | 250 | 250 | 245 | 237 | 230 | 225 |
| Plug-in or withdr.                      | 250        | 250              | 245 | 237 | 230 | 225 | 220 | 215 |
| <b>NSX250 + MicroLogic Vigi 4.2/7.2</b> |            |                  |     |     |     |     |     |     |
| Fixed                                   | 250        | 250              | 250 | 245 | 237 | 230 | 225 | 218 |
| Plug-in or withdr.                      | 250        | 225              | 220 | 215 | 210 | 205 | 198 | 190 |

## ComPact NSX400 and 630

The table below indicates the maximum long-time (LT) protection setting Ir (A) depending on the ambient temperature.

| Type of device                           | Rating (A) | Temperature (°C) |     |     |     |     |     |     |
|--|------------|------------------|-----|-----|-----|-----|-----|-----|
|  |            | 40               | 45  | 50  | 55  | 60  | 65  | 70  |
| <b>NSX400 + MicroLogic 2.3/5.3/6.3</b>   |            |                  |     |     |     |     |     |     |
| Fixed                                    | 400        | 400              | 400 | 400 | 390 | 380 | 370 | 360 |
| Plug-in/withdr.                          | 400        | 400              | 390 | 380 | 370 | 360 | 350 | 340 |
| <b>NSX400 + MicroLogic Vigi 4.3/ 7.3</b> |            |                  |     |     |     |     |     |     |
| Fixed                                    | 400        | 400              | 400 | 390 | 380 | 370 | 360 | 350 |
| Plug-in/withdr.                          | 400        | 400              | 390 | 380 | 370 | 360 | 350 | 340 |
| <b>NSX630 + MicroLogic 2.3/5.3/6.3</b>   |            |                  |     |     |     |     |     |     |
| Fixed                                    | 630        | 630              | 615 | 600 | 585 | 570 | 550 | 535 |
| Plug-in/withdr.                          | 630        | 570              | 550 | 535 | 520 | 505 | 490 | 475 |
| <b>NSX630 + MicroLogic Vigi 4.3/7.3</b>  |            |                  |     |     |     |     |     |     |
| Fixed                                    | 630        | 570              | 555 | 540 | 530 | 515 | 500 | 485 |
| Plug-in/withdr.                          | 630        | 480              | 470 | 457 | 445 | 435 | 420 | 405 |

Example. A fixed ComPact NSX400 equipped with a MicroLogic can have a maximum Ir setting of:

- 400 A up to 50 °C
- 380 A up to 60 °C.

# ComPact NSX temperature derating

## Equipped with electronic trip units

### Additional derating coefficient for an add-on module

For **fixed** or **plug-in / withdrawable** circuit breakers, the addition of a:

- Vigi add-on
- Vigi add-on Alarm
- ammeter module
- current-transformer module

can modify the derating values. Apply the coefficients shown below.

#### Derating of a ComPact NSX equipped with a MicroLogic trip unit

| Type of device          | Circuit breaker         | MicroLogic type | Vigi add-on or Vigi add-on Alarm | PowerTag NSX | Coupling busbar | Current transformer |      |   |   |  |
|-------------------------|-------------------------|-----------------|----------------------------------|--------------|-----------------|---------------------|------|---|---|--|
| Fixed                   | NSX100                  | 2.2/5.2/6.2     | 1                                | 1            | 1               | 1                   |      |   |   |  |
|                         |                         | 4.2/7.2         | -                                |              | 1               |                     |      |   |   |  |
|                         | NSX160                  | 2.2/5.2/6.2     | 1                                |              | 1               |                     |      |   |   |  |
|                         |                         | 4.2/7.2         | -                                |              | 1               |                     |      |   |   |  |
|                         | NSX250                  | 2.2/5.2/6.2     | 1                                |              | 1               |                     |      |   |   |  |
|                         |                         | 4.2/7.2         | -                                |              | 0.95            |                     |      |   |   |  |
| Plug-in or withdrawable | NSX100                  | 2.2/5.2/6.2     | 1                                | -            | -               |                     |      |   |   |  |
|                         |                         | 4.2/7.2         | -                                |              | -               |                     |      |   |   |  |
|                         | NSX160                  | 2.2/5.2/6.2     | 1                                |              | -               |                     |      |   |   |  |
|                         |                         | 4.2/7.2         | -                                |              | -               |                     |      |   |   |  |
|                         | NSX250                  | 2.2/5.2/6.2     | 0.86                             |              | -               |                     |      |   |   |  |
|                         |                         | 4.2/7.2         | -                                |              | -               |                     |      |   |   |  |
| Fixed                   | NSX400                  | 2.3/5.3/6.3     | 0.97                             | 0.97         | 1               | 1                   |      |   |   |  |
|                         |                         | 4.3/7.3         | -                                |              | 0.97            |                     |      |   |   |  |
|                         | NSX630                  | 2.3/5.3/6.3     | 0.9                              |              | 0.9             |                     | 1    |   |   |  |
|                         |                         | 4.3/7.3         | -                                |              |                 |                     | 0.9  |   |   |  |
|                         | Plug-in or withdrawable | NSX400          | 2.3/5.3/6.3                      |              |                 |                     | 0.97 | 1 | - |  |
|                         |                         |                 | 4.3/7.3                          |              |                 |                     | -    |   | - |  |
| NSX630                  |                         | 2.3/5.3/6.3     | 0.9                              | -            |                 |                     |      |   |   |  |
|                         |                         | 4.3/7.3         | -                                | -            |                 |                     |      |   |   |  |

**Note:**

- Coupling busbar is forbidden with Vigi add-on.
- Current transformer is forbidden with Vigi add-on and coupling busbar.
- Coupling busbar is forbidden with withdrawable installation.
- To provide the Visu function, ComPact NSX circuit breakers, with or without a Vigi add-on, are combined with INV switch-disconnectors. Tripping values for the selected combination are indicated in the ComPact INS/INV catalog.

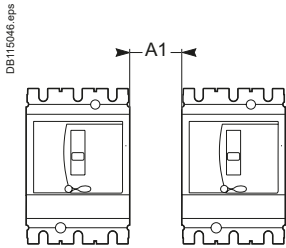


# ComCompact NSX installation in switchboards

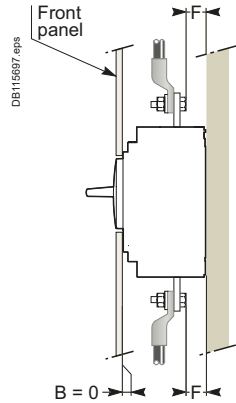
## Installation example

### Safety clearance

Minimum distance between two adjacent circuit breakers



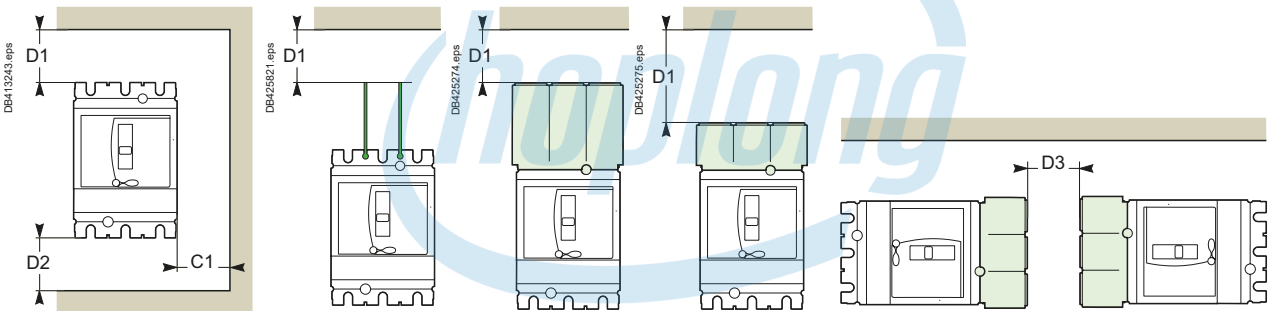
Minimum distance between circuit breaker and front or rear panels



Bare or painted sheetmetal

**Note:** if  $F < 8$  mm: an insulating screen or long terminal shield is mandatory (see page C-23).

Minimum distance between circuit breaker and top, bottom or side panels



Devices without accessories.

Devices with interphase barriers or long or short terminal shields.

Short terminal shield rear connected.

Minimum safety clearances for ComCompact NSX100 to 630

| Operating voltage                      | Clearance (mm)  |                               |    |    |    |     |     |    |
|--|-----------------|-------------------------------|----|----|----|-----|-----|----|
|  | Between devices | Between device and sheetmetal |    |    |    |     |     |    |
|  |                 | C1                            | D1 | D2 | C1 | D1  | D2  | D3 |
| <b>U ≤ 440 V</b>                       |                 |                               |    |    |    |     |     |    |
| for devices equipped with:             |                 |                               |    |    |    |     |     |    |
| ■ no accessories                       | 0               | 0                             | 30 | 30 | 5  | 40  | 40  | -  |
| ■ short terminal shields               | 0               | 0                             | 30 | 30 | 5  | 40  | 40  | 50 |
| ■ interphase barriers                  | 0               | 0                             | 0  | 0  | 5  | 0   | 0   | -  |
| ■ long terminal shields                | 0               | 0                             | 0  | 0  | 0  | 0   | 0   | -  |
| <b>440 V &lt; U ≤ 500 V</b>            |                 |                               |    |    |    |     |     |    |
| for devices equipped with:             |                 |                               |    |    |    |     |     |    |
| ■ short terminal shields               | 0               | 0                             | 30 | 30 | 10 | 40  | 40  | 50 |
| ■ interphase barriers <sup>[1]</sup>   | 0               | 0                             | 0  | 0  | 20 | 10  | 10  | -  |
| ■ long terminal shields <sup>[2]</sup> | 0               | 0                             | 0  | 0  | 10 | 10  | 10  | -  |
| <b>U &gt; 500 V</b>                    |                 |                               |    |    |    |     |     |    |
| for devices equipped with:             |                 |                               |    |    |    |     |     |    |
| ■ short terminal shields               | 0               | 10                            | 50 | 50 | 20 | 100 | 100 | 50 |
| ■ long terminal shields                | 0               | 10                            | 30 | 30 | 20 | 40  | 40  | -  |

[1] Only for NSX100 to 250.

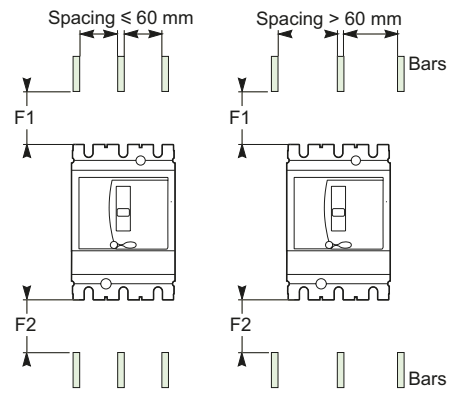
[2] For all cases.

### Clearances with respect to live bare busbars

Minimum clearances for ComCompact NSX100 to 630

| Operating voltage | Clearances with respect to live bare busbars                      |     |                 |     |
|-------------------|---|-----|-----------------|-----|
|                   | spacing ≤ 60 mm   |     | spacing > 60 mm |     |
|                   | F1  | F2  | F1              | F2  |
| U < 440 V         | 350   | 350 | 80              | 80  |
| 440 V ≤ U ≤ 500 V | 350   | 350 | 120             | 120 |
| U > 500 V         | prohibited: insulating screen required between device and busbars |     |                 |     |

These clearances can be reduced for special installations as long as the configuration is checked by tests.



Live busbars.

# ComPact NSX power loss/ resistance

## Equipped with thermal-magnetic trip units

ComPact NSX thermal power loss values are used to calculate total temperature rise in the switchboard in which the circuit breakers are installed.

The values indicated in the tables below are typical values for a device at full rated load and 50/60 Hz.

**Power loss per pole (P/pole) in Watts (W)**

The value indicated is the power loss at  $I_N$ , 50/60 Hz, for a three-pole or four-pole circuit breaker. Measurement and calculation of power loss are carried out in compliance with the recommendations of Annex G of standard IEC 60947-2.

**Resistance per pole (R/pole) in milliohms (mΩ)**

The value of the resistance per pole is provided as a general indication for a new device.

The value of the contact resistance must be determined on the basis of the measured voltage drop, in accordance with the manufacturer's test procedure (ABT instruction document no. 1 - BEE - 02.2 -A).

**Note:** this measurement is not sufficient to determine the quality of the contacts, i.e. the capacity of the circuit breaker to carry its rated current.

**Additional power loss**

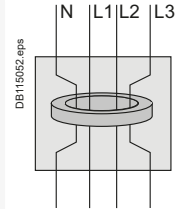
Additional power loss is equal to the sum of the power dissipated by the following:

- **Vigi add-on:** note that the deviation of the N and L3 bars required to pass through the toroid results in higher power losses compared to those of the L1 and L2 bars (diagram opposite). When calculating total power loss, use L1, L2, L3 for a 3P device and N, L1, L2, L3 for a 4P device
- disconnecting contacts (plug-in and withdrawable devices)
- ammeter module
- transformer module.

**Calculation of total power loss**

Total power loss at full rated load and 50/60 Hz is equal to the sum of the device and additional power losses per pole multiplied by the number of poles (2, 3 or 4).

If a Vigi is installed, it is necessary to differentiate between N and L3 on one hand and L1 and L2 on the other.



With a Vigi add-on, the deviation of the N and L3 bars required to pass through the toroid results in higher power losses compared to those of the L1 and L2 bars.

**ComPact NSX100 to 250 equipped with TM-D and TM-G trip units**

| Type of device | Fixed device |          |        | Additional power / pole |                     |                      |                   |                |                 |                     |
|----------------|--------------|----------|--------|-------------------------|---------------------|----------------------|-------------------|----------------|-----------------|---------------------|
|                | 3/4 poles    | Rat. (A) | R/pole | P/pole                  | Vigi add-on (N, L3) | Vigi add-on (L1, L2) | Plug-in / withdr. | Ammeter module | Transfo. module | PowerTag NSX module |
| NSX100         | 16           | 11.42    | 2.92   | 0                       | 0                   | 0                    | 0                 | 0              | 0               | 0                   |
|                | 25           | 6.42     | 4.01   | 0                       | 0                   | 0.1                  | 0                 | 0              | 0               | 0                   |
|                | 32           | 3.94     | 4.03   | 0.06                    | 0.03                | 0.15                 | 0.1               | 0.1            | 0.1             | 0                   |
|                | 40           | 3.42     | 5.47   | 0.10                    | 0.05                | 0.2                  | 0.1               | 0.1            | 0.1             | 0                   |
|                | 50           | 1.64     | 4.11   | 0.15                    | 0.08                | 0.3                  | 0.1               | 0.1            | 0.1             | 0.1                 |
|                | 63           | 2.17     | 8.61   | 0.3                     | 0.15                | 0.4                  | 0.1               | 0.1            | 0.1             | 0.1                 |
|                | 80           | 1.37     | 8.77   | 0.4                     | 0.2                 | 0.6                  | 0.1               | 0.1            | 0.1             | 0.1                 |
|                | 100          | 0.88     | 8.8    | 0.7                     | 0.35                | 1                    | 0.2               | 0.2            | 0.2             | 0.2                 |
| NSX160         | 80           | 1.26     | 8.06   | 0.4                     | 0.2                 | 0.6                  | 0.1               | 0.1            | 0.1             | 0.1                 |
|                | 100          | 0.77     | 7.7    | 0.7                     | 0.35                | 1                    | 0.2               | 0.2            | 0.2             | 0.2                 |
|                | 125          | 0.69     | 10.78  | 1.1                     | 0.55                | 1.6                  | 0.3               | 0.3            | 0.3             | 0.3                 |
|                | 160          | 0.55     | 13.95  | 1.8                     | 0.9                 | 2.6                  | 0.5               | 0.5            | 0.5             | 0.5                 |
| NSX250         | 125          | 0.61     | 9.45   | 1.1                     | 0.55                | 1.6                  | 0.3               | 0.3            | 0.3             | 0.3                 |
|                | 160          | 0.46     | 11.78  | 1.8                     | 0.9                 | 2.6                  | 0.5               | 0.5            | 0.5             | 0.5                 |
|                | 200          | 0.39     | 15.4   | 2.8                     | 1.4                 | 4                    | 0.8               | 0.8            | 0.8             | 0.8                 |
|                | 250          | 0.3      | 18.75  | 4.4                     | 2.2                 | 6.3                  | 1.3               | 1.3            | 1.3             | 1.3                 |

**ComPact NSX100 to 630 equipped with MA/1.3-M trip units**

| Type of device | Fixed device |          |        | Additional power / pole |                     |                      |                   |                |                 |                     |
|----------------|--------------|----------|--------|-------------------------|---------------------|----------------------|-------------------|----------------|-----------------|---------------------|
|                | 3 poles      | Rat. (A) | R/pole | P/pole                  | Vigi add-on (N, L3) | Vigi add-on (L1, L2) | Plug-in / withdr. | Ammeter module | Transfo. module | PowerTag NSX module |
| NSX100         | 2.5          | 148.42   | 0.93   | 0                       | 0                   | 0                    | 0                 | 0              | 0               | 0                   |
|                | 6.3          | 99.02    | 3.93   | 0                       | 0                   | 0                    | 0                 | 0              | 0               | 0                   |
|                | 12.5         | 4.05     | 0.63   | 0                       | 0                   | 0                    | 0                 | 0              | 0               | 0                   |
|                | 25           | 1.66     | 1.04   | 0                       | 0                   | 0                    | 0.1               | 0              | 0               | 0                   |
|                | 50           | 0.67     | 1.66   | 0.2                     | 0.1                 | 0.3                  | 0.1               | 0.1            | 0.1             | 0.1                 |
|                | 100          | 0.52     | 5.2    | 0.7                     | 0.35                | 1                    | 0.2               | 0.2            | 0.2             | 0.2                 |
| NSX160         | 150          | 0.38     | 8.55   | 1.35                    | 0.68                | 2.6                  | 0.45              | 0.45           | 0.45            | 0.5                 |
| NSX250         | 220          | 0.3      | 14.52  | 2.9                     | 1.45                | 4.89                 | 0.97              | 0.97           | 0.97            | 1                   |
| NSX400         | 320          | 0.12     | 12.29  | 3.2                     | 1.6                 | 6.14                 | 1.54              | 1.54           | 1.54            | 1.43                |
| NSX630         | 500          | 0.1      | 25     | 13.99                   | 7                   | 15                   | 3.75              | 3.75           | 3.75            | 3.5                 |



# ComPact NSX power loss/ resistance

## Equipped with electronic trip units

The values indicated in the table below are typical values for a device at full rated load and 50/60 Hz. The definitions and information are the same as that for circuit breakers equipped with thermal-magnetic trip units.

### ComPact NSX100 to 630 equipped with MicroLogic trip units

| Type of device<br>3/4 poles            | Rating (A)   | Fixed device |            | Additional power (W)/ pole |                        |         |                   |                        |      |      |
|--|--------------|--------------|------------|----------------------------|------------------------|---------|-------------------|------------------------|------|------|
|  |              | R/pole (mΩ)  | P/Pole (w) | Vigi add-on<br>(N/L3)      | Vigi add-on<br>(L1/L2) | Plug-In | Transfo<br>Module | PowerTag<br>NSX module |      |      |
| <b>NSX + MicroLogic 2.2/5.2/6.2</b>    |              |              |            |                            |                        |         |                   |                        |      |      |
| NSX100                                 | <40 A        | 0.84         | 1.3        | 0.1                        | 0.06                   | 0.2     | 0.1               | 0                      |      |      |
|  | 40 A ≤ 100 A | 0.47         | 4.7        | 0.7                        | 0.35                   | 1       | 0.2               | 0.2                    |      |      |
| NSX160                                 | <40 A        | 0.73         | 1.2        | 0.4                        | 0.2                    | 0.6     | 0.1               | 0                      |      |      |
|  | 40 A ≤ 160 A | 0.36         | 9.2        | 1.8                        | 0.9                    | 2.6     | 0.5               | 0.5                    |      |      |
| NSX250                                 | <40 A        | 0.27         | 2.7        | 1.1                        | 0.55                   | 1.6     | 0.2               | 0                      |      |      |
|  | 40 A ≤ 250 A | 0.28         | 17.6       | 4.4                        | 2.2                    | 6.3     | 1.3               | 1.3                    |      |      |
| <b>NSX + MicroLogic 2.3/5.3/6.3</b>    |              |              |            |                            |                        |         |                   |                        |      |      |
| NSX400                                 | <400 A       | 0.12         | 19.2       | 3.2                        | 1.6                    | 9.6     | 2.4               | 2.24                   |      |      |
| NSX630                                 | <630 A       | 0.1          | 39.7       | 6.5                        | 3.25                   | 19.49   | 5.95              | 5.56                   |      |      |
| <b>NSX + MicroLogic add-on 4.2/7.2</b> |              |              |            |                            |                        |         |                   |                        |      |      |
|  |              | N/L1/L3      | L2         | N/L1/L3                    | L2                     |         |                   |                        |      |      |
| NSX100                                 | <100 A       | 0.58         | 0.49       | 5.8                        | 4.9                    | -       | -                 | 1                      | 0.2  |      |
| NSX160                                 | <160 A       | 0.48         | 0.39       | 12.3                       | 10.0                   | -       | -                 | 2.6                    | 0.5  |      |
| NSX250                                 | <250 A       | 0.4          | 0.33       | 25                         | 20.6                   | -       | -                 | 6.3                    | 1.3  |      |
| <b>NSX + MicroLogic add-on 4.3/7.3</b> |              |              |            |                            |                        |         |                   |                        |      |      |
| NSX400                                 | <400 A       | 0.16         | 0.14       | 25.6                       | 22.4                   | -       | -                 | 9.6                    | 2.4  | 2.24 |
| NSX630 <sup>[1]</sup>                  | <630 A       | 0.14         | 0.12       | 55.6                       | 47.6                   | -       | -                 | 19.49                  | 5.95 | 5.56 |

Power loss/resistance values presented above are not contractual.

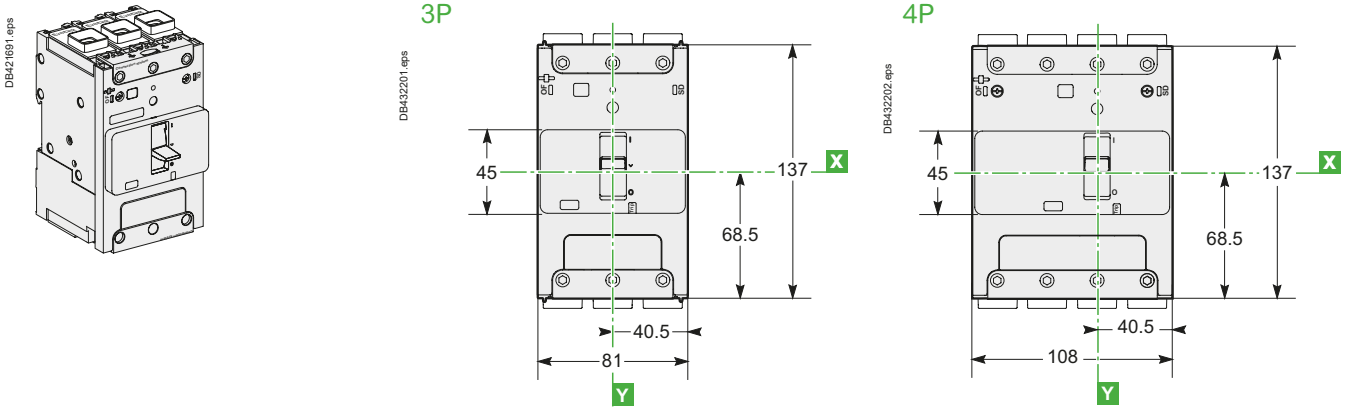
[1] The power loss values for Vigi add-on and withdrawable circuit breakers are given for 570 A.

INDUSTRIAL AUTOMATION

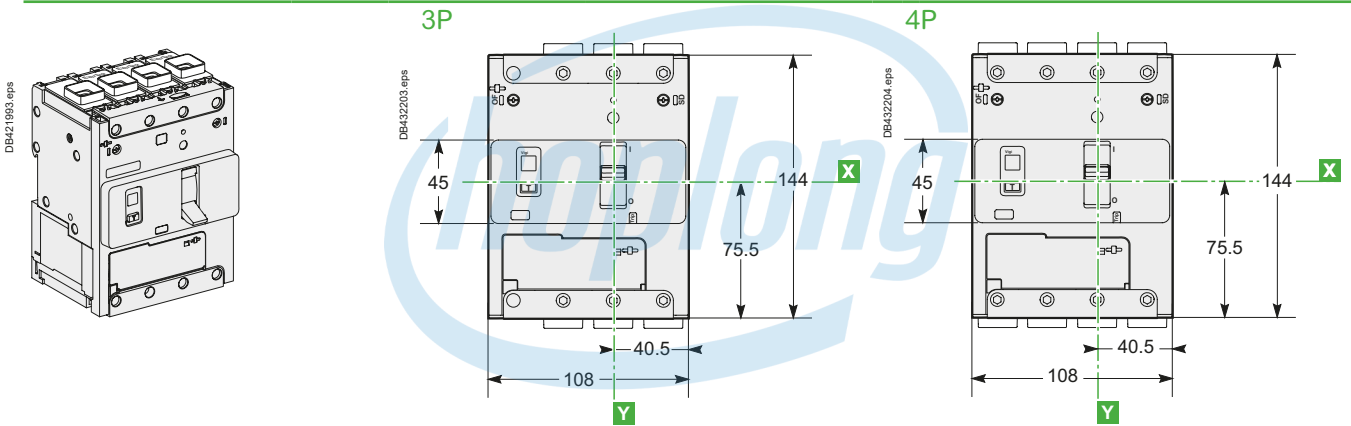
# ComPact NSXm dimensions and mounting

## Circuit breaker and switch-disconnector

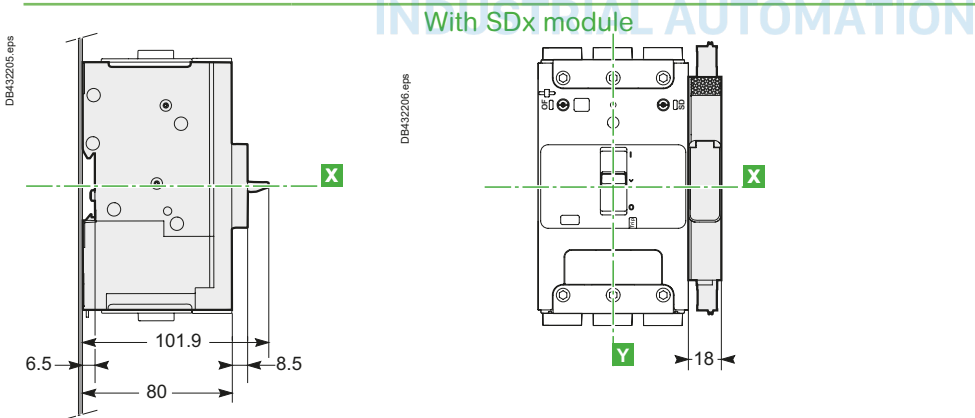
### Circuit breaker



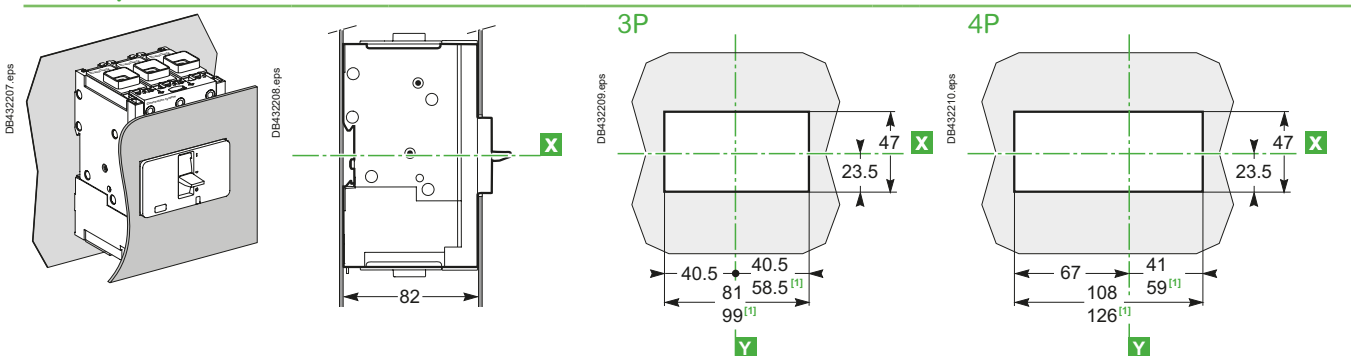
### Circuit breaker with MicroLogic Vigi 4.1



### Side view



### Front-panel cutouts



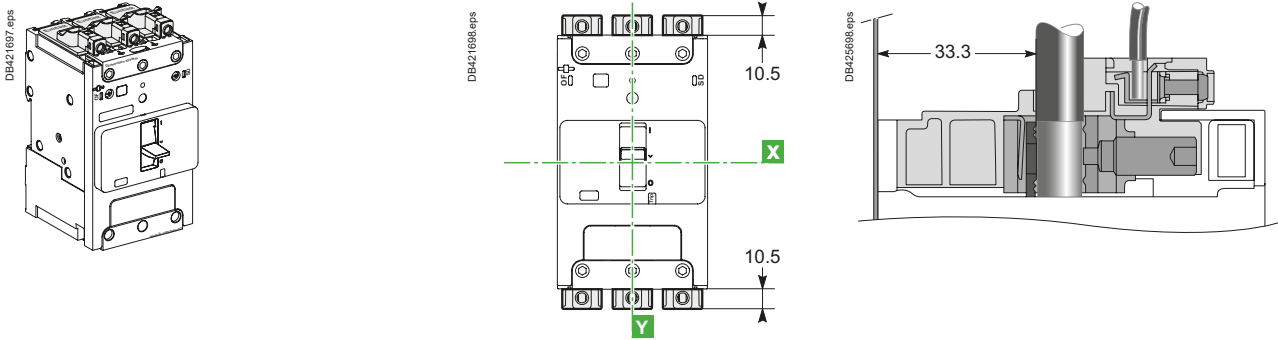
[1] With SDx module.

# ComPact NSXm dimensions and mounting

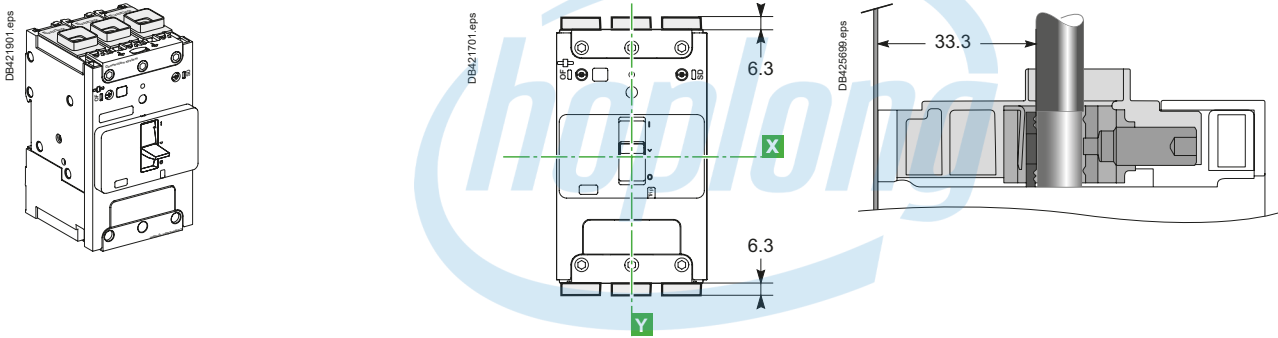
## Circuit breaker and switch-disconnector

### Connectors

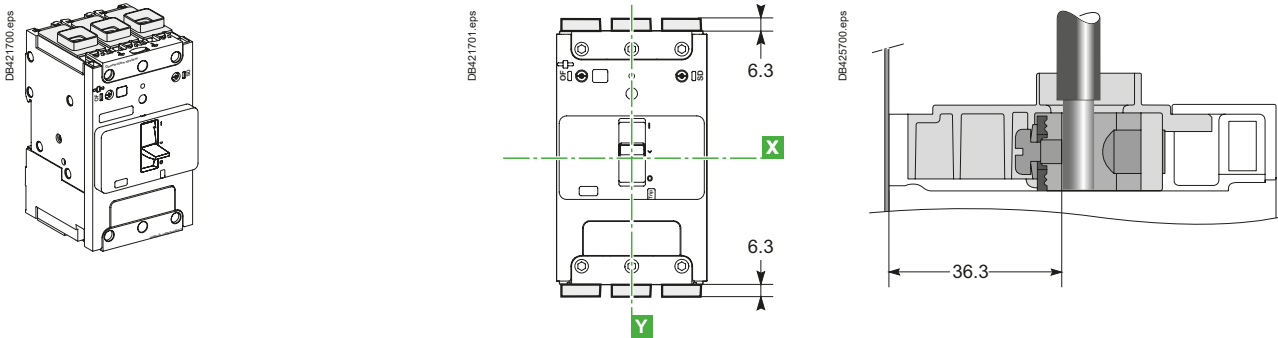
#### EverLink with control wire terminal connector



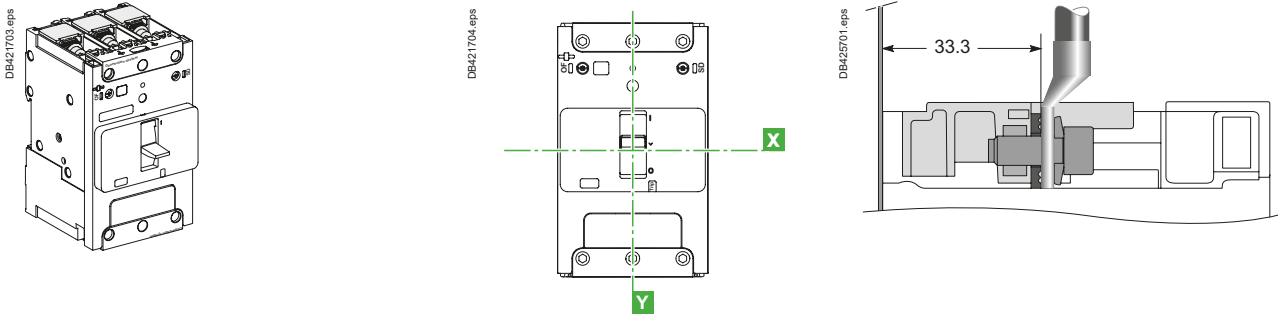
#### EverLink without control wire terminal connector



#### Mechanical lug connector



#### Compression lug / busbar connector



E

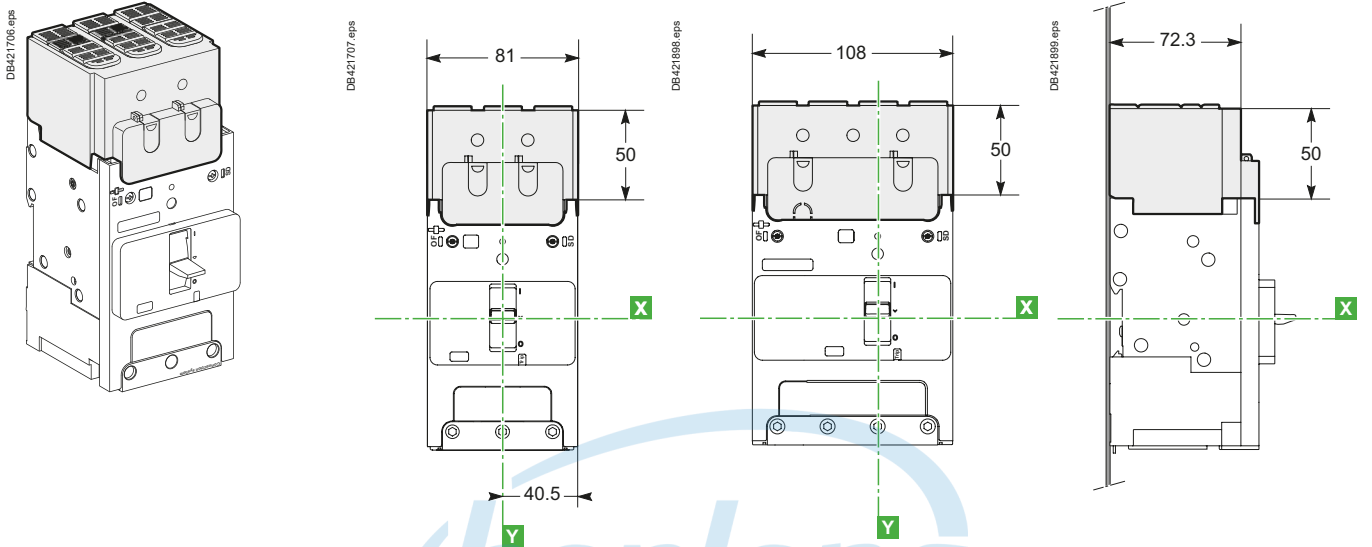
INDUSTRIAL AUTOMATION

# ComPact NSXm dimensions and mounting

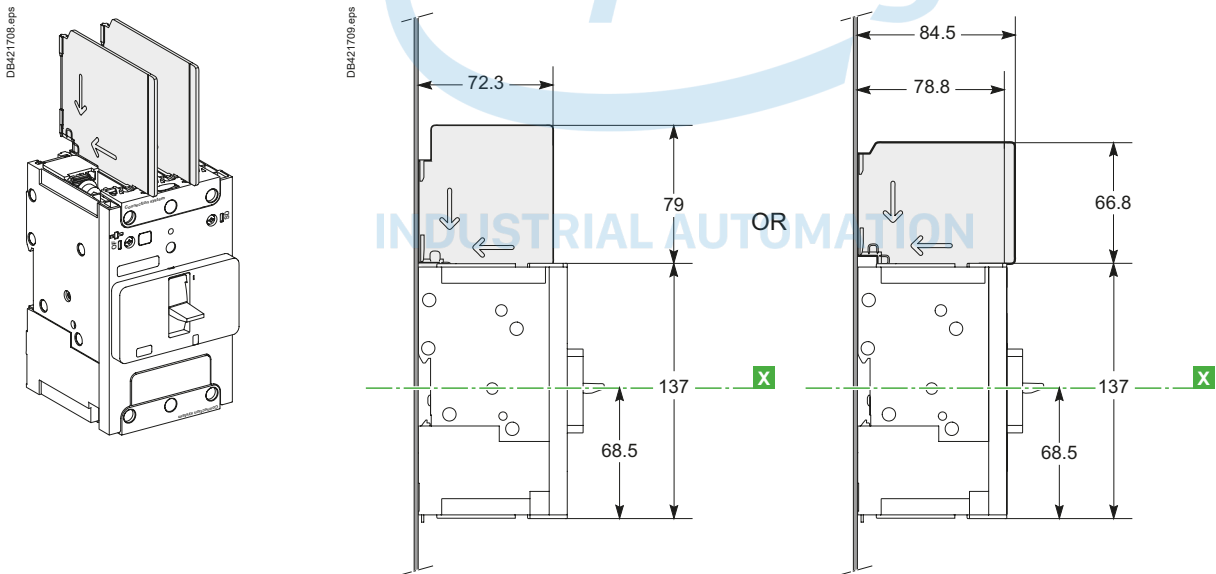
Circuit breaker and switch-disconnector

## Insulation of live parts

### Long terminal shields



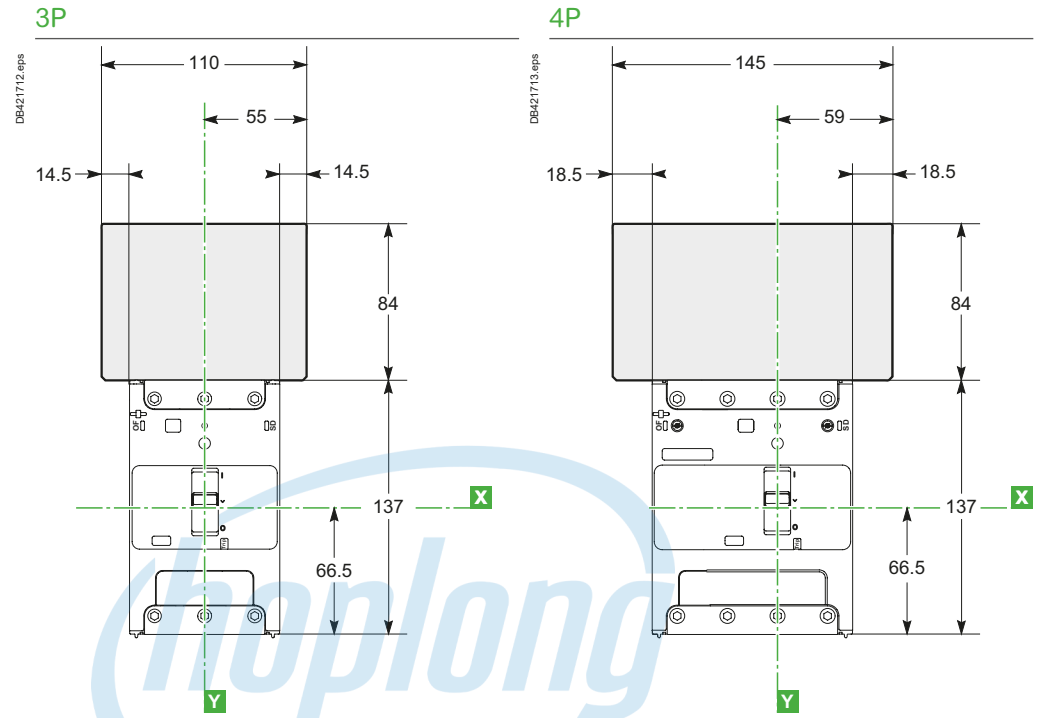
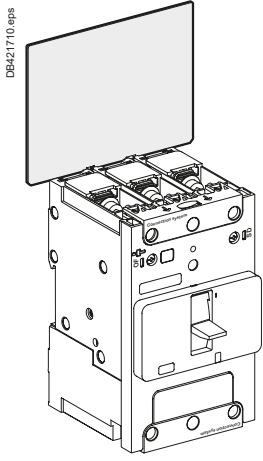
### Interphase barriers



# ComPact NSXm dimensions and mounting

## Circuit breaker and switch-disconnector

### Rear insulating screens



INDUSTRIAL AUTOMATION

E

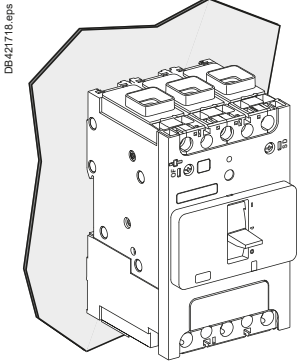


# ComPact NSXm dimensions and mounting

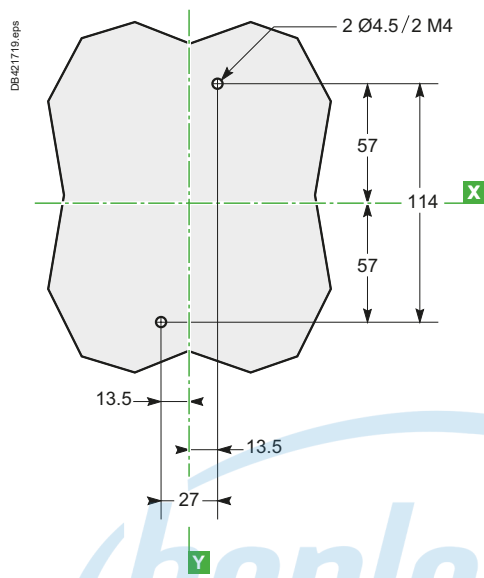
## Circuit breaker and switch-disconnector

### Mounting on backplate

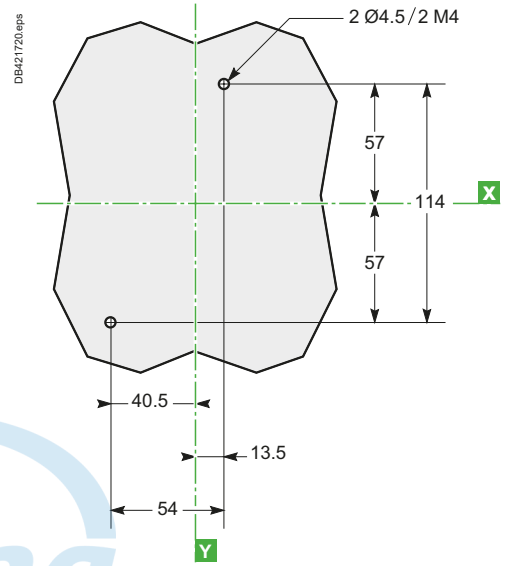
3P/4P



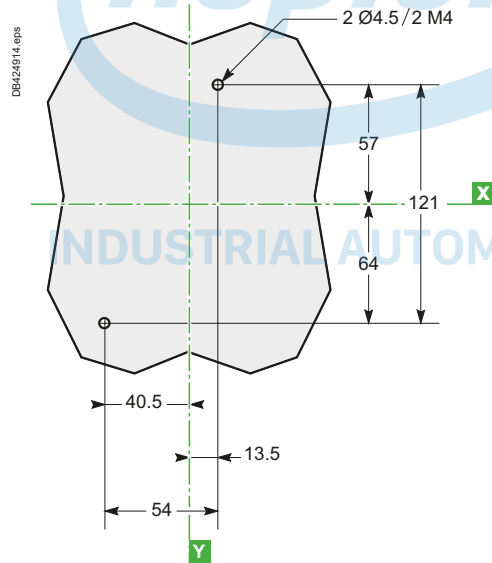
3P



4P

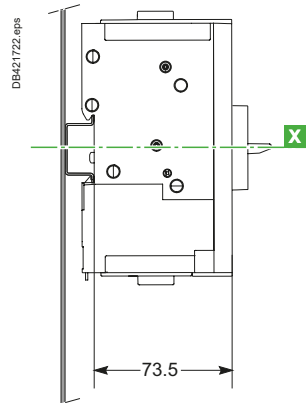
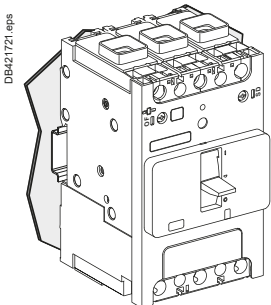


### 3P/4P Circuit breaker with MicroLogic Vigi 4.1



### Mounting on DIN rail

3P

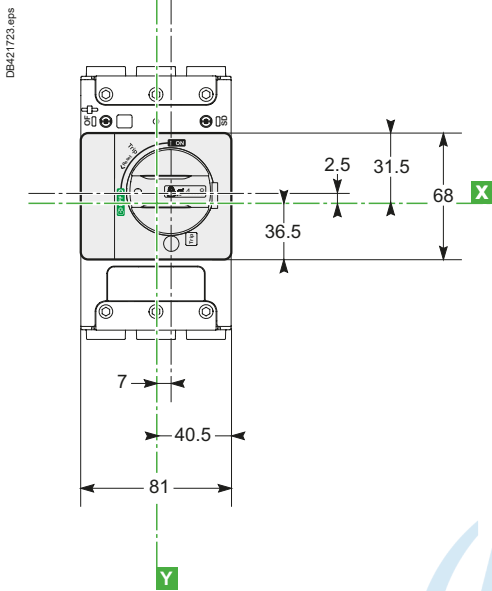


# ComPact NSXm dimensions and mounting

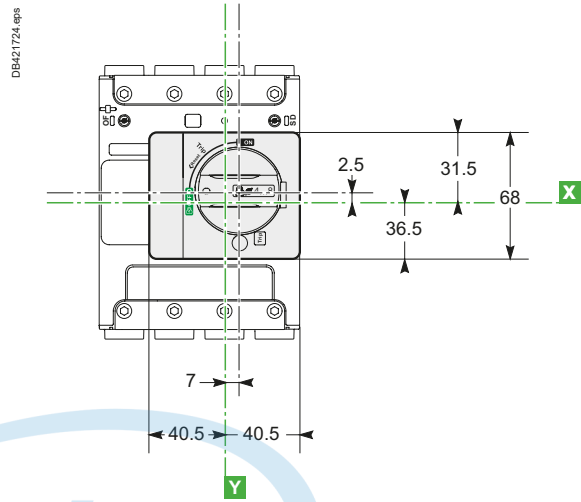
## Circuit breaker and switch-disconnector

### Direct rotary handle

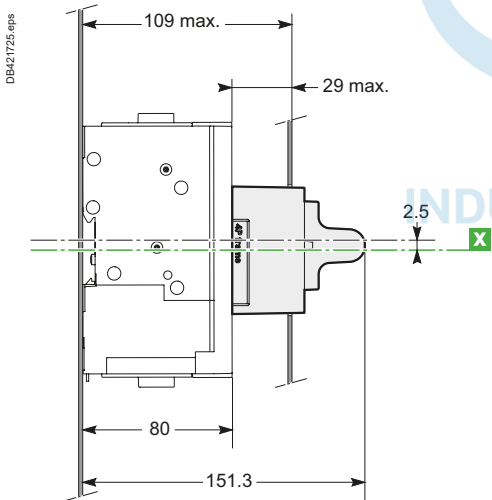
3P



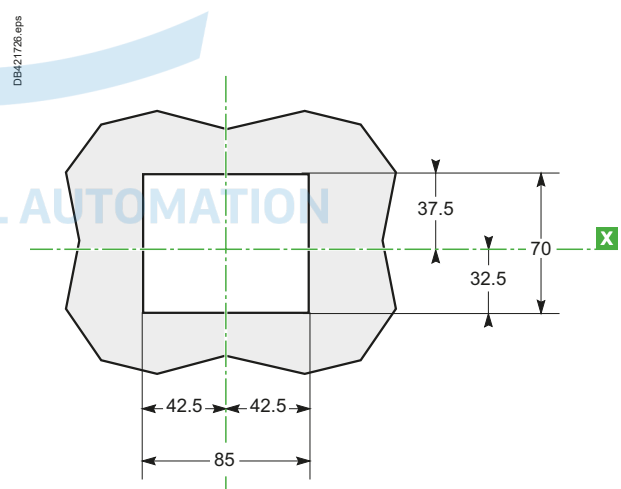
4P



Side view



Door cutout for 3P/4P



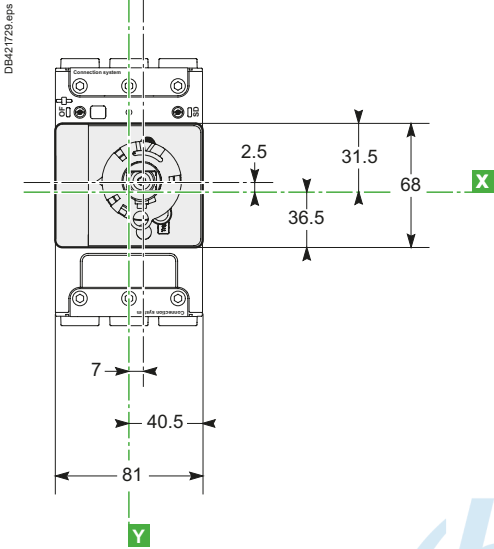
E

# ComPact NSXm dimensions and mounting

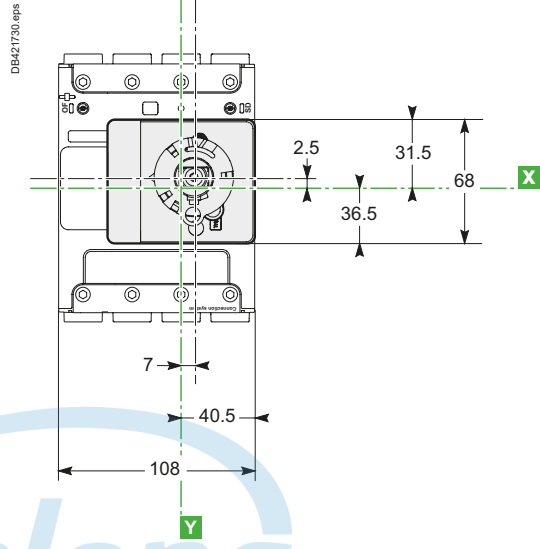
Circuit breaker and switch-disconnector

## Extended rotary handle

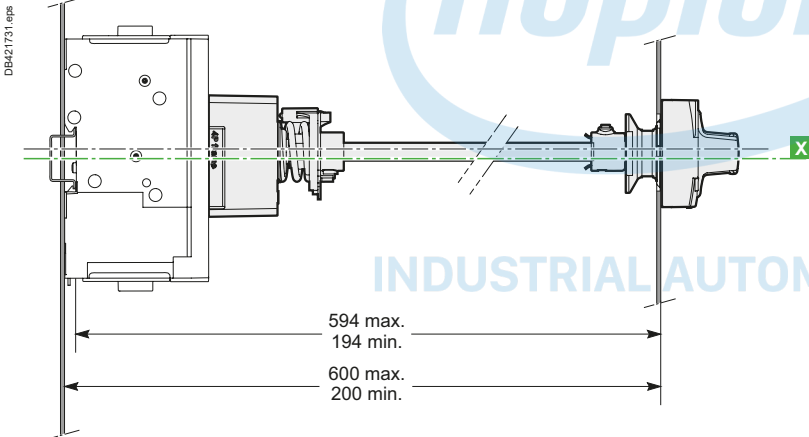
3P



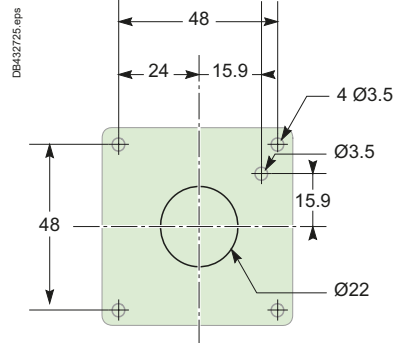
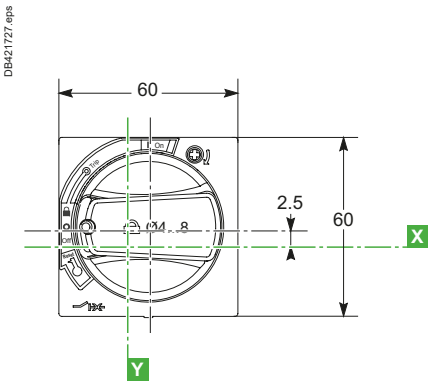
4P



3P/4P



## Dimensions and front-panel cutout

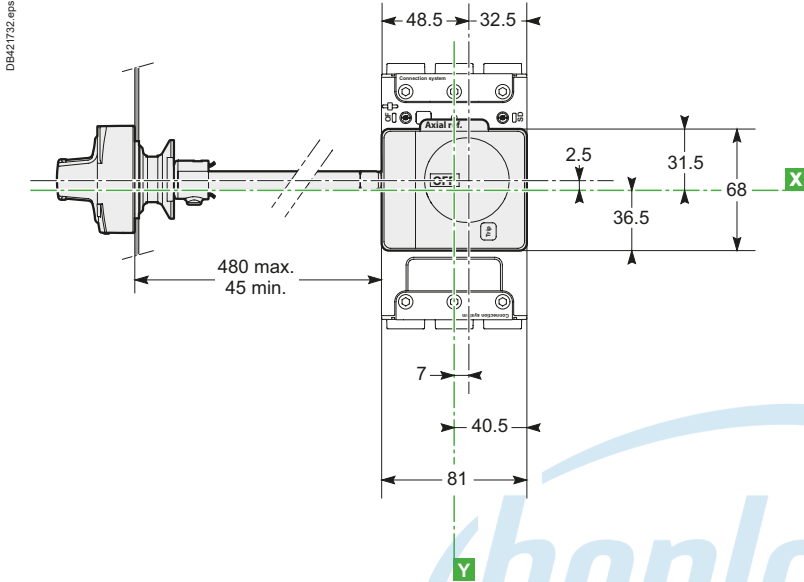


# ComPact NSXm dimensions and mounting

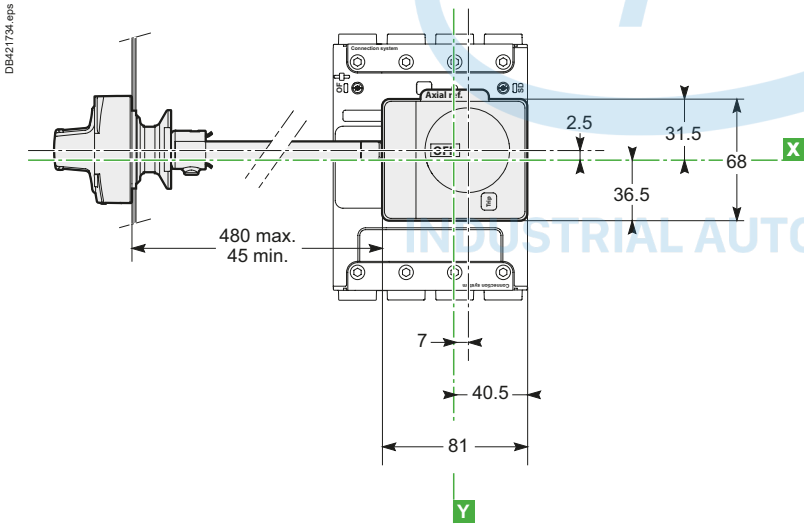
## Circuit breaker and switch-disconnector

### Side rotary handle

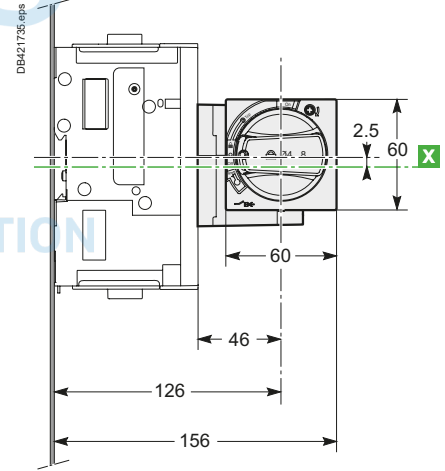
#### 3P - Extended



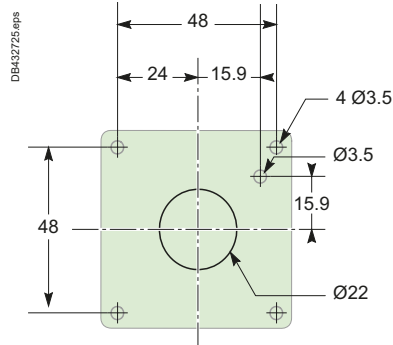
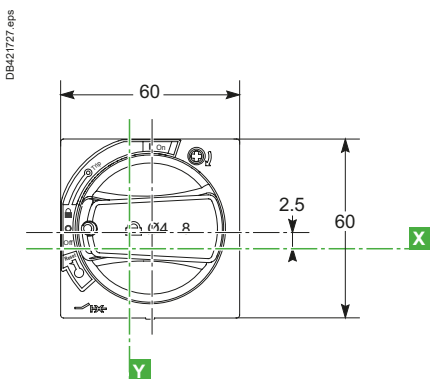
#### 4P - Extended



#### 4P - Direct



### Dimensions side rotary handle cutout



# ComPact NSXm dimensions and mounting

Circuit breaker and switch-disconnector

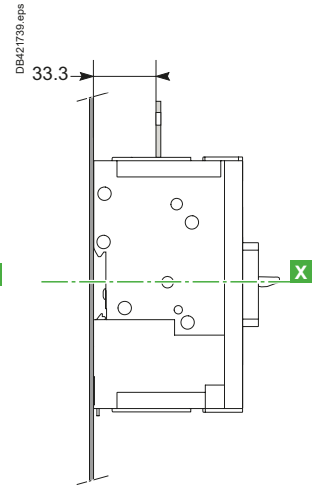
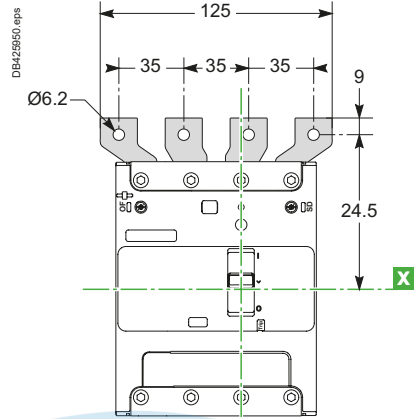
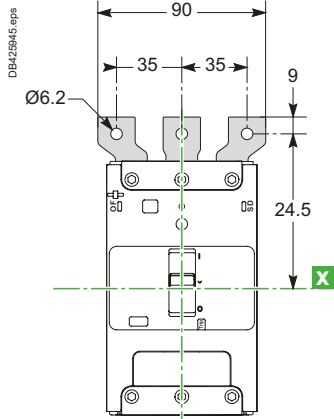
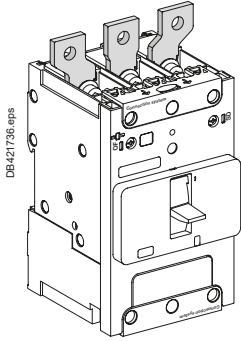
## Connection with accessories

Spreaders

3P

4P

Side view



INDUSTRIAL AUTOMATION

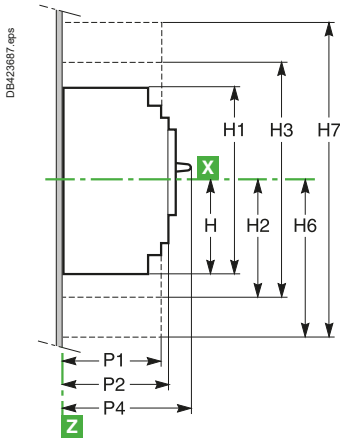




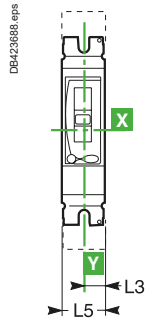
# ComPact NSX dimensions and mounting

## ComPact NSX100 to NSX250 fixed version, 1P-2P

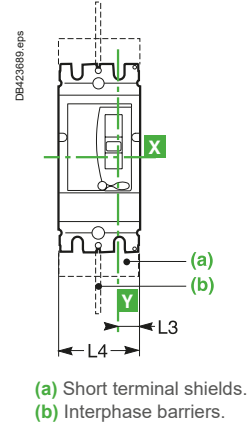
### Dimensions



1 pole



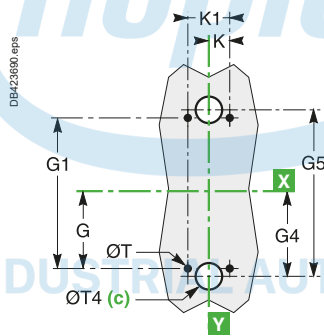
2 poles



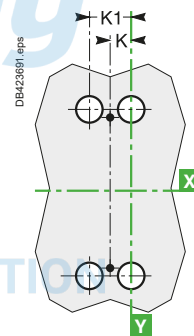
### Mounting

On backplate

1 pole

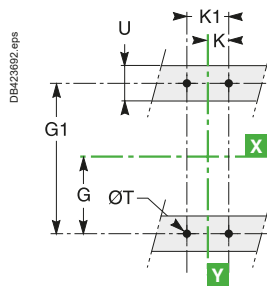


2 poles

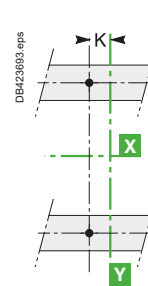


### On rails

1 pole



2 poles



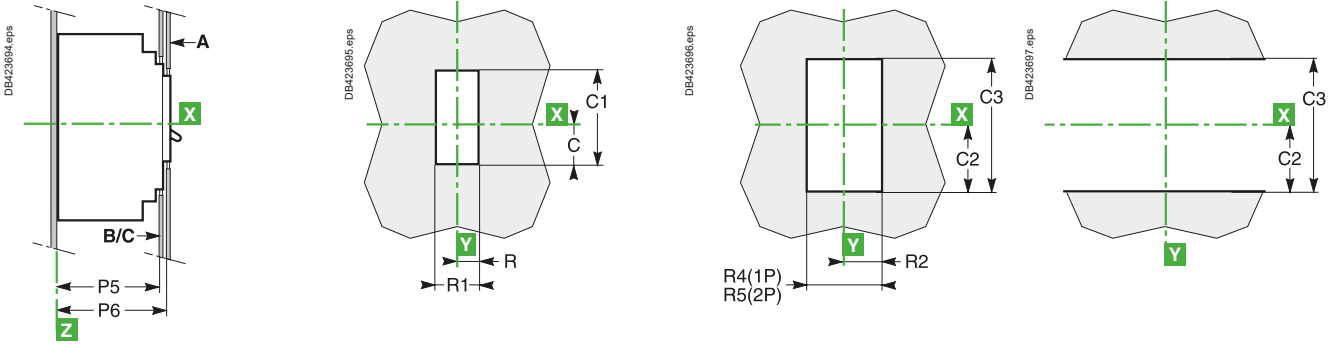
E

# ComPact NSX dimensions and mounting

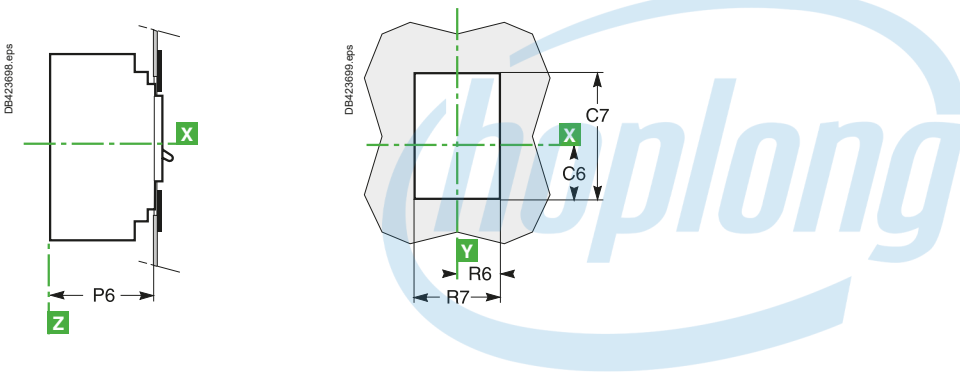
## ComPact NSX100 to NSX250 fixed version, 1P-2P

### Front-panel cutout

On backplate



### With escutcheon

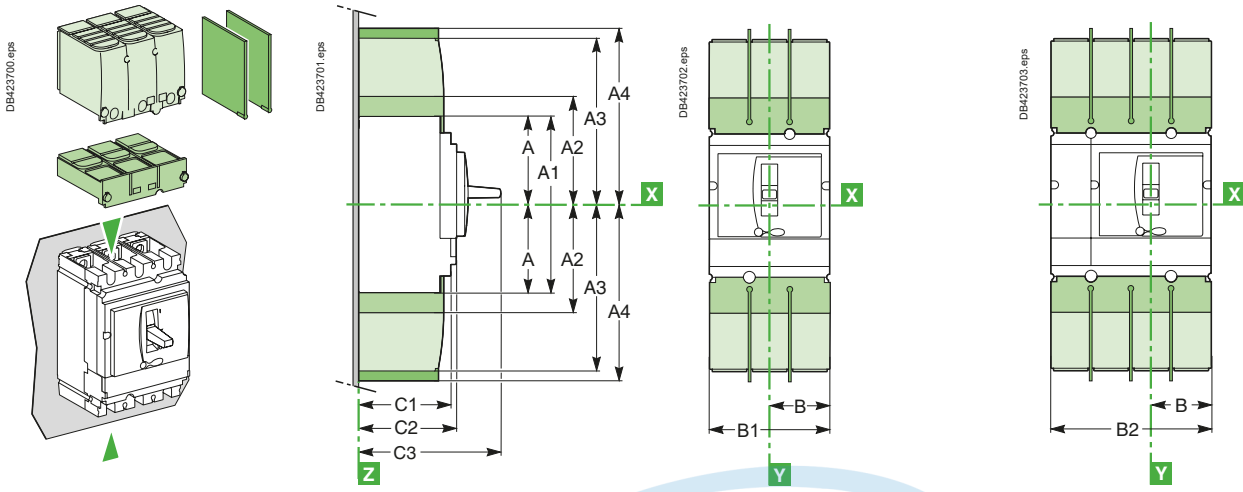


| Dimensions (mm) |     |    |     |       |       |      |      |     |      |     |      |
|-----------------|-----|----|-----|-------|-------|------|------|-----|------|-----|------|
| Type            | C   | C1 | C2  | C3    | C6    | C7   | G    | G1  | G4   | G5  | H    |
| NSX100/250      | 29  | 76 | 54  | 108   | 43    | 104  | 62.5 | 125 | 70   | 140 | 80.5 |
| Type            | H1  | H2 | H3  | H4    | H6    | H7   | K    | K1  | L3   | L4  | L5   |
| NSX100/250      | 161 | 94 | 188 | 160.5 | 178.5 | 357  | 17.5 | 35  | 17.5 | 70  | 35   |
| Type            | P1  | P2 | P4  | P5    | P6    | R    | R1   | R2  | R4   | R5  | R6   |
| NSX100/250      | 81  | 86 | 111 | 83    | 88    | 14.5 | 29   | 19  | 38   | 73  | 29   |
| Type            | R7  | ØT | ØT4 | U     |       |      |      |     |      |     |      |
| NSX100/250      | 58  | 6  | 22  | ≤ 32  |       |      |      |     |      |     |      |

# ComPact NSX dimensions and mounting

## ComPact NSX100 to 630 fixed version

### Dimensions



Interphase barriers.
  Long terminal shields (also available for NSX400/630 spreaders with 52.5 mm pitch:
  Short terminal shields.

B1 = 157.5 mm, B2 = 210 mm.

### Mounting

On backplate

**NSX100 to 250**

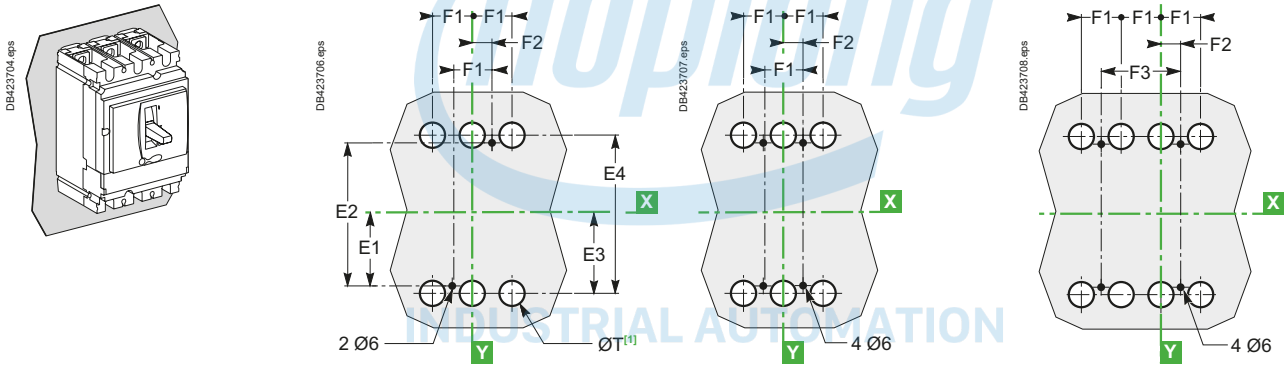
**NSX400/630 [2]**

**NSX100 to 630 [2]**

2/3P

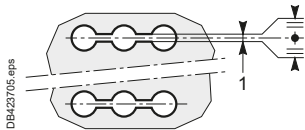
3P

4P



[2] For 630 A only:

[1] The ØT holes are required for rear connection only. For two-pole circuit breakers, the middle holes are not required.

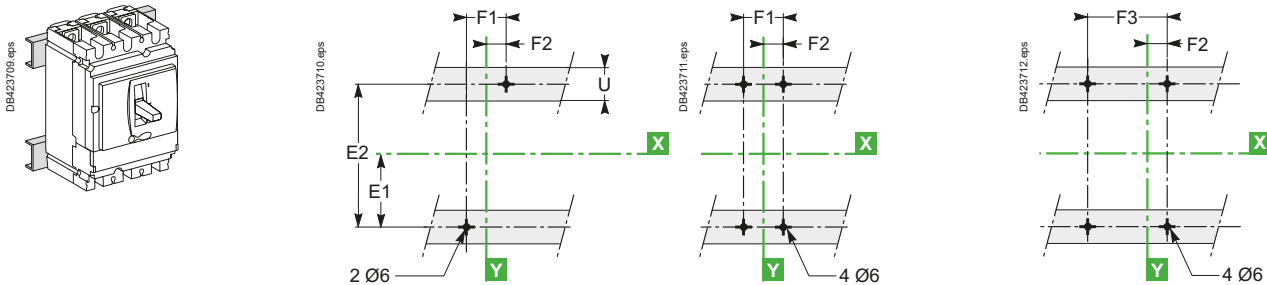


### On rails

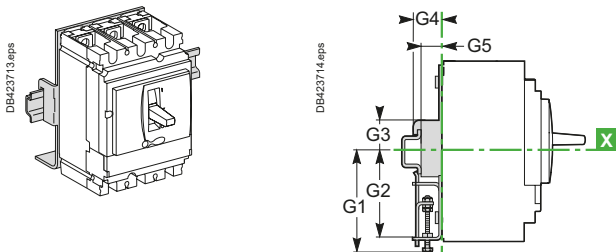
2/3P

3P

4P



### On DIN rail with adapter plate (NSX100 to 250)

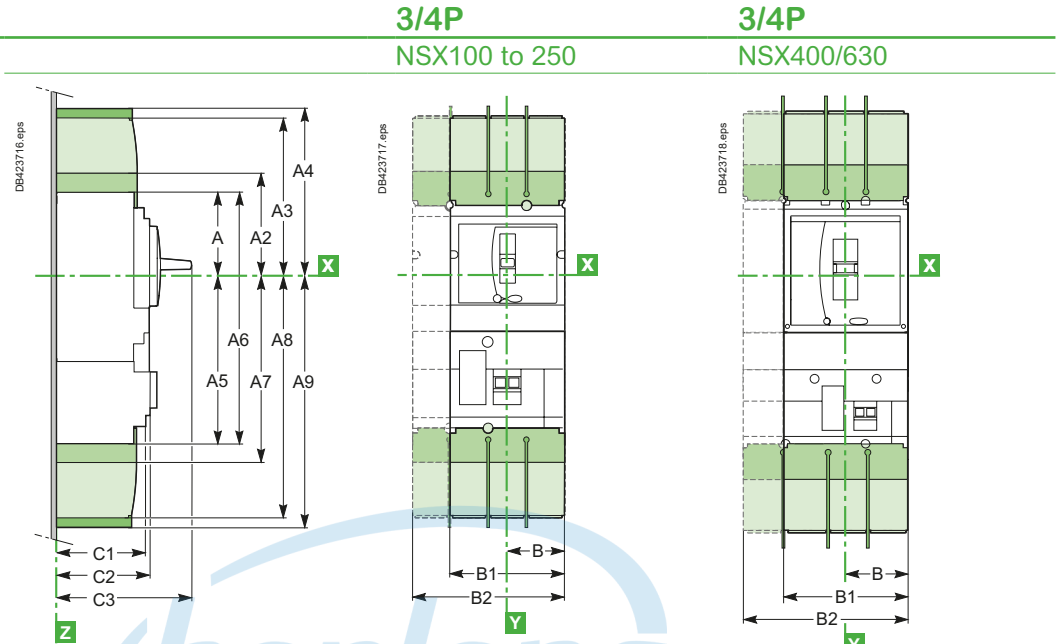
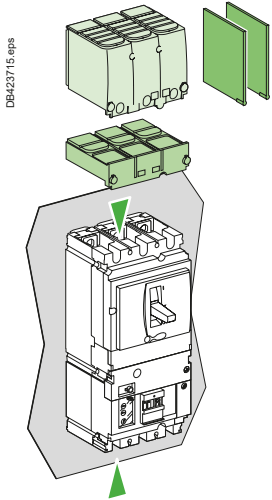


# CÔNG TY CỔ PHẦN CÔNG NGHỆ HỢP LONG Switchboard integration

## ComPact NSX dimensions and mounting

### ComPact NSX100 to 630 Vigi add-on fixed version

### Dimensions



### Mounting

On backplate

NSX100 to 250

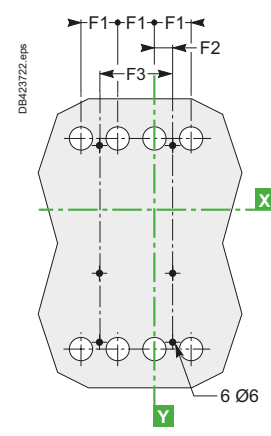
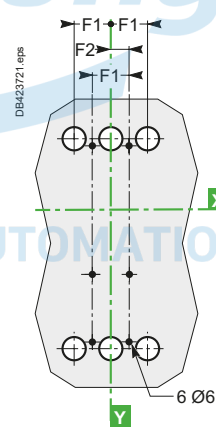
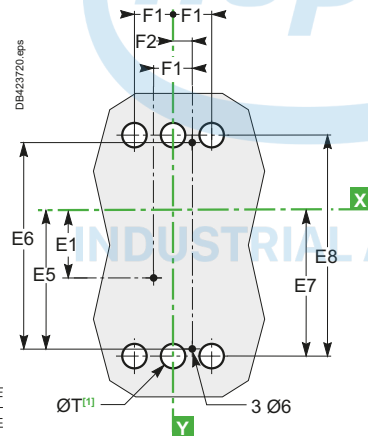
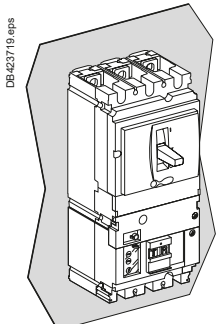
NSX400/630 [2]

NSX100 to 630 [2]

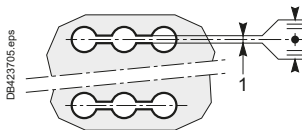
3P

3P

4P



[2] For 630 A only:



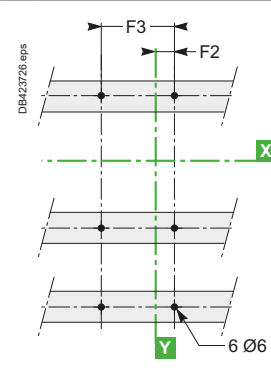
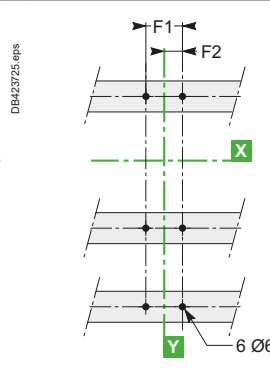
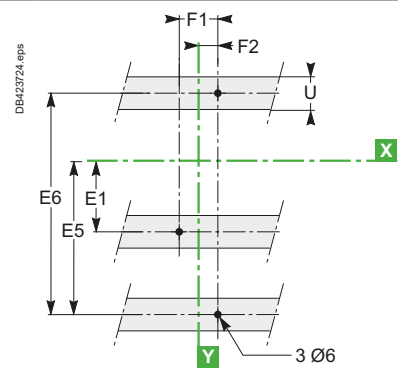
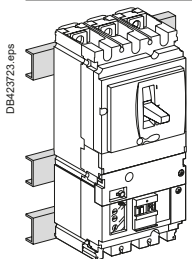
[1] The ØT holes are required for rear connection only.  
For two-pole circuit breakers, the middle holes are not required.

On rails

3P

3P

4P



| Type           | A     | A1    | A2    | A3    | A4    | A5    | A6  | A7    | A8   | A9    | B    | B1  | B2   | C1  | C2   | C3  | E1   |
|----------------|-------|-------|-------|-------|-------|-------|-----|-------|------|-------|------|-----|------|-----|------|-----|------|
| NSX100/160/250 | 80.5  | 161   | 94    | 145   | 178.5 | 155.5 | 236 | 169   | 220  | 253.5 | 52.5 | 105 | 140  | 81  | 86   | 126 | 62.5 |
| NSX400/630     | 127.5 | 255   | 142.5 | 200   | 237   | 227.5 | 355 | 242.5 | 300  | 337   | 70   | 140 | 185  | 105 | 110  | 168 | 100  |
| Type           | E2    | E3    | E4    | E5    | E6    | E7    | E8  | F1    | F2   | F3    | G1   | G2  | G3   | G4  | G5   | ØT  | U    |
| NSX100/160/250 | 125   | 70    | 140   | 137.5 | 200   | 145   | 215 | 35    | 17.5 | 70    | 95   | 75  | 13.5 | 23  | 17.5 | 24  | ≤ 32 |
| NSX400/630     | 200   | 113.5 | 227   | 200   | 300   | 213.5 | 327 | 45    | 22.5 | 90    | -    | -   | -    | -   | -    | 32  | ≤ 35 |

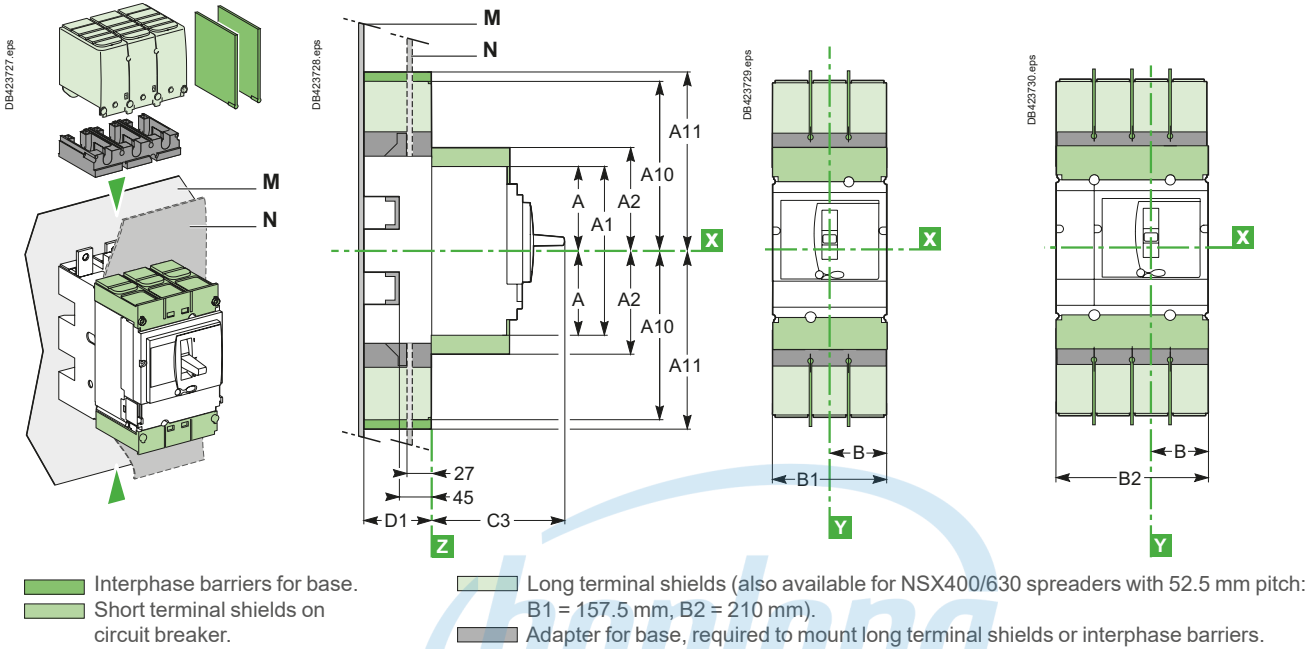
# ComPact NSX dimensions and mounting

## ComPact NSX100 to 630 plug-in version

### Dimensions

2/3P

4P



### Mounting

Through front panel (N)

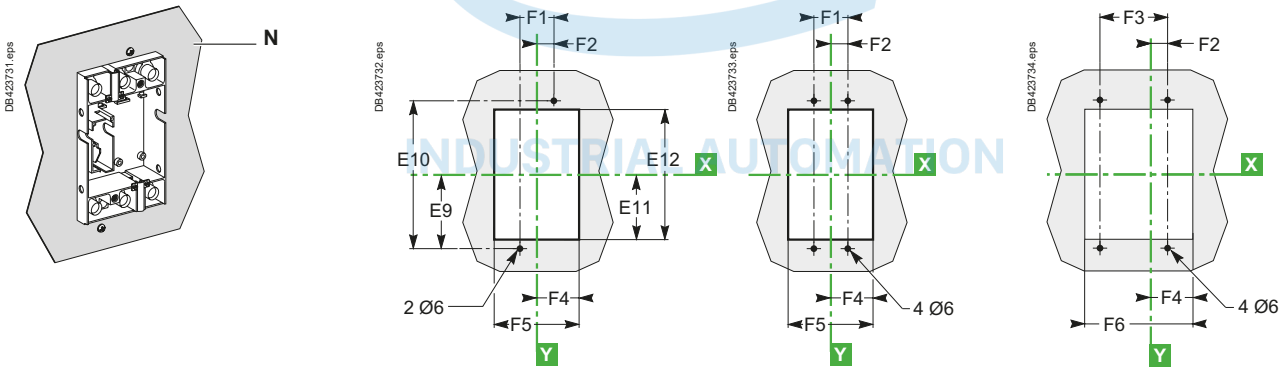
2/3P

3P

4P

NSX400/630

NSX100 to 630



# ComPact NSX dimensions and mounting

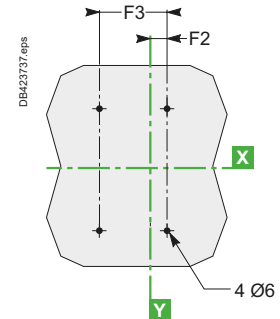
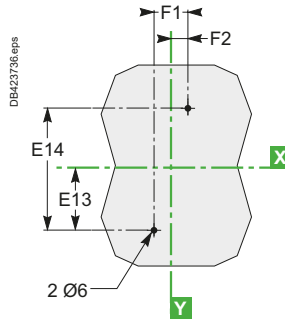
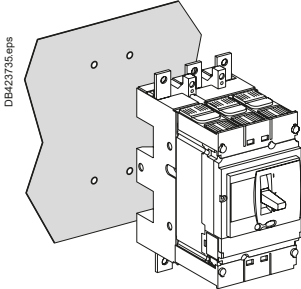
## ComPact NSX100 to 630 plug-in version

### On backplate (M)

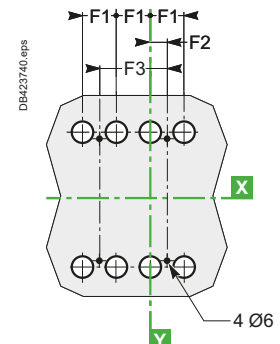
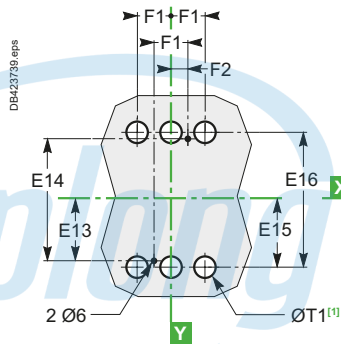
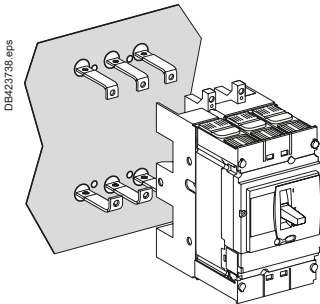
#### 2/3P

#### 4P

Front connection (an insulating screen is supplied with the base and must be fitted between the base and the backplate)

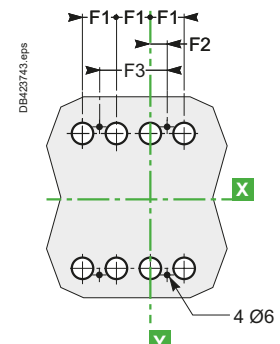
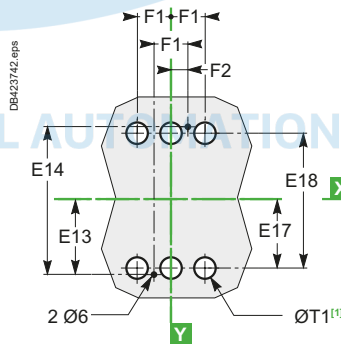
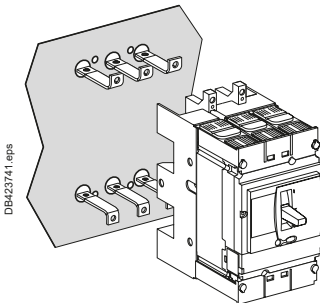


### Connection by exterior-mounted rear connectors



[1] The ØT1 holes are required for rear connection only (for two-pole circuit breakers, the middle holes are not required).

### Connection by interior-mounted rear connectors

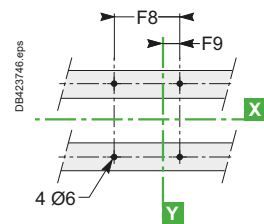
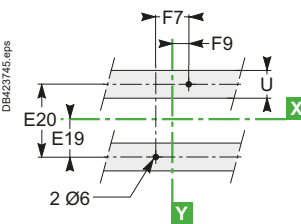
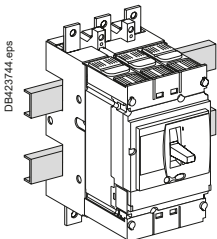


[1] The ØT1 holes are required for rear connection only (for two-pole circuit breakers, the middle holes are not required).

### On rails

#### 2/3P

#### 4P



| Type           | A     | A1  | A2    | A10  | A11 | B    | B1   | B2  | C3   | D1  | E9  | E10 | E11 | E12 | E13  | E14  | E15 |
|----------------|-------|-----|-------|------|-----|------|------|-----|------|-----|-----|-----|-----|-----|------|------|-----|
| NSX100/160/250 | 80.5  | 161 | 94    | 175  | 210 | 52.5 | 105  | 140 | 126  | 75  | 95  | 190 | 87  | 174 | 77.5 | 155  | 79  |
| NSX400/630     | 127.5 | 255 | 142.5 | 244  | 281 | 70   | 140  | 185 | 168  | 100 | 150 | 300 | 137 | 274 | 125  | 250  | 126 |
| Type           | E16   | E17 | E18   | E19  | E20 | F1   | F2   | F3  | F4   | F5  | F6  | F7  | F8  | F9  | ØT1  | U    |     |
| NSX100/160/250 | 158   | 61  | 122   | 37.5 | 75  | 35   | 17.5 | 70  | 54.5 | 109 | 144 | 70  | 105 | 35  | 24   | ≤ 32 |     |
| NSX400/630     | 252   | 101 | 202   | 75   | 150 | 45   | 22.5 | 90  | 71.5 | 143 | 188 | 100 | 145 | 50  | 33   | ≤ 35 |     |



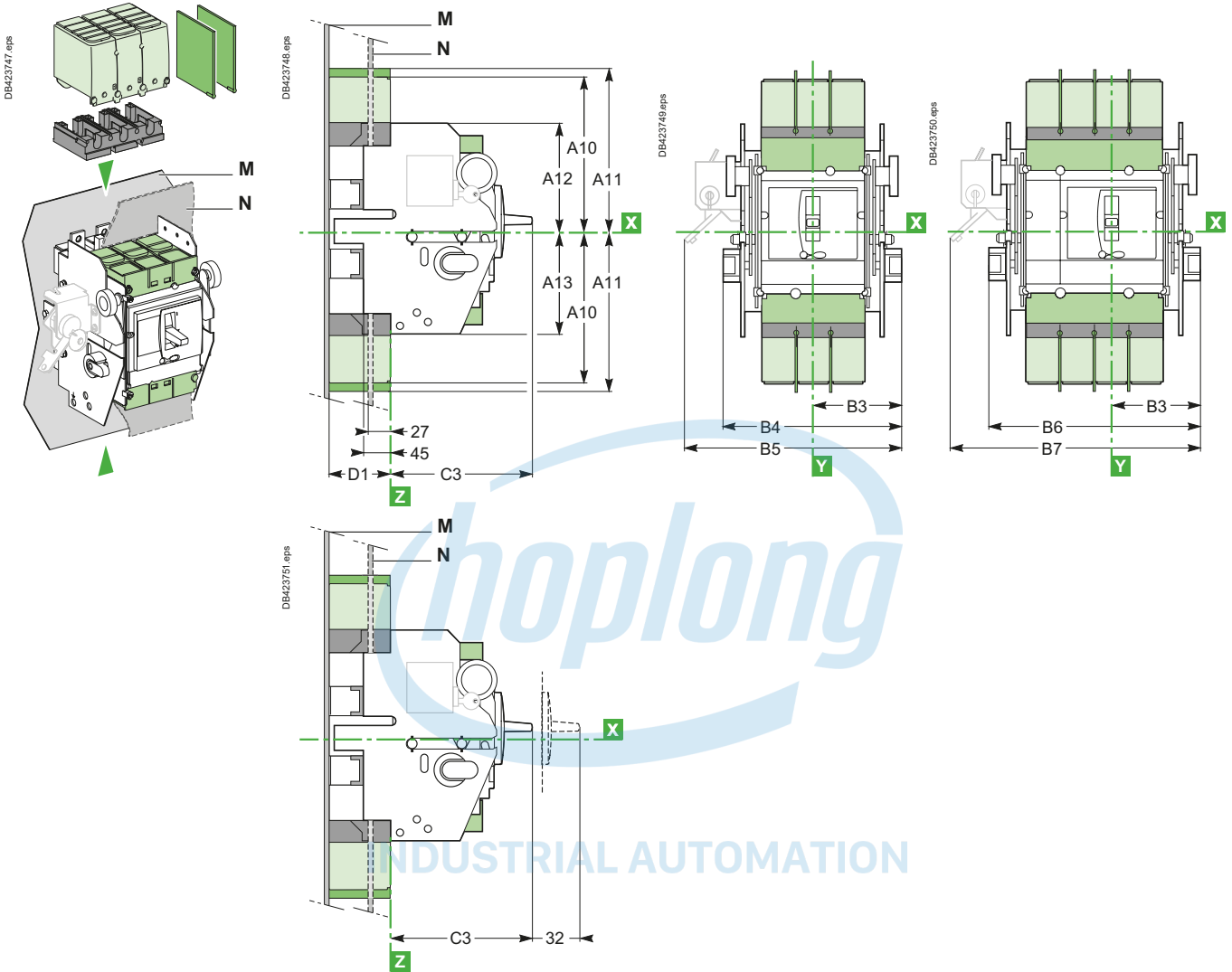
# ComPact NSX dimensions and mounting

## ComPact NSX100 to 630 withdrawable version

### Dimensions

2/3P

4P



- Interphase barriers for base.
- Short terminal shields on circuit breaker.
- Long terminal shields.
- Adapter for base, required to mount long terminal shields or interphase barriers.

### Mounting

Through front panel (N)

2/3P

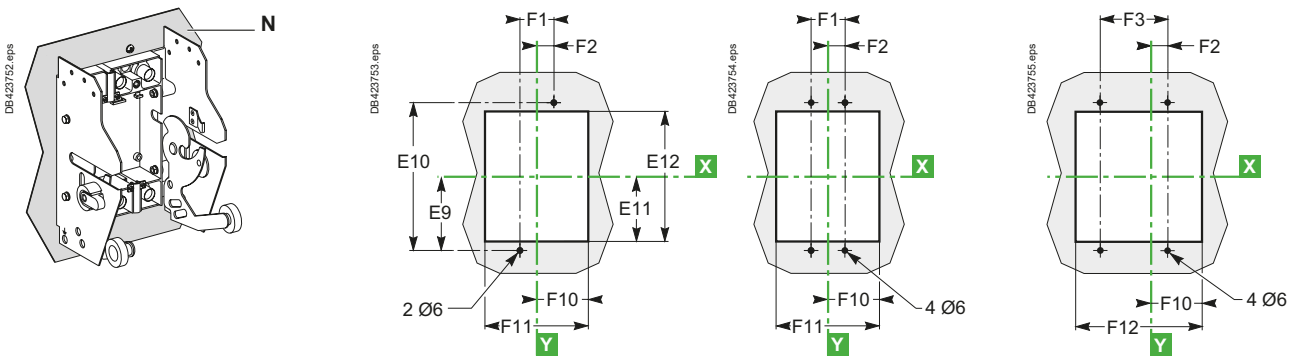
3P

4P

NSX100 to 250

NSX400/630

NSX100 to 630



# ComPact NSX dimensions and mounting

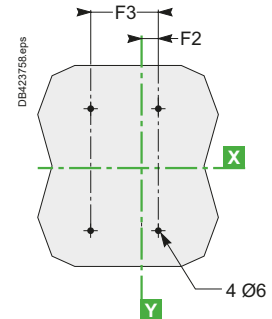
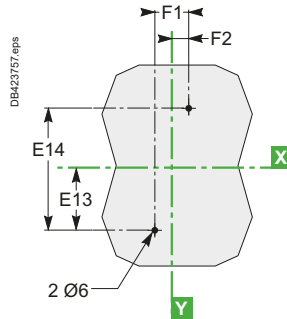
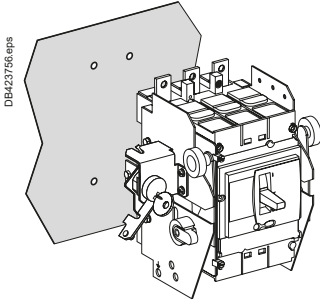
## ComPact NSX100 to 630 withdrawable version

### On backplate (M)

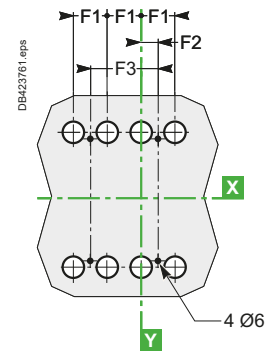
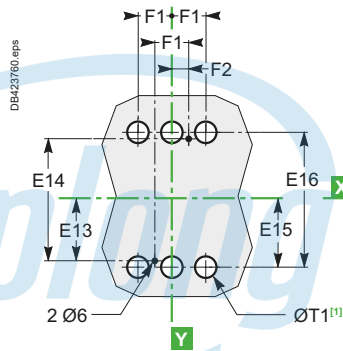
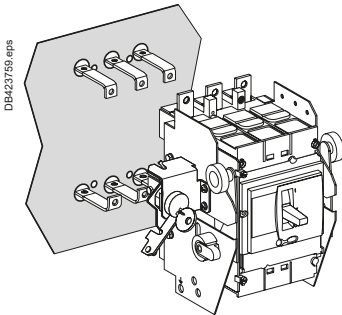
### 2/3P

### 4P

Front connection (an insulating screen is supplied with the base and must be fitted between the base and the backplate)

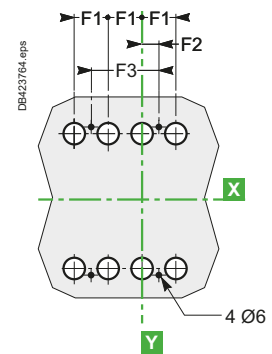
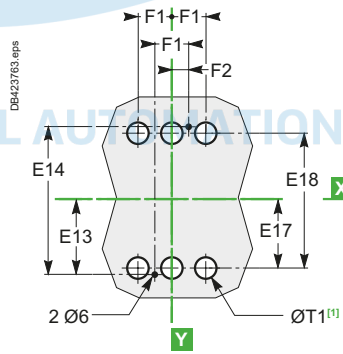
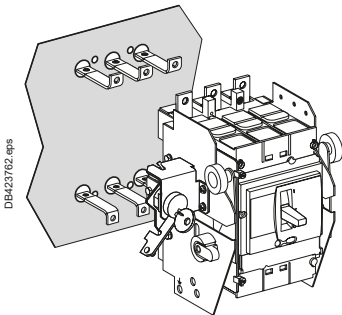


### Connection by exterior-mounted rear connectors



[1] The ØT1 holes are required for rear connection only (for two-pole circuit breakers, the middle holes are not required).

### Connection by interior-mounted rear connectors

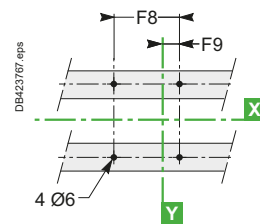
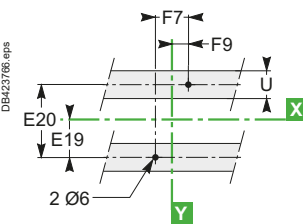
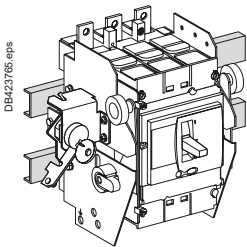


[1] The ØT1 holes are required for rear connection only (for two-pole circuit breakers, the middle holes are not required).

### On rails

### 2/3P

### 4P



| Type           | A10 | A11 | A12   | A13   | B3   | B4  | B5  | B6   | B7  | C3  | D1  | E9  | E10  | E11 | E12 | E13  | E14  |
|----------------|-----|-----|-------|-------|------|-----|-----|------|-----|-----|-----|-----|------|-----|-----|------|------|
| NSX100/160/250 | 175 | 210 | 106.5 | 103.5 | 92.5 | 185 | 216 | 220  | 251 | 126 | 75  | 95  | 190  | 87  | 174 | 77.5 | 155  |
| NSX400/630     | 244 | 281 | 140   | 140   | 110  | 220 | 250 | 265  | 295 | 168 | 100 | 150 | 300  | 137 | 274 | 125  | 250  |
| Type           | E15 | E16 | E17   | E18   | E19  | E20 | F1  | F2   | F3  | F7  | F8  | F9  | F10  | F11 | F12 | ØT1  | U    |
| NSX100/160/250 | 79  | 158 | 61    | 122   | 37.5 | 75  | 35  | 17.5 | 70  | 70  | 105 | 35  | 74   | 148 | 183 | 24   | ≤ 32 |
| NSX400/630     | 126 | 252 | 101   | 202   | 75   | 150 | 45  | 22.5 | 90  | 100 | 145 | 50  | 91.5 | 183 | 228 | 33   | ≤ 35 |

# ComPact NSX dimensions and mounting

ComPact NSX100 to 630 Vigi add-on plug-in and withdrawable versions

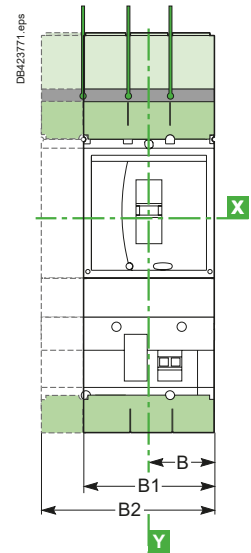
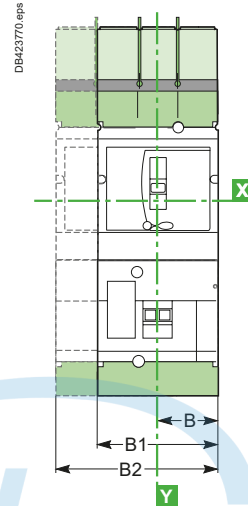
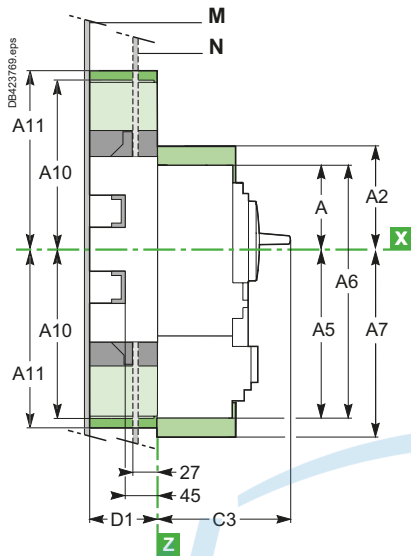
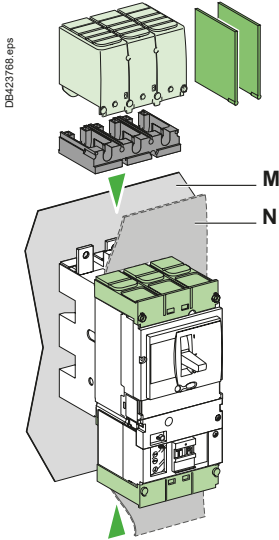
## Dimensions - plug-in version

### NSX100 to 250

3/4P

### NSX400/630

3/4P



Interphase barriers for base.  
Short terminal shields on circuit breaker.

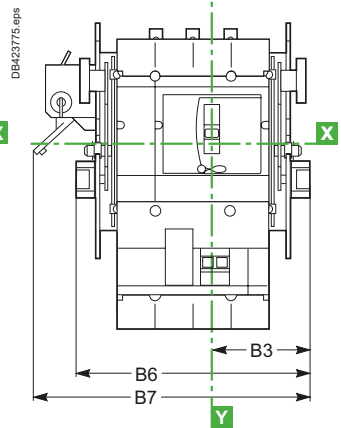
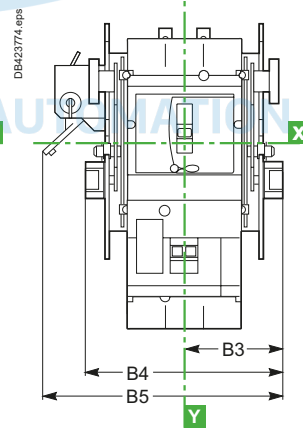
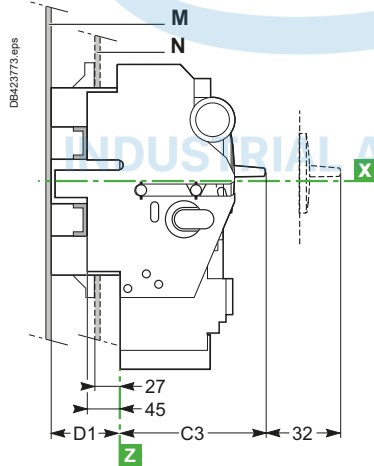
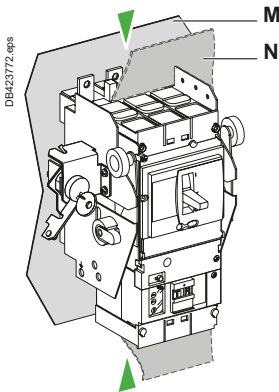
Long terminal shields (also available for NSX400/630 spreaders with 52.5 mm pitch):  
B1 = 157.5 mm, B2 = 210 mm).  
Adapter for base, required to mount long terminal shields or interphase barriers.

## Dimensions - withdrawable version

### NSX100 to 630

3P

4P



## Mounting

### Through front panel (N)

See ComPact NSX100 to 630 plug-in version, [page E-38](#), or withdrawable version, [page E-40](#)

### On backplate (M)

See ComPact NSX100 to 630 plug-in version, [page E-39](#), or withdrawable version, [page E-41](#)

### On rails

See ComPact NSX100 to 630 plug-in version, [page E-39](#), or withdrawable version, [page E-41](#)

| Type           | A     | A2    | A5    | A6  | A7    | A10 | A11 | B    | B1  | B2  | B3   | B4  | B5  | B6  | B7  | C3  | D1  |
|----------------|-------|-------|-------|-----|-------|-----|-----|------|-----|-----|------|-----|-----|-----|-----|-----|-----|
| NSX100/160/250 | 80.5  | 94    | 155.5 | 236 | 169   | 175 | 210 | 52.5 | 105 | 140 | 92.5 | 185 | 216 | 220 | 251 | 126 | 75  |
| NSX400/630     | 127.5 | 142.5 | 227.5 | 355 | 242.5 | 244 | 281 | 70   | 140 | 185 | 110  | 220 | 250 | 265 | 295 | 168 | 100 |

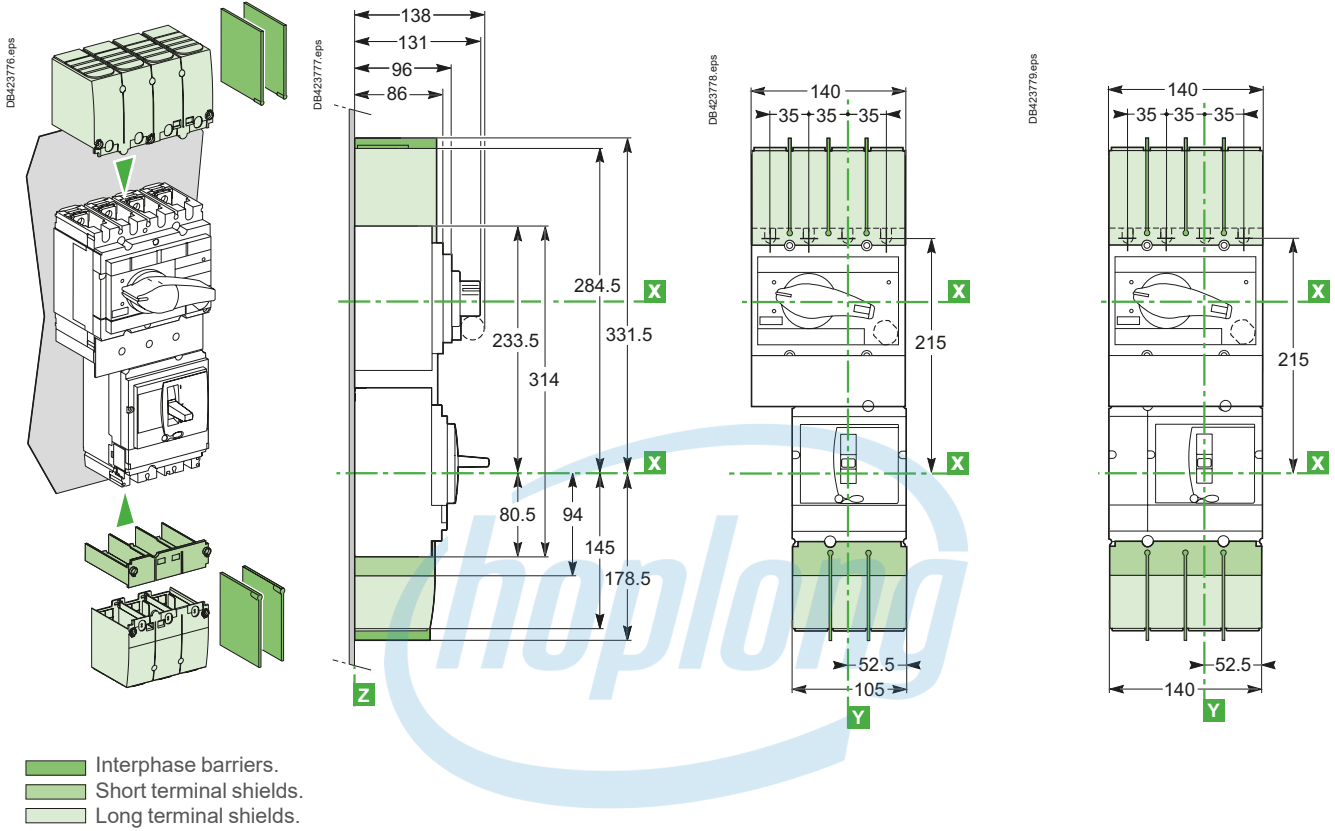
# ComPact NSX dimensions and mounting

Visu function for ComPact NSX100 to 250 fixed version

## Dimensions - combination with ComPact INV100 to 250

3P

4P

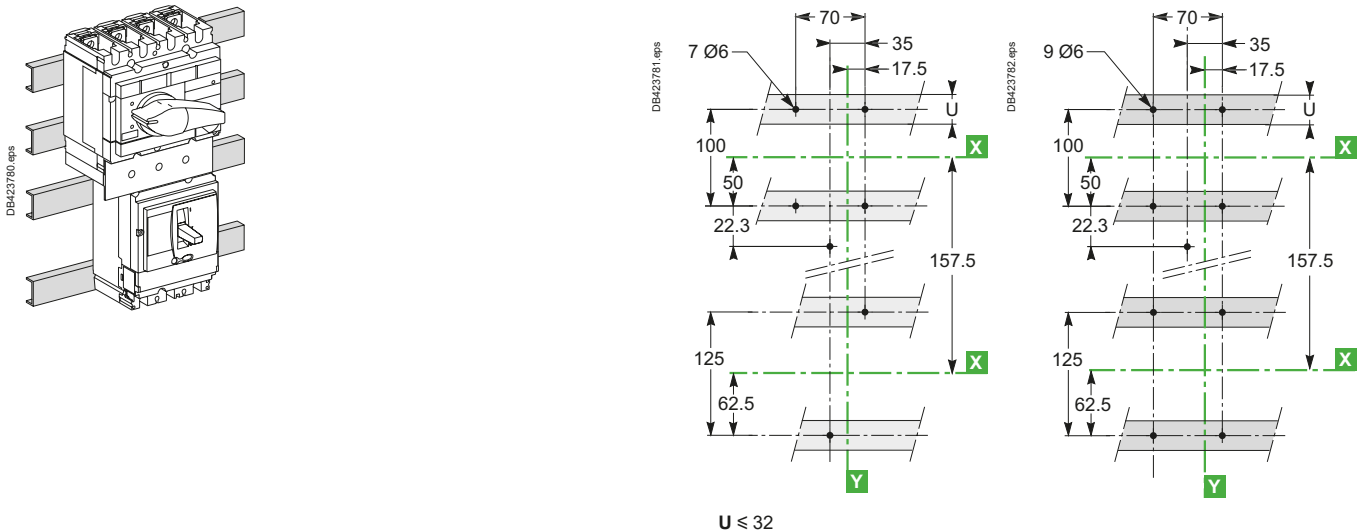


## Mounting

On rails or backplate

3P

4P



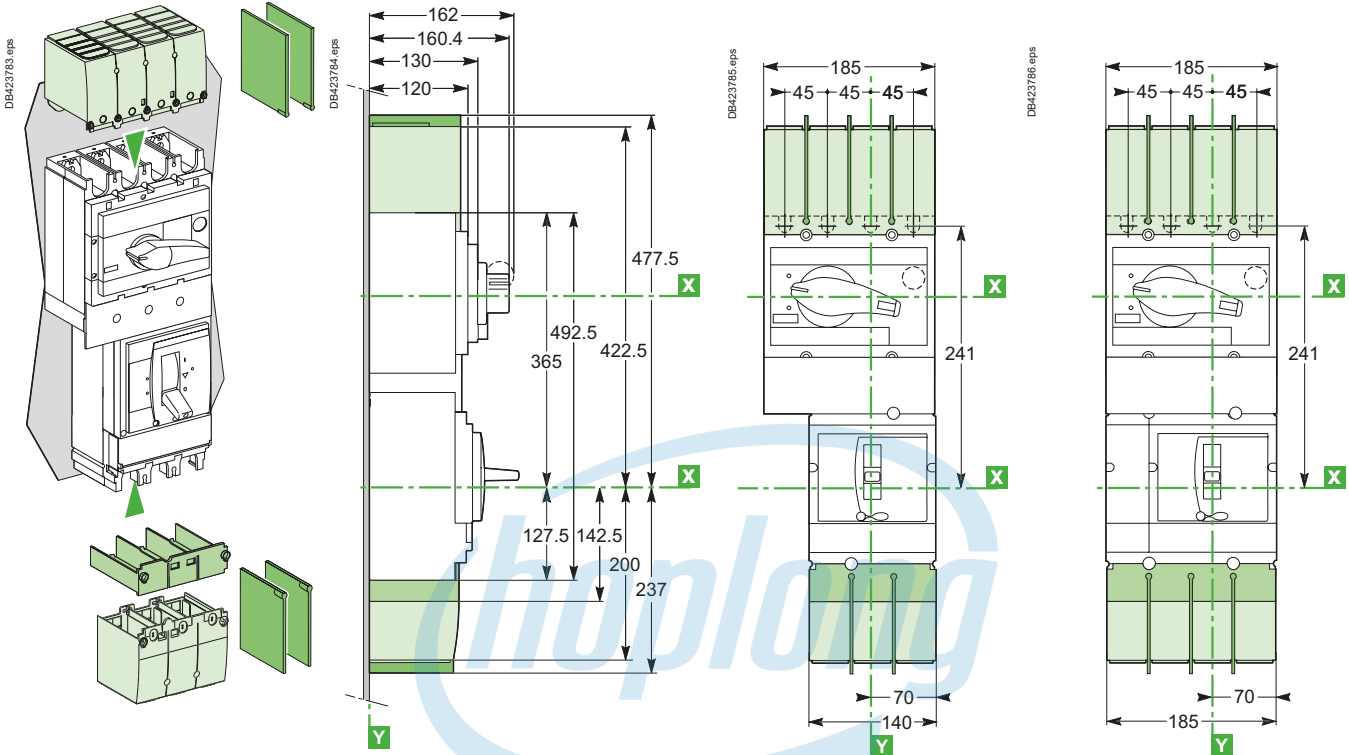
# ComPact NSX dimensions and mounting

Visu function for ComPact NSX400/630 fixed version

## Dimensions - combination with ComPact INV400 to 630

3P

4P



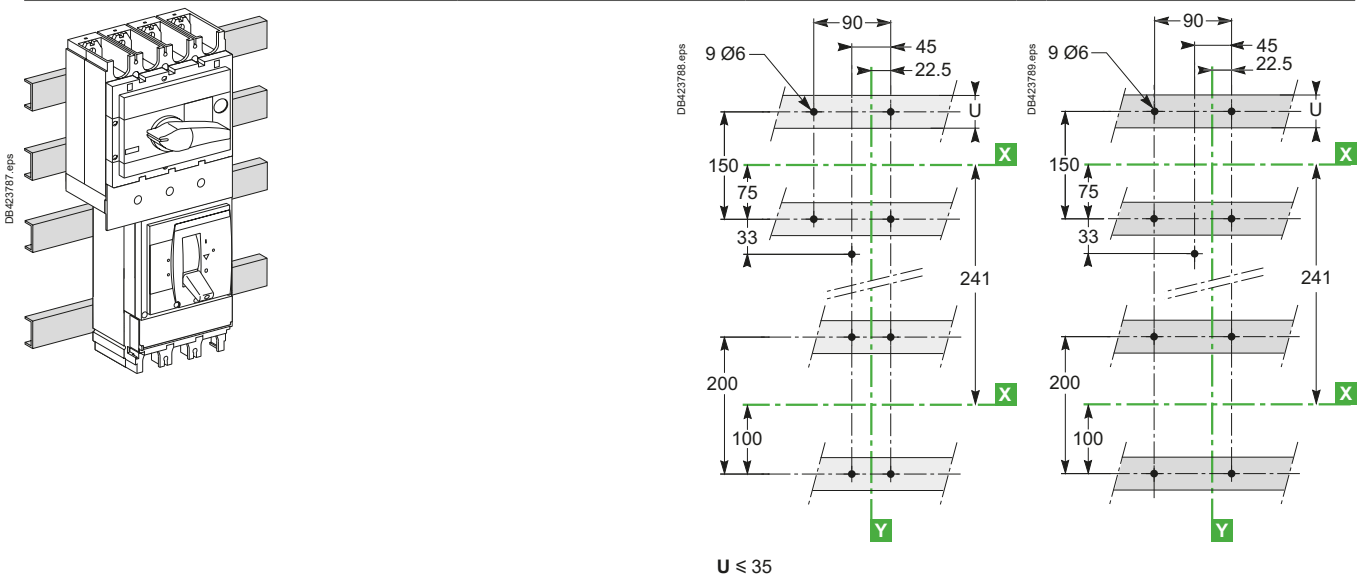
E

## Mounting

On rails or backplate

3P

4P



# ComPact NSX dimensions and mounting

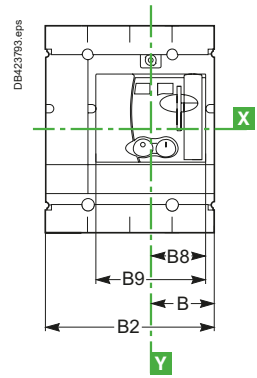
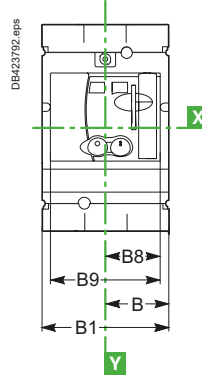
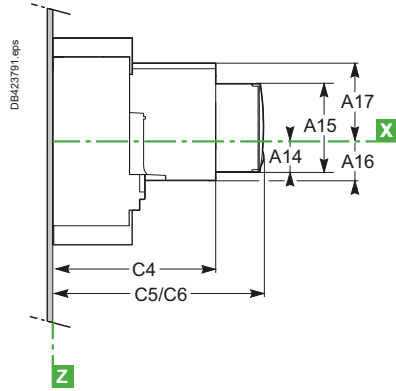
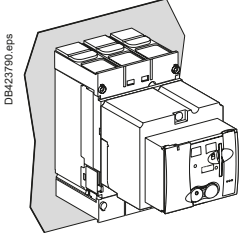
## Motor mechanism module for ComPact NSX100 to 630

### Dimensions

3P

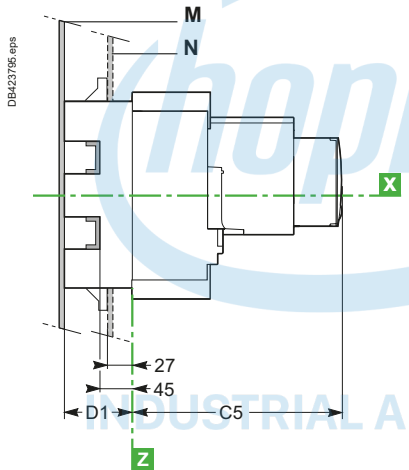
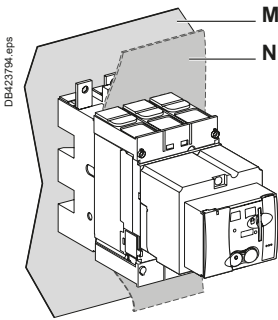
4P

#### Fixed circuit breaker

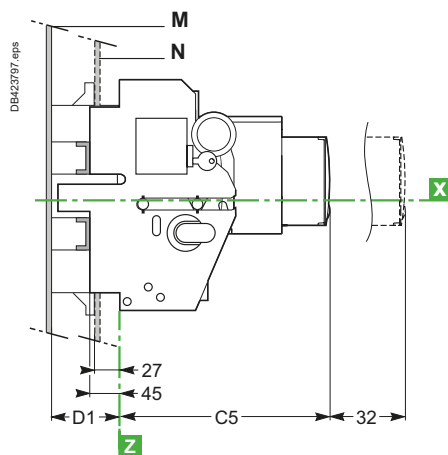
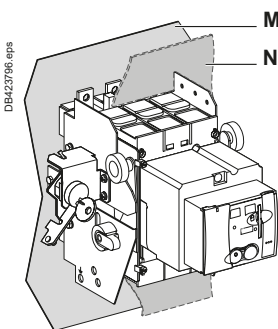


C5: without keylock  
C6: with keylock

#### Plug-in circuit breaker



#### Withdrawable circuit breaker



| Type           | A14  | A15 | A16  | A17  | B    | B1  | B2  | B8   | B9  | C4  | C5  | C6    | D1  |
|----------------|------|-----|------|------|------|-----|-----|------|-----|-----|-----|-------|-----|
| NSX100/160/250 | 27.5 | 73  | 34.5 | 62.5 | 52.5 | 105 | 140 | 45.5 | 91  | 143 | 182 | 209.5 | 75  |
| NSX400/630     | 40   | 123 | 52   | 100  | 70   | 140 | 185 | 61.5 | 123 | 215 | 256 | 258   | 100 |



# ComPact NSX dimensions and mounting

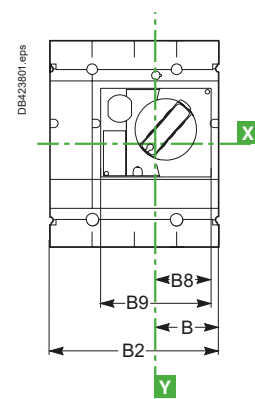
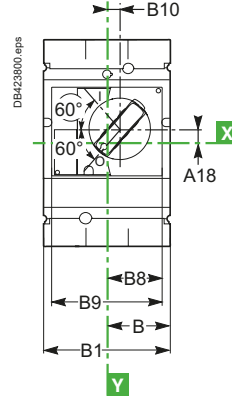
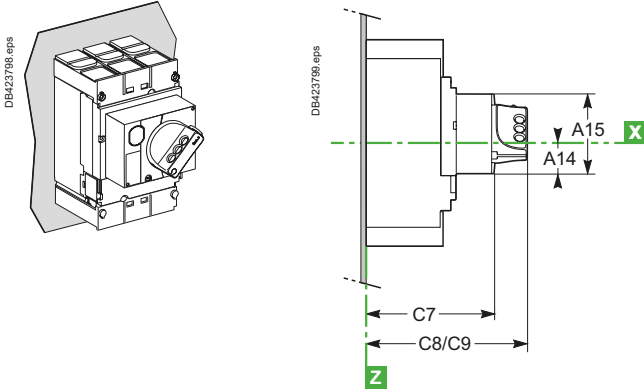
Direct rotary handle for ComPact NSX100 to 630

## Dimensions

### Fixed circuit breaker

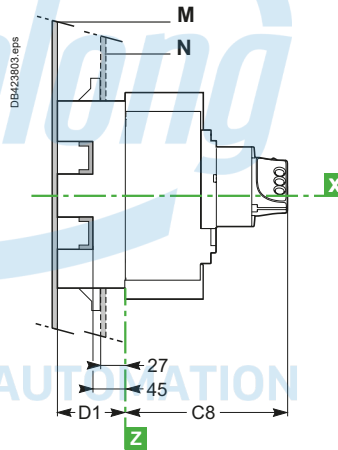
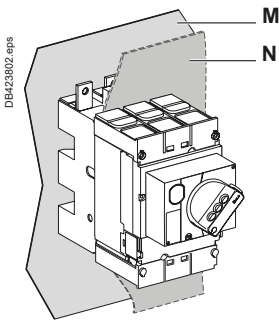
3P

4P

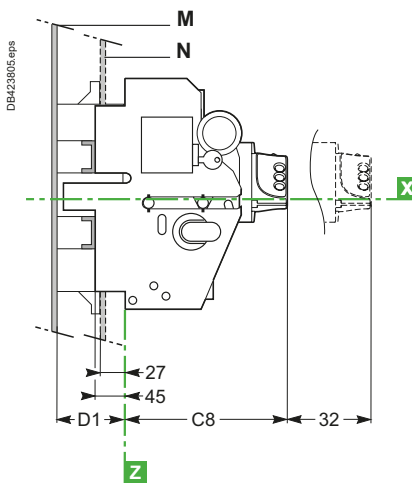
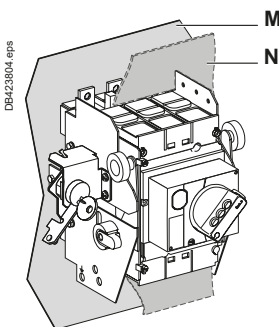


C8: without keylock  
C9: with keylock

### Plug-in circuit breaker



### Withdrawable circuit breaker



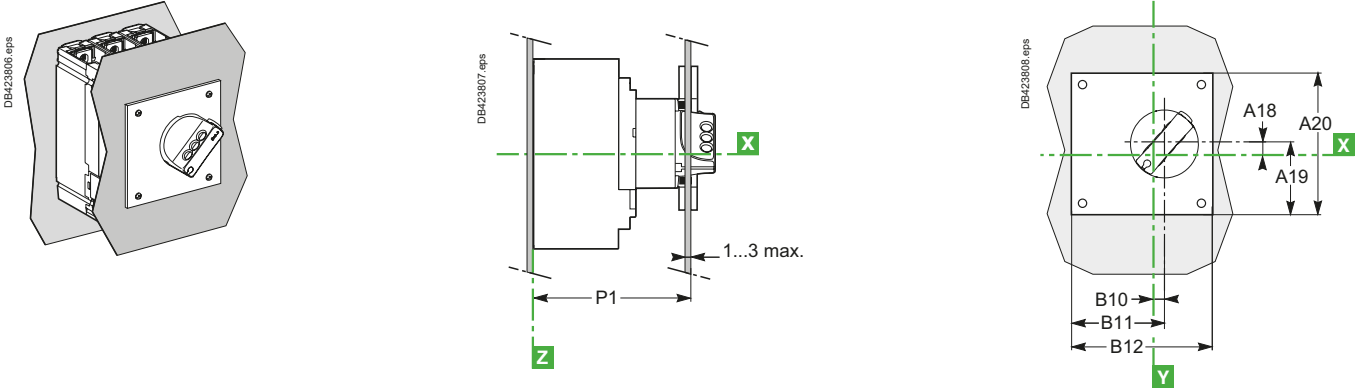
| Type           | A14  | A15 | A18  | B    | B1  | B2  | B8   | B9  | B10  | C7  | C8  | C9  | D1  |
|----------------|------|-----|------|------|-----|-----|------|-----|------|-----|-----|-----|-----|
| NSX100/160/250 | 27.5 | 73  | 9    | 52.5 | 105 | 140 | 45.5 | 91  | 9.25 | 121 | 155 | 164 | 75  |
| NSX400/630     | 40   | 123 | 24.6 | 70   | 140 | 185 | 61.5 | 123 | 5    | 145 | 179 | 188 | 100 |

# ComPact NSX dimensions and mounting

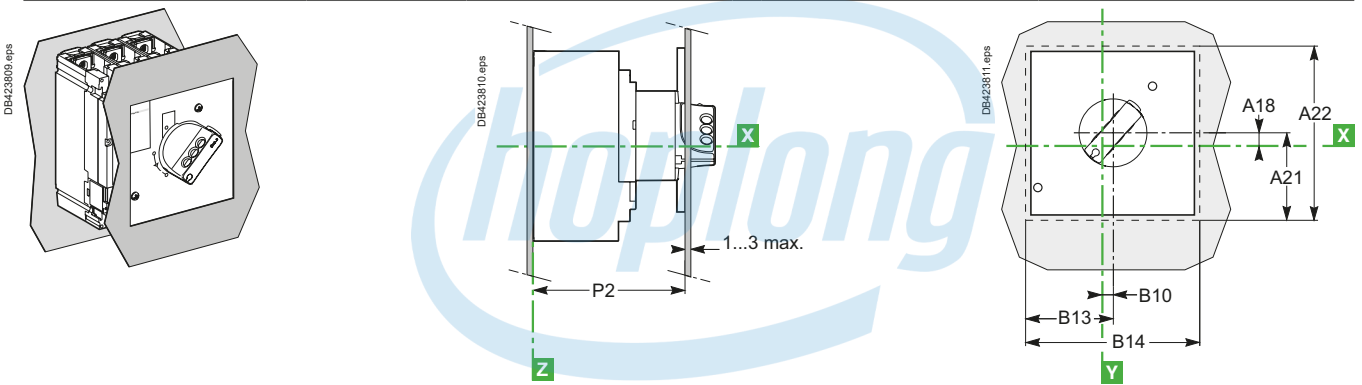
## MCC and CNOMO type direct rotary handles for ComPact NSX100 to 630 fixed version

### Dimensions

#### MCC type direct rotary handle



#### CNOMO type direct rotary handle

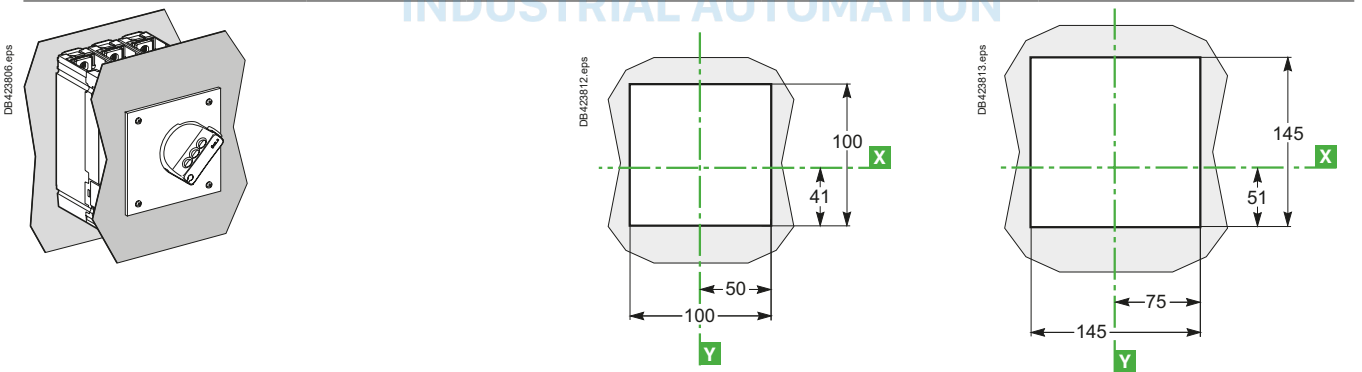


#### Front-panel cutout

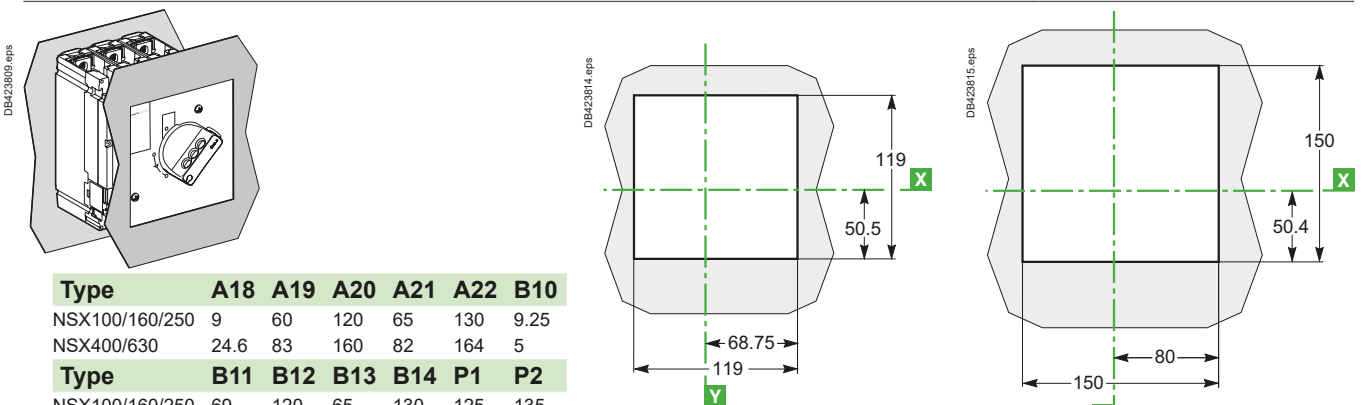
#### NSX100 to 250

#### NSX400/630

#### MCC type direct rotary handle



#### CNOMO type direct rotary handle



| Type           | A18  | A19 | A20 | A21 | A22 | B10  |
|----------------|------|-----|-----|-----|-----|------|
| NSX100/160/250 | 9    | 60  | 120 | 65  | 130 | 9.25 |
| NSX400/630     | 24.6 | 83  | 160 | 82  | 164 | 5    |

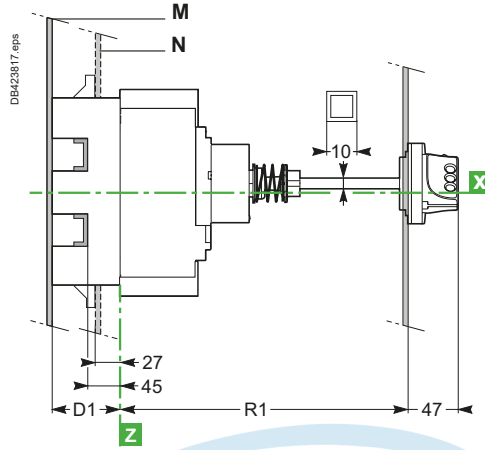
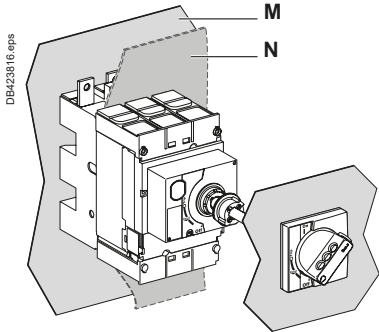
| Type           | B11 | B12 | B13 | B14 | P1  | P2  |
|----------------|-----|-----|-----|-----|-----|-----|
| NSX100/160/250 | 69  | 120 | 65  | 130 | 125 | 135 |
| NSX400/630     | 85  | 160 | 82  | 164 | 149 | 158 |

# ComPact NSX dimensions and mounting

## Extended rotary handle for ComPact NSX100 to 630

### Dimensions

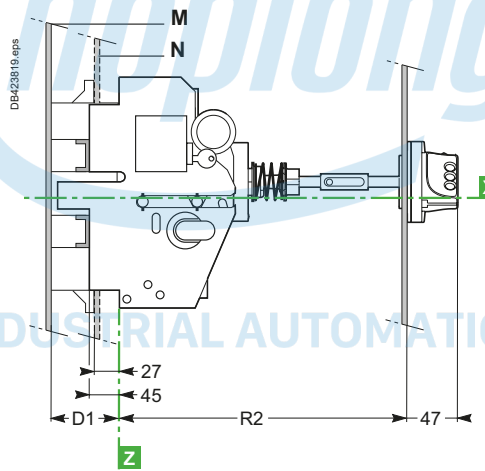
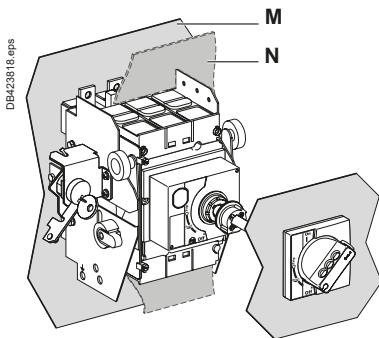
#### Fixed and plug-in circuit breakers



Cutout for shaft (mm)

| Type           | R1                   |
|----------------|----------------------|
| NSX100/160/250 | min. 171<br>max. 600 |
| NSX400/630     | min. 195<br>max. 600 |

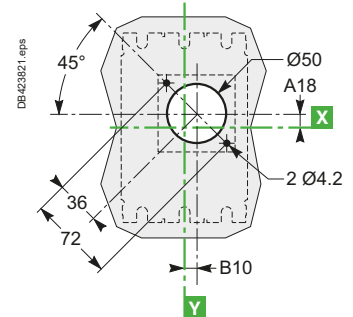
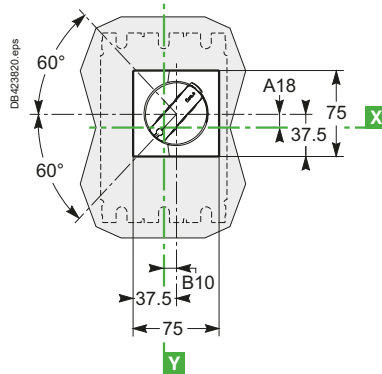
#### Withdrawable circuit breaker



Cutout for shaft (mm)

| Type           | R2                   |
|----------------|----------------------|
| NSX100/160/250 | min. 248<br>max. 600 |
| NSX400/630     | min. 272<br>max. 600 |

#### Dimensions and front-panel cutout



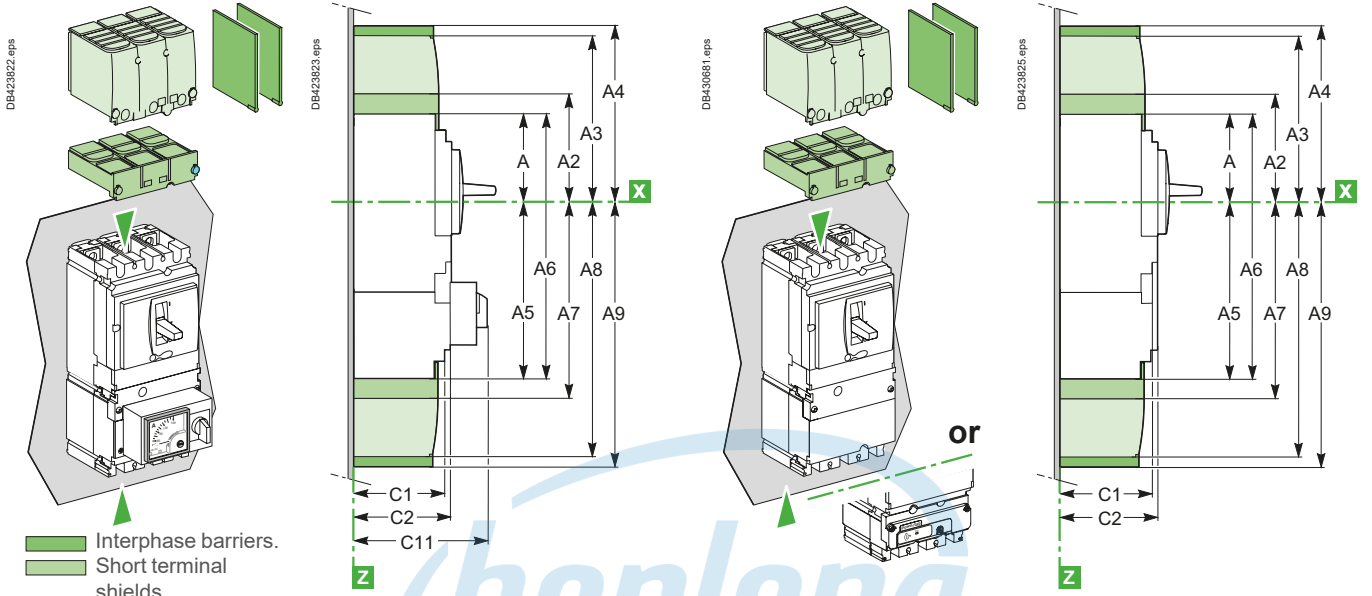
| Type           | A18  | B10  | D1  |
|----------------|------|------|-----|
| NSX100/160/250 | 9    | 9.25 | 75  |
| NSX400/630     | 24.6 | 5    | 100 |

# ComPact NSX dimensions and mounting

Indication and measurement modules for ComPact NSX100 to 630 fixed version

## Dimensions of circuit breaker with Ammeter module

## Current-transformer / PowerLogic PowerTag NSX module



### Mounting

On backplate

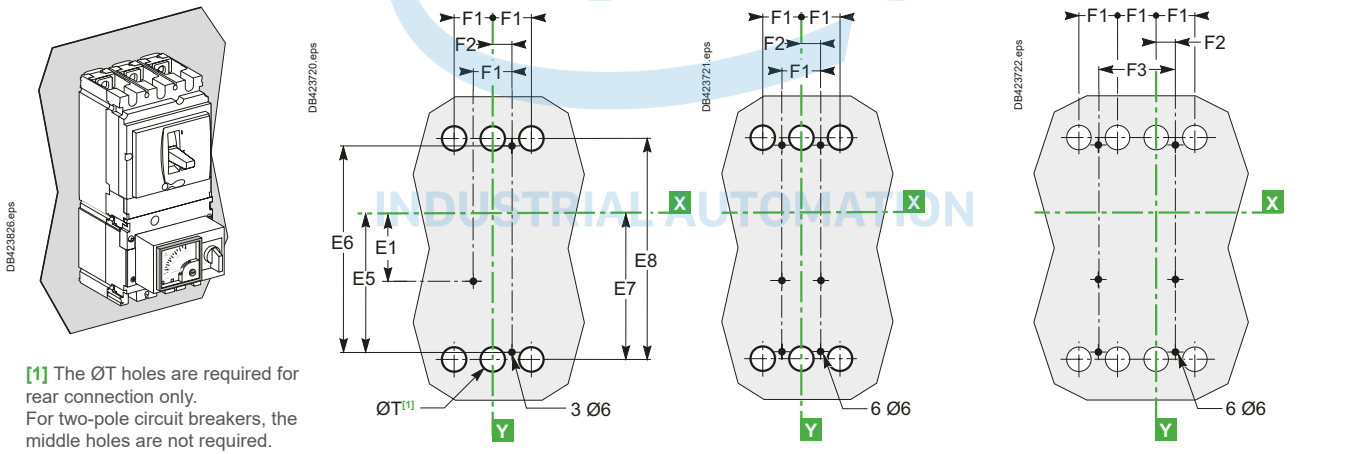
NSX100 to 250 NSX400/630

NSX100 to 630

2/3P

3P

4P

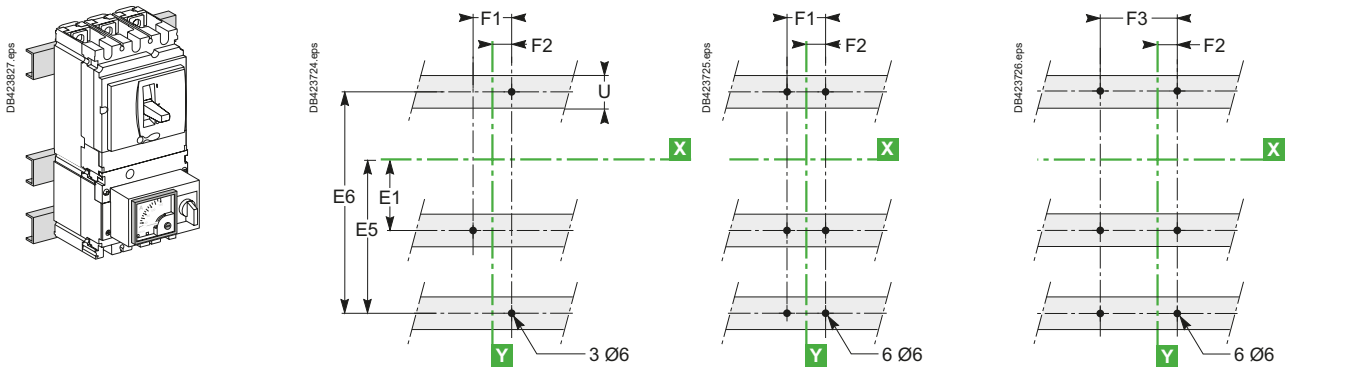


On rails

2/3P

3P

4P

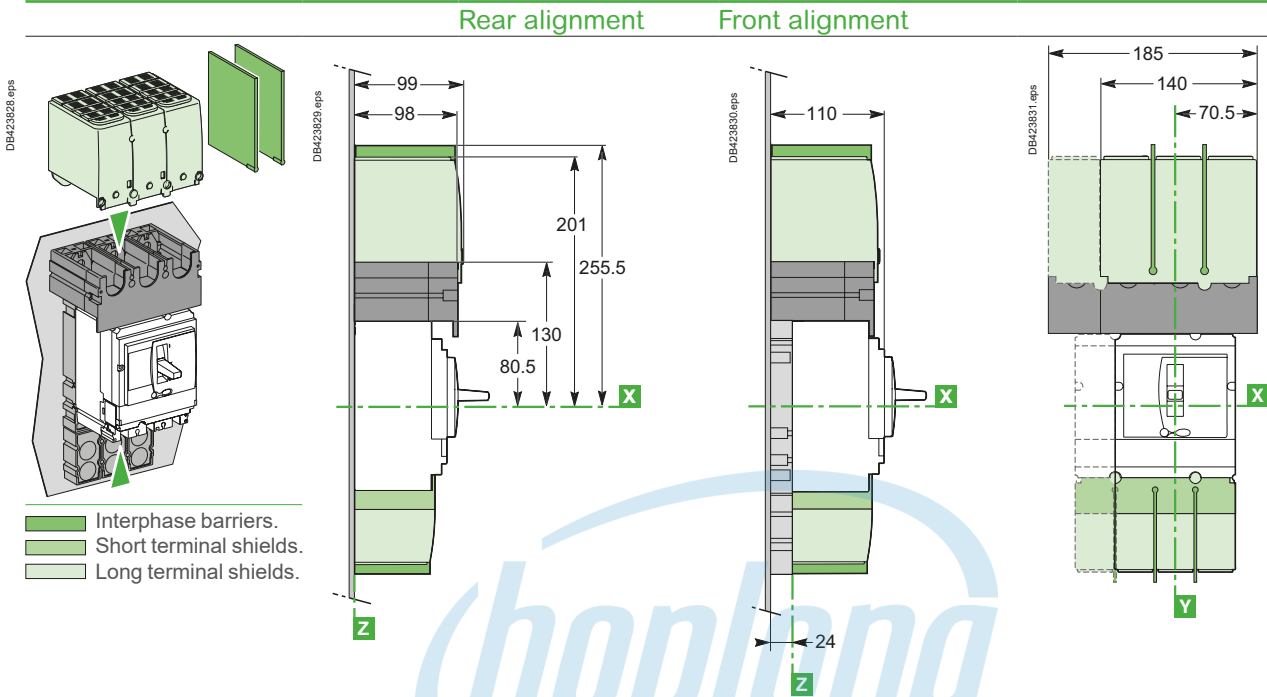


| Type           | A     | A2    | A3  | A4    | A5                               | A6    | A7    | A8    | A9    | C1    | C2    | C11 | E1    | E5    | E6  | E7    | E8  | F1 |
|----------------|-------|-------|-----|-------|----------------------------------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-----|-------|-----|----|
| NSX100/160/250 | 80.5  | 94    | 145 | 178.5 | 155.5                            | 236   | 169   | 220   | 253.5 | 81    | 86    | 137 | 62.5  | 137.5 | 200 | 145   | 215 | 35 |
| NSX400/630     | 127.5 | 142.5 | 200 | 237   | 227.5                            | 355   | 242.5 | 300   | 337   | 95.5  | 110   | 162 | 100   | 200   | 300 | 213.5 | 327 | 45 |
| Type           | F2    | F3    | ØT  | U     | Type                             | A5    | A6    | A7    | A8    | A9    | E5    | E6  | E7    | E8    |     |       |     |    |
| NSX100/160/250 | 17.5  | 70    | 24  | ≤ 32  | NSX100/160/250 with PowerTag NSX | 120.5 | 201   | 134   | 185   | 219.5 | 102.5 | 165 | 110   | 180   |     |       |     |    |
| NSX400/630     | 22.5  | 90    | 32  | ≤ 35  | NSX400/630 with PowerTag NSX     | 192.5 | 320   | 207.5 | 265   | 302.5 | 165   | 265 | 178.5 | 192   |     |       |     |    |

# ComPact NSX dimensions and mounting

One-piece spreader for ComPact NSX100 to 250 fixed version

## Dimensions

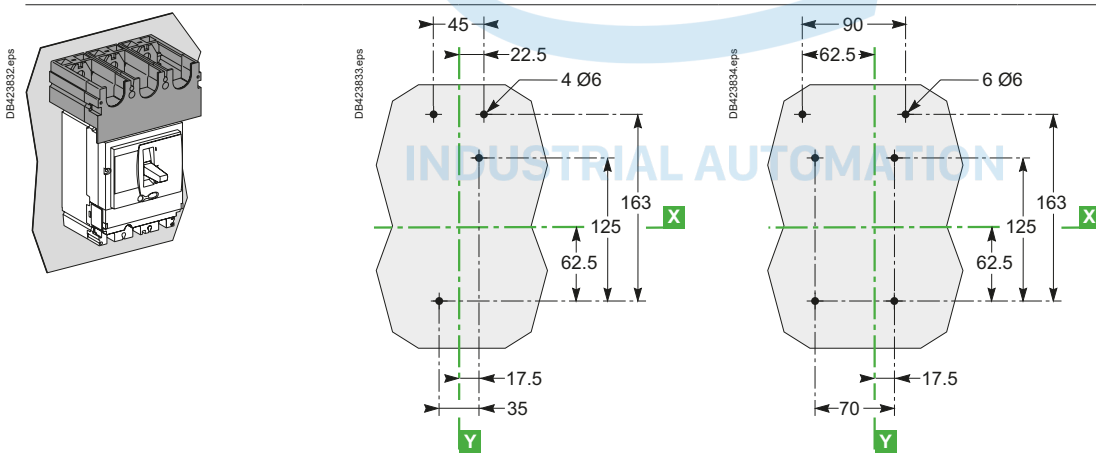


## Mounting

Rear alignment

2/3P

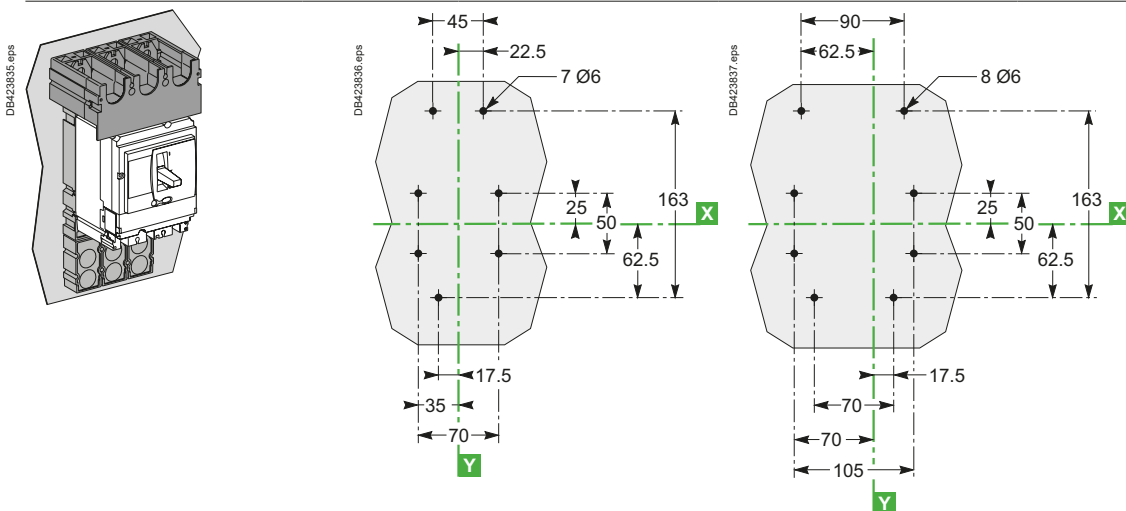
4P



Front alignment

2/3P

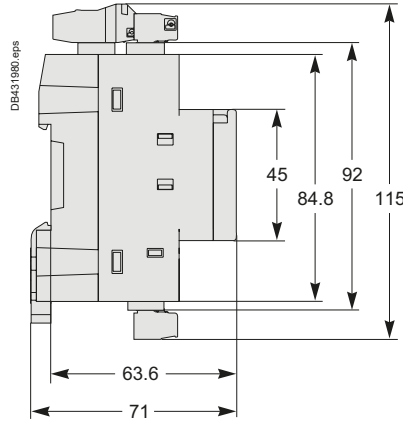
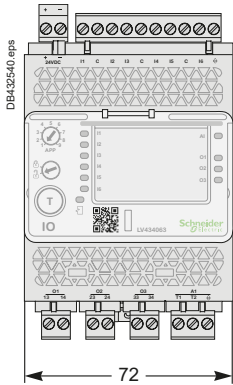
4P



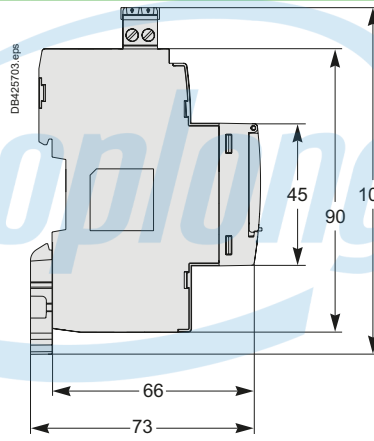
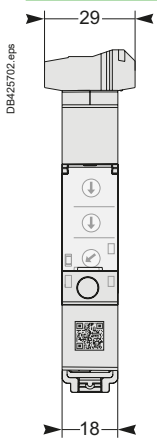
## ComPact NSX dimensions and mounting

### External modules

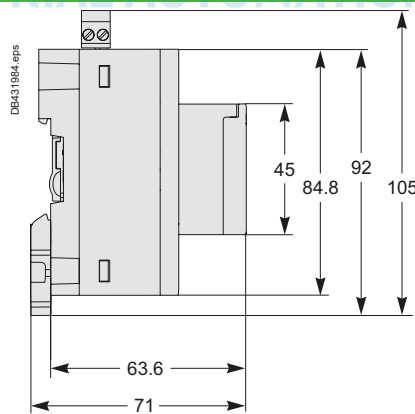
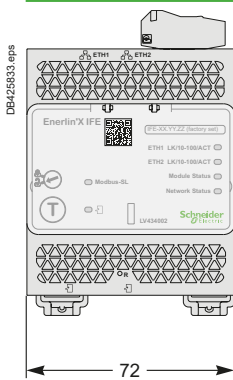
#### I/O (Input/Output) application module



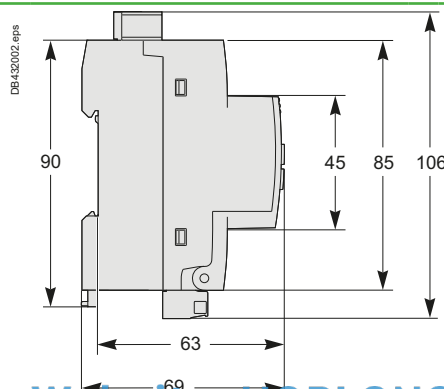
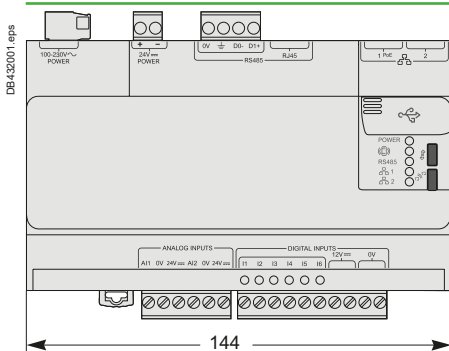
#### IFM - Modbus-SL interface



#### IFE - Ethernet interface



#### Com'X 500/510

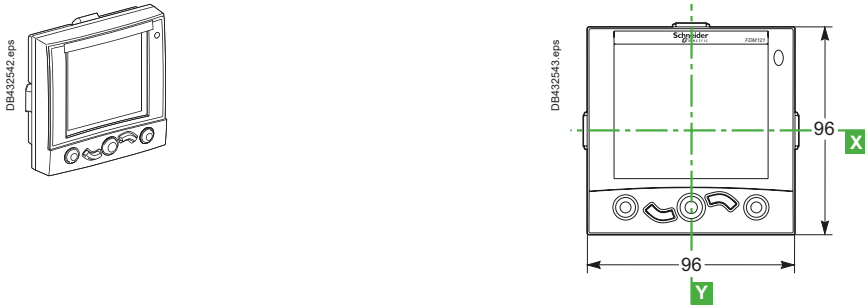




# ComPact NSX dimensions and mounting

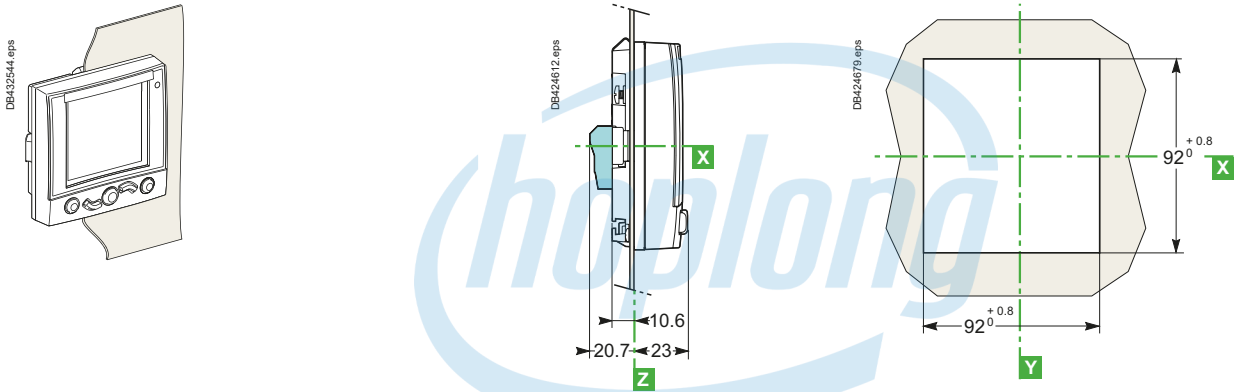
## FDM121 switchboard display

### Dimensions

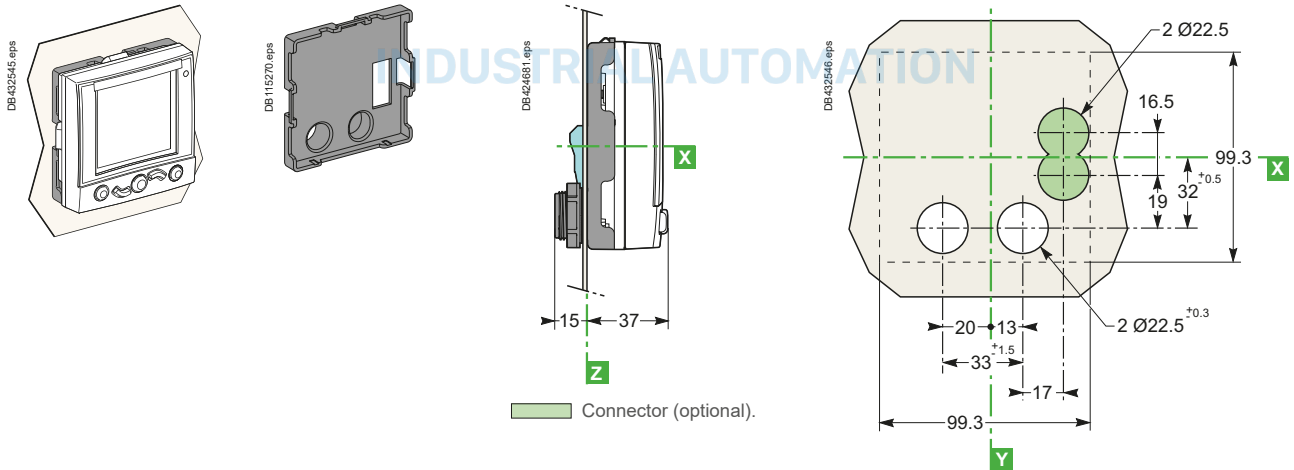


### Mounting

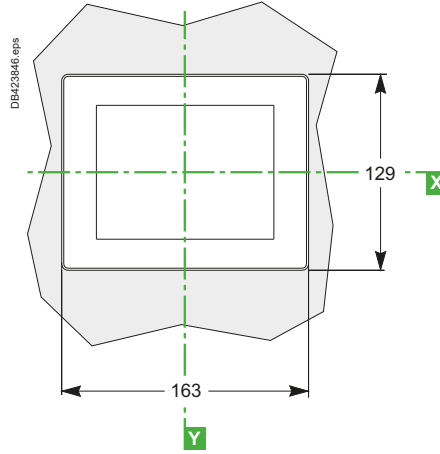
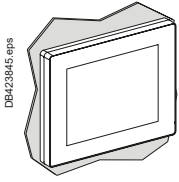
#### Through panel



#### On panel

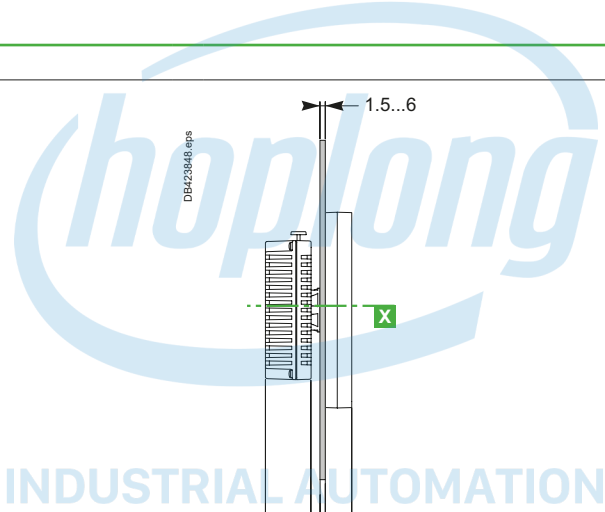
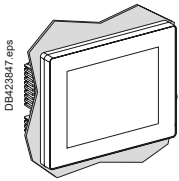


Dimensions

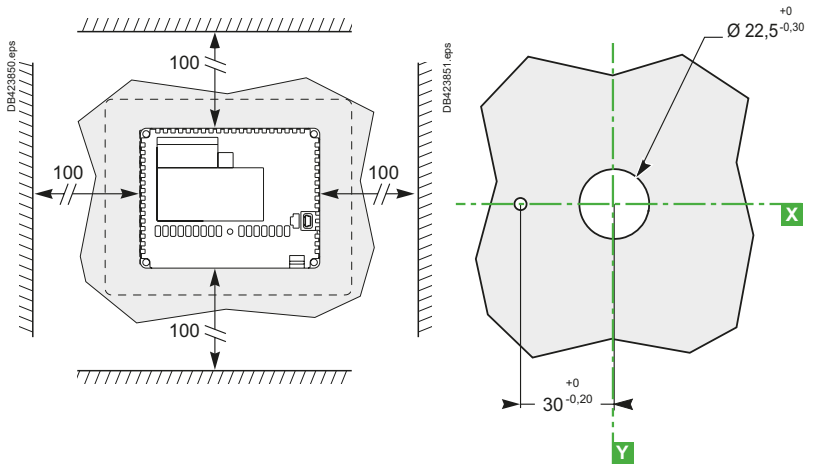
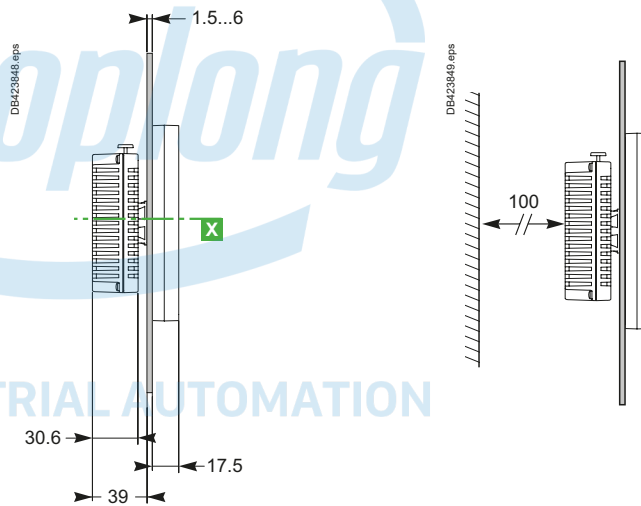


Mounting

On panel



INDUSTRIAL AUTOMATION

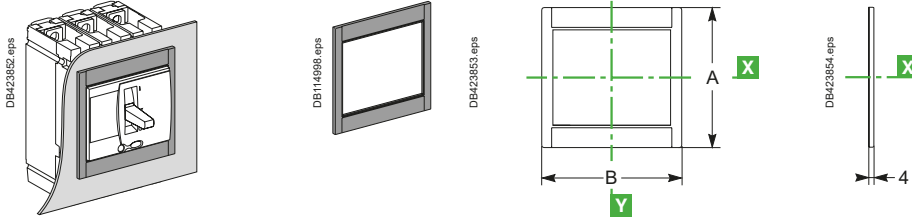


# ComPact NSX front-panel accessories

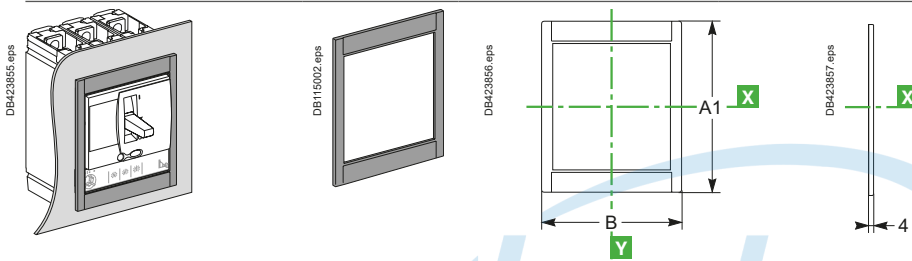
## ComPact NSX100 to 630

### IP30 front-panel escutcheons

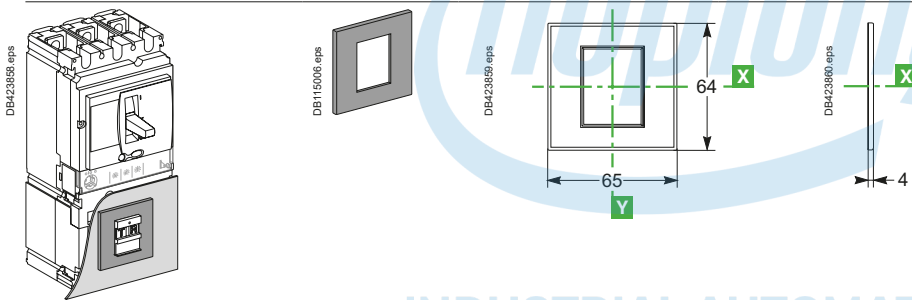
For toggle, rotary handle or motor mechanism module



For toggle or rotary handle with access to trip unit



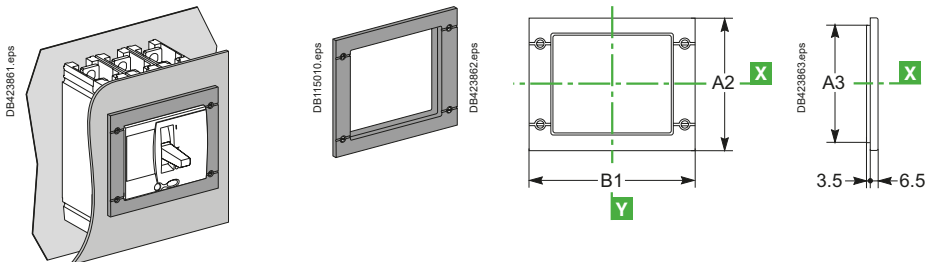
For Vigi add-on



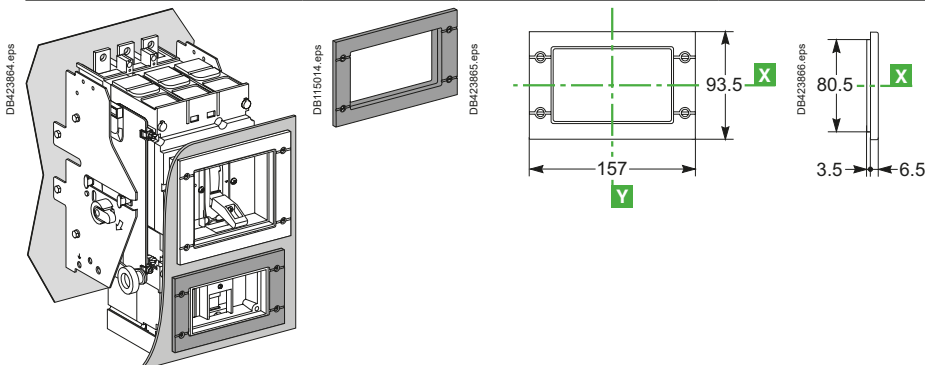
## INDUSTRIAL AUTOMATION

### IP40 front-panel escutcheons

For toggle, rotary handle or motor mechanism module and protection collar

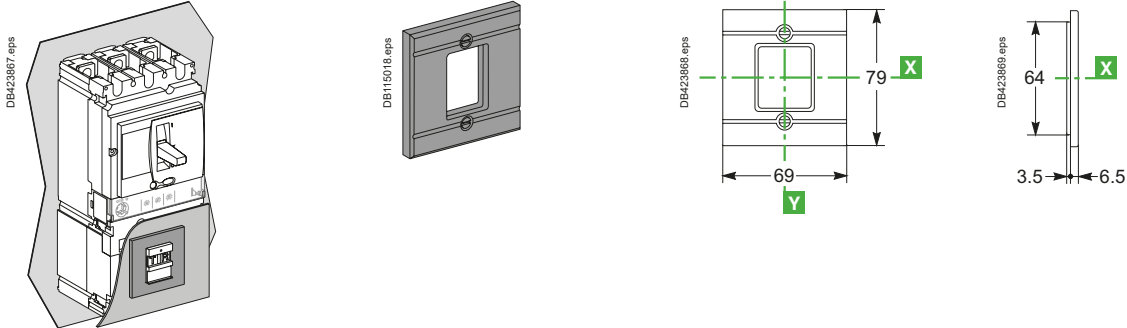


For Vigi add-on with protection collar or ammeter module



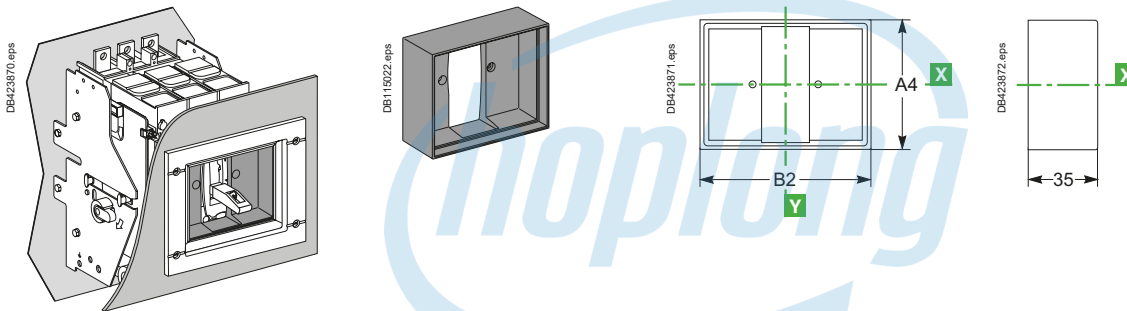
**IP40 front-panel escutcheons (cont.)**

For Vigi add-on

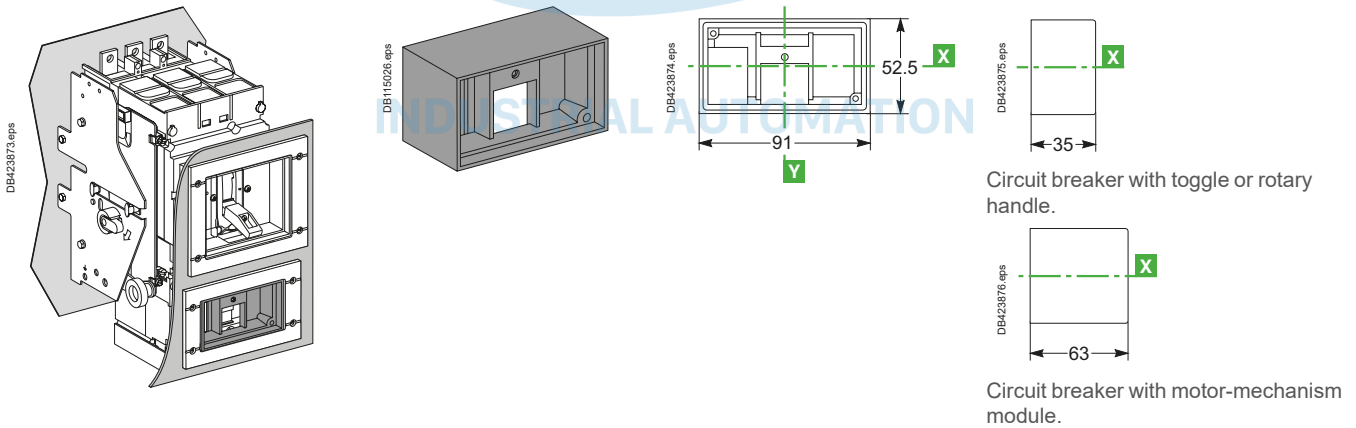


**Protection collars for IP40 front-panel escutcheons**

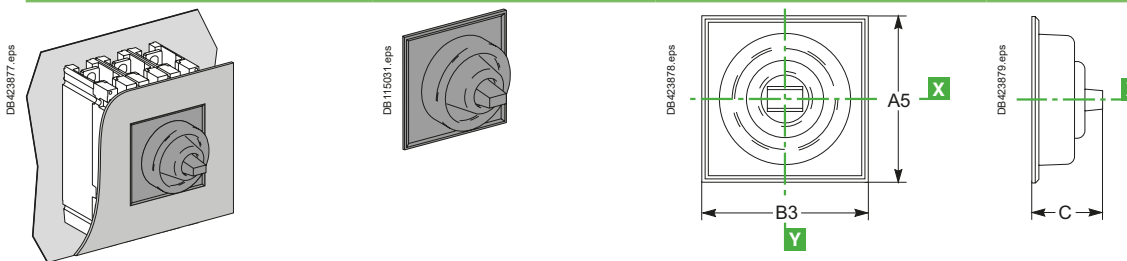
For toggle



For Vigi add-on



**IP43 toggle cover**



| Type           | A   | A1  | A2  | A3  | A4    | A5  | B   | B1  | B2    | B3  | C  |
|----------------|-----|-----|-----|-----|-------|-----|-----|-----|-------|-----|----|
| NSX100/160/250 | 113 | 138 | 114 | 101 | 73    | 85  | 113 | 157 | 91    | 103 | 40 |
| NSX400/630     | 163 | 211 | 164 | 151 | 122.5 | 138 | 163 | 189 | 122.5 | 138 | 60 |

# ComPact NSX front-panel cutouts

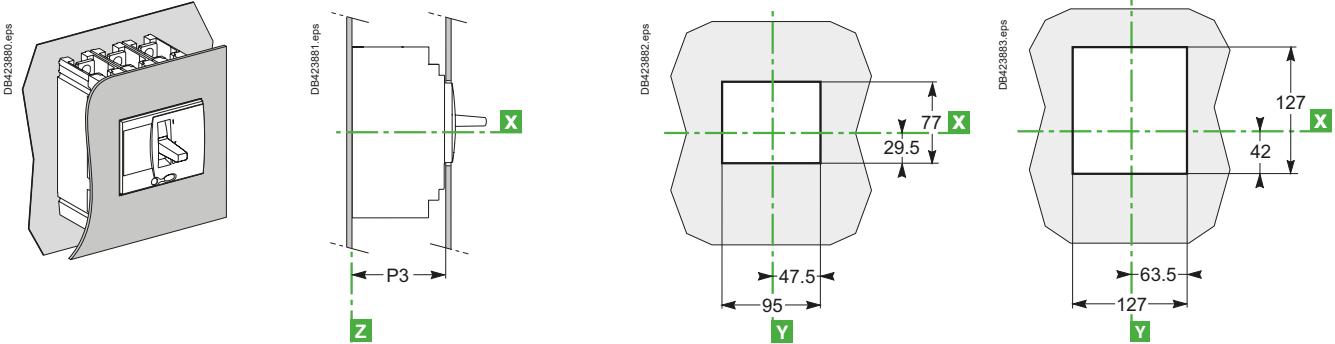
## ComPact NSX100 to 630 fixed version

### Bare sheet metal

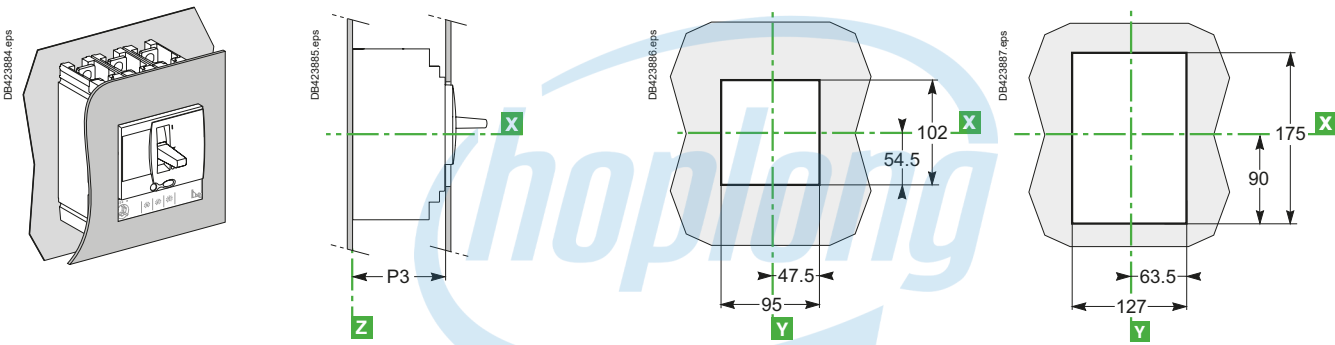
### NSX100 to 250

### NSX400/630

For toggle



For toggle with access to trip unit

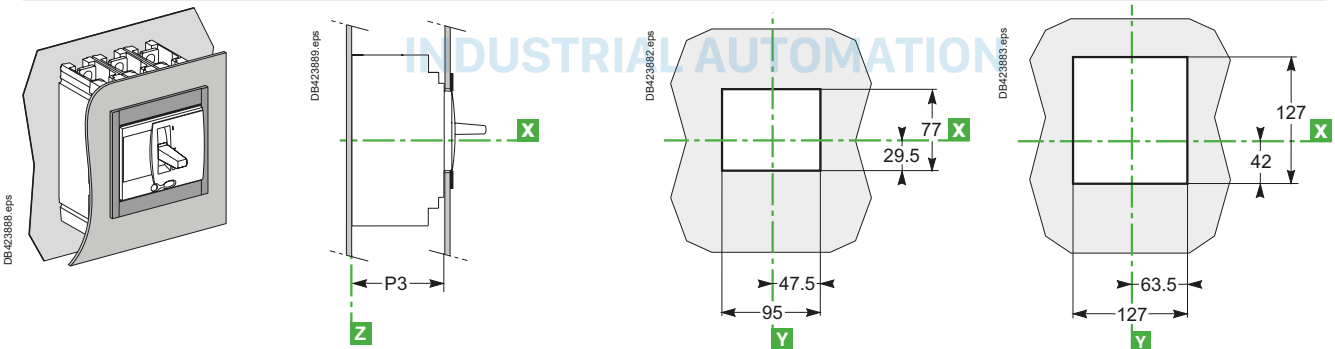


### With IP30 front-panel escutcheon

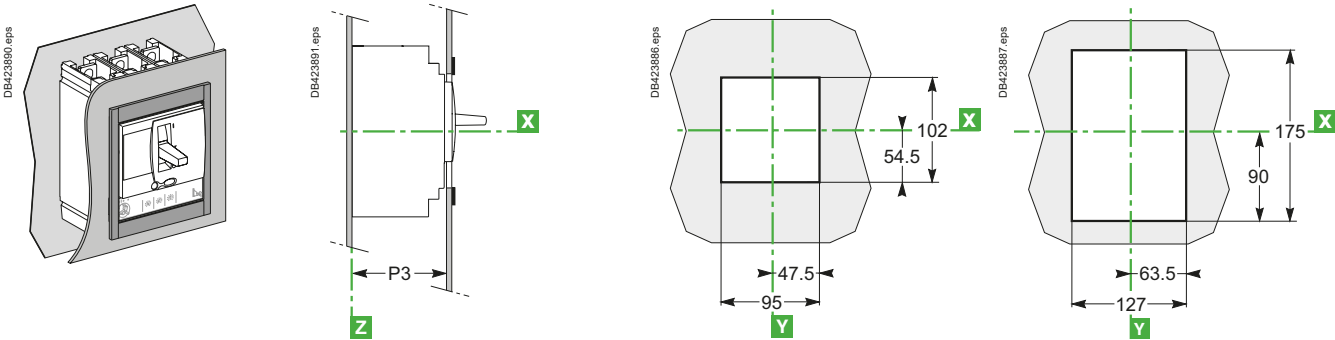
### NSX100 to 250

### NSX400/630

For toggle



For toggle with access to trip unit



E

# ComPact NSX front-panel cutouts

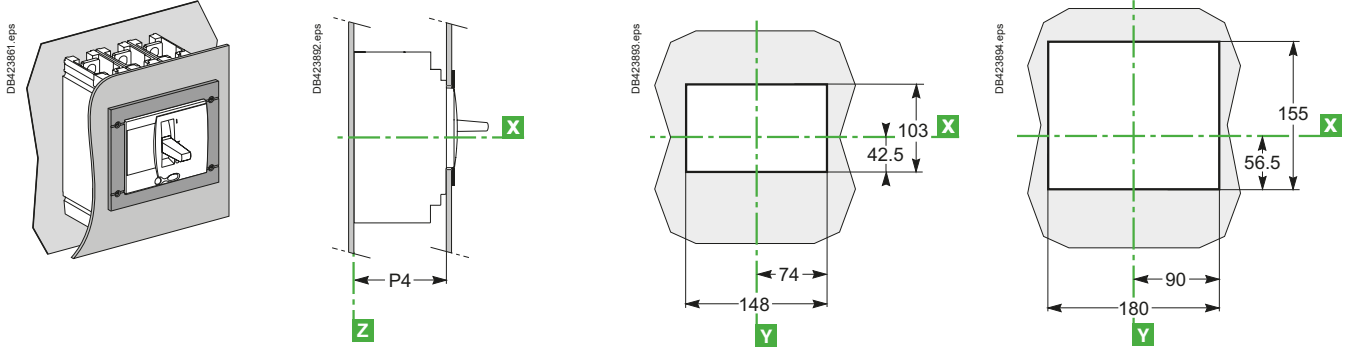
## ComPact NSX100 to 630 fixed version

### With IP40 front-panel escutcheon

For toggle

### NSX100 to 250

### NSX400/630

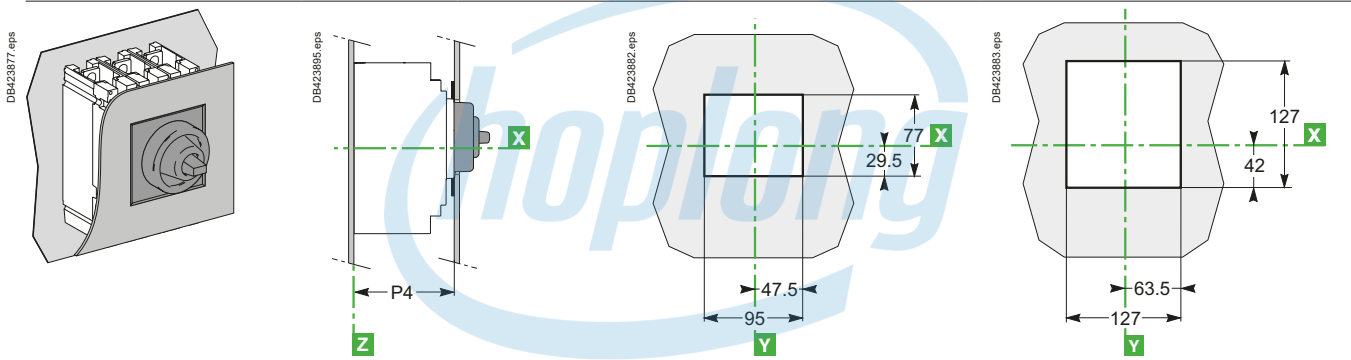


### With IP43 toggle cover

For toggle

### NSX100 to 250

### NSX400/630

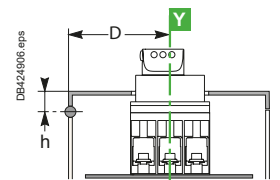


INDUSTRIAL AUTOMATION



| Type           | P3  | P4  |
|----------------|-----|-----|
| NSX100/160/250 | 88  | 89  |
| NSX400/630     | 112 | 113 |

**Note:** door cutout dimensions are given for a device position in the enclosure where  $D \geq 100 + (h \times 5)$  with respect to the door hinge.





# ComPact NSX front-panel cutouts

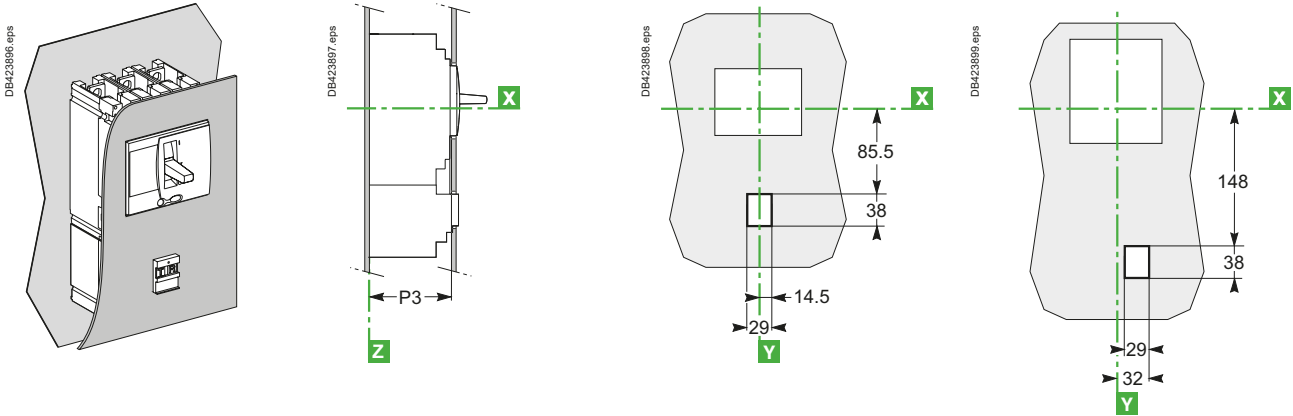
## ComPact NSX100 to 630 Vigi add-on fixed version

### Bare sheet metal

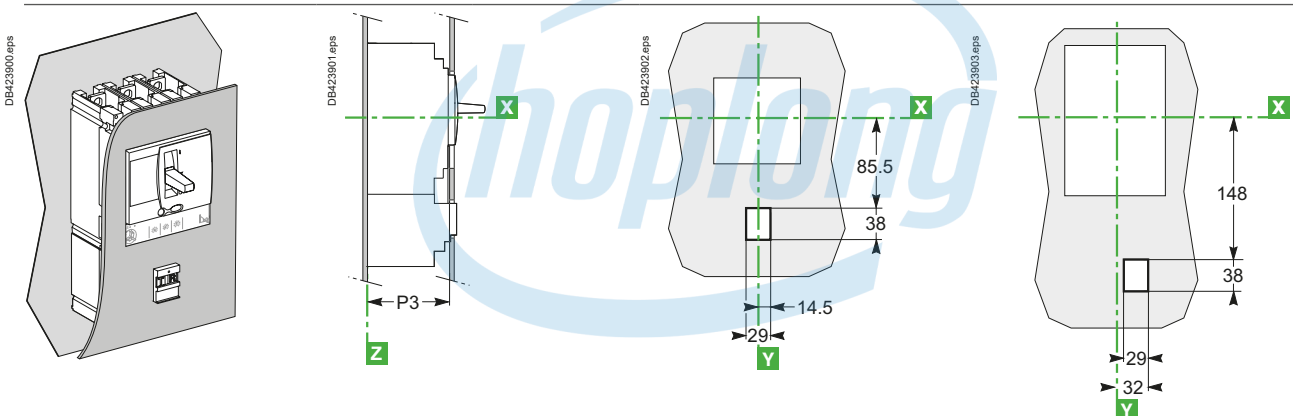
### NSX100 to 250

### NSX400/630

For toggle



For toggle with access to trip unit



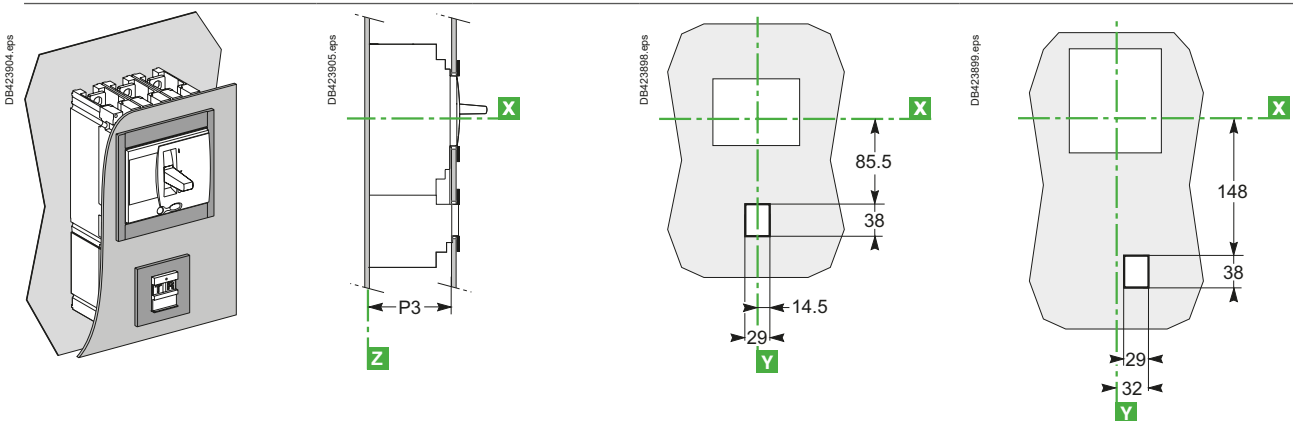
E

### With IP30 front-panel escutcheon

### NSX100 to 250

### NSX400/630

For toggle



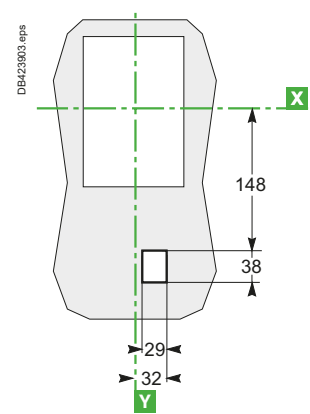
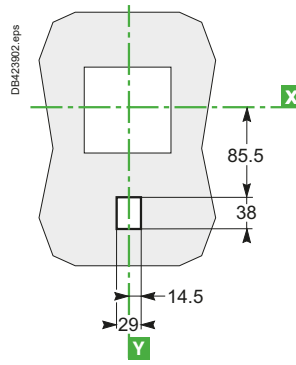
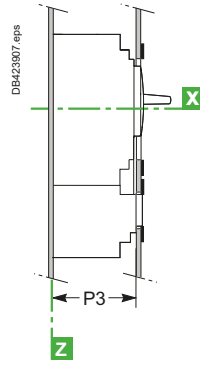
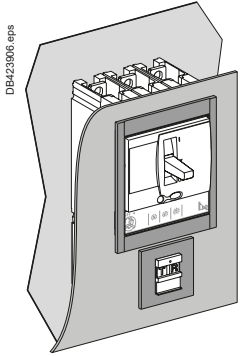
# ComPact NSX front-panel cutouts

## ComPact NSX100 to 630 Vigi add-on fixed version

**With IP30 front-panel escutcheon**  
For toggle with access to trip unit

**NSX100 to 250**

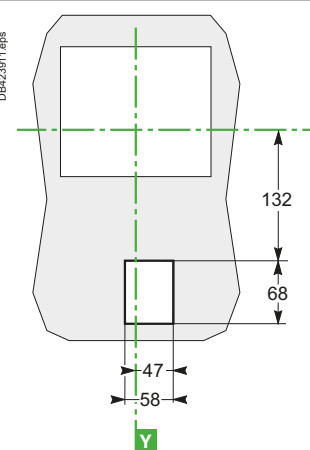
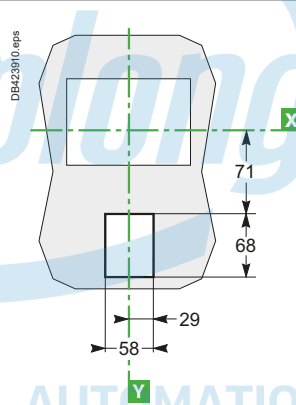
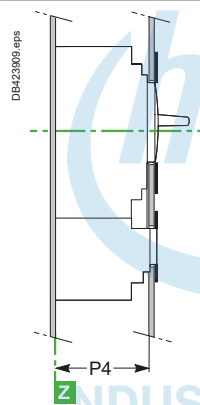
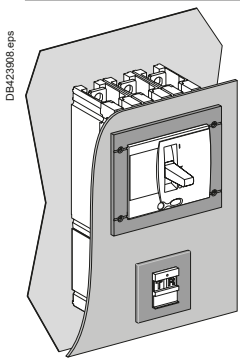
**NSX400/630**



**With IP40 front-panel escutcheon**  
For toggle

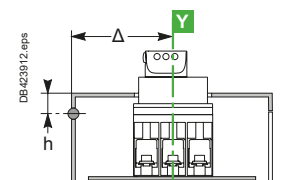
**NSX100 to 250**

**NSX400/630**



| Type           | P3  | P4  |
|----------------|-----|-----|
| NSX100/160/250 | 88  | 89  |
| NSX400/630     | 112 | 113 |

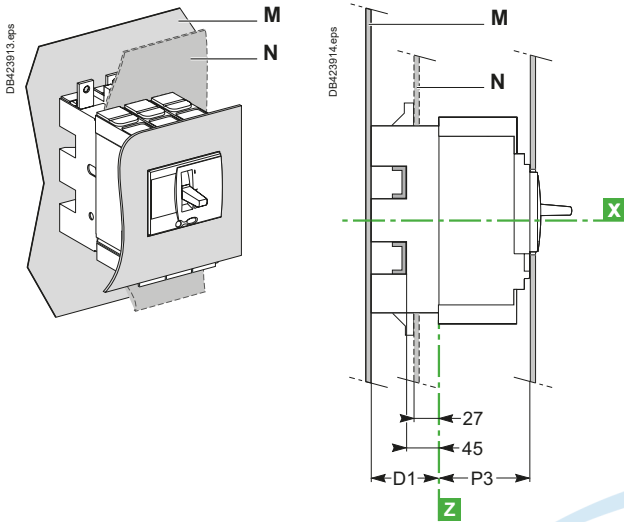
**Note:** door cutout dimensions are given for a device position in the enclosure where  $\Delta \geq 100 + (h \times 5)$  with respect to the door hinge.



# ComPact NSX front-panel cutouts

ComPact NSX100 to 630 plug-in and withdrawable versions

## Plug-in version



### Bare sheet metal

See ComPact NSX100 to 630 fixed version, [page E-56](#)

### With IP30 front-panel escutcheon

See ComPact NSX100 to 630 fixed version, [page E-56](#)

### With IP40 front-panel escutcheon

See ComPact NSX100 to 630 fixed version, [page E-57](#)

### With toggle cover

See ComPact NSX100 to 630 fixed version, [page E-57](#)

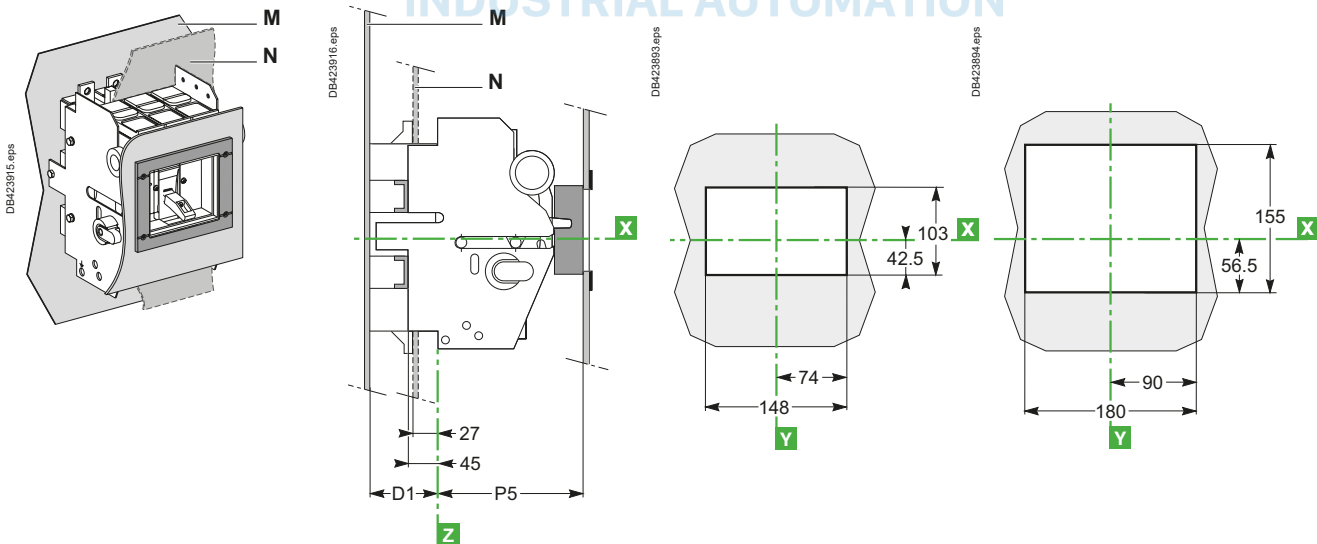
E

## Withdrawable version

NSX100 to 250

NSX400/630

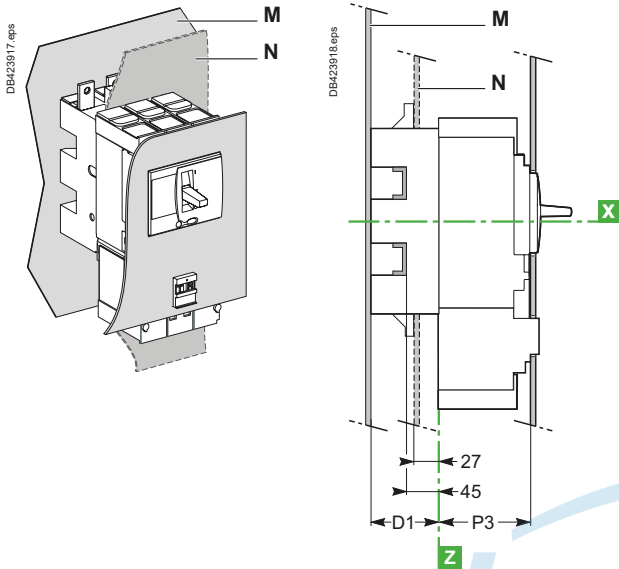
With protection collar and IP40 front-panel escutcheon



# ComPact NSX front-panel cutouts

ComPact NSX100 to 630 Vigi add-on plug-in and withdrawable versions

## Plug-in version



### Bare sheet metal

See ComPact NSX100 to 630 fixed version, [page E-58](#)

### With IP30 front-panel escutcheon

See ComPact NSX100 to 630 fixed version, [page E-58](#)

### With IP40 front-panel escutcheon

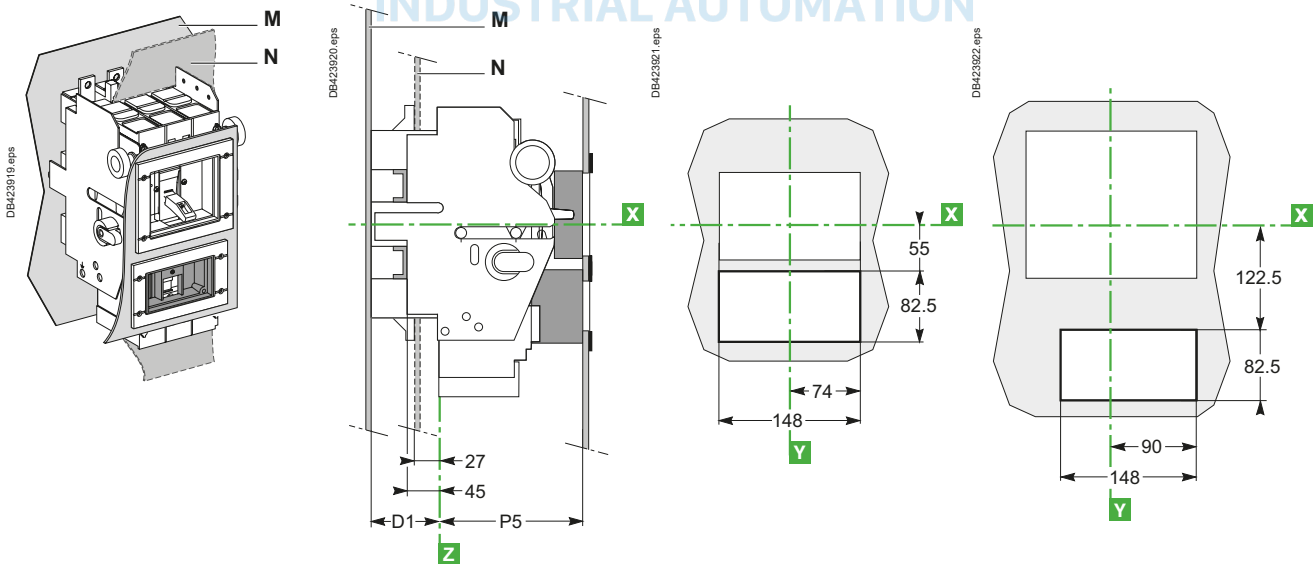
See ComPact NSX100 to 630 fixed version, [page E-59](#)

## Withdrawable version

NSX100 to 250

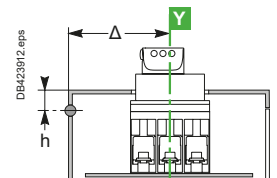
NSX400/630

With protection collar and IP40 front-panel escutcheon



| Type           | D1  | P3  | P5  |
|----------------|-----|-----|-----|
| NSX100/160/250 | 75  | 88  | 123 |
| NSX400/630     | 100 | 112 | 147 |

**Note:** door cutout dimensions are given for a device position in the enclosure where  $\Delta \geq 100 + (h \times 5)$  with respect to the door hinge.

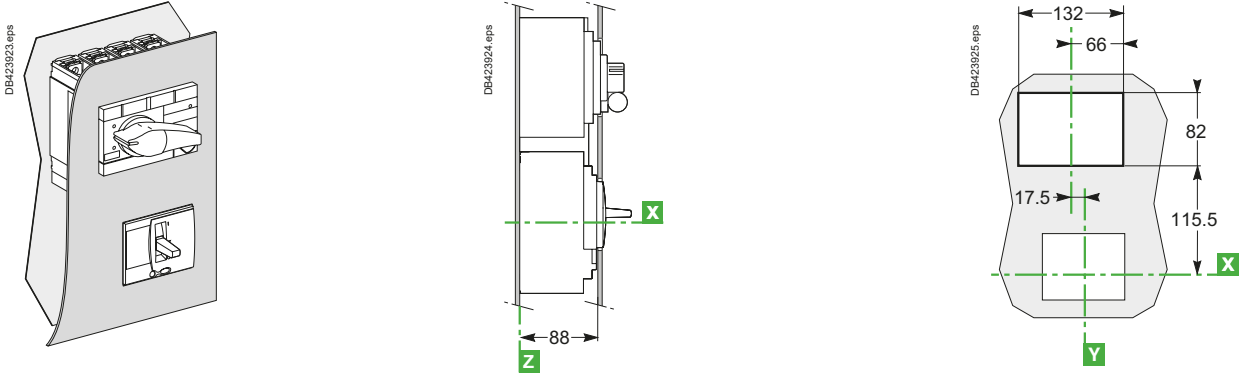


# ComPact NSX front-panel cutouts

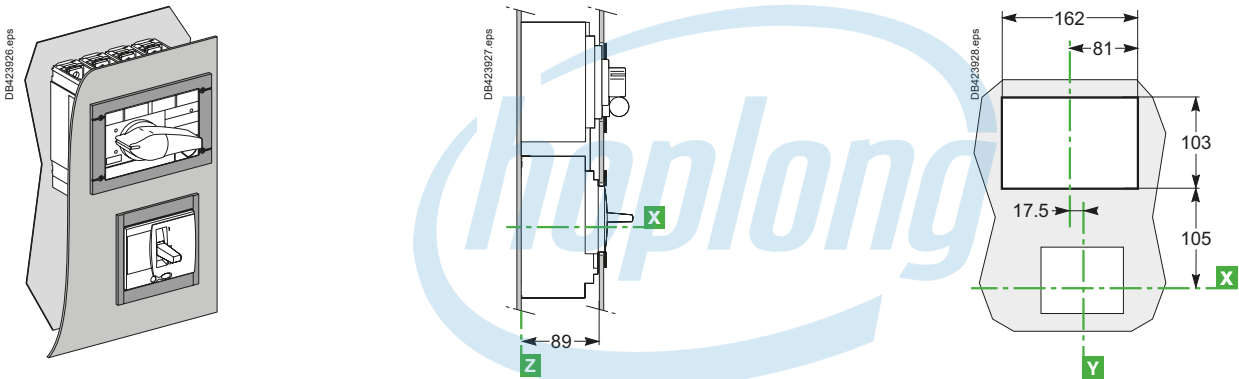
Visu function for ComPact NSX100 to 630 fixed version

## ComPact NSX100 to 250 with ComPact INV100 to 250 Visu function

Bare sheet metal

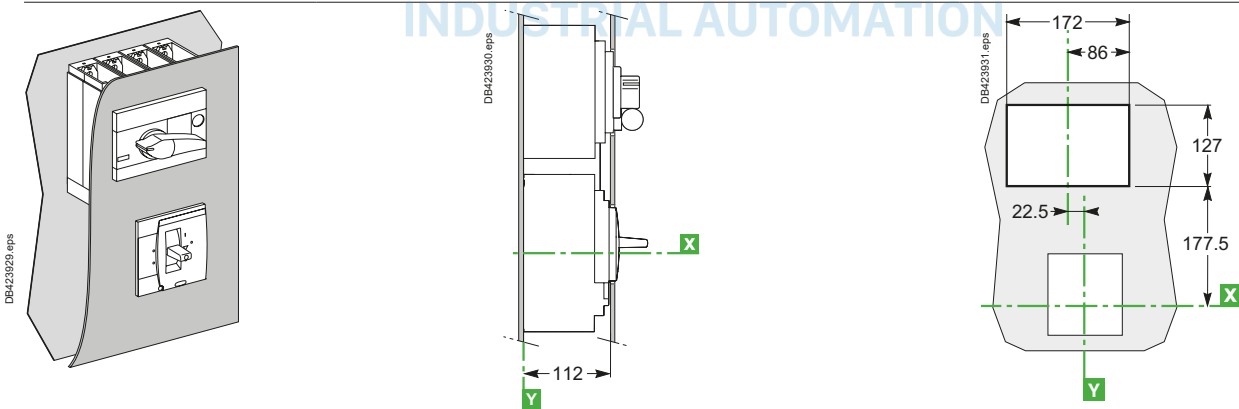


With IP40 front-panel escutcheon

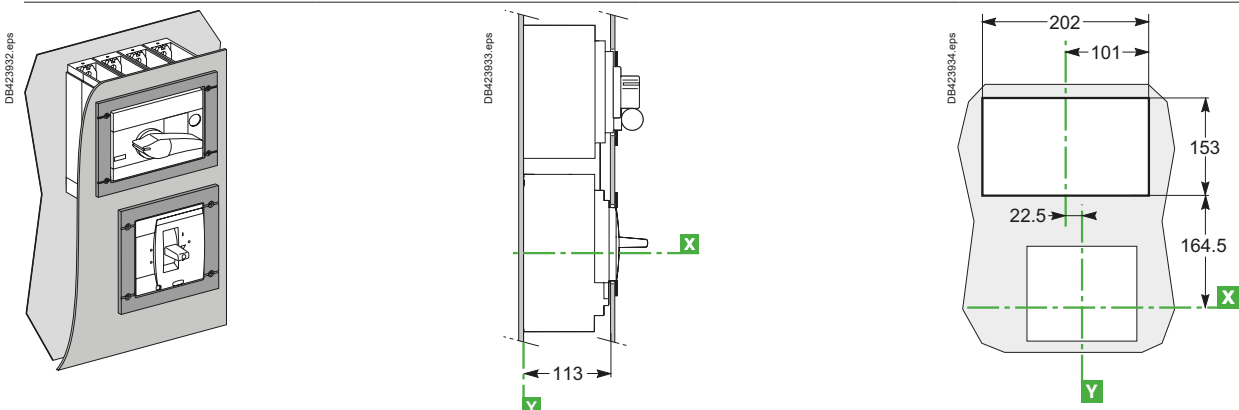


## ComPact NSX400/630 with ComPact INV400 to 630 Visu function

Bare sheet metal



With IP40 front-panel escutcheon



# ComPact NSX front-panel cutouts

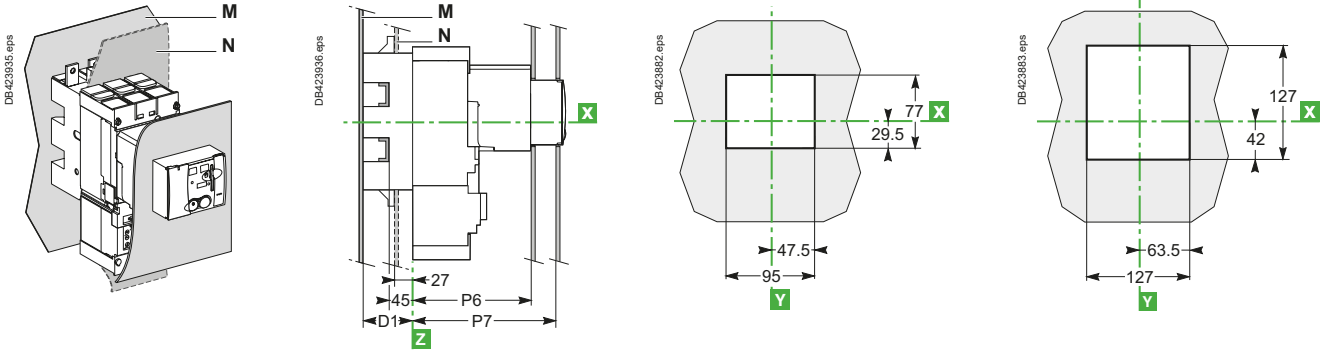
Motor mechanism module for ComPact NSX100 to 630 with/without Vigi add-on

## Bare sheet metal

Fixed, plug-in or withdrawable circuit breaker

### NSX100 to 250

### NSX400/630

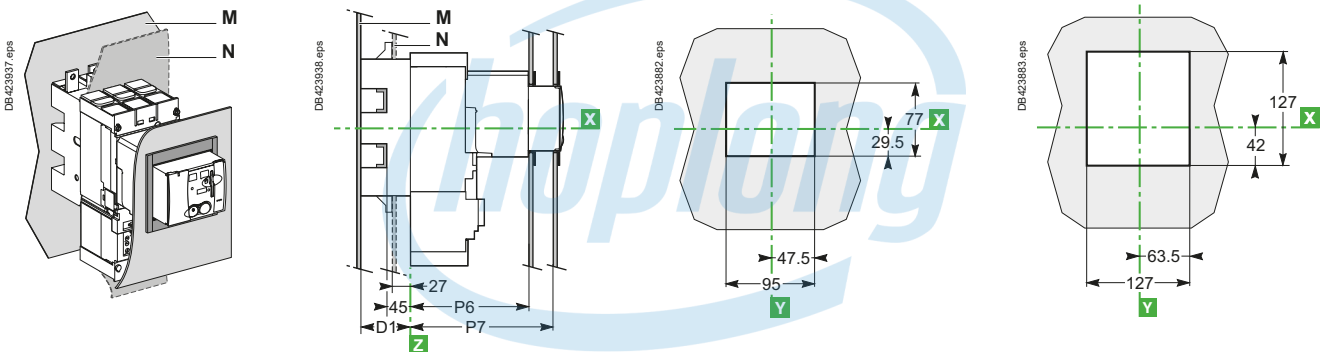


## With IP30 front-panel escutcheon

Fixed, plug-in or withdrawable circuit breaker

### NSX100 to 250

### NSX400/630

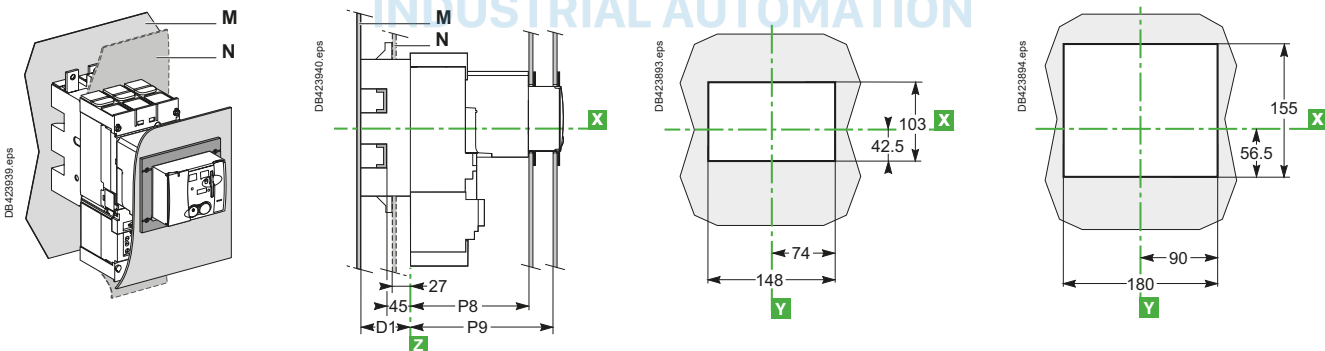


## With IP40 front-panel escutcheon

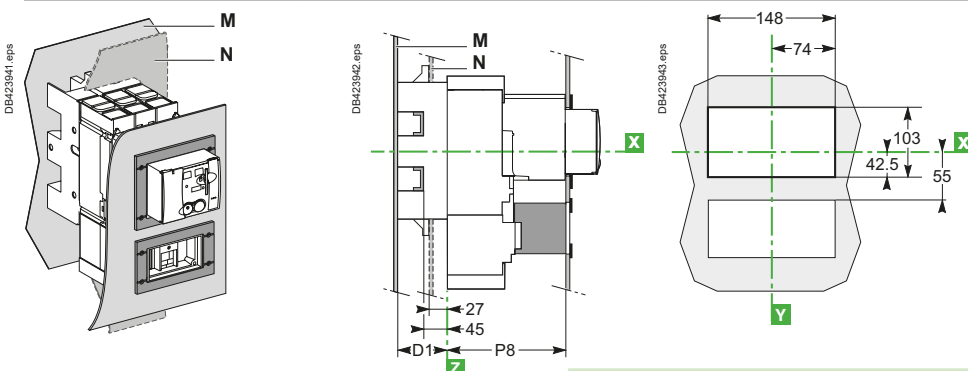
Fixed, plug-in or withdrawable circuit breaker without access to Vigi add-on

### NSX100 to 250

### NSX400/630



Fixed or plug-in circuit breaker with access to Vigi add-on



| Type           | D1 | P6 <sup>[1]</sup> | P7 <sup>[2]</sup> | P8 <sup>[1]</sup> | P9 <sup>[2]</sup> |
|----------------|----|-------------------|-------------------|-------------------|-------------------|
| NSX100/160/250 | 75 | 145               | 177               | 146               | 178               |

[1] Plug-in version.

[2] Withdrawable version.



# ComPact NSX front-panel cutouts

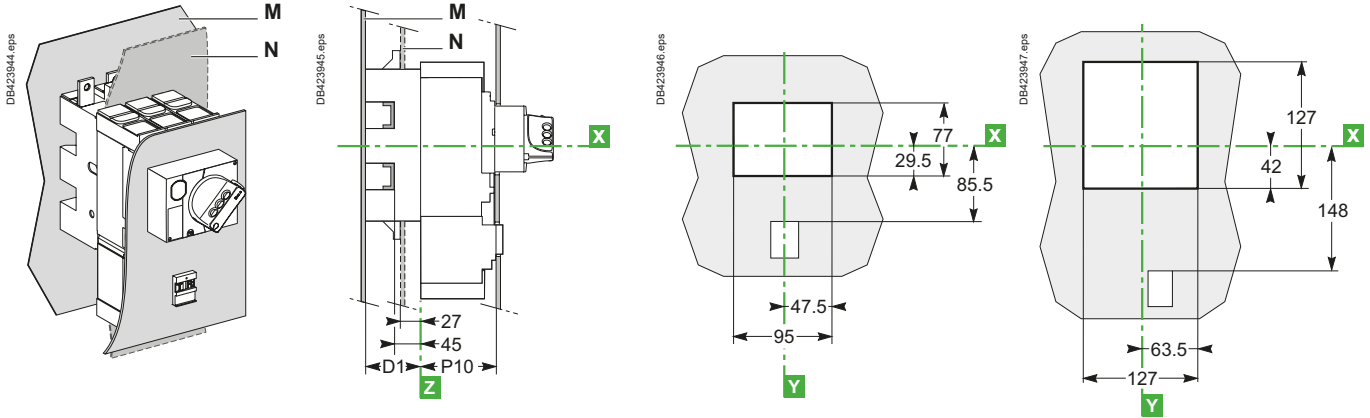
Direct rotary handle for ComPact NSX100 to 630 with/without Vigi add-on

## Fixed or plug-in circuit breakers

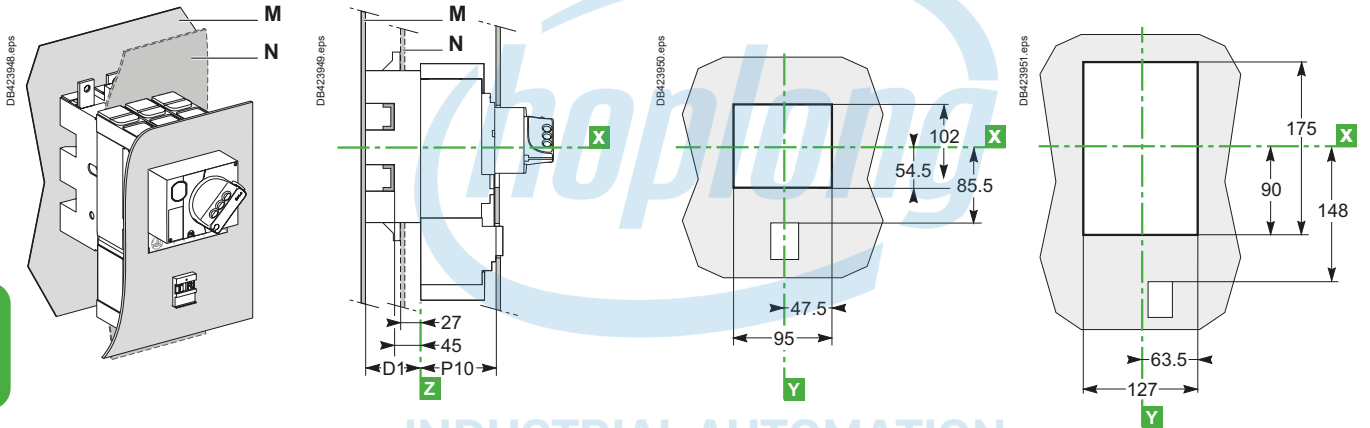
### NSX100 to 250

### NSX400/630

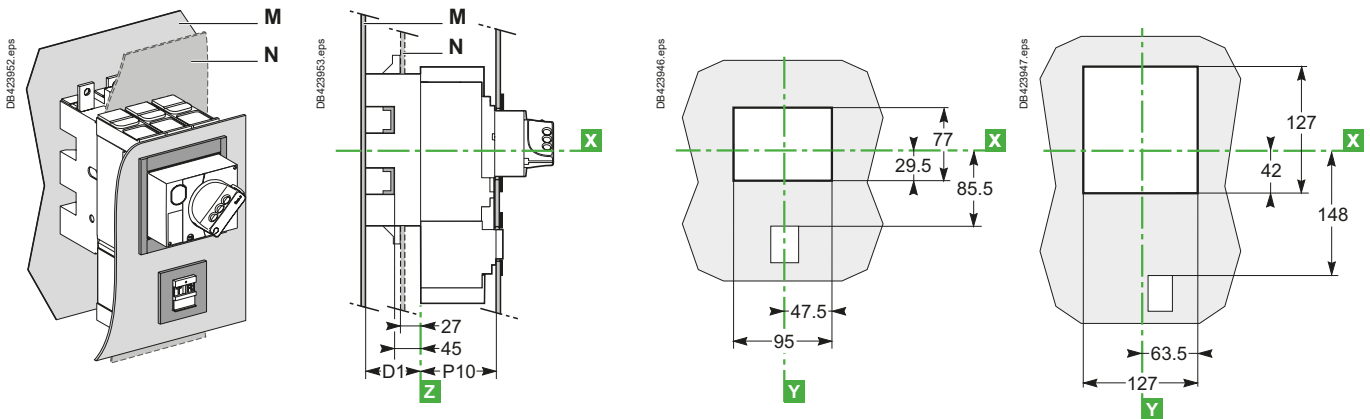
Bare sheet metal



Bare sheet metal with access to the trip unit



With IP30 front-panel escutcheon



E

INDUSTRIAL AUTOMATION

# ComPact NSX front-panel cutouts

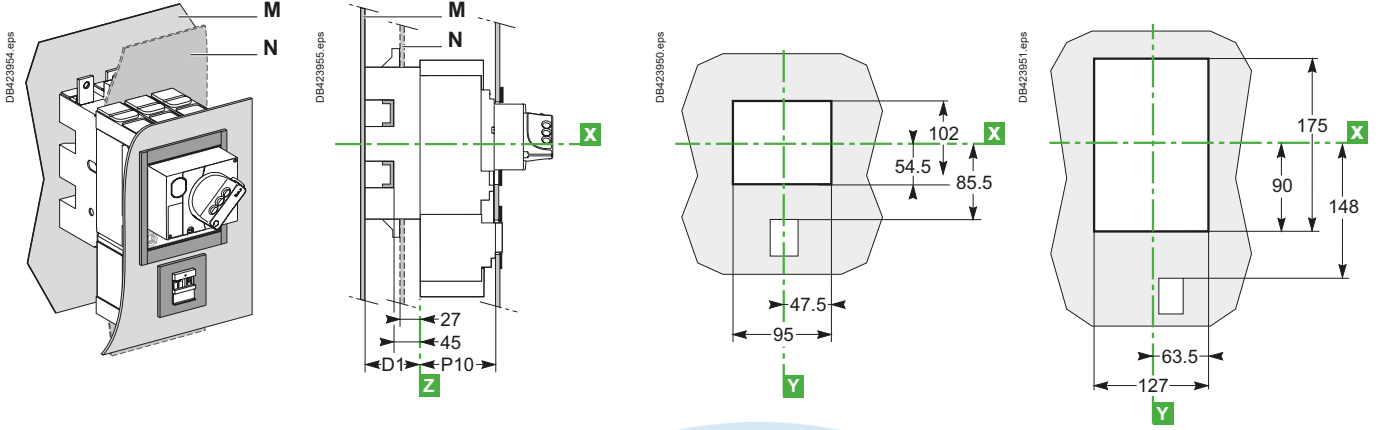
Direct rotary handle for ComPact NSX100 to 630 with/without Vigi add-on

## Fixed or plug-in circuit breakers

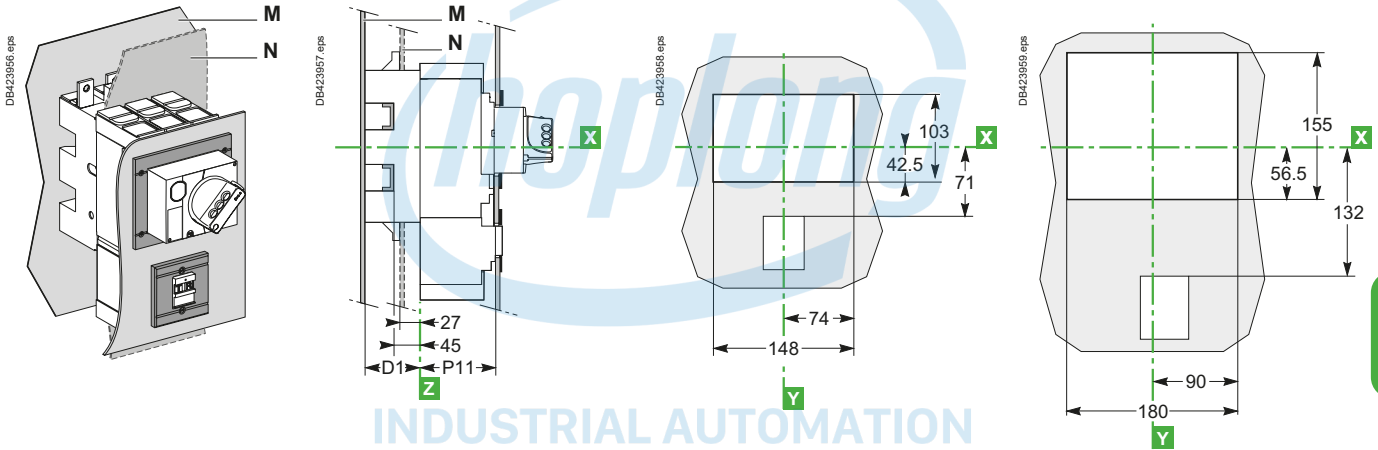
### NSX100 to 250

### NSX400/630

With IP30 front-panel escutcheon with access to the trip unit



With IP40 front-panel escutcheon

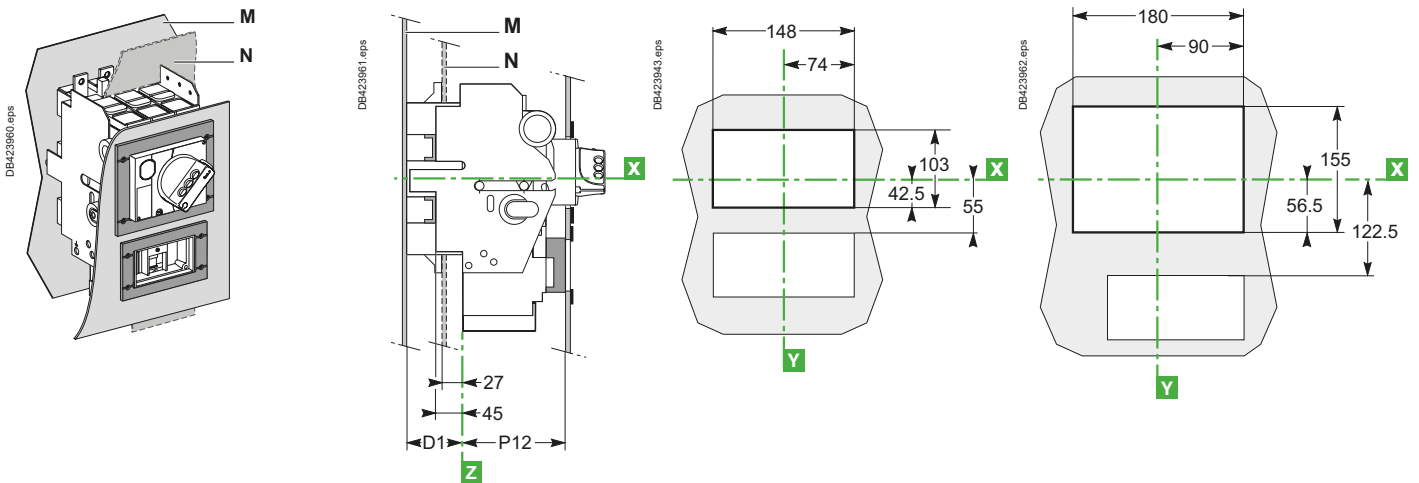


## Fixed or withdrawable circuit breakers

### NSX100 to 250

### NSX400/630

With IP40 front-panel escutcheon

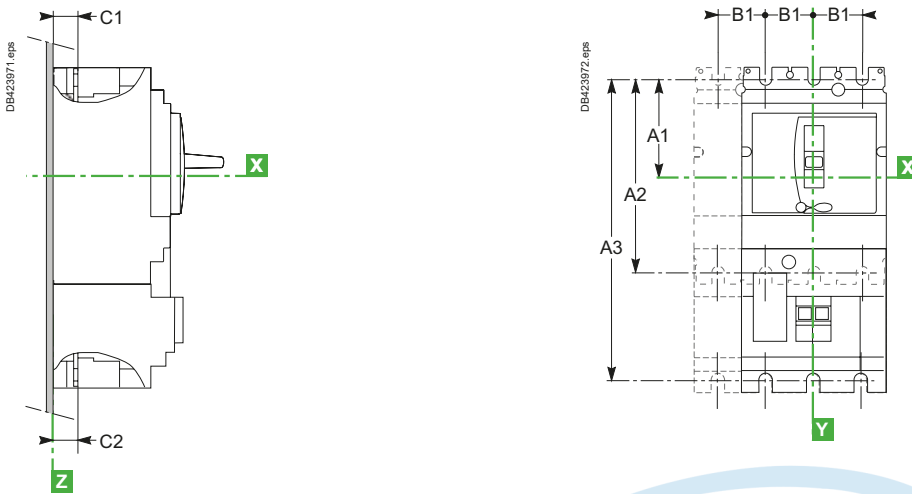


| Type           | D1  | P10 | P11 | P12 |
|----------------|-----|-----|-----|-----|
| NSX100/160/250 | 75  | 89  | 90  | 123 |
| NSX400/630     | 100 | 112 | 113 | 147 |

# ComPact NSX power connections

ComPact NSX100 to 630 with/without Vigi add-on fixed version

## Connection locations

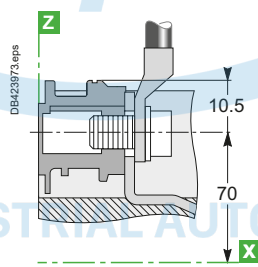
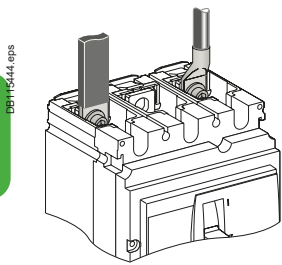


| Type       | A1    | A2  | B1 | C1   | C2   | Type              | A1    | A3  | B1 | C1   | C2   |
|------------|-------|-----|----|------|------|-------------------|-------|-----|----|------|------|
| NSX100/160 | 70    | 140 | 35 | 19.5 | 19.5 | NSX100/160 + Vigi | 70    | 215 | 35 | 19.5 | 21.5 |
| NSX250     | 70    | 140 | 35 | 21.5 | 19.5 | NSX250 + Vigi     | 70    | 215 | 35 | 21.5 | 21.5 |
| NSX400/630 | 113.5 | 227 | 45 | 26   | 26   | NSX400/630 + Vigi | 113.5 | 327 | 45 | 26   | 26   |

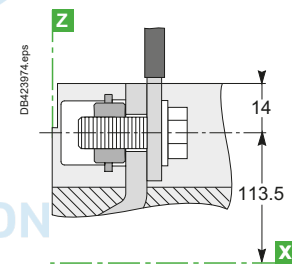
## Front connection without accessories

NSX100 to 250

NSX400/630



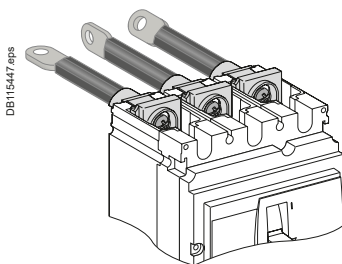
Cables with lugs/bars



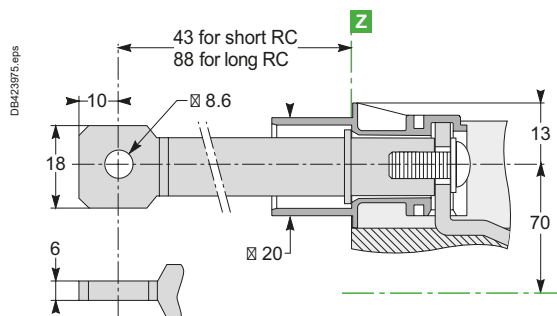
Bars/cables with lugs

## Connection with accessories

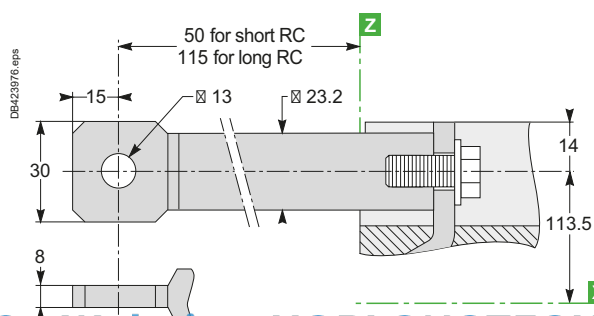
Long and short rear connectors



NSX100 to 250



NSX400/630



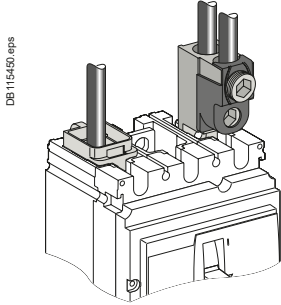
## ComPact NSX power connections

### ComPact NSX100 to 630 with/without Vigi add-on fixed version

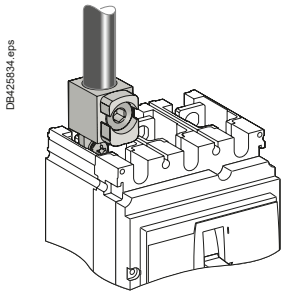
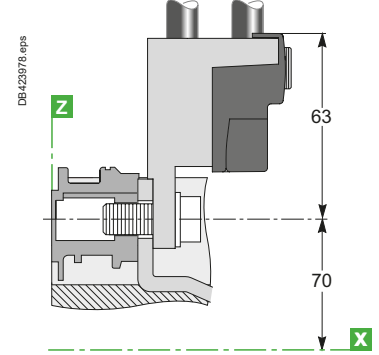
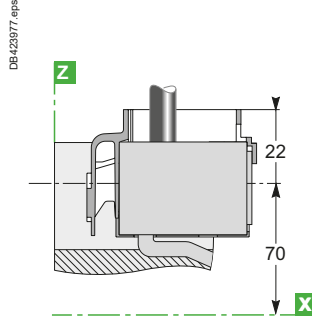
#### Connection with accessories

##### Bare-cable connectors

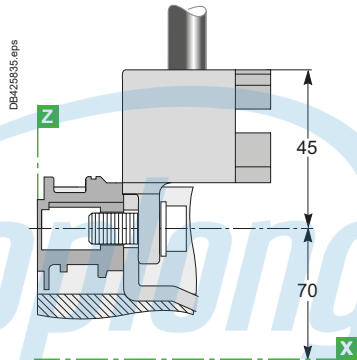
##### NSX100 to 250



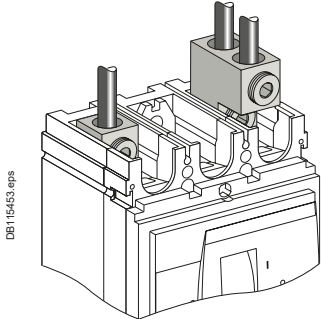
DB115430.eps



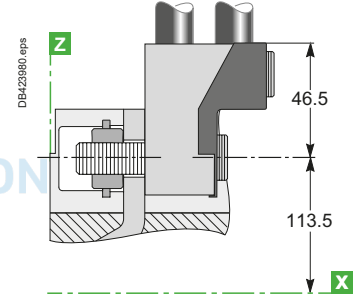
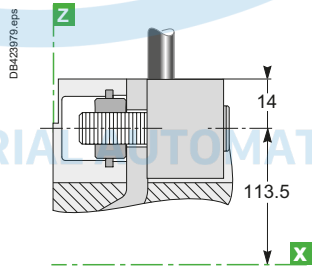
DB423954.eps



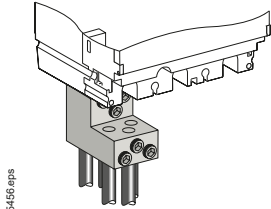
##### NSX400/630



DB115453.eps

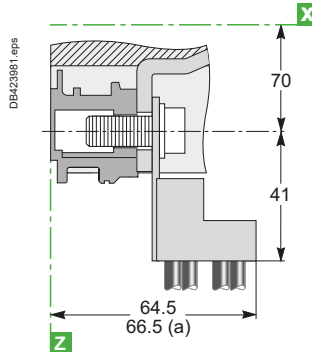


##### Distribution connectors (for NSX100 to 250 only)



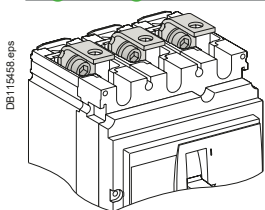
DB115456.eps

[a] Vigi add-on or NSX250.



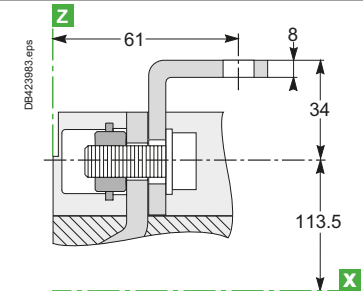
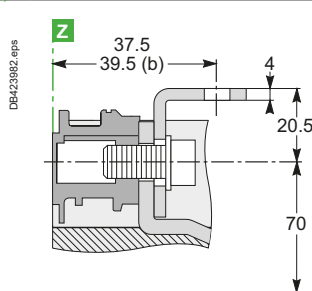
##### Right-angle terminal extensions (upstream only) NSX100 to 250

##### NSX400/630



DB115465.eps

[b] NSX250.

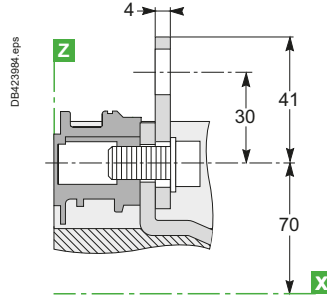
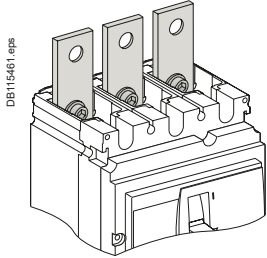


# ComPact NSX power connections

## ComPact NSX100 to 630 with/without Vigi add-on fixed version

### Connection with accessories

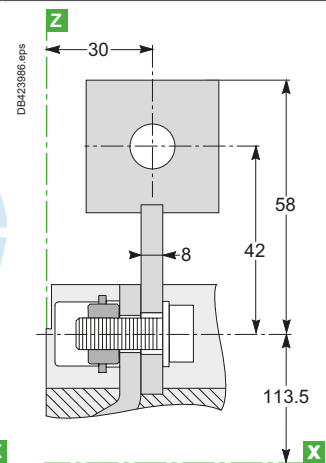
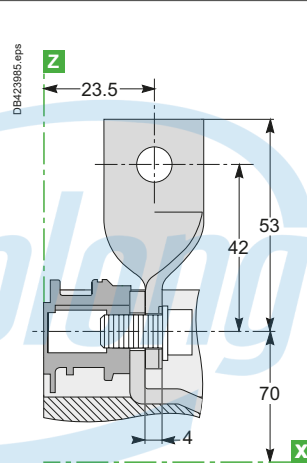
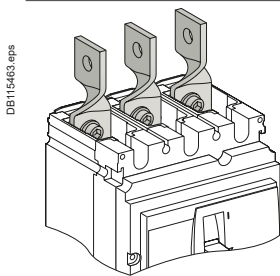
Straight terminal extensions (for NSX100 to 250 only)



### Edgewise terminal extensions

NSX100 to 250

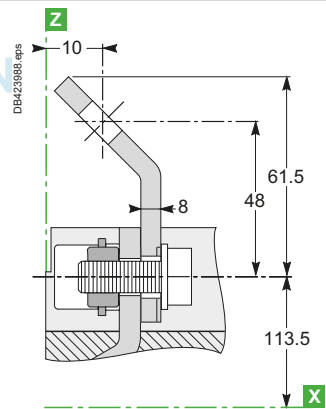
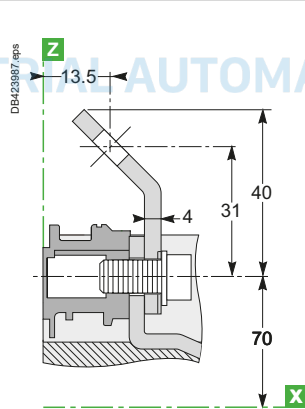
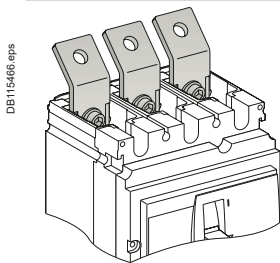
NSX400/630



### 45° terminal extensions

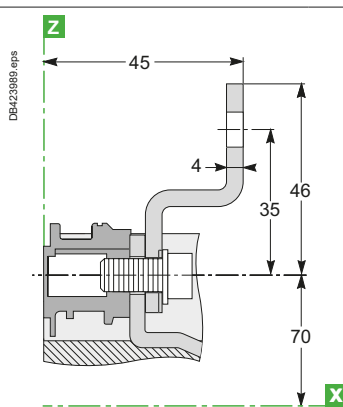
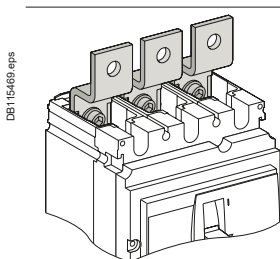
NSX100 to 250

NSX400/630



### Double-L terminal extensions

NSX100 to 250



E

INDUSTRIAL AUTOMATION

# ComPact NSX power connections

ComPact NSX100 to 630 with/without Vigi add-on fixed version

## Connection with accessories

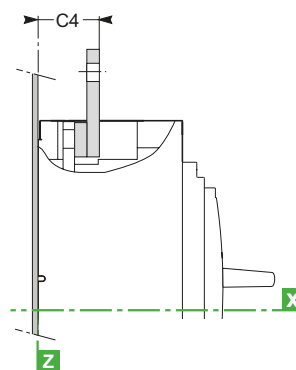
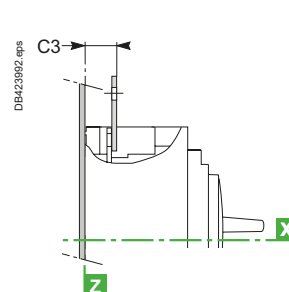
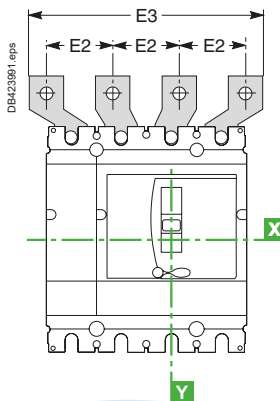
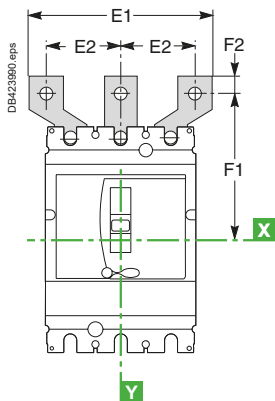
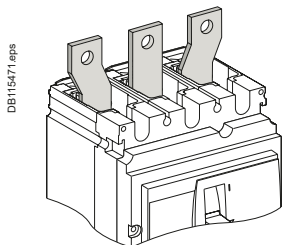
Spreaders

3P

4P

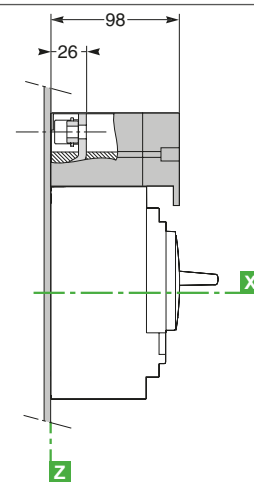
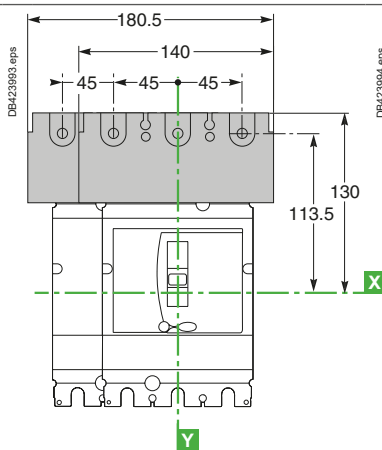
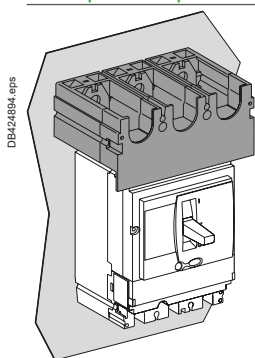
NSX100 to 250

NSX400/630



| Type       | C3   | C4 | E1         | E2         | E3           | F1           | F2       |
|------------|------|----|------------|------------|--------------|--------------|----------|
| NSX100/160 | 23.5 | -  | 114        | 45         | 159          | 100          | 11       |
| NSX250     | 25.5 | -  | 114        | 45         | 159          | 100          | 11       |
| NSX400/630 | -    | 44 | 135<br>170 | 52.5<br>70 | 187.5<br>240 | 152.5<br>166 | 15<br>15 |

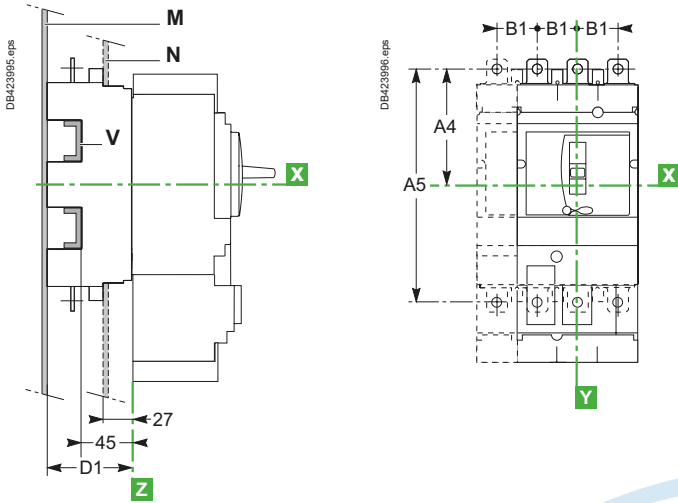
## One-piece spreader (for NSX100 to 250 only)



# ComPact NSX power connections

ComPact NSX100 to 630 with/without Vigi add-on plug-in and withdrawable versions

## Connection locations



| Type          | A4    | A5  | B1 | D1  |
|---------------|-------|-----|----|-----|
| NSX100 to 250 | 100   | 200 | 35 | 75  |
| NSX400/630    | 156.5 | 313 | 45 | 100 |

**Note :**

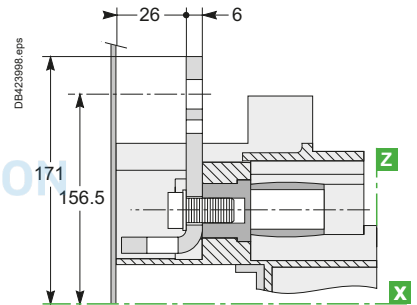
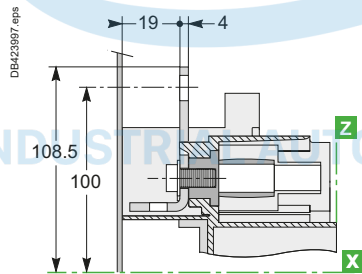
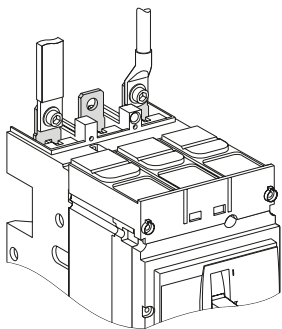
- for mounting on a backplate, the insulating screen supplied with the plug-in base must be installed.
- for withdrawable versions, terminal shields are recommended.

## Connection without accessories

Front connection: mounting on backplate (M) or rails (V)

NSX100 to 250

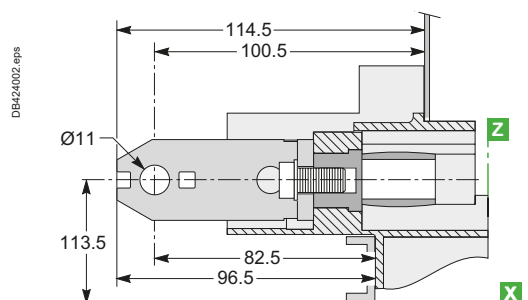
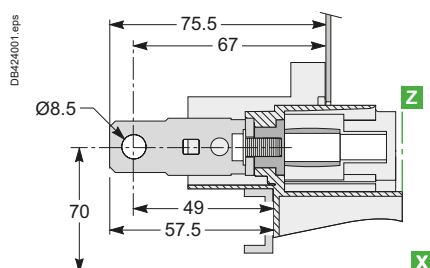
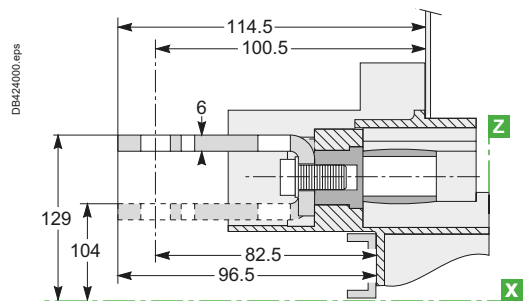
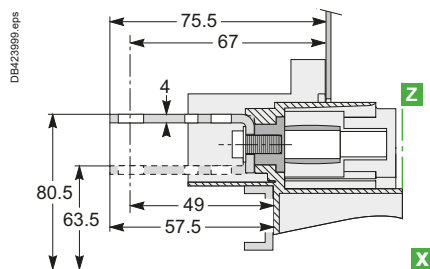
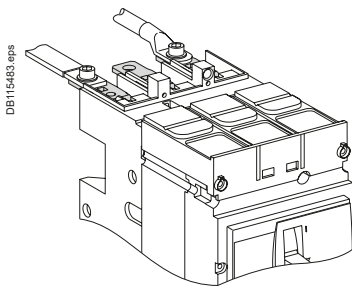
NSX400/630



Rear connection: mounting through front panel (N) or on rails (V)

NSX100 to 250

NSX400/630





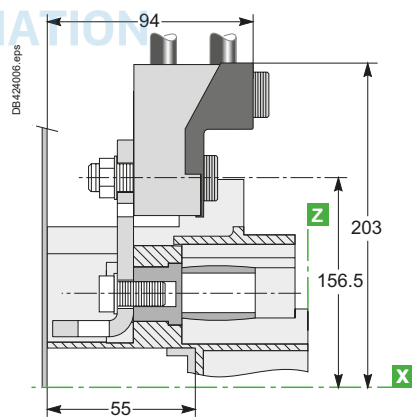
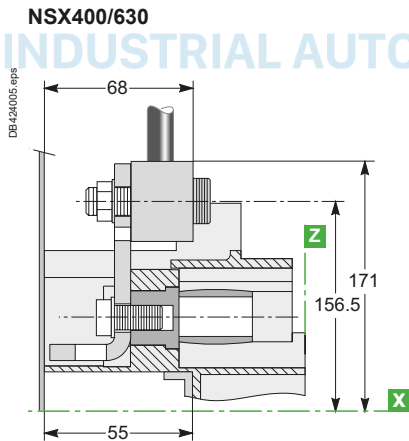
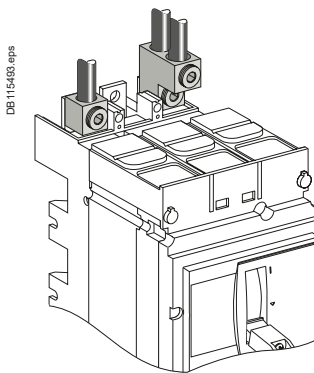
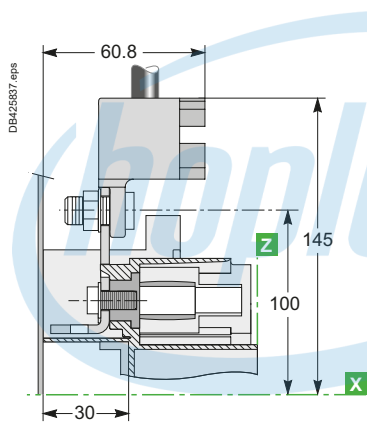
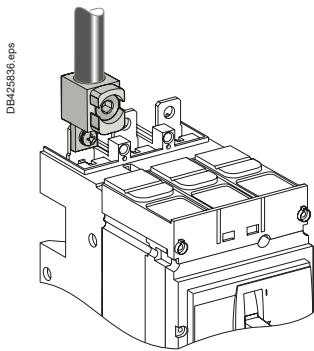
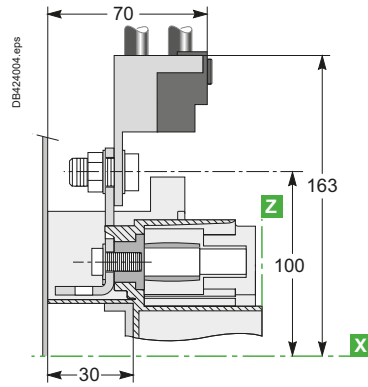
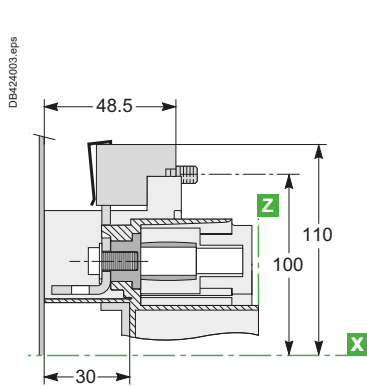
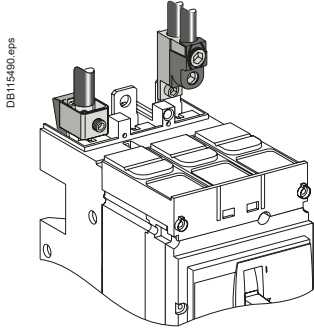
# ComPact NSX power connections

## ComPact NSX100 to 630 with/without Vigi add-on plug-in and withdrawable versions

### Connection with accessories

Bare-cable connectors: mounting on backplate (M) or rails (V)

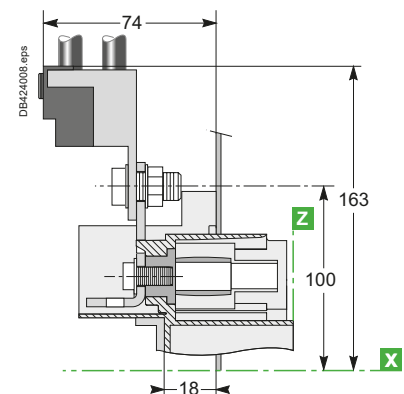
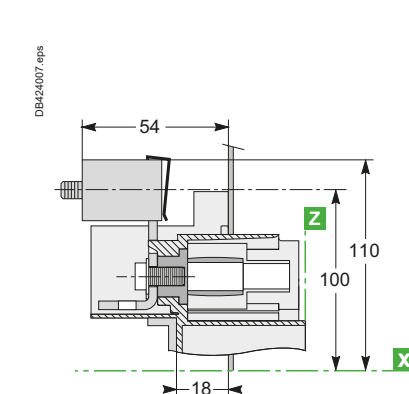
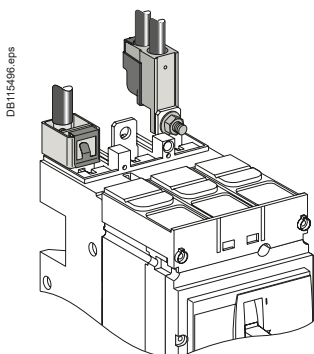
#### NSX100 to 250



#### NSX400/630

Bare-cable connectors: mounting through front panel (N) or on rails (V)

#### NSX100 to 250

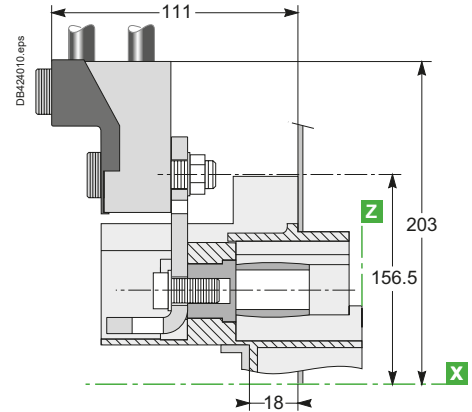
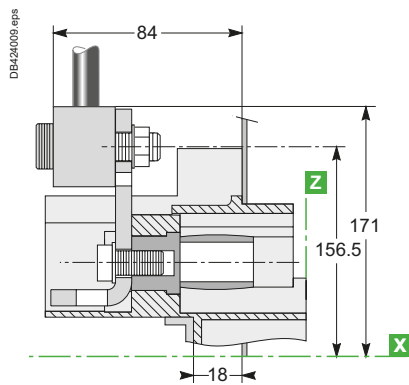
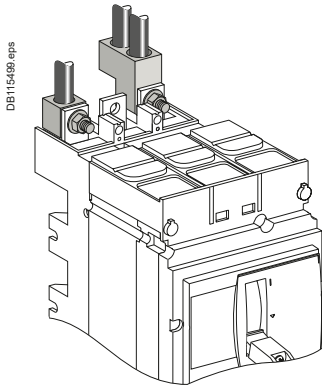


# ComPact NSX power connections

ComPact NSX100 to 630 with/without Vigi add-on plug-in and withdrawable versions

Bare-cable connectors: mounting through front panel (N) or on rails (V)

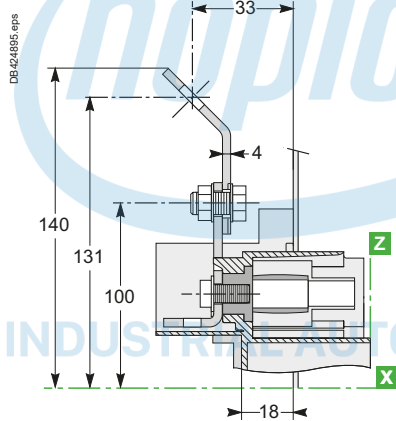
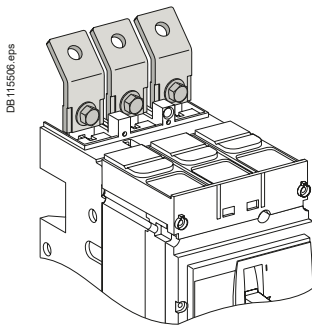
**NSX400/630**



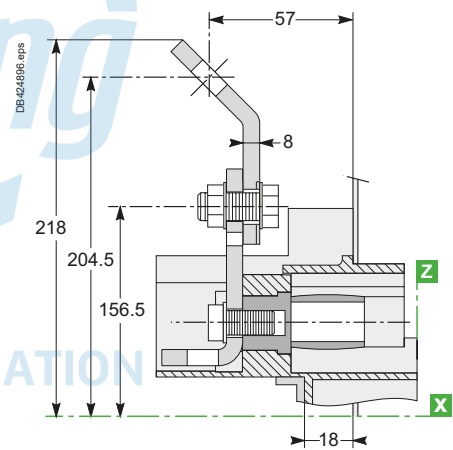
## Connection with accessories

45° extensions: mounting through front panel (N) or on rails (V)

**NSX100 to 250**

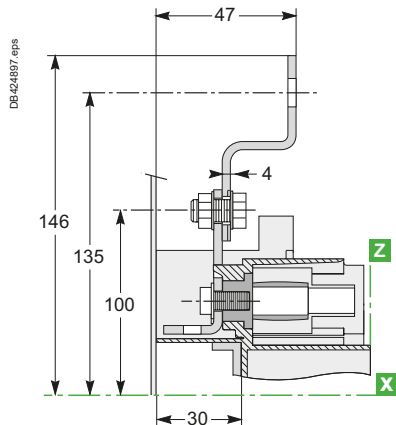
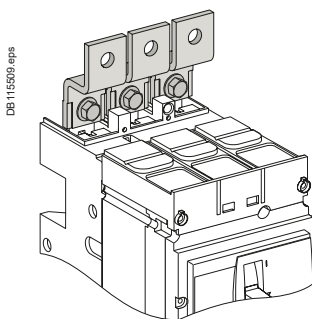


**NSX400/630**



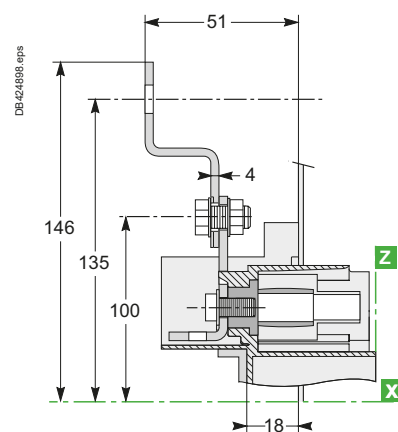
Double-L extensions: mounting on backplate (M) or rails (V)

**NSX100 to 250**



Double-L extensions: mounting through front panel (N) or on rails (V)

**NSX100 to 250**



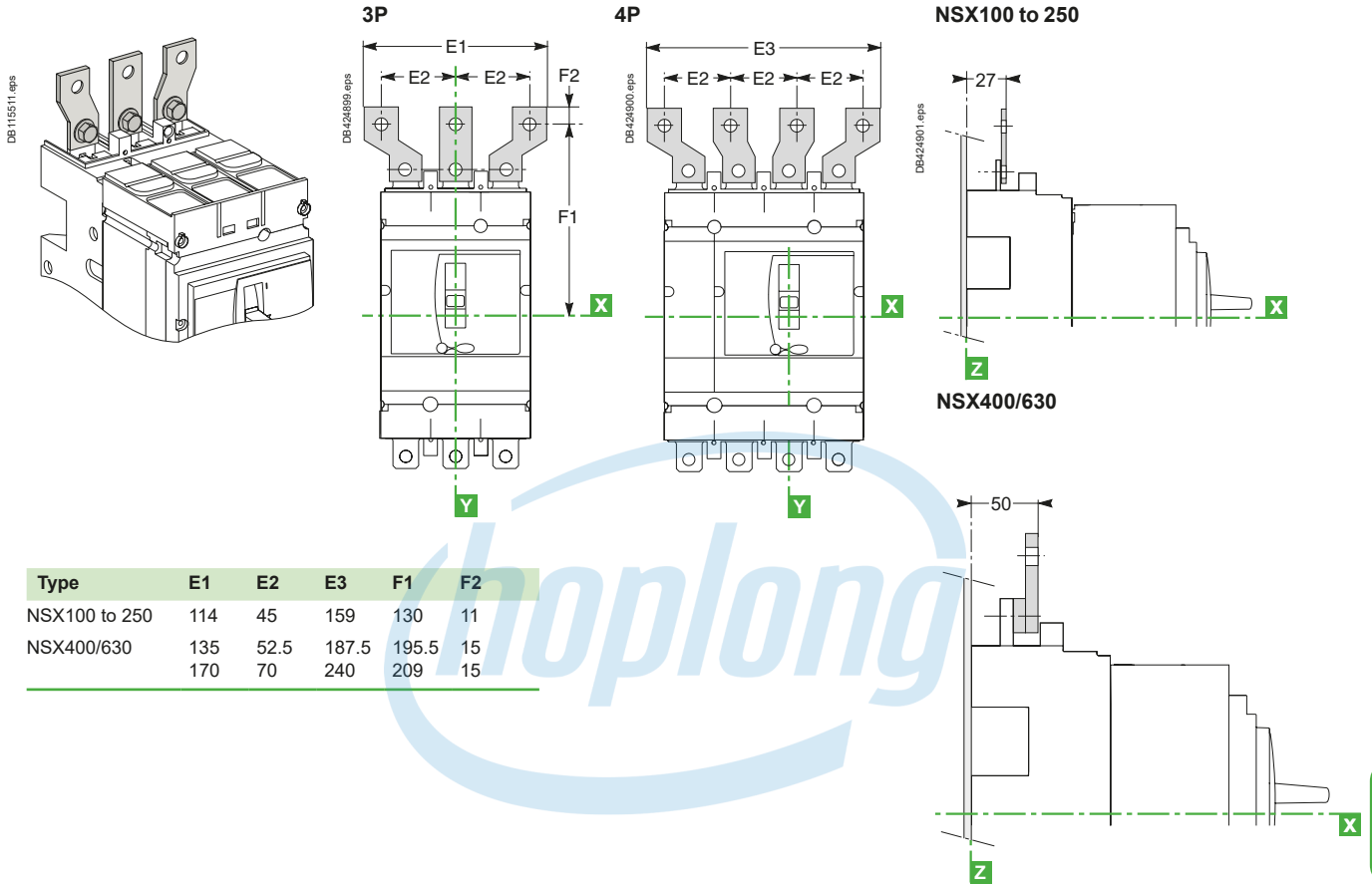
E

# ComPact NSX power connections

ComPact NSX100 to 630 with/without Vigi add-on plug-in and withdrawable versions

## Connection with accessories

Spreaders: mounting on backplate (M) or rails (V)

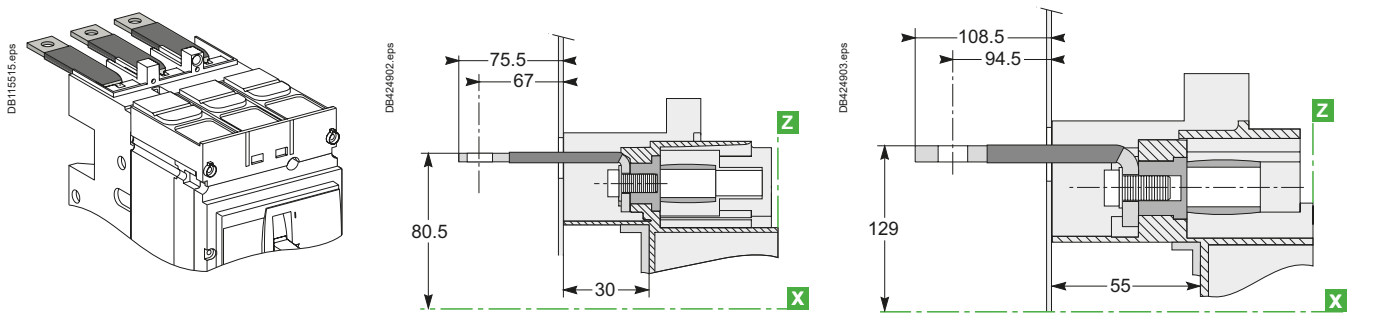


## Long insulated rear connectors: mounting on backplate (M) or rails (V)

Exterior-mounted rear connectors

NSX100 to 250

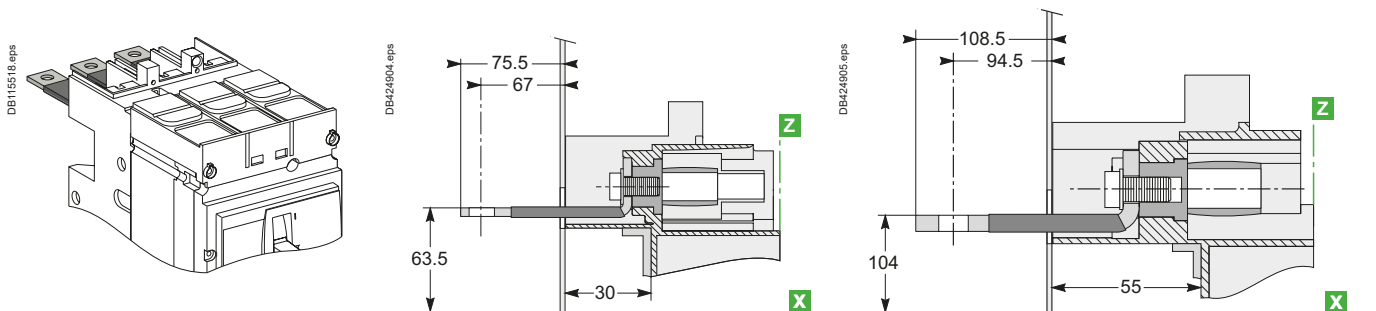
NSX400/630



Interior-mounted rear connectors

NSX100 to 250

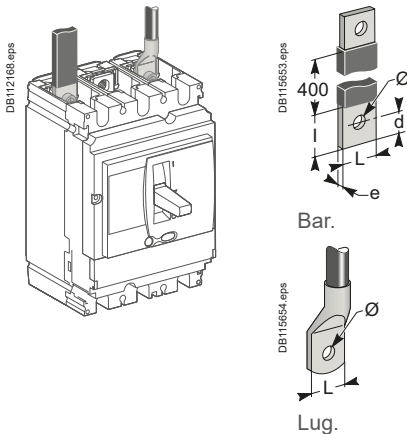
NSX400/630



Long, insulated connectors are mandatory.

# ComPact NSX power connections

Connection of insulated bars or cables with lugs to ComPact NSX100 to 630 with/without Vigi add-on



## Direct connection for NSX100 to 630

| Dimensions             |        | NSX100 | NSX160/250 | NSX400/630 |
|------------------------|--------|--------|------------|------------|
| <b>Bars</b>            | L (mm) | ≤ 25   | ≤ 25       | ≤ 32       |
|                        | l (mm) | d + 10 | d + 10     | d + 15     |
|                        | d (mm) | ≤ 10   | ≤ 10       | ≤ 15       |
|                        | e (mm) | ≤ 6    | ≤ 6        | 3 ≤ e ≤ 10 |
|                        | Ø (mm) | 6.5    | 8.5        | 10.5       |
| <b>Lugs</b>            | L (mm) | ≤ 25   | ≤ 25       | ≤ 32       |
|                        | Ø (mm) | 6.5    | 8.5        | 10.5       |
| <b>Torque (Nm) [1]</b> |        | 10     | 15         | 50         |
| <b>Torque (Nm) [2]</b> |        | 5/5    | 5/5        | 20/11      |
| <b>Torque (Nm) [3]</b> |        | 8      | 8          | 20         |

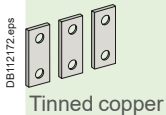
[1] Tightening torque on the circuit breaker for lugs or bars.

[2] Tightening torque on fixed devices for rear connectors//tightening torque on plug-in or withdrawable devices for power connectors.

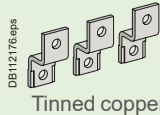
[3] Tightening torque on the plug-in base for terminal extensions.

## Accessories for NSX100 to 250

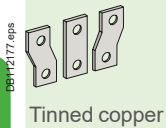
### Straight terminal extensions



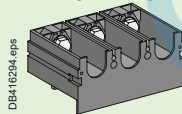
### Double-L terminal extensions



### Spreaders: separate parts



### one-piece spreader



For U > 600 V, the mandatory insulation kit is not compatible with spreaders made up of separate parts. The one-piece spreader must be used.

## Connection with accessories for NSX100 to 250 (60228)

| Pole pitch             |             | With spreaders or terminal extensions |             |
|------------------------|-------------|---------------------------------------|-------------|
|                        |             | NSX100                                | NSX160/250  |
| Without spreaders      |             | 35 mm                                 |             |
| With spreaders         |             | 45 mm                                 |             |
| <b>Dimensions</b>      | <b>Bars</b> | L (mm)                                | ≤ 25        |
|                        |             | l (mm)                                | 20 ≤ l ≤ 25 |
|                        |             | d (mm)                                | ≤ 10        |
|                        |             | e (mm)                                | ≤ 6         |
|                        |             | Ø (mm)                                | 6.5         |
| <b>Lugs</b>            | L (mm)      | ≤ 25                                  |             |
|                        | Ø (mm)      | 6.5                                   |             |
| <b>Torque (Nm) [1]</b> |             | 10                                    | 15          |
| <b>Torque (Nm) [2]</b> |             | 5                                     | 5           |

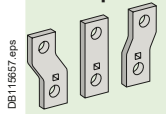
[1] Tightening torque on the circuit breaker for spreaders or terminal extensions.

[2] Tightening torque on the plug-in base for spreaders or terminal extensions.

Spreaders and straight, right-angle, 45° and edgewise terminal extensions are supplied with flexible interphase barriers.

## Accessories for NSX400 and 630

### Spreaders made up of separate parts for 52.5 and 70 mm pitch



For U > 600 V, use of the 52.5 mm pitch spreaders requires a specific insulation kit. The 70 mm pitch spreaders may not be used.

## Connection with accessories for NSX400 and 630 (60228)

| Pole pitch             |             | With spreaders |            | With terminal extensions |
|------------------------|-------------|----------------|------------|--------------------------|
| Without spreaders      |             | 45 mm          |            |                          |
| With spreaders         |             | 52.5 or 70 mm  |            |                          |
| <b>Dimensions</b>      | <b>Bars</b> | L (mm)         | ≤ 40       | ≤ 32                     |
|                        |             | l (mm)         | d + 15     | 30 ≤ l ≤ 34              |
|                        |             | d (mm)         | ≤ 20       | ≤ 15                     |
|                        |             | e (mm)         | 3 ≤ e ≤ 10 | 3 ≤ e ≤ 10               |
|                        |             | Ø (mm)         | 12.5       | 10.5                     |
| <b>Lugs</b>            | L (mm)      | ≤ 40           | ≤ 32       |                          |
|                        | Ø (mm)      | 12.5           | 10.5       |                          |
| <b>Torque (Nm) [1]</b> |             | 50             | 50         |                          |
| <b>Torque (Nm) [2]</b> |             | 20             | 20         |                          |

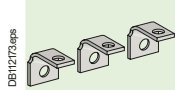
[1] Tightening torque on the circuit breaker for spreaders or terminal extensions.

[2] Tightening torque on the plug-in base for spreaders or terminal extensions.

Spreaders and right-angle, 45° and edgewise terminal extensions are supplied with flexible interphase barriers.

## Accessories for NSX100 to 630

### Right-angle terminal extensions



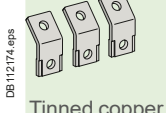
Tinned copper  
To be mounted on upstream side.

### Edgewise terminal extensions

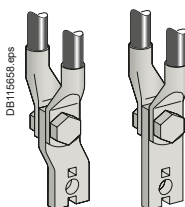


Tinned copper

### 45° terminal extensions



Tinned copper



Mounting detail: 2 cables with lugs.

# Characteristics and performance

## ComPact NSX circuit breakers from 100 to 250 A up to 690 V



### Common characteristics

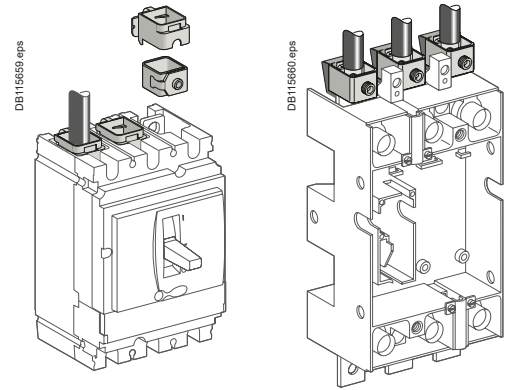
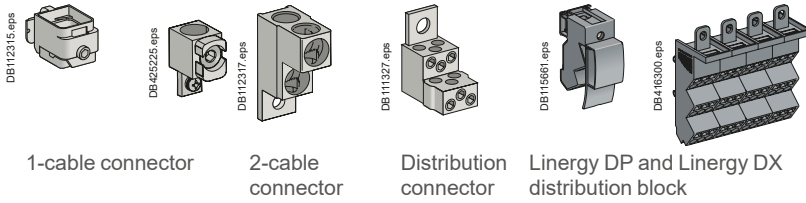
|          |              |                                       |                                  |
|----------|--------------|---------------------------------------|----------------------------------|
| Control  | Manual       | With toggle                           | <input checked="" type="radio"/> |
|          |              | With direct or extended rotary handle | <input checked="" type="radio"/> |
| Versions | Electrical   | With remote control                   | <input checked="" type="radio"/> |
|          |              | Fixed                                 | <input checked="" type="radio"/> |
|          | Withdrawable | Plug-in base                          | <input checked="" type="radio"/> |
|          |              | Chassis                               | <input checked="" type="radio"/> |

| NSX100                           |    |    |     |     |     |     | NSX160 <sup>[4]</sup>            |     |    |    |    |     |     | NSX250                           |     |     |     |    |    |    |                                  |     |     |     |     |     |  |
|----------------------------------|----|----|-----|-----|-----|-----|----------------------------------|-----|----|----|----|-----|-----|----------------------------------|-----|-----|-----|----|----|----|----------------------------------|-----|-----|-----|-----|-----|--|
| B                                | F  | N  | H   | S   | L   | R   | HB1                              | HB2 | B  | F  | N  | H   | S   | L                                | R   | HB1 | HB2 | B  | F  | N  | H                                | S   | L   | R   | HB1 | HB2 |  |
| <b>100</b>                       |    |    |     |     |     |     | <b>160</b>                       |     |    |    |    |     |     | <b>250</b>                       |     |     |     |    |    |    |                                  |     |     |     |     |     |  |
| 2 <sup>[5]</sup> , 3, 4          |    |    |     |     |     |     | 3, 4                             |     |    |    |    |     |     | 2 <sup>[5]</sup> , 3, 4          |     |     |     |    |    |    | 3, 4                             |     |     |     |     |     |  |
| 40                               | 85 | 90 | 100 | 120 | 150 | 200 | -                                | -   | 40 | 85 | 90 | 100 | 120 | 150                              | 200 | -   | -   | 40 | 85 | 90 | 100                              | 120 | 150 | 200 | -   | -   |  |
| 25                               | 36 | 50 | 70  | 100 | 150 | 200 | -                                | -   | 25 | 36 | 50 | 70  | 100 | 150                              | 200 | -   | -   | 25 | 36 | 50 | 70                               | 100 | 150 | 200 | -   | -   |  |
| 20                               | 35 | 50 | 65  | 90  | 130 | 200 | -                                | -   | 20 | 35 | 50 | 65  | 90  | 130                              | 200 | -   | -   | 20 | 35 | 50 | 65                               | 90  | 130 | 200 | -   | -   |  |
| 15                               | 25 | 36 | 50  | 65  | 70  | 80  | 85                               | 100 | 15 | 30 | 36 | 50  | 65  | 70                               | 80  | 85  | 100 | 15 | 30 | 36 | 50                               | 65  | 70  | 80  | 85  | 100 |  |
| -                                | 22 | 35 | 35  | 40  | 50  | 65  | 80                               | 100 | -  | 22 | 35 | 35  | 40  | 50                               | 65  | 80  | 100 | -  | 22 | 35 | 35                               | 40  | 50  | 65  | 80  | 100 |  |
| -                                | 8  | 10 | 10  | 15  | 20  | 45  | 75                               | 100 | -  | 8  | 10 | 10  | 15  | 20                               | 45  | 75  | 100 | -  | 8  | 10 | 10                               | 15  | 20  | 45  | 75  | 100 |  |
| 40                               | 85 | 90 | 100 | 120 | 150 | 200 | -                                | -   | 40 | 85 | 90 | 100 | 120 | 150                              | 200 | -   | -   | 40 | 85 | 90 | 100                              | 120 | 150 | 200 | -   | -   |  |
| 25                               | 36 | 50 | 70  | 100 | 150 | 200 | -                                | -   | 25 | 36 | 50 | 70  | 100 | 150                              | 200 | -   | -   | 25 | 36 | 50 | 70                               | 100 | 150 | 200 | -   | -   |  |
| 20                               | 35 | 50 | 65  | 90  | 130 | 200 | -                                | -   | 20 | 35 | 50 | 65  | 90  | 130                              | 200 | -   | -   | 20 | 35 | 50 | 65                               | 90  | 130 | 200 | -   | -   |  |
| 7                                | 12 | 36 | 50  | 65  | 70  | 80  | 85                               | 100 | 7  | 12 | 36 | 50  | 65  | 70                               | 80  | 85  | 100 | 7  | 12 | 36 | 50                               | 65  | 70  | 80  | 85  | 100 |  |
| -                                | 11 | 35 | 35  | 40  | 50  | 65  | 80                               | 100 | -  | 11 | 35 | 35  | 40  | 50                               | 65  | 80  | 100 | -  | 11 | 35 | 35                               | 40  | 50  | 65  | 80  | 100 |  |
| -                                | 4  | 10 | 10  | 15  | 20  | 45  | 75                               | 100 | -  | 4  | 10 | 10  | 15  | 20                               | 45  | 75  | 100 | -  | 4  | 10 | 10                               | 15  | 20  | 45  | 75  | 100 |  |
| 50000                            |    |    |     |     |     |     | 20000                            |     |    |    |    |     |     | 40000                            |     |     |     |    |    |    | 20000                            |     |     |     |     |     |  |
| 50000                            |    |    |     |     |     |     | 20000                            |     |    |    |    |     |     | 40000                            |     |     |     |    |    |    | 20000                            |     |     |     |     |     |  |
| 30000                            |    |    |     |     |     |     | 10000                            |     |    |    |    |     |     | 20000                            |     |     |     |    |    |    | 10000                            |     |     |     |     |     |  |
| 20000                            |    |    |     |     |     |     | 10000                            |     |    |    |    |     |     | 15000                            |     |     |     |    |    |    | 10000                            |     |     |     |     |     |  |
| 10000                            |    |    |     |     |     |     | 5000                             |     |    |    |    |     |     | 7500                             |     |     |     |    |    |    | 5000                             |     |     |     |     |     |  |
| -                                | 85 | 85 | 85  | -   | -   | -   | -                                | -   | -  | 85 | 85 | 85  | -   | -                                | -   | -   | -   | -  | 85 | 85 | 85                               | -   | -   | -   | -   | -   |  |
| -                                | 25 | 50 | 65  | -   | -   | -   | -                                | -   | -  | 35 | 50 | 65  | -   | -                                | -   | -   | -   | -  | 35 | 50 | 65                               | -   | -   | -   | -   | -   |  |
| -                                | 10 | 10 | 10  | -   | -   | -   | -                                | -   | -  | 10 | 10 | 10  | -   | -                                | -   | -   | -   | -  | 15 | 15 | -                                | -   | -   | -   | -   | -   |  |
| <input checked="" type="radio"/> |    |    |     |     |     |     | <input checked="" type="radio"/> |     |    |    |    |     |     | <input checked="" type="radio"/> |     |     |     |    |    |    | <input checked="" type="radio"/> |     |     |     |     |     |  |
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| <input checked="" type="radio"/> |    |    |     |     |     |     | <input checked="" type="radio"/> |     |    |    |    |     |     | <input checked="" type="radio"/> |     |     |     |    |    |    | <input checked="" type="radio"/> |     |     |     |     |     |  |
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# ComPact NSX power connections

Connection of bare cables to ComPact NSX100 to 630 with/without Vigi add-on

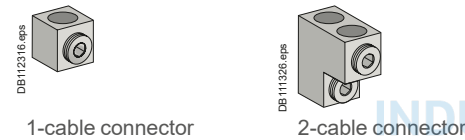
## Connection for NSX100 to 250



|  | 1-cable connector   | Steel<br>≤ 160 A  | Aluminium<br>≤ 250 A |          |                              |
|--|---|-------------------|----------------------|----------|------------------------------|
|  | L (mm)  | 25                | 25                   |          |                              |
|  | S (mm <sup>2</sup> ) Cu / Al  | 1.5 to 95 [1]     | 25 to 50             | 70 to 95 | 120 to 240<br>150 max. flex. |
|  | Torque (Nm)   | 12                | 20                   | 26       | 31                           |
|  | <b>2-cable connector</b>  |                   |                      |          |                              |
|  | L (mm)  | 25 or 50          |                      |          |                              |
|  | S (mm <sup>2</sup> ) Cu / Al  | 2 x 50 to 2 x 120 |                      |          |                              |
|  | Torque (Nm)   | 22                |                      |          |                              |
|  | <b>6-cable distribution connector (copper or aluminium)</b>         |                   |                      |          |                              |
|  | L (mm)  | 15 or 30          |                      |          |                              |
|  | S (mm <sup>2</sup> ) Cu / Al  | 1.5 to 6 [1]      | 8 to 35              |          |                              |
|  | Torque (Nm)   | 4                 | 6                    |          |                              |
|  | <b>Linergy DX and Linergy DP distribution block (6 or 9 cables)</b> |                   |                      |          |                              |
|  | L (mm)  | 12                | 16                   |          |                              |
|  | S (mm <sup>2</sup> ) Cu / Al  | 6 x 4 to 10       | 3 x 6 to 16          |          |                              |

[1] For flexible cables from 1.5 to 4 mm<sup>2</sup>, connection with crimped or self-crimping ferrules.

## Connection for NSX400 and 630



|  | 1-cable connector            | 2-cable connector                 |
|--|------------------------------|-----------------------------------|
|  | L (mm)                       | 30                                |
|  | S (mm <sup>2</sup> ) Cu / Al | 35 to 300 rigid<br>240 max. flex. |
|  | Torque (Nm)                  | 31                                |

## Conductor materials and electrodynamic stresses

ComPact NSX circuit breakers can be connected indifferently with bare-copper, tinned-copper and tinned-aluminium conductors (flexible or rigid bars, cables). In the event of a short-circuit, thermal and electrodynamic stresses will be exerted on the conductors. They must therefore be correctly sized and held in place by supports. Electrical connection points on switchgear devices (switch-disconnectors, contactors, circuit breakers, etc.) should not be used for mechanical support. Any partition between upstream and downstream connections of the device must be made of non-magnetic material.

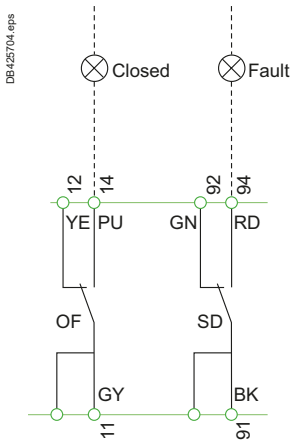


# ComPact NSXm

## Auxiliaries

The diagram is shown with circuits de-energized, relays in normal position, and all devices open, connected, and charged. Terminal connections shown as **O** must be connected by the customer.

### Indication contacts



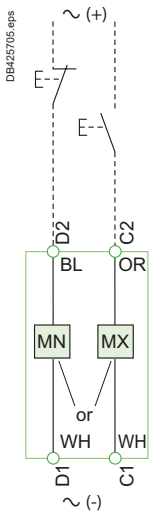
### Indication contacts

- OF** Device ON/OFF indication contacts
- SD** Trip indication contact

### Color code for auxiliary wiring

- BK:** Black
- GN:** Green
- GY:** Grey
- RD:** Red
- PU:** Purple
- YE:** Yellow

### Remote operation



### Remote operation

- MN** Undervoltage Release
- or
- MX** Shunt trip Release

### Color code for auxiliary wiring

- BL:** Blue
- OR:** Orange
- WH:** White

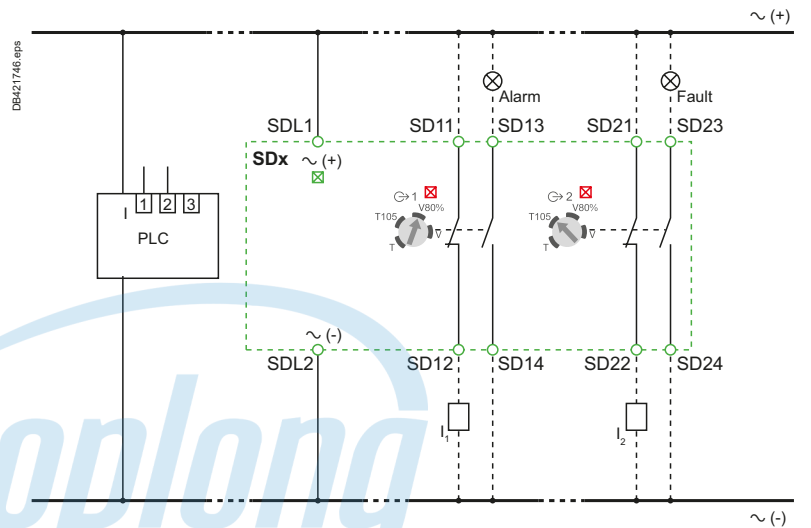
E

INDUSTRIAL AUTOMATION



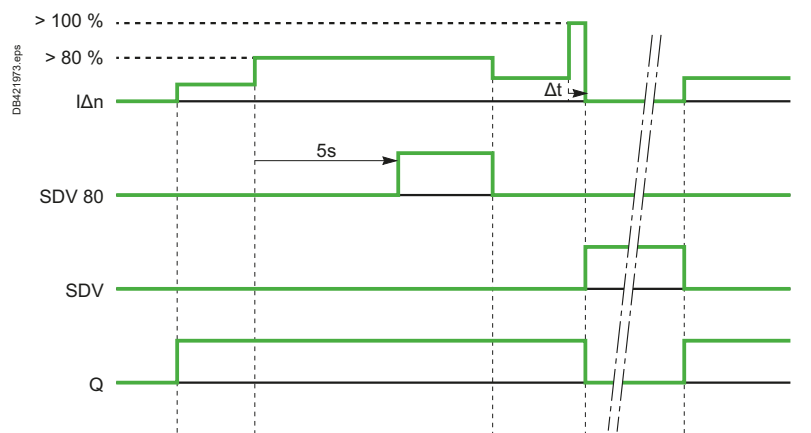
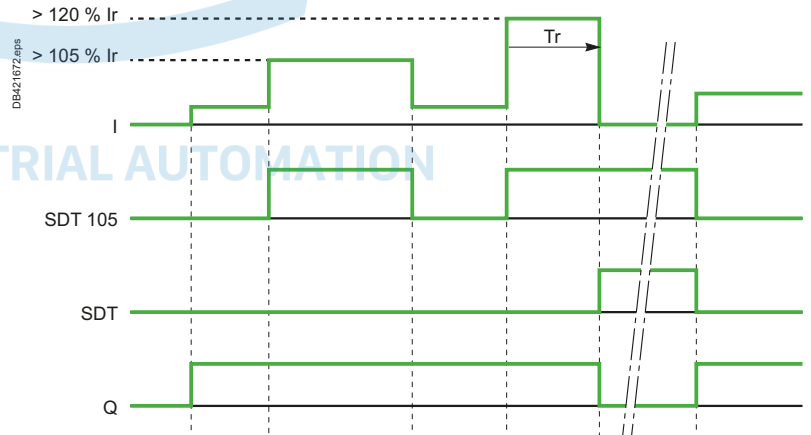
The diagram is shown with circuits de-energised, all devices open, connected and charged and relays in normal position.

Connection



Operation

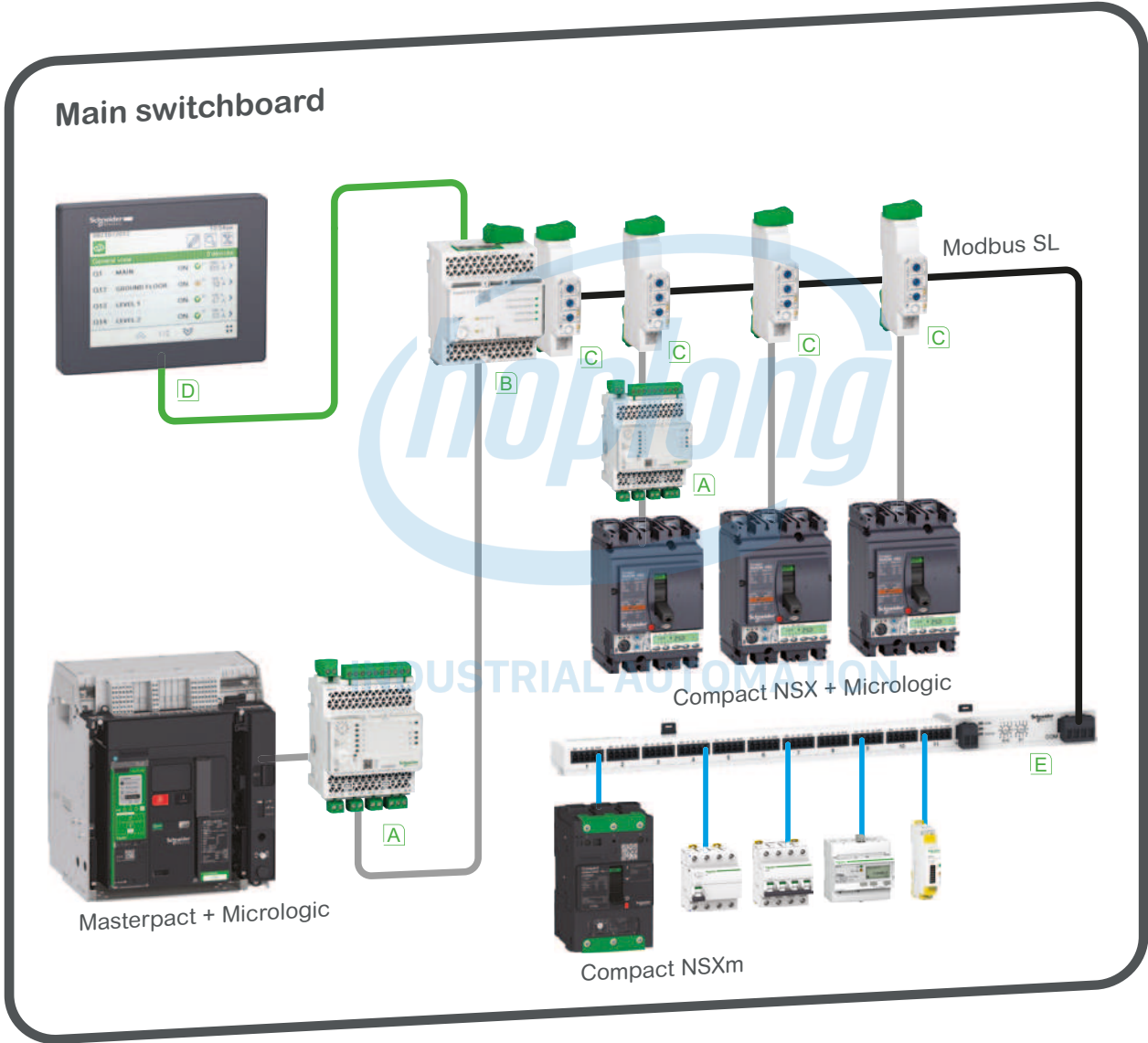
- I: charge current
- SDT105: overload alarm
- SDT: overload trip indication
- $I_{\Delta n}$ : earth leakage current
- SDV80: earth leakage alarm
- SDV: earth leakage trip indication
- Q: circuit breaker



Connection of circuit breakers to the Modbus communication network

DB452561 eps

E

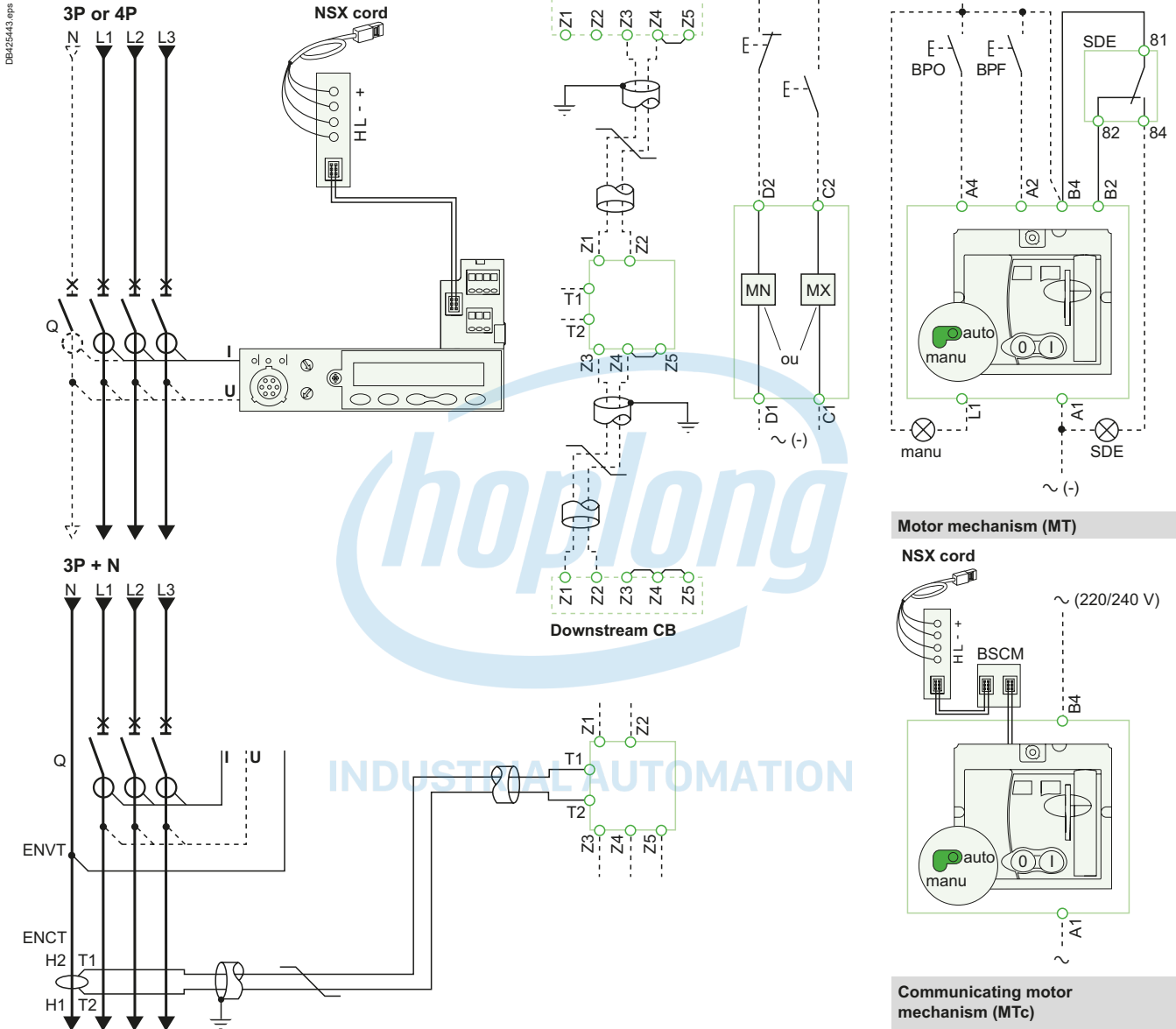


- |                                  |                                 |            |
|----------------------------------|---------------------------------|------------|
| <b>A</b> I/O                     | <b>D</b> FDM128                 | Ethernet   |
| <b>B</b> IFE interface + gateway | <b>E</b> Acti9 Smartlink Modbus | Modbus SL  |
| <b>C</b> IFM                     |                                 | ULP        |
|                                  |                                 | Hard wired |

Power

MicroLogic

Remote operation



MicroLogic A or E

- A/E Communication**  
H(WH), L(BL): data  
- (BK), + (RD): 24 V DC power supply
- A/E ZSI (Zone Selective Interlocking)**  
Z1: ZSI OUT SOURCE  
Z2: ZSI OUT  
Z3: ZSI IN SOURCE  
Z4: ZSI IN ST (short time)  
Z5: ZSI IN GF (ground fault)  
**Note:** Z3, Z4, Z5 for NSX400/630 only.
- A/E ENCT: external neutral current transformer:**  
- shielded cable with 1 twisted pair (T1, T2)  
- shielding earthed at one end only (CT end).  
Connection L = 30 cm max.  
- maximum length of 10 metres  
- cable size 0.4 to 1.5 mm<sup>2</sup>  
- recommended cable: Belden 8441 or equivalent.
- E ENVT: external neutral voltage tap for connection to the neutral via a 3P circuit breaker.**

Remote operation

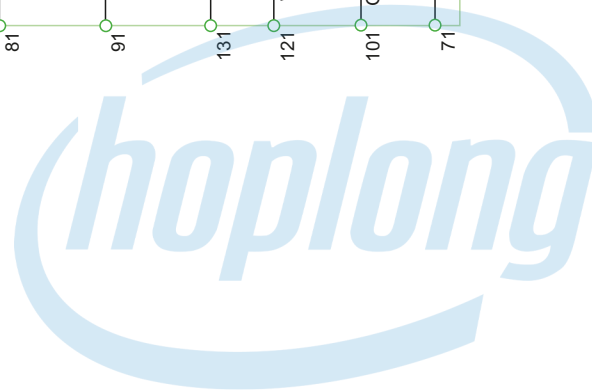
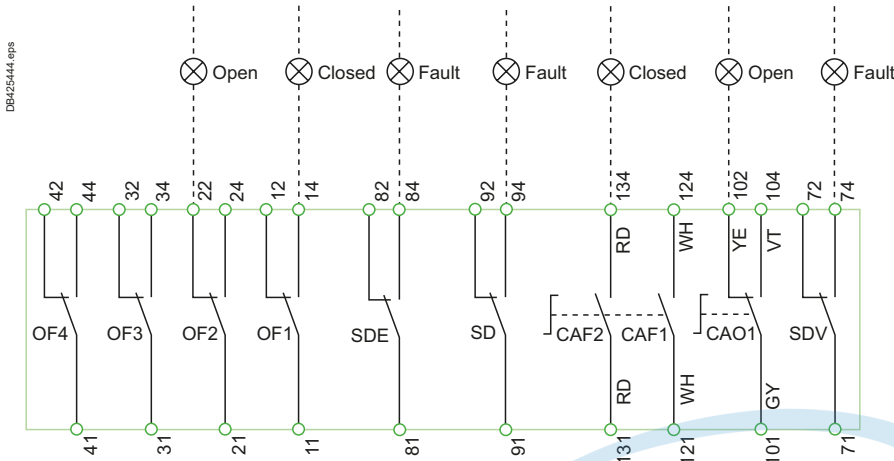
- MN:** undervoltage release
  - or**
  - MX:** shunt release
- Motor mechanism (MT)**
- A4:** opening order
  - A2:** closing order
  - B4, A1:** power supply to motor mechanism
  - L1:** manual position (manu)
  - B2:** SDE interlocking (mandatory for correct operation)
- BPO:** opening pushbutton
  - BPF:** closing pushbutton
- Communicating motor mechanism (MTc)**
- B4, A1:** motor mechanism power supply
  - BSCM:** breaker status and control module



# ComPact NSX

## Fixed circuit breakers

### Indication contacts



INDUSTRIAL AUTOMATION

The diagram is shown with circuits de-energised, all devices open, connected and charged and relays in normal position. Terminals shown in green ● must be connected by the customer.

#### Indication contacts

- OF2 / OF1:** device ON/OFF indication contacts
- OF4 / OF3:** device ON/OFF indication contacts (NSX400/630)
- SDE:** fault-trip indication contact (short-circuit, overload, ground fault, earth leakage)
- SD:** trip-indication contact
- CAF2/CAF1:** early-make contact (rotary handle only)
- CAO1:** early-break contact (rotary handle only)
- SDV:** earth leakage fault trip indication contact (Vigi add-on)

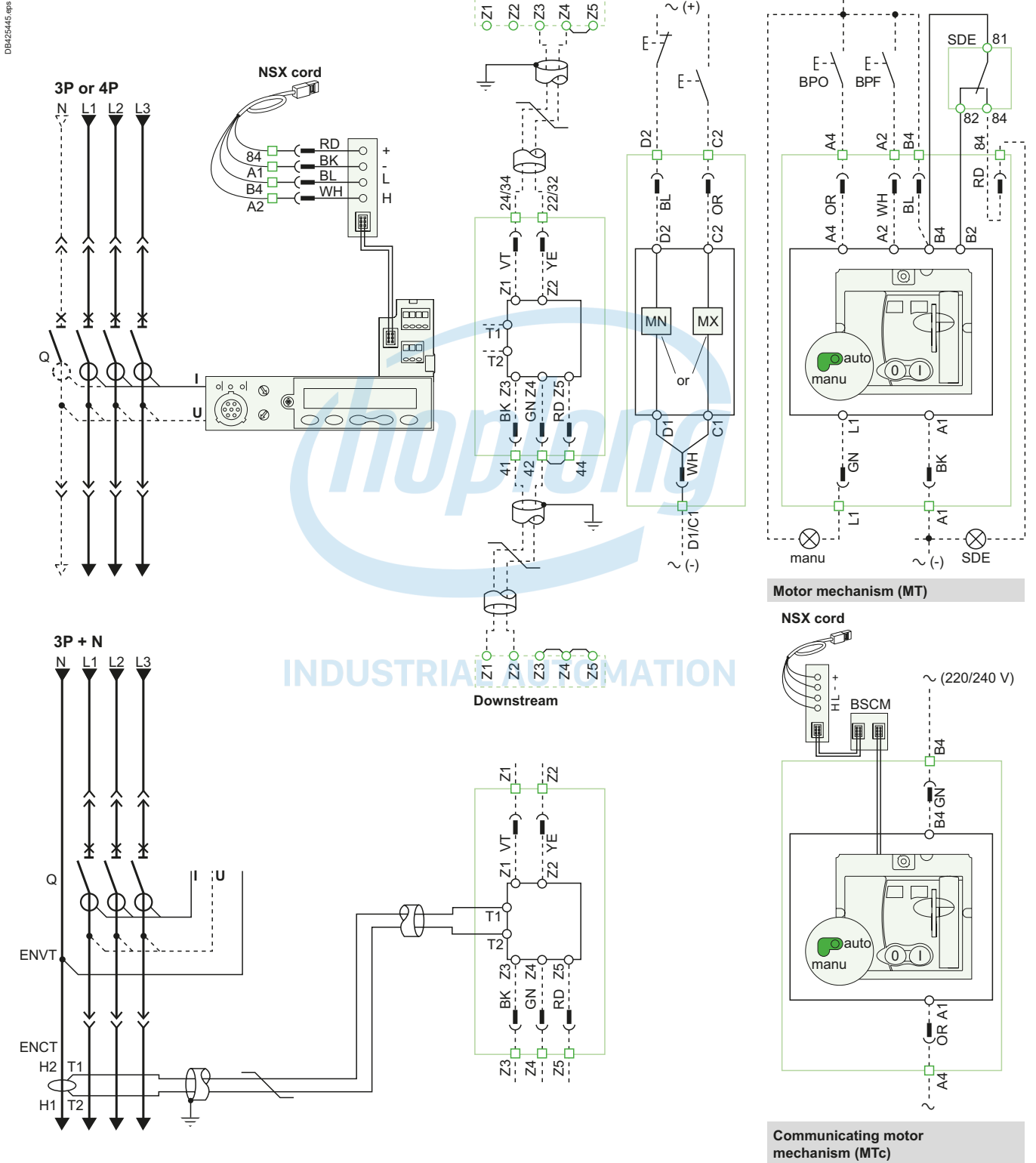
#### Colour code for auxiliary wiring

- |                   |                   |
|-------------------|-------------------|
| <b>RD:</b> red    | <b>VT:</b> violet |
| <b>WH:</b> white  | <b>GY:</b> grey   |
| <b>YE:</b> yellow | <b>OR:</b> orange |
| <b>BK:</b> black  | <b>BL:</b> blue   |
| <b>GN:</b> green  |                   |

Power

MicroLogic

Remote operation



The diagram is shown with circuits de-energised, all devices open, connected and charged and relays in normal position.

# Characteristics and performance

## ComPact NSX circuit breakers from 400 to 630 A up to 690 V

PB1108106.eps



ComPact NSX400/630.

PB111001.eps



ComPact NSX630 R.

PB111013.eps



ComPact NSX630 HB2.

[1] OSN: Over Sized Neutral protection for neutrals carrying high currents (e.g. 3rd harmonics).

[2] ZSI: Zone Selective Interlocking using pilot wires.

[3] Vigi add-on is not available for breaking capacity levels HB1/HB2.

[4] Earth Leakage Circuit Breaker (MicroLogic Vigi 4.3 and 7.3 E)

### Common characteristics

|                           |                                 |                |     |
|---------------------------|---------------------------------|----------------|-----|
| Rated voltages            | Insulation voltage (V)          | Ui             | 800 |
|                           | Insulation voltage for ELCB [4] |                | 500 |
|                           | Impulse withstand voltage (kV)  | Uimp           | 8   |
|                           | Operational voltage (V)         | Ue AC 50/60 Hz | 690 |
|                           | Operation voltage for ELCB [4]  | Ue AC 50/60 Hz | 440 |
| Suitability for isolation |                                 | IEC/EN 60947-2 | yes |
| Utilisation category      |                                 |                | A   |
| Pollution degree          |                                 | IEC 60664-1    | 3   |

### Circuit breakers

#### Breaking capacity levels

#### Electrical characteristics as per IEC/EN 60947-2

|                   |    |       |
|-------------------|----|-------|
| Rated current (A) | In | 40 °C |
|-------------------|----|-------|

Number of poles

#### Breaking capacity (kA rms)

|     |             |           |
|-----|-------------|-----------|
| Icu | AC 50/60 Hz | 220/240 V |
|     |             | 380/415 V |
|     |             | 440 V     |
|     |             | 500 V     |
|     |             | 525 V     |
|     |             | 660/690 V |

#### Service breaking capacity (kA rms)

|     |             |           |
|-----|-------------|-----------|
| Ics | AC 50/60 Hz | 220/240 V |
|     |             | 380/415 V |
|     |             | 440 V     |
|     |             | 500 V     |
|     |             | 525 V     |
|     |             | 660/690 V |

Durability (C-O cycles)

|            |            |       |      |
|------------|------------|-------|------|
| Mechanical | Electrical | 440 V | In/2 |
|            |            |       | In   |
|            |            | 690 V | In/2 |
|            |            |       | In   |

#### Characteristics as per UL 508

|                            |             |       |
|----------------------------|-------------|-------|
| Breaking capacity (kA rms) | AC 50/60 Hz | 240 V |
|                            |             | 480 V |
|                            |             | 600 V |

#### Protection and measurements

|                                     |   |
|-------------------------------------|---|
| Short-circuit protection            | Magnetic only                               |
| Overload / short-circuit protection | Thermal magnetic                            |
|                                     | Electronic                                  |
|                                     | with neutral protection (Off-0.5-1-OSN) [1] |
|                                     | with ground-fault protection                |
|                                     | with zone selective interlocking (ZSI) [2]  |

Display / I, U, f, P, E, THD measurements / interrupted-current measurement

|         |                             |
|---------|-----------------------------|
| Options | Power Meter display on door |
|         | Operating assistance        |
|         | Counters                    |
|         | Histories and alarms        |
|         | Metering Com                |
|         | Device status/control Com   |

|                          |                    |
|--------------------------|--------------------|
| Earth-leakage protection | By Vigi add-on [3] |
|                          | By Vigirex relay   |

#### Installation / connections

#### Dimensions and weights

|                           |                          |      |
|---------------------------|--------------------------|------|
| Dimensions (mm) W x H x D | Fixed, front connections | 2/3P |
|                           |                          | 4P   |
| Weight (kg)               | Fixed, front connections | 2/3P |
|                           |                          | 4P   |

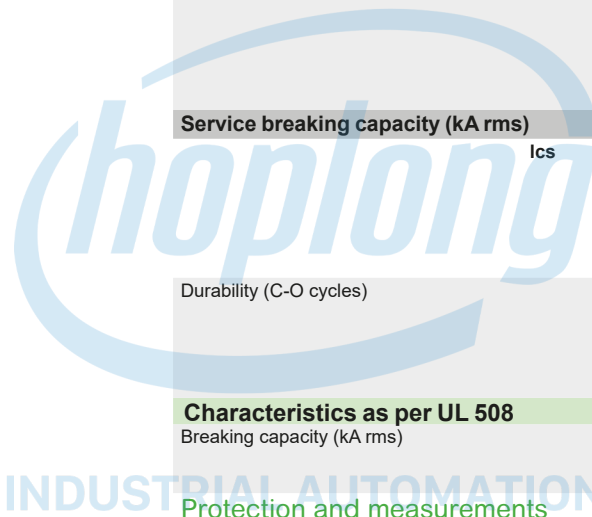
#### Connections

|                       |               |                        |
|-----------------------|---------------|------------------------|
| Connection terminals  | Pitch         | With/without spreaders |
| Large Cu or Al cables | Cross-section | mm <sup>2</sup>        |

#### Source-changeover system

Manual mechanical interlocking

Automatic source-changeover



INDUSTRIAL AUTOMATION

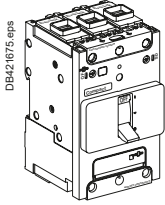


# Complete fixed device

## ComPact NSXm E/B (16/25 kA at 380/415 V)

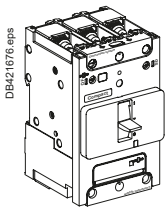
### ComPact NSXm E (16 kA at 380/415 V)

With thermal-magnetic trip unit TM-D



EverLink™ connectors

| Rating | 3P       | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM16D  | LV426100 | LV426110 | LV426120 |
| TM25D  | LV426101 | LV426111 | LV426121 |
| TM32D  | LV426102 | LV426112 | LV426122 |
| TM40D  | LV426103 | LV426113 | LV426123 |
| TM50D  | LV426104 | LV426114 | LV426124 |
| TM63D  | LV426105 | LV426115 | LV426125 |
| TM80D  | LV426106 | LV426116 | LV426126 |
| TM100D | LV426107 | LV426117 | LV426127 |
| TM125D | LV426108 | LV426118 | LV426128 |
| TM160D | LV426109 | LV426119 | LV426129 |

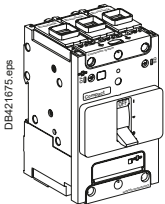


Compression lug/busbar connectors

| Rating | 3P       | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM16D  | LV426150 | LV426160 | LV426170 |
| TM25D  | LV426151 | LV426161 | LV426171 |
| TM32D  | LV426152 | LV426162 | LV426172 |
| TM40D  | LV426153 | LV426163 | LV426173 |
| TM50D  | LV426154 | LV426164 | LV426174 |
| TM63D  | LV426155 | LV426165 | LV426175 |
| TM80D  | LV426156 | LV426166 | LV426176 |
| TM100D | LV426157 | LV426167 | LV426177 |
| TM125D | LV426158 | LV426168 | LV426178 |
| TM160D | LV426159 | LV426169 | LV426179 |

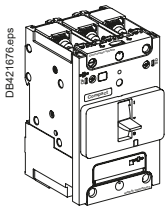
### ComPact NSXm B (25 kA at 380/415 V)

With thermal-magnetic trip unit TM-D



EverLink™ connectors

| Rating | 3P       | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM16D  | LV426200 | LV426210 | LV426220 |
| TM25D  | LV426201 | LV426211 | LV426221 |
| TM32D  | LV426202 | LV426212 | LV426222 |
| TM40D  | LV426203 | LV426213 | LV426223 |
| TM50D  | LV426204 | LV426214 | LV426224 |
| TM63D  | LV426205 | LV426215 | LV426225 |
| TM80D  | LV426206 | LV426216 | LV426226 |
| TM100D | LV426207 | LV426217 | LV426227 |
| TM125D | LV426208 | LV426218 | LV426228 |
| TM160D | LV426209 | LV426219 | LV426229 |



Compression lug/busbar connectors

| Rating | 3P       | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM16D  | LV426250 | LV426260 | LV426270 |
| TM25D  | LV426251 | LV426261 | LV426271 |
| TM32D  | LV426252 | LV426262 | LV426272 |
| TM40D  | LV426253 | LV426263 | LV426273 |
| TM50D  | LV426254 | LV426264 | LV426274 |
| TM63D  | LV426255 | LV426265 | LV426275 |
| TM80D  | LV426256 | LV426266 | LV426276 |
| TM100D | LV426257 | LV426267 | LV426277 |
| TM125D | LV426258 | LV426268 | LV426278 |
| TM160D | LV426259 | LV426269 | LV426279 |

F





# Characteristics and performance

## ComPact NSX circuit breakers from 400 to 630 A up to 690 V

A

### Common characteristics

|          |              |                                       |                       |
|----------|--------------|---------------------------------------|-----------------------|
| Control  | Manual       | With toggle                           | <input type="radio"/> |
|          |              | With direct or extended rotary handle | <input type="radio"/> |
| Versions | Electrical   | With remote control                   | <input type="radio"/> |
|          | Fixed        |                                       | <input type="radio"/> |
|          | Withdrawable | Plug-in base                          | <input type="radio"/> |
|          |              | Chassis                               | <input type="radio"/> |

| NSX400     |    |     |     |            |       |     |     | NSX630     |    |     |     |            |       |     |     | I <sub>r</sub> = 225 - 500 A |     |     | I <sub>r</sub> = 501 - 630 A |     |     |
|------------|----|-----|-----|------------|-------|-----|-----|------------|----|-----|-----|------------|-------|-----|-----|------------------------------|-----|-----|------------------------------|-----|-----|
| F          | N  | H   | S   | L          | R     | HB1 | HB2 | F          | N  | H   | S   | L          | R     | HB1 | HB2 | R                            | HB1 | HB2 | R                            | HB1 | HB2 |
| <b>400</b> |    |     |     | <b>400</b> |       |     |     | <b>630</b> |    |     |     | <b>630</b> |       |     |     |                              |     |     |                              |     |     |
| 3, 4       |    |     |     | 3, 4       |       |     |     | 3, 4       |    |     |     | 3, 4       |       |     |     |                              |     |     |                              |     |     |
| 40         | 85 | 100 | 120 | 150        | 200   | -   | -   | 40         | 85 | 100 | 120 | 150        | 200   | -   | -   | 200                          | -   | -   | 200                          | -   | -   |
| 36         | 50 | 70  | 100 | 150        | 200   | -   | -   | 36         | 50 | 70  | 100 | 150        | 200   | -   | -   | 200                          | -   | -   | 200                          | -   | -   |
| 30         | 42 | 65  | 90  | 130        | 200   | -   | -   | 30         | 42 | 65  | 90  | 130        | 200   | -   | -   | 200                          | -   | -   | 200                          | -   | -   |
| 25         | 30 | 50  | 65  | 70         | 80    | 85  | 100 | 25         | 30 | 50  | 65  | 70         | 80    | 85  | 100 | 80                           | 85  | 100 | 80                           | 85  | 100 |
| 20         | 22 | 35  | 40  | 50         | 65    | 80  | 100 | 20         | 22 | 35  | 40  | 50         | 65    | 80  | 100 | 65                           | 80  | 100 | 65                           | 80  | 100 |
| 10         | 10 | 20  | 25  | 35         | 45    | 75  | 100 | 10         | 10 | 20  | 25  | 35         | 45    | 75  | 100 | 45                           | 75  | 100 | 45                           | 75  | 100 |
| 40         | 85 | 100 | 120 | 150        | 200   | -   | -   | 40         | 85 | 100 | 120 | 150        | 200   | -   | -   | 200                          | -   | -   | 200                          | -   | -   |
| 36         | 50 | 70  | 100 | 150        | 200   | -   | -   | 36         | 50 | 70  | 100 | 150        | 200   | -   | -   | 200                          | -   | -   | 200                          | -   | -   |
| 30         | 42 | 65  | 90  | 130        | 200   | -   | -   | 30         | 42 | 65  | 90  | 130        | 200   | -   | -   | 200                          | -   | -   | 200                          | -   | -   |
| 25         | 30 | 50  | 65  | 70         | 80    | 85  | 100 | 25         | 30 | 50  | 65  | 70         | 80    | 85  | 100 | 80                           | 85  | 100 | 80                           | 85  | 100 |
| 10         | 11 | 11  | 12  | 12         | 65    | 80  | 100 | 10         | 11 | 11  | 12  | 12         | 65    | 80  | 100 | 65                           | 80  | 100 | -                            | -   | -   |
| 10         | 10 | 10  | 12  | 12         | 45    | 75  | 100 | 10         | 10 | 10  | 12  | 12         | 45    | 75  | 100 | 45                           | 75  | 100 | -                            | -   | -   |
| 15000      |    |     |     |            | 15000 |     |     | 15000      |    |     |     |            | 15000 |     |     | 15000                        |     |     | 15000                        |     |     |
| 12000      |    |     |     |            | 12000 |     |     | 8000       |    |     |     |            | 8000  |     |     | 8000                         |     |     | 8000                         |     |     |
| 6000       |    |     |     |            | 6000  |     |     | 4000       |    |     |     |            | 4000  |     |     | 4000                         |     |     | 4000                         |     |     |
| 6000       |    |     |     |            | 6000  |     |     | 6000       |    |     |     |            | 6000  |     |     | 6000                         |     |     | 6000                         |     |     |
| 3000       |    |     |     |            | 3000  |     |     | 2000       |    |     |     |            | 2000  |     |     | 2000                         |     |     | 2000                         |     |     |

|    |    |    |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |   |   |
|----|----|----|---|---|---|---|---|----|----|----|---|---|---|---|---|---|---|---|---|---|---|
| 85 | 85 | 85 | - | - | - | - | - | 85 | 85 | 85 | - | - | - | - | - | - | - | - | - | - | - |
| 35 | 50 | 65 | - | - | - | - | - | 35 | 50 | 65 | - | - | - | - | - | - | - | - | - | - | - |
| 20 | 10 | 20 | - | - | - | - | - | 20 | 20 | 20 | - | - | - | - | - | - | - | - | - | - | - |

|                       |                       |
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| <input type="radio"/> | <input type="radio"/> |

|                 |                 |
|-----------------|-----------------|
| 140 x 255 x 110 | 140 x 255 x 110 |
| 185 x 255 x 110 | 185 x 255 x 110 |
| 6.05            | 6.2             |
| 7.90            | 8.13            |

|            |            |
|------------|------------|
| 45/52.5 mm | 45/52.5 mm |
| 45/70 mm   | 45/70 mm   |
| 4 x 240    | 4 x 240    |

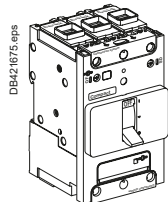
|                       |                       |
|-----------------------|-----------------------|
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| <input type="radio"/> | <input type="radio"/> |

# Complete fixed device

## ComPact NSXm F/N (36/50 kA at 380/415 V)

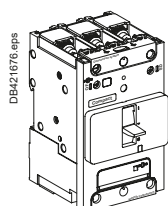
### ComPact NSXm F (36 kA at 380/415 V)

With thermal-magnetic trip unit TM-D



#### EverLink™ connectors

| Rating | 3P       | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM16D  | LV426300 | LV426310 | LV426320 |
| TM25D  | LV426301 | LV426311 | LV426321 |
| TM32D  | LV426302 | LV426312 | LV426322 |
| TM40D  | LV426303 | LV426313 | LV426323 |
| TM50D  | LV426304 | LV426314 | LV426324 |
| TM63D  | LV426305 | LV426315 | LV426325 |
| TM80D  | LV426306 | LV426316 | LV426326 |
| TM100D | LV426307 | LV426317 | LV426327 |
| TM125D | LV426308 | LV426318 | LV426328 |
| TM160D | LV426309 | LV426319 | LV426329 |

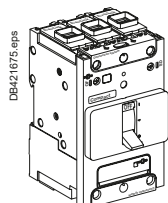


#### Compression lug/busbar connectors

| Rating | 3P       | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM16D  | LV426350 | LV426360 | LV426370 |
| TM25D  | LV426351 | LV426361 | LV426371 |
| TM32D  | LV426352 | LV426362 | LV426372 |
| TM40D  | LV426353 | LV426363 | LV426373 |
| TM50D  | LV426354 | LV426364 | LV426374 |
| TM63D  | LV426355 | LV426365 | LV426375 |
| TM80D  | LV426356 | LV426366 | LV426376 |
| TM100D | LV426357 | LV426367 | LV426377 |
| TM125D | LV426358 | LV426368 | LV426378 |
| TM160D | LV426359 | LV426369 | LV426379 |

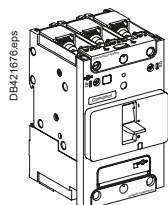
### ComPact NSXm N (50 kA at 380/415 V)

With thermal-magnetic trip unit TM-D



#### EverLink™ connectors

| Rating | 3P       | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM16D  | LV426400 | LV426410 | LV426420 |
| TM25D  | LV426401 | LV426411 | LV426421 |
| TM32D  | LV426402 | LV426412 | LV426422 |
| TM40D  | LV426403 | LV426413 | LV426423 |
| TM50D  | LV426404 | LV426414 | LV426424 |
| TM63D  | LV426405 | LV426415 | LV426425 |
| TM80D  | LV426406 | LV426416 | LV426426 |
| TM100D | LV426407 | LV426417 | LV426427 |
| TM125D | LV426408 | LV426418 | LV426428 |
| TM160D | LV426409 | LV426419 | LV426429 |



#### Compression lug/busbar connectors

| Rating | 3P       | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM16D  | LV426450 | LV426460 | LV426470 |
| TM25D  | LV426451 | LV426461 | LV426471 |
| TM32D  | LV426452 | LV426462 | LV426472 |
| TM40D  | LV426453 | LV426463 | LV426473 |
| TM50D  | LV426454 | LV426464 | LV426474 |
| TM63D  | LV426455 | LV426465 | LV426475 |
| TM80D  | LV426456 | LV426466 | LV426476 |
| TM100D | LV426457 | LV426467 | LV426477 |
| TM125D | LV426458 | LV426468 | LV426478 |
| TM160D | LV426459 | LV426469 | LV426479 |

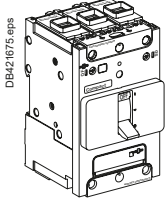
F

# Complete fixed device

## ComPact NSXm H (70 kA at 380/415 V)

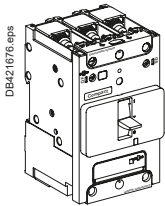
### ComPact NSXm H (70 kA at 380/415 V)

With thermal-magnetic trip unit TM-D



EverLink™ connectors

| Rating | 3P       | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM16D  | LV426500 | LV426510 | LV426520 |
| TM25D  | LV426501 | LV426511 | LV426521 |
| TM32D  | LV426502 | LV426512 | LV426522 |
| TM40D  | LV426503 | LV426513 | LV426523 |
| TM50D  | LV426504 | LV426514 | LV426524 |
| TM63D  | LV426505 | LV426515 | LV426525 |
| TM80D  | LV426506 | LV426516 | LV426526 |
| TM100D | LV426507 | LV426517 | LV426527 |
| TM125D | LV426508 | LV426518 | LV426528 |
| TM160D | LV426509 | LV426519 | LV426529 |



Compression lug/busbar connectors

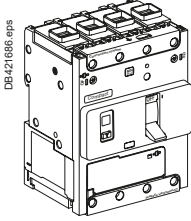
| Rating | 3P       | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM16D  | LV426550 | LV426560 | LV426570 |
| TM25D  | LV426551 | LV426561 | LV426571 |
| TM32D  | LV426552 | LV426562 | LV426572 |
| TM40D  | LV426553 | LV426563 | LV426573 |
| TM50D  | LV426554 | LV426564 | LV426574 |
| TM63D  | LV426555 | LV426565 | LV426575 |
| TM80D  | LV426556 | LV426566 | LV426576 |
| TM100D | LV426557 | LV426567 | LV426577 |
| TM125D | LV426558 | LV426568 | LV426578 |
| TM160D | LV426559 | LV426569 | LV426579 |

INDUSTRIAL AUTOMATION

Complete fixed device  
Com**Pact** NSXm MicroLogic Vigi 4.1 E/B/F  
(16/25/36 kA at 380/415 V)

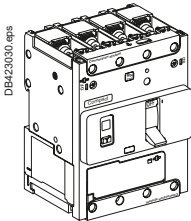
**ComPact NSXm MicroLogic Vigi 4.1 E (16 kA at 380/415 V)**

With MicroLogic Vigi 4.1



EverLink™ connectors

| Rating | 3P       | 4P       |
|--------|----------|----------|
| 25 A   | LV426700 | LV426705 |
| 50 A   | LV426701 | LV426706 |
| 100 A  | LV426702 | LV426707 |
| 160 A  | LV426703 | LV426708 |

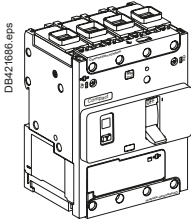


Compression lug/busbar connectors

| Rating | 3P       | 4P       |
|--------|----------|----------|
| 25 A   | LV426750 | LV426755 |
| 50 A   | LV426751 | LV426756 |
| 100 A  | LV426752 | LV426757 |
| 160 A  | LV426753 | LV426758 |

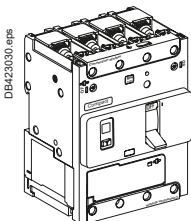
**ComPact NSXm MicroLogic Vigi 4.1 B (25 kA at 380/415 V)**

With MicroLogic Vigi 4.1



EverLink™ connectors

| Rating | 3P       | 4P       |
|--------|----------|----------|
| 25 A   | LV426710 | LV426715 |
| 50 A   | LV426711 | LV426716 |
| 100 A  | LV426712 | LV426717 |
| 160 A  | LV426713 | LV426718 |

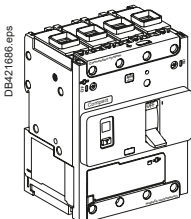


Compression lug/busbar connectors

| Rating | 3P       | 4P       |
|--------|----------|----------|
| 25 A   | LV426760 | LV426765 |
| 50 A   | LV426761 | LV426766 |
| 100 A  | LV426762 | LV426767 |
| 160 A  | LV426763 | LV426768 |

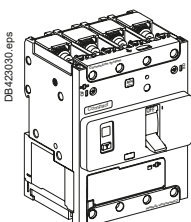
**ComPact NSXm MicroLogic Vigi 4.1 F (36 kA at 380/415 V)**

With MicroLogic Vigi 4.1



EverLink™ connectors

| Rating | 3P       | 4P       |
|--------|----------|----------|
| 25 A   | LV426720 | LV426725 |
| 50 A   | LV426721 | LV426726 |
| 100 A  | LV426722 | LV426727 |
| 160 A  | LV426723 | LV426728 |



Compression lug/busbar connectors

| Rating | 3P       | 4P       |
|--------|----------|----------|
| 25 A   | LV426770 | LV426775 |
| 50 A   | LV426771 | LV426776 |
| 100 A  | LV426772 | LV426777 |
| 160 A  | LV426773 | LV426778 |

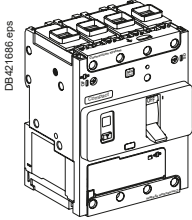


# Complete fixed device

## ComPact NSXm MicroLogic Vigi 4.1 N/H (50/70kA at 380/415 V)

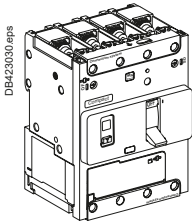
### ComPact NSXm MicroLogic Vigi 4.1 N (50 kA at 380/415 V)

With MicroLogic Vigi 4.1



EverLink™ connectors

| Rating | 3P       | 4P       |
|--------|----------|----------|
| 25 A   | LV426730 | LV426735 |
| 50 A   | LV426731 | LV426736 |
| 100 A  | LV426732 | LV426737 |
| 160 A  | LV426733 | LV426738 |

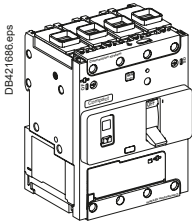


Compression lug/busbar connectors

| Rating | 3P       | 4P       |
|--------|----------|----------|
| 25 A   | LV426780 | LV426785 |
| 50 A   | LV426781 | LV426786 |
| 100 A  | LV426782 | LV426787 |
| 160 A  | LV426783 | LV426788 |

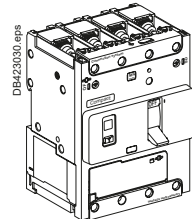
### ComPact NSXm MicroLogic Vigi 4.1 H (70 kA at 380/415 V)

With MicroLogic Vigi 4.1



EverLink™ connectors

| Rating | 3P       | 4P       |
|--------|----------|----------|
| 25 A   | LV426740 | LV426745 |
| 50 A   | LV426741 | LV426746 |
| 100 A  | LV426742 | LV426747 |
| 160 A  | LV426743 | LV426748 |

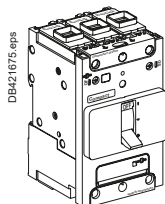


Compression lug/busbar connectors

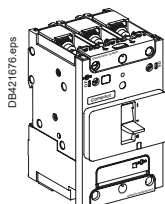
| Rating | 3P       | 4P       |
|--------|----------|----------|
| 25 A   | LV426790 | LV426795 |
| 50 A   | LV426791 | LV426796 |
| 100 A  | LV426792 | LV426797 |
| 160 A  | LV426793 | LV426798 |

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**ComPact NSXm NA switch-disconnector**



| EverLink™ connectors |          |          |
|----------------------|----------|----------|
| Rating               | 3P       | 4P       |
| 50NA                 | LV426600 | LV426610 |
| 100NA                | LV426601 | LV426611 |
| 160NA                | LV426602 | LV426612 |



| Compression lug/busbar connectors |          |          |
|-----------------------------------|----------|----------|
| Rating                            | 3P       | 4P       |
| 50NA                              | LV426650 | LV426660 |
| 100NA                             | LV426651 | LV426661 |
| 160NA                             | LV426652 | LV426662 |



INDUSTRIAL AUTOMATION

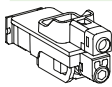
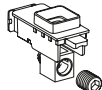


# Accessories

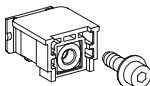
## Connection and insulation

### Connection accessories (Cu or Al)

#### Bare cable connectors

|   |   |  |          |                 |
|---|---|--|----------|-----------------|
| <br>DB421533.eps | Everlink connector with control wire terminal | 1x (2.5 to 95 mm <sup>2</sup> );<br>≤ 160 A Cu or ≤ 100 A Al | Set of 3 | <b>LV426970</b> |
|   |   |  | Set of 4 | <b>LV426971</b> |
| <br>DB419793.eps | Aluminium connector                           | 1x (2.5 to 70 mm <sup>2</sup> );<br>≤ 125 A Cu or Al         | Set of 2 | <b>LV426966</b> |
|   |   |  | Set of 3 | <b>LV426967</b> |

#### Compression lugs / busbar connectors

|   |                                  |         |          |                 |
|---|----------------------------------|---------|----------|-----------------|
| <br>DB421537.eps | Terminal with nuts and screws M6 | ≤ 160 A | Set of 3 | <b>LV426960</b> |
|   |                                  |         | Set of 4 | <b>LV426961</b> |

#### Terminal extensions

|   |   |    |                 |
|---|---|----|-----------------|
| <br>DB421538.eps | Spreaders from 27 to 35 mm pitch <sup>[1]</sup> | 3P | <b>LV426940</b> |
|   |   | 4P | <b>LV426941</b> |

#### Crimp lugs for copper cable <sup>[1]</sup>

|   |                              |          |                 |
|---|------------------------------|----------|-----------------|
| <br>DB421539.eps | For cable 50 mm <sup>2</sup> | Set of 3 | <b>LV426978</b> |
|   |                              | Set of 4 | <b>LV426979</b> |
|   | For cable 70 mm <sup>2</sup> | Set of 3 | <b>LV426980</b> |
|   |                              | Set of 4 | <b>LV426981</b> |
|   | For cable 95 mm <sup>2</sup> | Set of 3 | <b>LV426982</b> |
|   |                              | Set of 4 | <b>LV426983</b> |

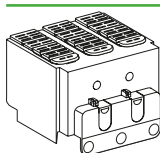
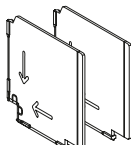
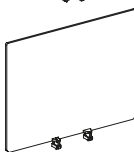
#### Crimp lugs for aluminium cable <sup>[1]</sup>

|   |                                     |          |                 |
|---|-------------------------------------|----------|-----------------|
| <br>DB421540.eps | For cable 95 mm <sup>2</sup> rigid  | Set of 3 | <b>LV426984</b> |
|   |                                     | Set of 4 | <b>LV426985</b> |
|   | For cable 120 mm <sup>2</sup> rigid | Set of 3 | <b>LV426976</b> |
|   |                                     | Set of 4 | <b>LV426977</b> |

#### Torque limiting breakaway bits

|   |       |          |                 |
|---|-------|----------|-----------------|
| <br>DB421541.eps | 9 N.m | Set of 6 | <b>LV426990</b> |
|   |       | Set of 8 | <b>LV426991</b> |
|   | 5 N.m | Set of 6 | <b>LV426992</b> |
|   |       | Set of 8 | <b>LV426993</b> |

### Insulation accessories

|   |                           |          |                 |
|---|---------------------------|----------|-----------------|
| <br>DB421542.eps | 1 long terminal shield    | 3P       | <b>LV426912</b> |
|   |                           | 4P       | <b>LV426913</b> |
| <br>DB421543.eps | Interphase barriers       | Set of 6 | <b>LV426920</b> |
|   |                           |          |                 |
| <br>DB21544eps   | 2 rear insulation screens | 3P       | <b>LV426922</b> |
|   |                           | 4P       | <b>LV426923</b> |

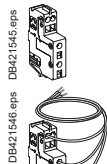
[1] Supplied with 2 or 3 interphase barriers.

F



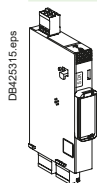
**Electrical auxiliaries**

**Auxiliary contacts (changeover)**



|                             |          |
|-----------------------------|----------|
| Standard OF or SD           | LV426950 |
| Pre-wired OF <sup>[1]</sup> | LV426951 |
| Pre-wired SD <sup>[1]</sup> | LV426952 |

**SDx for MicroLogic Vigi 4.1**



|                           |          |
|---------------------------|----------|
| SDx module 24-250 V AC/DC | LV426900 |
|---------------------------|----------|

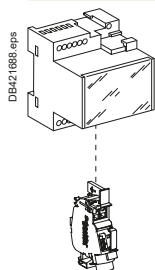
**Voltage releases**



|                          | Standard | Voltage              | MX                   | MN       |          |
|--------------------------|----------|----------------------|----------------------|----------|----------|
| AC                       |          | 24 V 50/60 Hz        | LV426841             | LV426801 |          |
|                          |          | 48 V 50/60 Hz        | LV426842             | LV426802 |          |
|                          |          | 110...130 V 50/60 Hz | LV426843             | LV426803 |          |
|                          |          | 220...240 V 50 Hz    | LV426844             | LV426804 |          |
|                          |          | 208...240 V 60 Hz    |                      |          |          |
|                          |          | 277 V 60 Hz          | LV426844             | LV426805 |          |
|                          |          | 380...415 V 50 Hz    | LV426846             | LV426806 |          |
|                          |          | 440...480 V 60 Hz    | LV426846             | LV426807 |          |
| DC                       |          | 12 V DC              | LV426850             | -        |          |
|                          |          | 24 V DC              | LV426841             | LV426801 |          |
|                          |          | 48 V DC              | LV426842             | LV426802 |          |
|                          |          | 125 V DC             | LV426843             | LV426803 |          |
|                          |          | 250 V DC             | LV426844             | LV426815 |          |
| Pre-wired <sup>[1]</sup> |          | Voltage              |                      | MN       |          |
|                          |          | AC                   | 24 V 50/60 Hz        | LV426861 | LV426821 |
|                          |          |                      | 48 V 50/60 Hz        | LV426862 | LV426822 |
|                          |          |                      | 110...130 V 50/60 Hz | LV426863 | LV426823 |
|                          |          |                      | 220...240 V 50 Hz    | LV426864 | LV426824 |
|                          |          |                      | 208...240 V 60 Hz    |          |          |
|                          |          |                      | 277 V 60 Hz          | LV426864 | LV426825 |
|                          |          |                      | 380...415 V 50 Hz    | LV426866 | LV426826 |
|                          |          |                      | 440...480 V 60 Hz    | LV426866 | LV426827 |
|                          |          | DC                   | 12 V DC              | LV426870 | -        |
|                          |          |                      | 24 V DC              | LV426861 | LV426821 |
|                          |          |                      | 48 V DC              | LV426862 | LV426822 |
|                          |          |                      | 125 V DC             | LV426863 | LV426823 |
| 250 V DC                 | LV426864 |                      | LV426835             |          |          |



**Time delay unit for undervoltage release (MN)**



|   |                                     |          |
|---|-------------------------------------|----------|
| <b>MN 48 V 50/60 Hz with fixed time delay</b>                 |                                     |          |
| Composed of:  | MN 48 V DC                          | LV426802 |
|   | Delay unit 48 V 50/60 Hz            | LV429426 |
| <b>MN 220-240 V 50/60 Hz with fixed time delay</b>            |                                     |          |
| Composed of:  | MN 250 V DC                         | LV426815 |
|   | Delay unit 220-240 V 50/60 Hz       | LV429427 |
| <b>MN 48 V DC/AC 50/60 Hz with adjustable time delay</b>      |                                     |          |
| Composed of:  | MN 48 V DC                          | LV426802 |
|   | Delay unit 48 V DC/AC 50/60 Hz      | 33680    |
| <b>MN 110-130 V DC/AC 50/60 Hz with adjustable time delay</b> |                                     |          |
| Composed of:  | MN 125 V DC                         | LV426803 |
|   | Delay unit 100-130 V DC/AC 50/60 Hz | 33681    |
| <b>MN 220-250 V DC/AC 50/60 Hz with adjustable time delay</b> |                                     |          |
| Composed of:  | MN 250 V DC                         | LV426815 |
|   | Delay unit 200-250 V DC/AC 50-60 Hz | 33682    |

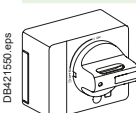
[1] Cable: 1 meter long - AWG 18 - 480 V UL certified.

# Accessories

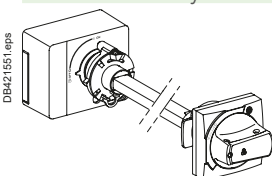

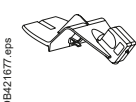
## Rotary handles, locks and seals

### Rotary handle

#### Direct rotary handle

|  |                                 |          |
|--|---------------------------------|----------|
|  | With black handle               | LV426930 |
|  | With red handle on yellow front | LV426931 |


#### Extended rotary handle

|  |                                      |          |
|--|--------------------------------------|----------|
|  | With black handle IP54               | LV426932 |
|  | With red handle on yellow front IP54 | LV426933 |
|  | With red handle on yellow front IP65 | LV426934 |
|  | Open door shaft operator             | LV426937 |
|  | Laser tool                           | GVAPL01  |

#### Side rotary handle

|   |                                      |          |
|---|--------------------------------------|----------|
|  | With black handle IP54               | LV426935 |
|   | With red handle on yellow front IP54 | LV426936 |

#### Universal handle

|  |   |          |
|--|---|----------|
|  | Black handle IP54 (spare part for replacement of front, ext. or side rotary handle) | LV426997 |
|  | Red handle on yellow front IP54   | LV426998 |
|  | Red handle on yellow front IP65   | LV426999 |

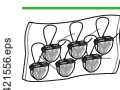
### Locks

## INDUSTRIAL AUTOMATION

#### Toggle locking device for 1 to 3 padlocks

|  |                             |          |
|--|-----------------------------|----------|
|  | By removable device         | 29370    |
|  | By fixed device (OFF or ON) | LV426905 |
|  | By fixed device (OFF only)  | LV426906 |
|  |                             |          |

#### Lead - Sealing accessories

|  |                    |          |
|--|--------------------|----------|
|  | Bag of accessories | LV429375 |
|--|--------------------|----------|

F

# Accessories

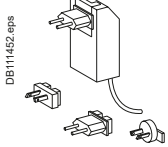
Spare parts, test tool and software

## Spare parts

|   |   |                     |          |
|---|---|---------------------|----------|
| <br>DB421557.eps | Front cover   | 3P                  | LV426946 |
|   | <br>DB421558.eps | 4P                  | LV426947 |
|   |   | ELCB <sup>[1]</sup> | LV426948 |

## Test tool, software, demo

### Test tool

|   |  |  |          |
|---|--|--|----------|
| <br>DB111449.eps   | Pocket battery for MicroLogic  |  | LV434206 |
| <br>DB111451.eps  | Maintenance case<br>Comprising:<br><ul style="list-style-type: none"> <li>■ USB maintenance interface</li> <li>■ Power supply</li> <li>■ MicroLogic cord</li> <li>■ USB cord</li> <li>■ RJ45/RJ45 male cord</li> </ul> |  | TRV00910 |
|   | Spare USB maintenance interface  |  | TRV00911 |
| <br>DB111450.eps | Spare power supply<br>110-240 V AC   |  | TRV00915 |
| <br>DB111452.eps | Spare MicroLogic cord for USB maintenance interface  |  | TRV00917 |

### Software

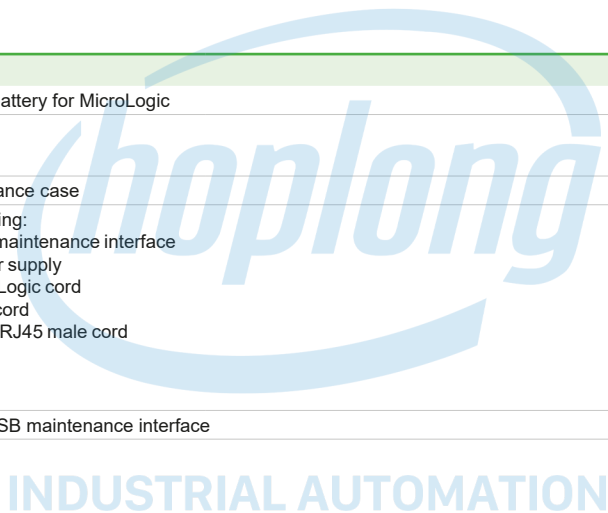
|   |   |  |                         |
|---|---|--|-------------------------|
| <br>DB111758.eps | Configuration and setting EcoStruxure Power Commission software |  | LV4ST100                |
|   | Test software LTU   |  | LV4ST121 <sup>[2]</sup> |
|   | Monitoring EcoStruxure Power Commission software                |  | LV4SM100 <sup>[2]</sup> |

### Demo tool

|  |                       |  |          |
|--|-----------------------|--|----------|
|  | Demo case for ComPact |  | LV434207 |
|--|-----------------------|--|----------|

[1] ELCB: Earth Leakage Circuit Breaker.

[2] Downloadable from <http://schneider-electric.com>.



# Characteristics and performance

## ComPact NSXm switch-disconnectors from 50 to 160 A NA

A

Installation standards require upstream protection. However ComPact NSXm 50 to 160 NA switch-disconnectors are self-protected by their high-set magnetic release.



ComPact NSXm switch-disconnectors.

### Common characteristics

|                           |                                |                 |                 |
|---------------------------|--------------------------------|-----------------|-----------------|
| Rated voltages            | Insulation voltage (V)         | Ui              | 800             |
|                           | Impulse withstand voltage (kV) | Uimp            | 8               |
|                           | Operational voltage (V)        | Ue              | AC 50/60 Hz 690 |
| Suitability for isolation |                                | IEC/EN 60947-3  | yes             |
| Utilisation category      |                                | AC 22 A/AC 23 A |                 |
| Pollution degree          |                                | IEC 60664-1     | 3               |

### Switch-disconnectors

#### Electrical characteristics as per IEC/EN 60947-3

Conventional thermal current (A) Ith 40 °C

Number of poles

|   |    |             |           |
|---|----|-------------|-----------|
| Operational current (A) depending on the utilisation category | Ie | AC 50/60 Hz | 220/240 V |
|   |    |             | 380/415 V |
|   |    |             | 440/480 V |
|   |    |             | 500/525 V |
|   |    |             | 660/690 V |

Short-circuit making capacity (kA peak) Icm min. (switch-disconnector alone) max. (protection by upstream circuit breaker)

|  |     |      |
|--|-----|------|
| Rated short-time withstand current (A rms) Icw | for | 1 s  |
|  |     | 3 s  |
|  |     | 20 s |

Durability (C-O cycles)

mechanical

electrical AC

|       |      |
|-------|------|
| 440 V | Ie/2 |
|       | Ie   |
| 690 V | Ie/2 |
|       | Ie   |

Positive contact indication

Pollution degree

#### Additional indication and control auxiliaries

Indication contacts

|                  |                         |
|------------------|-------------------------|
| Voltage releases | MX shunt trip release   |
|                  | MN undervoltage release |

#### Installation / connections

##### Dimensions and weights

|                 |    |
|-----------------|----|
| Dimensions (mm) | 3P |
| W x H x D       | 4P |
| Weight (kg)     | 3P |
|                 | 4P |

##### Connections

|                                  |                     |
|----------------------------------|---------------------|
| Pitch (mm)                       | Standard            |
|                                  | With spreaders      |
| EverLink lug Cu or Al [1] cables | Cross-section (mm²) |
|                                  | Rigid               |
|                                  | Flexible            |
| Crimp lugs Cu or Al              | Cross-section (mm²) |
|                                  | Rigid               |
|                                  | Flexible            |

#### Source-changeover systems

Manual mechanical interlocking

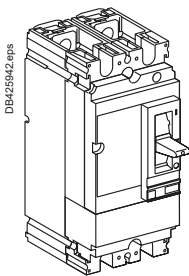
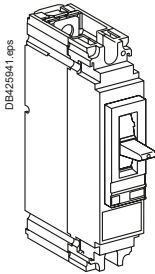
[1] Al up to 100 A.

# Complete fixed device

## ComPact NSX100/160 1P-2P NSX250N 1P

### ComPact NSX100/160 F/N/M/S 1P/2P

With thermal-magnetic trip unit TM-D



**ComPact NSX100F AC/DC**

| Rating | 1P 1d (Icu = 18 kA 220/240 V AC) |
|--------|----------------------------------|
| TM16D  | LV438562                         |
| TM20D  | LV438563                         |
| TM25D  | LV438564                         |
| TM30D  | LV438565                         |
| TM40D  | LV438566                         |
| TM50D  | LV438567                         |
| TM63D  | LV438568                         |
| TM80D  | LV438569                         |
| TM100D | LV438570                         |

**ComPact NSX100F AC/DC**

| Rating | 2P 2d (Icu = 18 kA 380/415 V AC) |
|--------|----------------------------------|
|        | LV438592                         |
|        | LV438593                         |
|        | LV438594                         |
|        | LV438595                         |
|        | LV438596                         |
|        | LV438597                         |
|        | LV438598                         |
|        | LV438599                         |
|        | LV438600                         |

**ComPact NSX160F AC/DC**

| Rating | 1P 1d (Icu = 18 kA 220/240 V AC) |
|--------|----------------------------------|
| TM125D | LV438669                         |
| TM160D | LV438670                         |

**ComPact NSX160F AC/DC**

| Rating | 2P 2d (Icu = 18 kA 380/415 V AC) |
|--------|----------------------------------|
|        | LV438699                         |
|        | LV438700                         |

**ComPact NSX100N AC/DC**

| Rating | 1P 1d (Icu = 25 kA 220/240 V AC) |
|--------|----------------------------------|
| TM16D  | LV438572                         |
| TM20D  | LV438573                         |
| TM25D  | LV438574                         |
| TM30D  | LV438575                         |
| TM40D  | LV438576                         |
| TM50D  | LV438577                         |
| TM63D  | LV438578                         |
| TM80D  | LV438579                         |
| TM100D | LV438580                         |

**ComPact NSX100M AC/DC**

| Rating | 2P 2d (Icu = 25 kA 380/415 V AC) |
|--------|----------------------------------|
|        | LV438602                         |
|        | LV438603                         |
|        | LV438604                         |
|        | LV438605                         |
|        | LV438606                         |
|        | LV438607                         |
|        | LV438608                         |
|        | LV438609                         |
|        | LV438610                         |

**ComPact NSX160N AC/DC**

| Rating | 1P 1d (Icu = 25 kA 220/240 V AC) |
|--------|----------------------------------|
| TM125D | LV438679                         |
| TM160D | LV438680                         |

**ComPact NSX160M AC/DC**

| Rating | 2P 2d (Icu = 40 kA 380/415 V AC) |
|--------|----------------------------------|
|        | LV438709                         |
|        | LV438710                         |

**ComPact NSX100M AC/DC**

| Rating | 1P 1d (Icu = 40 kA 220/240 V AC) |
|--------|----------------------------------|
| TM16D  | LV438582                         |
| TM20D  | LV438583                         |
| TM25D  | LV438584                         |
| TM30D  | LV438585                         |
| TM40D  | LV438586                         |
| TM50D  | LV438587                         |
| TM63D  | LV438588                         |
| TM80D  | LV438589                         |
| TM100D | LV438590                         |

**ComPact NSX100S AC/DC**

| Rating | 2P 2d (Icu = 70 kA 380/415 V AC) |
|--------|----------------------------------|
|        | LV438612                         |
|        | LV438613                         |
|        | LV438614                         |
|        | LV438615                         |
|        | LV438616                         |
|        | LV438617                         |
|        | LV438618                         |
|        | LV438619                         |
|        | LV438620                         |

**ComPact NSX160M AC/DC**

| Rating | 1P 1d (Icu = 40 kA 220/240 V AC) |
|--------|----------------------------------|
| TM125D | LV438689                         |
| TM160D | LV438690                         |

**ComPact NSX160S AC/DC**

| Rating | 2P 2d (Icu = 70 kA 380/415 V AC) |
|--------|----------------------------------|
|        | LV438719                         |
|        | LV438720                         |

### ComPact NSX250 N 1P

With thermal-magnetic trip unit TM-D

**ComPact NSX250N AC**

| Rating | 1P 1d (Icu = 25 kA 220/240 V AC) |
|--------|----------------------------------|
| TM160D | LV438693                         |
| TM200D | LV438694                         |
| TM250D | LV438695                         |

F

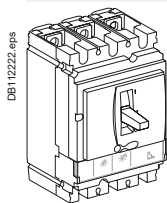


Complete fixed device

ComPact NSX100/160/250B (25 kA 380/415 V)

**ComPact NSX100/160/250B**

With thermal-magnetic trip unit TM-D



**ComPact NSX100B (25 kA at 380/415 V)**

| Rating | 3P 2d    | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|----------|
| TM16D  | LV429547 | LV429557 | LV429567 | LV429577 |
| TM25D  | LV429546 | LV429556 | LV429566 | LV429576 |
| TM32D  | LV429545 | LV429555 | LV429565 | LV429575 |
| TM40D  | LV429544 | LV429554 | LV429564 | LV429574 |
| TM50D  | LV429543 | LV429553 | LV429563 | LV429573 |
| TM63D  | LV429542 | LV429552 | LV429562 | LV429572 |
| TM80D  | LV429541 | LV429551 | LV429561 | LV429571 |
| TM100D | LV429540 | LV429550 | LV429560 | LV429570 |

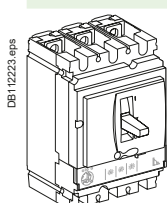
**ComPact NSX160B (25 kA at 380/415 V)**

| Rating | 3P 2d    | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|----------|
| TM80D  | LV430303 | LV430313 | LV430323 | LV430333 |
| TM100D | LV430302 | LV430312 | LV430322 | LV430332 |
| TM125D | LV430301 | LV430311 | LV430321 | LV430331 |
| TM160D | LV430300 | LV430310 | LV430320 | LV430330 |

**ComPact NSX250B (25 kA at 380/415 V)**

| Rating | 3P 2d    | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|----------|
| TM125D | LV431103 | LV431113 | LV431123 | LV431133 |
| TM160D | LV431102 | LV431112 | LV431122 | LV431132 |
| TM200D | LV431101 | LV431111 | LV431121 | LV431131 |
| TM250D | LV431100 | LV431110 | LV431120 | LV431130 |

With electronic trip unit MicroLogic 2.2 (LS<sub>o</sub>I protection)



**ComPact NSX100B (25 kA at 380/415 V)**

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 40     | LV429777 | LV429787            |
| 100    | LV429775 | LV429785            |

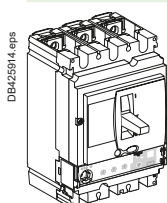
**ComPact NSX160B (25 kA at 380/415 V)**

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 100    | LV430746 | LV430751            |
| 160    | LV430745 | LV430750            |

**ComPact NSX250B (25 kA at 380/415 V)**

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 100    | LV431142 | LV431152            |
| 160    | LV431141 | LV431151            |
| 250    | LV431140 | LV431150            |

With electronic trip unit MicroLogic Vigi 4.2 (LS<sub>o</sub>IR protection)



**ComPact NSX100B (25 kA 380/415V)**

| Rating | 3P 3d    | 4P 4d, 3d + N/2 |
|--------|----------|-----------------|
| 40 A   | LV433810 | LV433818        |
| 100 A  | LV433811 | LV433819        |

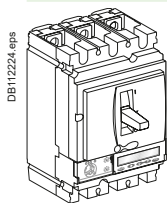
**ComPact NSX160B (25 kA 380/415V)**

| Rating | 3P 3d    | 4P 4d, 3d + N/2 |
|--------|----------|-----------------|
| 100 A  | LV433812 | LV433820        |
| 160 A  | LV433813 | LV433821        |

**ComPact NSX250B (25 kA 380/415V)**

| Rating | 3P 3d    | 4P 4d, 3d + N/2 |
|--------|----------|-----------------|
| 100 A  | LV433814 | LV433822        |
| 160 A  | LV433815 | LV433823        |
| 250 A  | LV433816 | LV433824        |

With electronic trip unit MicroLogic 5.2 A (LSI protection, ammeter)



**ComPact NSX100B (25 kA at 380/415 V)**

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, 3d + OSN |
|--------|----------|-------------------------------|
| 40     | LV429872 | LV429877                      |
| 100    | LV429870 | LV429875                      |

**ComPact NSX160B (25 kA at 380/415 V)**

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, 3d + OSN |
|--------|----------|-------------------------------|
| 100    | LV430871 | LV430876                      |
| 160    | LV430870 | LV430875                      |

**ComPact NSX250B (25 kA at 380/415 V)**

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, 3d + OSN |
|--------|----------|-------------------------------|
| 100    | LV431147 | LV431157                      |
| 160    | LV431146 | LV431156                      |
| 250    | LV431145 | LV431155                      |

With electronic trip unit MicroLogic 5.2 E (LSI protection, energy meter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

With electronic trip unit MicroLogic 6.2 A (LSIG protection, ammeter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

With electronic trip unit MicroLogic 6.2 E (LSIG protection, energy meter)

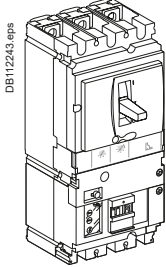
To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

# Complete fixed device

## ComPact NSX100/160/250B Vigi add-on (25 kA 380/415 V)

### ComPact NSX100/160/250B Vigi add-on

With thermal-magnetic trip unit TM-D



#### ComPact NSX100B (25 kA at 380/415 V) MH Vigi add-on (200 to 440 V)

| Rating | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM16D  | LV429667 | LV429707 | LV429967 |
| TM25D  | LV429666 | LV429706 | LV429966 |
| TM32D  | LV429665 | LV429705 | LV429965 |
| TM40D  | LV429664 | LV429704 | LV429964 |
| TM50D  | LV429663 | LV429703 | LV429963 |
| TM63D  | LV429662 | LV429702 | LV429962 |
| TM80D  | LV429661 | LV429701 | LV429961 |
| TM100D | LV429660 | LV429700 | LV429960 |

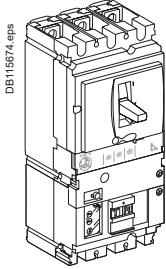
#### ComPact NSX160B (25 kA at 380/415 V) MH Vigi add-on (200 to 440 V)

| Rating | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM80D  | LV430343 | LV430353 | LV430363 |
| TM100D | LV430342 | LV430352 | LV430362 |
| TM125D | LV430341 | LV430351 | LV430361 |
| TM160D | LV430340 | LV430350 | LV430360 |

#### ComPact NSX250B (25 kA at 380/415 V) MH Vigi add-on (200 to 440 V)

| Rating | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM125D | LV431903 | LV431913 | LV431963 |
| TM160D | LV431902 | LV431912 | LV431962 |
| TM200D | LV431901 | LV431911 | LV431961 |
| TM250D | LV431900 | LV431910 | LV431960 |

With electronic trip unit MicroLogic 2.2 (LS<sub>01</sub>I protection)



#### ComPact NSX100B (25 kA at 380/415 V) MH Vigi add-on (200 to 440 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 40     | LV429975 | LV429985            |
| 100    | LV429974 | LV429984            |

#### ComPact NSX160B (25 kA at 380/415 V) MH Vigi add-on (200 to 440 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 40     | LV430962 | LV430997            |
| 100    | LV430961 | LV430996            |
| 160    | LV430960 | LV430995            |

#### ComPact NSX250B (25 kA at 380/415 V) MH Vigi add-on (200 to 440 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 100    | LV431977 | LV431987            |
| 160    | LV431976 | LV431986            |
| 250    | LV431975 | LV431985            |

With electronic trip unit MicroLogic 5.2 A or 5.2 E (LSI protection, ammeter or energy meter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

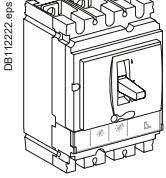


# Complete fixed device

## ComPact NSX100/160/250F (36 kA 380/415 V)

### ComPact NSX100/160/250F

With thermal-magnetic trip unit TM-D



#### ComPact NSX100F (36 kA at 380/415 V)

| Rating | 3P 2d    | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|----------|
| TM16D  | LV429627 | LV429637 | LV429647 | LV429657 |
| TM25D  | LV429626 | LV429636 | LV429646 | LV429656 |
| TM32D  | LV429625 | LV429635 | LV429645 | LV429655 |
| TM40D  | LV429624 | LV429634 | LV429644 | LV429654 |
| TM50D  | LV429623 | LV429633 | LV429643 | LV429653 |
| TM63D  | LV429622 | LV429632 | LV429642 | LV429652 |
| TM80D  | LV429621 | LV429631 | LV429641 | LV429651 |
| TM100D | LV429620 | LV429630 | LV429640 | LV429650 |

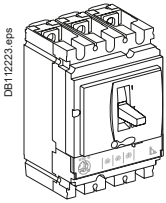
#### ComPact NSX160F (36 kA at 380/415 V)

| Rating | 3P 2d    | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|----------|
| TM80D  | LV430623 | LV430633 | LV430643 | LV430653 |
| TM100D | LV430622 | LV430632 | LV430642 | LV430652 |
| TM125D | LV430621 | LV430631 | LV430641 | LV430651 |
| TM160D | LV430620 | LV430630 | LV430640 | LV430650 |

#### ComPact NSX250F (36 kA at 380/415 V)

| Rating | 3P 2d    | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|----------|
| TM125D | LV431623 | LV431633 | LV431643 | LV431653 |
| TM160D | LV431622 | LV431632 | LV431642 | LV431652 |
| TM200D | LV431621 | LV431631 | LV431641 | LV431651 |
| TM250D | LV431620 | LV431630 | LV431640 | LV431650 |

With electronic trip unit MicroLogic 2.2 (LS<sub>o</sub>I protection)



#### ComPact NSX100F (36 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 40     | LV429772 | LV429782            |
| 100    | LV429770 | LV429780            |

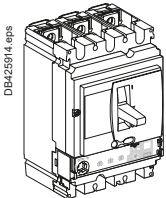
#### ComPact NSX160F (36 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 100    | LV430771 | LV430781            |
| 160    | LV430770 | LV430780            |

#### ComPact NSX250F (36 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 100    | LV431772 | LV431782            |
| 160    | LV431771 | LV431781            |
| 250    | LV431770 | LV431780            |

With electronic trip unit MicroLogic Vigi 4.2 (LS<sub>o</sub>IR protection)



#### ComPact NSX100F (36 kA 380/415V)

| Rating | 3P 3d    | 4P 4d, 3d + N/2 |
|--------|----------|-----------------|
| 40 A   | LV433826 | LV433834        |
| 100 A  | LV433827 | LV433835        |

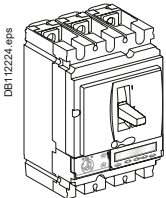
#### ComPact NSX160F (36 kA 380/415V)

| Rating | 3P 3d    | 4P 4d, 3d + N/2 |
|--------|----------|-----------------|
| 100 A  | LV433828 | LV433836        |
| 160 A  | LV433829 | LV433837        |

#### ComPact NSX250F (36 kA 380/415V)

| Rating | 3P 3d    | 4P 4d, 3d + N/2 |
|--------|----------|-----------------|
| 100 A  | LV433830 | LV433838        |
| 160 A  | LV433831 | LV433839        |
| 250 A  | LV433832 | LV433840        |

With electronic trip unit MicroLogic 5.2 A (LSI protection, ammeter)



#### ComPact NSX100F (36 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, 3d + OSN |
|--------|----------|-------------------------------|
| 40     | LV429882 | LV429887                      |
| 100    | LV429880 | LV429885                      |

#### ComPact NSX160F (36 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, 3d + OSN |
|--------|----------|-------------------------------|
| 100    | LV430881 | LV430886                      |
| 160    | LV430880 | LV430885                      |

#### ComPact NSX250F (36 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, 3d + OSN |
|--------|----------|-------------------------------|
| 100    | LV431862 | LV431867                      |
| 160    | LV431861 | LV431866                      |
| 250    | LV431860 | LV431865                      |

With electronic trip unit MicroLogic 5.2 E (LSI protection, energy meter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

With electronic trip unit MicroLogic 6.2 A (LSIG protection, ammeter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

With electronic trip unit MicroLogic 6.2 E (LSIG protection, energy meter)

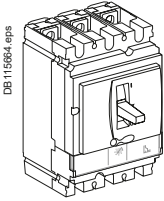
To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

# Complete fixed device

## ComPact NSX100/160/250F (36 kA 380/415 V)

### ComPact NSX100/160/250F

With magnetic trip unit MA



**ComPact NSX100F (36 kA at 380/415 V)**

|        |                 |
|--------|-----------------|
| Rating | <b>3P 3d</b>    |
| MA2.5  | <b>LV429745</b> |
| MA6.3  | <b>LV429744</b> |
| MA12.5 | <b>LV429743</b> |
| MA25   | <b>LV429742</b> |
| MA50   | <b>LV429741</b> |
| MA100  | <b>LV429740</b> |

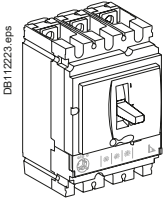
**ComPact NSX160F (36 kA at 380/415 V)**

|        |                 |
|--------|-----------------|
| Rating | <b>3P 3d</b>    |
| MA100  | <b>LV430831</b> |
| MA150  | <b>LV430830</b> |

**ComPact NSX250F (36 kA at 380/415 V)**

|        |                 |
|--------|-----------------|
| Rating | <b>3P 3d</b>    |
| MA150  | <b>LV431749</b> |
| MA220  | <b>LV431748</b> |

With electronic trip unit MicroLogic 2.2 M (LS<sub>o</sub> motor protection)



**ComPact NSX100F (36 kA at 380/415 V)**

|        |                 |
|--------|-----------------|
| Rating | <b>3P 3d</b>    |
| 25 A   | <b>LV429828</b> |
| 50 A   | <b>LV429827</b> |
| 100 A  | <b>LV429825</b> |

**ComPact NSX160F (36 kA at 380/415 V)**

|        |                 |
|--------|-----------------|
| Rating | <b>3P 3d</b>    |
| 100 A  | <b>LV430986</b> |
| 150 A  | <b>LV430985</b> |

**ComPact NSX250F (36 kA at 380/415 V)**

|        |                 |
|--------|-----------------|
| Rating | <b>3P 3d</b>    |
| 150 A  | <b>LV431161</b> |
| 220 A  | <b>LV431160</b> |

With electronic trip unit MicroLogic 6.2 E-M (LSIG motor protection, energy meter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

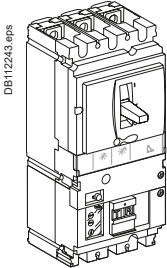
## INDUSTRIAL AUTOMATION

# Complete fixed device

## ComPact NSX100/160/250F Vigi add-on (36 kA 380/415 V)

### ComPact NSX100/160/250F Vigi add-on

With thermal-magnetic trip unit TM-D



ComPact NSX100F (36 kA at 380/415 V) MH Vigi add-on (200 to 440 V)

| Rating | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM16D  | LV429937 | LV429947 | LV429957 |
| TM25D  | LV429936 | LV429946 | LV429956 |
| TM32D  | LV429935 | LV429945 | LV429955 |
| TM40D  | LV429934 | LV429944 | LV429954 |
| TM50D  | LV429933 | LV429943 | LV429953 |
| TM63D  | LV429932 | LV429942 | LV429952 |
| TM80D  | LV429931 | LV429941 | LV429951 |
| TM100D | LV429930 | LV429940 | LV429950 |

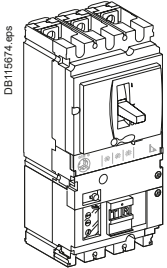
ComPact NSX160F (36 kA at 380/415 V) MH Vigi add-on (200 to 440 V)

| Rating | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM80D  | LV430933 | LV430943 | LV430953 |
| TM100D | LV430932 | LV430942 | LV430952 |
| TM125D | LV430931 | LV430941 | LV430951 |
| TM160D | LV430930 | LV430940 | LV430950 |

ComPact NSX250F (36 kA at 380/415 V) MH Vigi add-on (200 to 440 V)

| Rating | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM125D | LV431933 | LV431943 | LV431953 |
| TM160D | LV431932 | LV431942 | LV431952 |
| TM200D | LV431931 | LV431941 | LV431951 |
| TM250D | LV431930 | LV431940 | LV431950 |

With electronic trip unit MicroLogic 2.2 (LS<sub>0</sub>I protection)



ComPact NSX100F (36 kA at 380/415 V) MH Vigi add-on (200 to 440 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 40 A   | LV429972 | LV429982            |
| 100 A  | LV429970 | LV429980            |

ComPact NSX160F (36 kA at 380/415 V) MH Vigi add-on (200 to 440 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 40 A   | LV430973 | LV430983            |
| 100 A  | LV430971 | LV430981            |
| 160 A  | LV430970 | LV430980            |

ComPact NSX250F (36 kA at 380/415 V) MH Vigi add-on (200 to 440 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 100 A  | LV431972 | LV431982            |
| 160 A  | LV431971 | LV431981            |
| 250 A  | LV431970 | LV431980            |

With electronic trip unit MicroLogic 5.2 A or 5.2 E (LSI protection, energy meter)

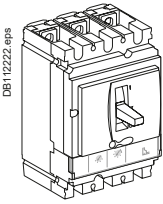
To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

# Complete fixed device

## ComPact NSX100/160/250N (50 kA 380/415 V)

### ComPact NSX100/160/250N

With thermal-magnetic trip unit TM-D



#### ComPact NSX100N (50 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM16D  | LV429847 | LV429857 | LV429867 |
| TM25D  | LV429846 | LV429856 | LV429866 |
| TM32D  | LV429845 | LV429855 | LV429865 |
| TM40D  | LV429844 | LV429854 | LV429864 |
| TM50D  | LV429843 | LV429853 | LV429863 |
| TM63D  | LV429842 | LV429852 | LV429862 |
| TM80D  | LV429841 | LV429851 | LV429861 |
| TM100D | LV429840 | LV429850 | LV429860 |

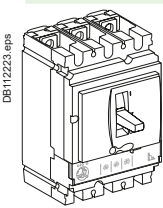
#### ComPact NSX160N (50 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM80D  | LV430843 | LV430853 | LV430863 |
| TM100D | LV430842 | LV430852 | LV430862 |
| TM125D | LV430841 | LV430851 | LV430861 |
| TM160D | LV430840 | LV430850 | LV430860 |

#### ComPact NSX250N (50 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM125D | LV431833 | LV431843 | LV431853 |
| TM160D | LV431832 | LV431842 | LV431852 |
| TM200D | LV431831 | LV431841 | LV431851 |
| TM250D | LV431830 | LV431840 | LV431850 |

With electronic trip unit MicroLogic 2.2 (LS<sub>o</sub>I protection)



#### ComPact NSX100N (50 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 40 A   | LV429797 | LV429807            |
| 100 A  | LV429795 | LV429805            |

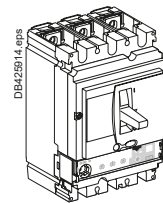
#### ComPact NSX160N (50 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 100 A  | LV430776 | LV430786            |
| 160 A  | LV430775 | LV430785            |

#### ComPact NSX250N (50 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 100 A  | LV431872 | LV431877            |
| 160 A  | LV431871 | LV431876            |
| 250 A  | LV431870 | LV431875            |

With electronic trip unit MicroLogic Vigi 4.2 (LS<sub>o</sub>IR protection)



#### ComPact NSX100N (50 kA 380/415V)

| Rating | 3P 3d    | 4P 4d, 3d + N/2 |
|--------|----------|-----------------|
| 40 A   | LV433842 | LV433850        |
| 100 A  | LV433843 | LV433851        |

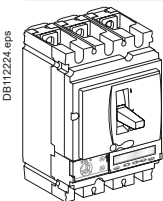
#### ComPact NSX160N (50 kA 380/415V)

| Rating | 3P 3d    | 4P 4d, 3d + N/2 |
|--------|----------|-----------------|
| 100 A  | LV433844 | LV433852        |
| 160 A  | LV433845 | LV433853        |

#### ComPact NSX250N (50 kA 380/415V)

| Rating | 3P 3d    | 4P 4d, 3d + N/2 |
|--------|----------|-----------------|
| 100 A  | LV433846 | LV433854        |
| 160 A  | LV433847 | LV433855        |
| 250 A  | LV433848 | LV433856        |

With electronic trip unit MicroLogic 5.2 A (LSI protection, ammeter)



#### ComPact NSX100N (50 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
|--------|----------|--------------------------|
| 40 A   | LV429892 | LV429897                 |
| 100 A  | LV429890 | LV429895                 |

#### ComPact NSX160N (50 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
|--------|----------|--------------------------|
| 100 A  | LV430891 | LV430896                 |
| 160 A  | LV430890 | LV430895                 |

#### ComPact NSX250N (50 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
|--------|----------|--------------------------|
| 100 A  | LV431882 | LV431887                 |
| 160 A  | LV431881 | LV431886                 |
| 250 A  | LV431880 | LV431885                 |

With electronic trip unit MicroLogic 5.2 E (LSI protection, energy meter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

With electronic trip unit MicroLogic 6.2 A (LSIG protection, ammeter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

With electronic trip unit MicroLogic 6.2 E (LSIG protection, energy meter)

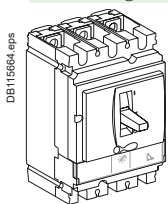
To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

Complete fixed device

ComPact NSX100/160/250N (50 kA 380/415 V)

**ComPact NSX100/160/250N**

With magnetic trip unit MA



ComPact NSX100N (50 kA at 380/415 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| MA2.5  | LV429755 |
| MA6.3  | LV429754 |
| MA12.5 | LV429753 |
| MA25   | LV429752 |
| MA50   | LV429751 |
| MA100  | LV429750 |

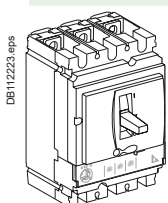
ComPact NSX160N (50 kA at 380/415 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| MA100  | LV430833 |
| MA150  | LV430832 |

ComPact NSX250N (50 kA at 380/415 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| MA150  | LV431753 |
| MA220  | LV431752 |

With electronic trip unit MicroLogic 2.2 M (LS<sub>0</sub>I motor protection)



ComPact NSX100N (50 kA at 380/415 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 25 A   | LV429833 |
| 50 A   | LV429832 |
| 100 A  | LV429830 |

ComPact NSX160N (50 kA at 380/415 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 100 A  | LV430989 |
| 150 A  | LV430988 |

ComPact NSX250N (50 kA at 380/415 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 150 A  | LV431166 |
| 220 A  | LV431165 |

With electronic trip unit MicroLogic 6.2 E-M (LSIG motor protection, energy meter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

INDUSTRIAL AUTOMATION



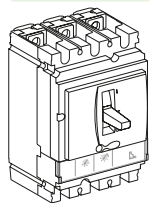
# Complete fixed device

## ComPact NSX100/160/250H (70 kA 380/415 V)

### ComPact NSX100/160/250H

With thermal-magnetic trip unit TM-D

DB112222.eps



#### ComPact NSX100H (70 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM16D  | LV429677 | LV429687 | LV429697 |
| TM25D  | LV429676 | LV429686 | LV429696 |
| TM32D  | LV429675 | LV429685 | LV429695 |
| TM40D  | LV429674 | LV429684 | LV429694 |
| TM50D  | LV429673 | LV429683 | LV429693 |
| TM63D  | LV429672 | LV429682 | LV429692 |
| TM80D  | LV429671 | LV429681 | LV429691 |
| TM100D | LV429670 | LV429680 | LV429690 |

#### ComPact NSX160H (70 kA at 380/415 V)

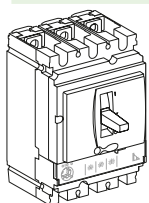
| Rating | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM80D  | LV430673 | LV430683 | LV430693 |
| TM100D | LV430672 | LV430682 | LV430692 |
| TM125D | LV430671 | LV430681 | LV430691 |
| TM160D | LV430670 | LV430680 | LV430690 |

#### ComPact NSX250H (70 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d    | 4P 4d    |
|--------|----------|----------|----------|
| TM125D | LV431673 | LV431683 | LV431693 |
| TM160D | LV431672 | LV431682 | LV431692 |
| TM200D | LV431671 | LV431681 | LV431691 |
| TM250D | LV431670 | LV431680 | LV431690 |

With electronic trip unit MicroLogic 2.2 (LS<sub>o</sub>I protection)

DB112223.eps



#### ComPact NSX100H (70 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 40 A   | LV429792 | LV429802            |
| 100 A  | LV429790 | LV429800            |

#### ComPact NSX160H (70 kA at 380/415 V)

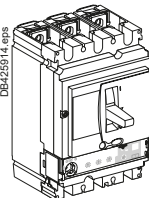
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 100 A  | LV430791 | LV430801            |
| 160 A  | LV430790 | LV430800            |

#### ComPact NSX250H (70 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 100 A  | LV431792 | LV431802            |
| 160 A  | LV431791 | LV431801            |
| 250 A  | LV431790 | LV431800            |

With electronic trip unit MicroLogic Vigi 4.2 (LS<sub>o</sub>IR protection)

DB425914.eps



#### ComPact NSX100H (70 kA 380/415V)

| Rating | 3P 3d    | 4P 4d, 3d + N/2 |
|--------|----------|-----------------|
| 40 A   | LV433858 | LV433866        |
| 100 A  | LV433859 | LV433867        |

#### ComPact NSX160H (70 kA 380/415V)

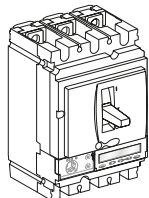
| Rating | 3P 3d    | 4P 4d, 3d + N/2 |
|--------|----------|-----------------|
| 100 A  | LV433860 | LV433868        |
| 160 A  | LV433861 | LV433869        |

#### ComPact NSX250H (70 kA 380/415V)

| Rating | 3P 3d    | 4P 4d, 3d + N/2 |
|--------|----------|-----------------|
| 100 A  | LV433862 | LV433870        |
| 160 A  | LV433863 | LV433871        |
| 250 A  | LV433864 | LV433872        |

With electronic trip unit MicroLogic 5.2 A (LSI protection, ammeter)

DB112224.eps



#### ComPact NSX100H (70 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
|--------|----------|--------------------------|
| 40 A   | LV429794 | LV429804                 |
| 100 A  | LV429793 | LV429803                 |

#### ComPact NSX160H (70 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
|--------|----------|--------------------------|
| 100 A  | LV430795 | LV430805                 |
| 160 A  | LV430794 | LV430804                 |

#### ComPact NSX250H (70 kA at 380/415 V)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
|--------|----------|--------------------------|
| 100 A  | LV431797 | LV431807                 |
| 160 A  | LV431796 | LV431806                 |
| 250 A  | LV431795 | LV431805                 |

With electronic trip unit MicroLogic 5.2 E (LSI protection, energy meter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

With electronic trip unit MicroLogic 6.2 A (LSIG protection, ammeter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

With electronic trip unit MicroLogic 6.2 E (LSIG protection, energy meter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

# Characteristics and performance

## ComPact NSXm switch-disconnectors from 50 to 160 A NA



### Common characteristics

|          |        |                                       |                                  |
|----------|--------|---------------------------------------|----------------------------------|
| Control  | Manual | With toggle                           | <input checked="" type="radio"/> |
|          |        | With direct or extended rotary handle | <input checked="" type="radio"/> |
|          |        | With side rotary handle               | <input checked="" type="radio"/> |
| Versions | Fixed  |                                       | <input checked="" type="radio"/> |

|  | NSXm50NA                         | NSXm100NA                        | NSXm160NA                        |
|--|----------------------------------|----------------------------------|----------------------------------|
|  | <b>50</b>                        | <b>100</b>                       | <b>160</b>                       |
|  | 3, 4                             | 3, 4                             | 3, 4                             |
|  | <b>AC22A / AC23A</b>             | <b>AC22A / AC23A</b>             | <b>AC22A / AC23A</b>             |
|  | 50                               | 100                              | 160 / 100                        |
|  | 50                               | 100                              | 160 / 100                        |
|  | 50                               | 100                              | 160 / 100                        |
|  | 50                               | 100                              | 160 / 100                        |
|  | 50                               | 100                              | 160 / 100                        |
|  | 1.28                             | 2.13                             | 2.13                             |
|  | 150                              | 150                              | 150                              |
|  | 900                              | 1500                             | 1500                             |
|  | 900                              | 1500                             | 1500                             |
|  | 200                              | 335                              | 335                              |
|  | 20000                            | 20000                            | 20000                            |
|  | <b>AC22A / AC23A</b>             | <b>AC22A / AC23A</b>             | <b>AC22A / AC23A</b>             |
|  | 20000 / 20000                    | 20000 / 20000                    | 20000 / 20000                    |
|  | 10000 / 10000                    | 10000 / 10000                    | 10000 / 10000                    |
|  | 10000 / 6000                     | 10000 / 6000                     | 10000 / 6000                     |
|  | 5000 / 3000                      | 5000 / 3000                      | 5000 / 3000                      |
|  | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
|  | 3                                | 3                                | 3                                |
|  | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
|  | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
|  | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
|  | 81 x 137 x 80                    |                                  |                                  |
|  | 108 x 137 x 80                   |                                  |                                  |
|  | 1.06                             |                                  |                                  |
|  | 1.42                             |                                  |                                  |
|  | 27                               |                                  |                                  |
|  | 35                               |                                  |                                  |
|  | 95                               |                                  |                                  |
|  | 70                               |                                  |                                  |
|  | 120                              |                                  |                                  |
|  | 95                               |                                  |                                  |
|  | <input checked="" type="radio"/> |                                  |                                  |

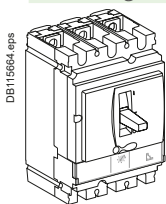


# Complete fixed device

## ComPact NSX100/160/250H (70 kA 380/415 V)

### ComPact NSX100/160/250H

With magnetic trip unit MA



**ComPact NSX100H (70 kA at 380/415 V)**

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| MA2.5  | LV429765 |
| MA6.3  | LV429764 |
| MA12.5 | LV429763 |
| MA25   | LV429762 |
| MA50   | LV429761 |
| MA100  | LV429760 |

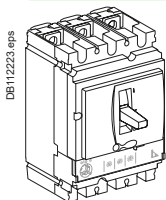
**ComPact NSX160H (70 kA at 380/415 V)**

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| MA100  | LV430835 |
| MA150  | LV430834 |

**ComPact NSX250H (70 kA at 380/415 V)**

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| MA150  | LV431757 |
| MA220  | LV431756 |

With electronic trip unit MicroLogic 2.2 M (LS<sub>o</sub>I motor protection)



**ComPact NSX100H (70 kA at 380/415 V)**

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 25 A   | LV429838 |
| 50 A   | LV429837 |
| 100 A  | LV429835 |

**ComPact NSX160H (70 kA at 380/415 V)**

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 100 A  | LV430992 |
| 150 A  | LV430991 |

**ComPact NSX250H (70 kA at 380/415 V)**

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 150 A  | LV431171 |
| 220 A  | LV431170 |

With electronic trip unit MicroLogic 6.2 E-M (LSIG motor protection, energy meter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

## INDUSTRIAL AUTOMATION

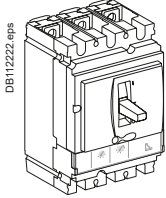


# Complete fixed device

## ComPact NSX100/250R (200 kA 380/415 V - 45 kA 690 V)

### ComPact NSX100/250R

With thermal-magnetic trip unit TM-D



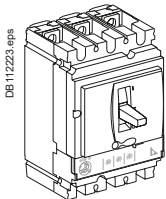
ComPact NSX100R (200 kA at 380/415 V - 45 kA at 690 V)

|        |          |          |
|--------|----------|----------|
| Rating | 3P 3d    | 4P 4d    |
| TM40D  | LV433200 | LV433201 |
| TM50D  | LV433202 | LV433203 |
| TM63D  | LV433204 | LV433205 |
| TM80D  | LV433206 | LV433207 |
| TM100D | LV433208 | LV433209 |

ComPact NSX250R (200 kA at 380/415 V - 45 kA at 690 V)

|        |          |          |
|--------|----------|----------|
| Rating | 3P 3d    | 4P 4d    |
| TM125D | LV433470 | LV433471 |
| TM160D | LV433472 | LV433473 |
| TM200D | LV433474 | LV433475 |
| TM250D | LV433476 | LV433477 |

With electronic trip unit MicroLogic 2.2 (LS<sub>o</sub>I protection)



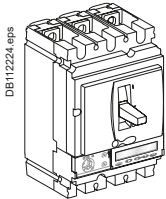
ComPact NSX100R (200 kA at 380/415 V - 45 kA at 690 V)

|        |          |                     |
|--------|----------|---------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
| 40 A   | LV433270 | LV433271            |
| 100 A  | LV433272 | LV433273            |

ComPact NSX250R (200 kA at 380/415 V - 45 kA at 690 V)

|        |          |                     |
|--------|----------|---------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
| 100 A  | LV433510 | LV433511            |
| 160 A  | LV433512 | LV433513            |
| 250 A  | LV433514 | LV433515            |

With electronic trip unit MicroLogic 5.2 E (LSI protection, energy meter)



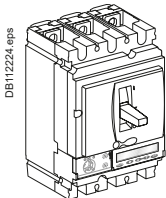
ComPact NSX100R (200 kA at 380/415 V - 45 kA at 690 V)

|        |          |                          |
|--------|----------|--------------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
| 40 A   | LV433277 | LV433278                 |
| 100 A  | LV433279 | LV433280                 |

ComPact NSX250R (200 kA at 380/415 V - 45 kA at 690 V)

|        |          |                          |
|--------|----------|--------------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
| 100 A  | LV433518 | LV433519                 |
| 160 A  | LV433520 | LV433521                 |
| 250 A  | LV433522 | LV433523                 |

With electronic trip unit MicroLogic 6.2 E (LSIG protection, energy meter)



ComPact NSX100R (200 kA at 380/415 V - 45 kA at 690 V)

|        |          |                          |
|--------|----------|--------------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
| 40 A   | LV433281 | LV433282                 |
| 100 A  | LV433283 | LV433284                 |

ComPact NSX250R (200 kA at 380/415 V - 45 kA at 690 V)

|        |          |                          |
|--------|----------|--------------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
| 100 A  | LV433524 | LV433525                 |
| 160 A  | LV433526 | LV433527                 |
| 250 A  | LV433528 | LV433529                 |

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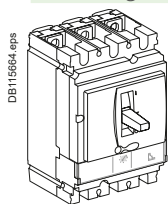


# Complete fixed device

## ComPact NSX100/250R (200 kA 380/415 V - 45 kA 690 V)

### ComPact NSX100/250R

With magnetic trip unit MA



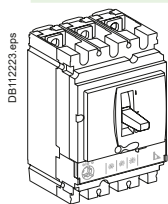
ComPact NSX100R (200 kA at 380/415 V - 45 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| MA12.5 | LV433242 |
| MA25   | LV433243 |
| MA50   | LV433244 |
| MA100  | LV433245 |

ComPact NSX250R (200 kA at 380/415 V - 45 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| MA150  | LV433500 |
| MA220  | LV433501 |

With electronic trip unit MicroLogic 2.2 M (LS<sub>o</sub>I motor protection)



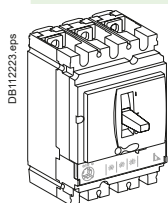
ComPact NSX100R (200 kA at 380/415 V - 45 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 25 A   | LV433274 |
| 50 A   | LV433275 |
| 100 A  | LV433276 |

ComPact NSX250R (200 kA at 380/415 V - 45 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 150 A  | LV433516 |
| 220 A  | LV433517 |

With electronic trip unit MicroLogic 6.2 E-M (LSIG motor protection, energy meter)



ComPact NSX100R (200 kA at 380/415 V - 45 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 25 A   | LV433285 |
| 50 A   | LV433286 |
| 80 A   | LV433287 |

ComPact NSX250R (200 kA at 380/415 V - 45 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 150 A  | LV433530 |
| 220 A  | LV433531 |

INDUSTRIAL AUTOMATION

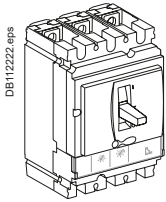


# Complete fixed device

## ComPact NSX100/250HB1 (85 kA 500 V - 75 kA 690 V)

### ComPact NSX100/250HB1

With thermal-magnetic trip unit TM-D



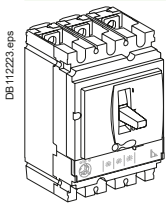
ComPact NSX100HB1 (85 kA at 500 V - 75 kA at 690 V)

|        |          |          |
|--------|----------|----------|
| Rating | 3P 3d    | 4P 4d    |
| TM40D  | LV433210 | LV433211 |
| TM50D  | LV433212 | LV433213 |
| TM63D  | LV433214 | LV433215 |
| TM80D  | LV433216 | LV433217 |
| TM100D | LV433218 | LV433219 |

ComPact NSX250HB1 (85 kA at 500 V - 75 kA at 690 V)

|        |          |          |
|--------|----------|----------|
| Rating | 3P 3d    | 4P 4d    |
| TM125D | LV433478 | LV433479 |
| TM160D | LV433480 | LV433481 |
| TM200D | LV433482 | LV433483 |
| TM250D | LV433484 | LV433485 |

With electronic trip unit MicroLogic 2.2 (LS<sub>0</sub>I protection)



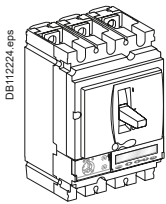
ComPact NSX100HB1 (85 kA at 500 V - 75 kA at 690 V)

|        |          |                     |
|--------|----------|---------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
| 40 A   | LV433300 | LV433301            |
| 100 A  | LV433302 | LV433303            |

ComPact NSX250HB1 (85 kA at 500 V - 75 kA at 690 V)

|        |          |                     |
|--------|----------|---------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
| 100 A  | LV433540 | LV433541            |
| 160 A  | LV433542 | LV433543            |
| 250 A  | LV433544 | LV433545            |

With electronic trip unit MicroLogic 5.2 E (LSI protection, energy meter)



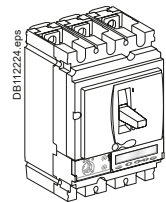
ComPact NSX100HB1 (85 kA at 500 V - 75 kA at 690 V)

|        |          |                          |
|--------|----------|--------------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
| 40 A   | LV433307 | LV433308                 |
| 100 A  | LV433309 | LV433310                 |

ComPact NSX250HB1 (85 kA at 500 V - 75 kA at 690 V)

|        |          |                          |
|--------|----------|--------------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
| 100 A  | LV433548 | LV433549                 |
| 160 A  | LV433550 | LV433551                 |
| 250 A  | LV433552 | LV433553                 |

With electronic trip unit MicroLogic 6.2 E (LSIG protection, energy meter)



ComPact NSX100HB1 (85 kA at 500 V - 75 kA at 690 V)

|        |          |                          |
|--------|----------|--------------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
| 40 A   | LV433311 | LV433312                 |
| 100 A  | LV433313 | LV433314                 |

ComPact NSX250HB1 (85 kA at 500 V - 75 kA at 690 V)

|        |          |                          |
|--------|----------|--------------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
| 100 A  | LV433554 | LV433555                 |
| 160 A  | LV433556 | LV433557                 |
| 250 A  | LV433558 | LV433559                 |

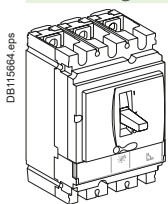
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# Complete fixed device

## ComPact NSX100/250HB1 (85 kA 500 V - 75 kA 690 V)

### ComPact NSX100/250HB1

With magnetic trip unit MA



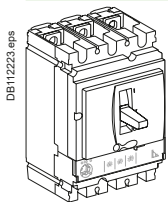
ComPact NSX100HB1 (85 kA at 500 V - 75 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| MA12.5 | LV433248 |
| MA25   | LV433249 |
| MA50   | LV433250 |
| MA100  | LV433251 |

ComPact NSX250HB1 (85 kA at 500 V - 75 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| MA150  | LV433502 |
| MA220  | LV433503 |

With electronic trip unit MicroLogic 2.2 M (LS<sub>o</sub>I motor protection)



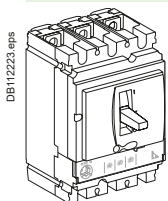
ComPact NSX100HB1 (85 kA at 500 V - 75 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 25 A   | LV433304 |
| 50 A   | LV433305 |
| 100 A  | LV433306 |

ComPact NSX250HB1 (85 kA at 500 V - 75 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 150 A  | LV433546 |
| 220 A  | LV433547 |

With electronic trip unit MicroLogic 6.2 E-M (LSIG motor protection, energy meter)



ComPact NSX100HB1 (85 kA at 500 V - 75 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 25 A   | LV433315 |
| 50 A   | LV433316 |
| 80 A   | LV433317 |

ComPact NSX250HB1 (85 kA at 500 V - 75 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 150 A  | LV433560 |
| 220 A  | LV433561 |

INDUSTRIAL AUTOMATION

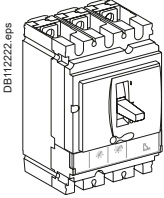


# Complete fixed device

## ComPact NSX100/250HB2 (100 kA 500 V - 100 kA 690 V)

### ComPact NSX100/250HB2

With thermal-magnetic trip unit TM-D



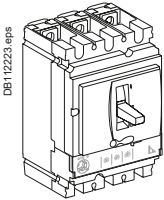
ComPact NSX100HB2 (100 kA at 500 V - 100 kA at 690 V)

|        |          |          |
|--------|----------|----------|
| Rating | 3P 3d    | 4P 4d    |
| TM63D  | LV433224 | LV433225 |
| TM80D  | LV433226 | LV433227 |
| TM100D | LV433228 | LV433229 |

ComPact NSX250HB2 (100 kA at 500 V - 100 kA at 690 V)

|        |          |          |
|--------|----------|----------|
| Rating | 3P 3d    | 4P 4d    |
| TM125D | LV433486 | LV433487 |
| TM160D | LV433488 | LV433489 |
| TM200D | LV433490 | LV433491 |
| TM250D | LV433492 | LV433493 |

With electronic trip unit MicroLogic 2.2 (LS<sub>0</sub>I protection)



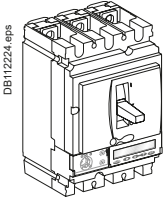
ComPact NSX100HB2 (100 kA at 500 V - 100 kA at 690 V)

|        |          |                     |
|--------|----------|---------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
| 40 A   | LV433330 | LV433331            |
| 100 A  | LV433332 | LV433333            |

ComPact NSX250HB2 (100 kA at 500 V - 100 kA at 690 V)

|        |          |                     |
|--------|----------|---------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
| 100 A  | LV433570 | LV433571            |
| 160 A  | LV433572 | LV433573            |
| 250 A  | LV433574 | LV433575            |

With electronic trip unit MicroLogic 5.2 E (LSI protection, energy meter)



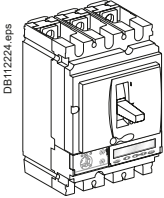
ComPact NSX100HB2 (100 kA at 500 V - 100 kA at 690 V)

|        |          |                          |
|--------|----------|--------------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
| 40 A   | LV433337 | LV433338                 |
| 100 A  | LV433339 | LV433340                 |

ComPact NSX250HB2 (100 kA at 500 V - 100 kA at 690 V)

|        |          |                          |
|--------|----------|--------------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
| 100 A  | LV433578 | LV433579                 |
| 160 A  | LV433580 | LV433581                 |
| 250 A  | LV433582 | LV433583                 |

With electronic trip unit MicroLogic 6.2 E (LSIG protection, energy meter)



ComPact NSX100HB2 (100 kA at 500 V - 100 kA at 690 V)

|        |          |                          |
|--------|----------|--------------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
| 40 A   | LV433341 | LV433342                 |
| 100 A  | LV433343 | LV433344                 |

ComPact NSX250HB2 (100 kA at 500 V - 100 kA at 690 V)

|        |          |                          |
|--------|----------|--------------------------|
| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, OSN |
| 100 A  | LV433584 | LV433585                 |
| 160 A  | LV433586 | LV433587                 |
| 250 A  | LV433588 | LV433589                 |

F

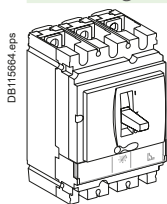


# Complete fixed device

## ComPact NSX100/250HB2 (100 kA 500 V - 100 kA 690 V)

### ComPact NSX100/250HB2

With magnetic trip unit MA



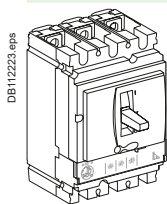
ComPact NSX100HB2 (100 kA at 500 V - 100 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| MA12.5 | LV433254 |
| MA25   | LV433255 |
| MA50   | LV433256 |
| MA100  | LV433257 |

ComPact NSX250HB2 (100 kA at 500 V - 100 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| MA150  | LV433504 |
| MA220  | LV433505 |

With electronic trip unit MicroLogic 2.2 M (LS<sub>o</sub>I motor protection)



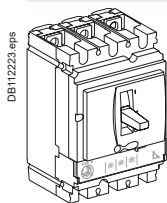
ComPact NSX100HB2 (100 kA at 500 V - 100 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 25 A   | LV433334 |
| 50 A   | LV433335 |
| 100 A  | LV433336 |

ComPact NSX250HB2 (100 kA at 500 V - 100 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 150 A  | LV433576 |
| 220 A  | LV433577 |

With electronic trip unit MicroLogic 6.2 E-M (LSIG motor protection, energy meter)



ComPact NSX100HB2 (100 kA at 500 V - 100 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 25 A   | LV433345 |
| 50 A   | LV433346 |
| 80 A   | LV433347 |

ComPact NSX250HB2 (100 kA at 500 V - 100 kA at 690 V)

|        |          |
|--------|----------|
| Rating | 3P 3d    |
| 150 A  | LV433590 |
| 220 A  | LV433591 |

INDUSTRIAL AUTOMATION

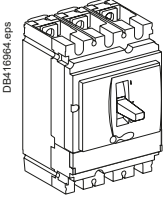




Complete fixed device  
Com**Pact** NSX100/160/250NA

Com**Pact** NSX100/160/250NA switch-disconnector

With NA switch-disconnector unit



Com**Pact** NSX100NA

|        |                 |                 |                 |
|--------|-----------------|-----------------|-----------------|
| Rating | <b>2P</b>       | <b>3P</b>       | <b>4P</b>       |
| 100 A  | <b>LV429619</b> | <b>LV429629</b> | <b>LV429639</b> |

Com**Pact** NSX160NA

|        |                 |                 |                 |
|--------|-----------------|-----------------|-----------------|
| Rating | <b>2P</b>       | <b>3P</b>       | <b>4P</b>       |
| 160 A  | <b>LV430619</b> | <b>LV430629</b> | <b>LV430639</b> |

Com**Pact** NSX250NA

|        |                 |                 |                 |
|--------|-----------------|-----------------|-----------------|
| Rating | <b>2P</b>       | <b>3P</b>       | <b>4P</b>       |
| 250 A  | <b>LV431619</b> | <b>LV431629</b> | <b>LV431639</b> |

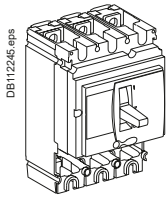


INDUSTRIAL AUTOMATION

Based on separate components

ComPact NSX100/160/250

## Basic frame



DB112245.eps

## ComPact NSX100

|                            | 3P       | 4P       |
|----------------------------|----------|----------|
| NSX100B (25 kA 380/415 V)  | LV429014 | LV429015 |
| NSX100F (36 kA 380/415 V)  | LV429003 | LV429008 |
| NSX100N (50 kA 380/415 V)  | LV429006 | LV429011 |
| NSX100H (70 kA 380/415 V)  | LV429004 | LV429009 |
| NSX100S (100 kA 380/415 V) | LV429018 | LV429019 |
| NSX100L (150 kA 380/415 V) | LV429005 | LV429010 |

## ComPact NSX160

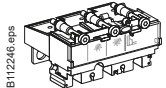
|                            | 3P       | 4P       |
|----------------------------|----------|----------|
| NSX160B (25 kA 380/415 V)  | LV430390 | LV430395 |
| NSX160F (36 kA 380/415 V)  | LV430403 | LV430408 |
| NSX160N (50 kA 380/415 V)  | LV430406 | LV430411 |
| NSX160H (70 kA 380/415 V)  | LV430404 | LV430409 |
| NSX160S (100 kA 380/415 V) | LV430391 | LV430396 |
| NSX160L (150 kA 380/415 V) | LV430405 | LV430410 |

## ComPact NSX250

|                            | 3P       | 4P       |
|----------------------------|----------|----------|
| NSX250B (25 kA 380/415 V)  | LV431390 | LV431395 |
| NSX250F (36 kA 380/415 V)  | LV431403 | LV431408 |
| NSX250N (50 kA 380/415 V)  | LV431406 | LV431411 |
| NSX250H (70 kA 380/415 V)  | LV431404 | LV431409 |
| NSX250S (100 kA 380/415 V) | LV431391 | LV431396 |
| NSX250L (150 kA 380/415 V) | LV431405 | LV431410 |

## + Trip unit

## Distribution protection



DB112246.eps

## Thermal-magnetic TM-D

| Rating                | 3P 3d    | 4P 3d    | 4P 4d    |
|-----------------------|----------|----------|----------|
| TM16D                 | LV429037 | LV429047 | LV429057 |
| TM25D                 | LV429036 | LV429046 | LV429056 |
| TM32D                 | LV429035 | LV429045 | LV429055 |
| TM40D                 | LV429034 | LV429044 | LV429054 |
| TM50D                 | LV429033 | LV429043 | LV429053 |
| TM63D                 | LV429032 | LV429042 | LV429052 |
| TM80D                 | LV429031 | LV429041 | LV429051 |
| TM100D                | LV429030 | LV429040 | LV429050 |
| TM125D                | LV430431 | LV430441 | LV430451 |
| TM160D <sup>[1]</sup> | LV430430 | LV430440 | LV430450 |
| TM160D <sup>[2]</sup> | LV431432 | LV431442 | LV431452 |
| TM200D                | LV431431 | LV431441 | LV431451 |
| TM250D                | LV431430 | LV431440 | LV431450 |

MicroLogic 2.2 (LS<sub>o</sub>I protection)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 40 A   | LV429072 | LV429082            |
| 100 A  | LV429070 | LV429080            |
| 160 A  | LV430470 | LV430480            |
| 250 A  | LV431470 | LV431480            |

## MicroLogic 5.2 A (LSI protection, ammeter)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, 3d + OSN |
|--------|----------|-------------------------------|
| 40 A   | LV429091 | LV429101                      |
| 100 A  | LV429090 | LV429100                      |
| 160 A  | LV430490 | LV430495                      |
| 250 A  | LV431490 | LV431495                      |

## MicroLogic 5.2 E (LSI protection, energy meter)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, 3d + OSN |
|--------|----------|-------------------------------|
| 40 A   | LV429096 | LV429106                      |
| 100 A  | LV429095 | LV429105                      |
| 160 A  | LV430491 | LV430496                      |
| 250 A  | LV431491 | LV431496                      |

## MicroLogic 6.2 A (LSIG protection, ammeter)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, 3d + OSN |
|--------|----------|-------------------------------|
| 40 A   | LV429111 | LV429136                      |
| 100 A  | LV429110 | LV429135                      |
| 160 A  | LV430505 | LV430515                      |
| 250 A  | LV431505 | LV431515                      |

## MicroLogic 6.2 E (LSIG protection, energy meter)

| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2, 3d + OSN |
|--------|----------|-------------------------------|
| 40 A   | LV429116 | LV429141                      |
| 100 A  | LV429115 | LV429140                      |
| 160 A  | LV430506 | LV430516                      |
| 250 A  | LV431506 | LV431516                      |

[1] For NSX160.

[2] For NSX250.

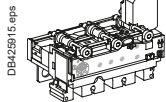
Based on separate components

ComPact NSX100/160/250

+ Trip unit (cont.)

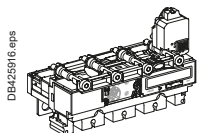
Distribution protection with embedded earth leakage protection

MicroLogic Vigi 4.2 (LS<sub>o</sub>IR protection)



| Rating | 3P 3d    | 4P 4d 3d + N/2 |
|--------|----------|----------------|
| 40 A   | LV433800 | LV433805       |
| 100 A  | LV433801 | LV433806       |
| 160 A  | LV433802 | LV433807       |
| 250 A  | LV433803 | LV433808       |

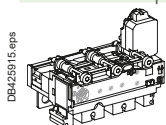
MicroLogic Vigi 7.2 E (LSIR protection)



| Rating | 3P 3d | 4P 4d 3d + N/2 |
|--------|-------|----------------|
| 40 A   | -     | LV433879       |
| 100 A  | -     | LV433880       |
| 160 A  | -     | LV433881       |
| 250 A  | -     | LV433882       |

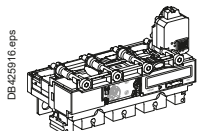
Distribution protection with embedded earth leakage alarm

MicroLogic Vigi 4.2 AL (LS<sub>o</sub>I protection + earth leakage alarm)



| Rating | 3P 3d    | 4P 4d 3d + N/2 |
|--------|----------|----------------|
| 40 A   | LV433884 | LV433889       |
| 100 A  | LV433885 | LV433890       |
| 160 A  | LV433886 | LV433891       |
| 250 A  | LV433887 | LV433892       |

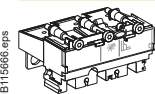
MicroLogic Vigi 7.2 E AL (LSI protection + earth leakage alarm)



| Rating | 3P 3d | 4P 4d 3d + N/2 |
|--------|-------|----------------|
| 40 A   | -     | LV433898       |
| 100 A  | -     | LV433899       |
| 160 A  | -     | LV433900       |
| 250 A  | -     | LV433901       |

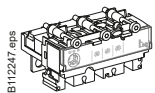
Motor protection

Magnetic MA (I protection)



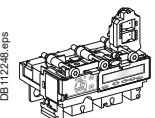
| Rating | 3P 3d    | 4P 3d    |
|--------|----------|----------|
| MA2.5  | LV429125 |          |
| MA6.3  | LV429124 |          |
| MA12.5 | LV429123 |          |
| MA25   | LV429122 |          |
| MA50   | LV429121 |          |
| MA100  | LV429120 | LV429130 |
| MA150  | LV430500 | LV430510 |
| MA220  | LV431500 | LV431510 |

MicroLogic 2.2 M (LS<sub>o</sub>I protection)



| Rating | 3P 3d    |
|--------|----------|
| 25 A   | LV429174 |
| 50 A   | LV429172 |
| 100 A  | LV429170 |
| 150 A  | LV430520 |
| 220 A  | LV431520 |

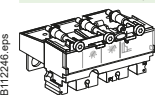
MicroLogic 6.2 E-M (LSIG protection, energy meter)



| Rating | 3P 3d    |
|--------|----------|
| 25 A   | LV429184 |
| 50 A   | LV429182 |
| 80 A   | LV429180 |
| 150 A  | LV430521 |
| 220 A  | LV431521 |

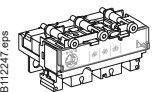
Generator protection

Thermal-magnetic TM-G



| Rating | 3P 3d    | 4P 4d    |
|--------|----------|----------|
| TM16G  | LV429155 | LV429165 |
| TM25G  | LV429154 | LV429164 |
| TM40G  | LV429153 | LV429163 |
| TM63G  | LV429152 | LV429162 |
| TM80G  | LV430080 | LV430092 |
| TM100G | LV430081 | LV430093 |
| TM125G | LV430082 | LV430094 |
| TM160G | LV430083 | LV430095 |
| TM200G | LV430084 | LV430096 |
| TM250G | LV430085 | LV430097 |

MicroLogic 2.2 G (LS<sub>o</sub>I protection)



| Rating | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------|----------|---------------------|
| 40 A   | LV429076 | LV429086            |
| 100 A  | LV429075 | LV429085            |
| 160 A  | LV430475 | LV430485            |
| 250 A  | LV431475 | LV431485            |

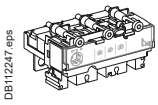
F

Based on separate components

ComPact NSX100/160/250

**+ Trip unit (cont.)**

## Protection of public distribution systems

MicroLogic 2.2 AB (LS<sub>0</sub>I) protection)

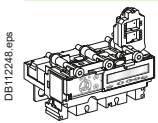
| Rating | 3P 3d | 4P       |
|--------|-------|----------|
| 100 A  |       | LV434550 |
| 160 A  |       | LV434551 |
| 240 A  |       | LV434554 |

## Earth Leakage protection of public distribution systems

## MicroLogic Vigi 4.2 AB distribution protections

| Rating | 3P 3d | 4P       |
|--------|-------|----------|
| 100 A  |       | LV433804 |
| 160 A  |       | LV433809 |
| 250 A  |       | LV433817 |

## 16 Hz 2/3 network protection

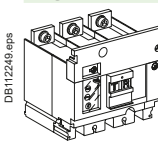


## MicroLogic 5.2 A-Z (LSI protection, ammeter)

| Rating | 3P 3d    | 4P |
|--------|----------|----|
| 100 A  | LV429089 |    |
| 250 A  | LV431489 |    |

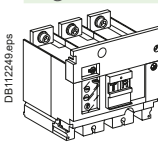
**+ Vigi add-on or Vigi add-on Alarm**

## Vigi add-on



|  | 3P       | 4P       |
|--|----------|----------|
| ME type for NSX100/160 (200 to 440 V)    | LV429212 | LV429213 |
| MH type for NSX100/160 (200 to 440 V)    | LV429210 | LV429211 |
| MH type for NSX250 (200 to 440 V)        | LV431535 | LV431536 |
| MH type for NSX100/160 (440 to 550 V)    | LV429215 | LV429216 |
| MH type for NSX250 (440 to 550 V)        | LV431533 | LV431534 |
| Connection for a 4P Vigi on a 3P breaker |          | LV429214 |

## Vigi add-on Alarm



|  | 3P       | 4P       |
|--|----------|----------|
| 200 to 440 V AC  | LV429459 | LV429460 |
| Connection for a 4P insulation monitoring module on a 3P breaker |          | LV429214 |

INDUSTRIAL AUTOMATION

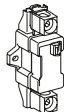
F

# Trip unit accessories


## ComPact NSX100/160/250 with/without Vigi add-on

### Trip unit accessories


#### External neutral CT for 3 pole breaker with MicroLogic 5/6

|   |           |          |
|---|-----------|----------|
|  | 25-100 A  | LV429521 |
|   | 150-250 A | LV430563 |

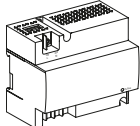
#### 24 V DC wiring accessory for MicroLogic 5/6

|   |                                |          |
|---|--------------------------------|----------|
|  | 24 V DC power supply connector | LV434210 |
|---|--------------------------------|----------|

#### ZSI wiring accessory for NS630b NW with NSX

|   |            |          |
|---|------------|----------|
|  | ZSI module | LV434212 |
|---|------------|----------|

#### External power supply module (24 V DC - 1 A), class 4

|   |              |          |
|---|--------------|----------|
|  | 24-30 V DC   | LV454440 |
|   | 48-60 V DC   | LV454441 |
|   | 100-125 V DC | LV454442 |
|   | 110-130 V AC | LV454443 |
|   | 200-240 V AC | LV454444 |

#### Battery module

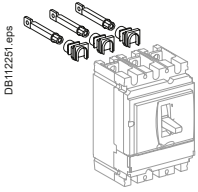
|  |                        |       |
|--|------------------------|-------|
|  | 24 V DC battery module | 54446 |
|--|------------------------|-------|

INDUSTRIAL AUTOMATION

# Installation and connection

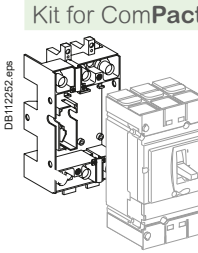
## ComPact NSX100/160/250 with/without Vigi add-on

**Fixed/RC device = fixed/FC device + rear connection kit**



|                     |           |     |                 |
|---------------------|-----------|-----|-----------------|
| <b>Short RC kit</b> |           |     |                 |
| Kit 3P              |           | 3 x | <b>LV429235</b> |
| Kit 4P              |           | 4 x | <b>LV429235</b> |
| <b>Mixed RC kit</b> |           |     |                 |
| Kit 3P              | Short RCs | 2 x | <b>LV429235</b> |
|                     | Long RCs  | 1 x | <b>LV429236</b> |
| Kit 4P              | Short RCs | 2 x | <b>LV429235</b> |
|                     | Long RCs  | 2 x | <b>LV429236</b> |

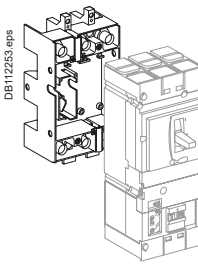
**Plug-in version = fixed/FC device + plug-in kit**



Kit for ComPact NSX

| Plug-in kit            | 2P (3P)<br>LV429288 | 3P<br>LV429289 | 4P<br>LV429290 |
|------------------------|---------------------|----------------|----------------|
| Comprising:            |                     |                |                |
| Base                   | = 1 x LV429265      | = 1 x LV429266 | = 1 x LV429267 |
| Power connections      | + 2 x LV429268      | + 3 x LV429268 | + 4 x LV429268 |
| Short terminal shields | + 2 x LV429515      | + 2 x LV429515 | + 2 x LV429516 |
| Safety trip interlock  | + 1 x LV429270      | + 1 x LV429270 | + 1 x LV429270 |

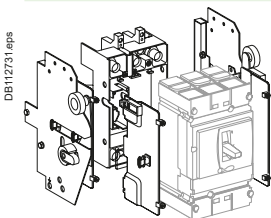
**Kit for ComPact NSX Vigi add-on**



| ComPact NSX Vigi add-on plug-in kit | 3P<br>LV429291 | 4P<br>LV429292 |
|-------------------------------------|----------------|----------------|
| Comprising:                         |                |                |
| Base                                | = 1 x LV429266 | = 1 x LV429267 |
| Power connections                   | + 3 x LV429269 | + 4 x LV429269 |
| Short terminal shields              | + 2 x LV429515 | + 2 x LV429516 |
| Safety trip interlock               | + 1 x LV429270 | + 1 x LV429270 |

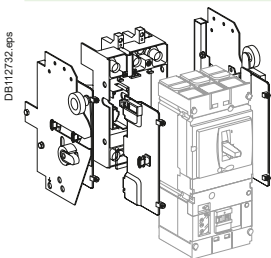
**Withdrawable version = fixed/FC device + withdrawable kit**

Kit for ComPact NSX



| Plug-in kit                     | 2P (3P)<br>Kit for ComPact NSX<br>= 1 x LV429288 | 3P<br>Kit for ComPact NSX<br>= 1 x LV429289 | 4P<br>Kit for ComPact NSX<br>= 1 x LV429290 |
|---------------------------------|--|---|---|
| Chassis side plates for base    | + 1 x LV429282                                   | + 1 x LV429282                              | + 1 x LV429282                              |
| Chassis side plates for breaker | + 1 x LV429283                                   | + 1 x LV429283                              | + 1 x LV429283                              |

**Kit for ComPact NSX Vigi add-on**



| Plug-in kit                     | 3P<br>Kit for Vigi add-on<br>= 1 x LV429291 | 4P<br>Kit for Vigi add-on<br>= 1 x LV429292 |
|---------------------------------|---|---|
| Chassis side plates for base    | + 1 x LV429282                              | + 1 x LV429282                              |
| Chassis side plates for breaker | + 1 x LV429283                              | + 1 x LV429283                              |

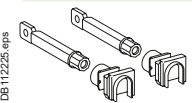


# Accessories and auxiliaries

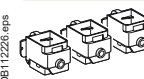
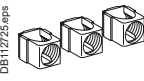
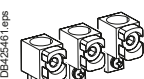
## ComPact NSX100/160/250 with/without Vigi add-on

### Connection accessories (Cu or Al)

#### Rear connections

|  |         |          |
|--|---------|----------|
|  | 2 short | LV429235 |
|  | 2 long  | LV429236 |

#### Bare cable connectors

|  |                      |   |          |          |
|--|----------------------|---|----------|----------|
|  | Steel connectors     | 1 x (1.5 to 95 mm <sup>2</sup> ) ; ≤ 160 A  | Set of 2 | LV429246 |
|  |                      |   | Set of 3 | LV429242 |
|  |                      |   | Set of 4 | LV429243 |
|  | Aluminium connectors | 1 x (25 to 95 mm <sup>2</sup> ) ; ≤ 250 A   | Set of 2 | LV429255 |
|  |                      |   | Set of 3 | LV429227 |
|  |                      |   | Set of 4 | LV429228 |
|  |                      | 1 x (120 to 185 mm <sup>2</sup> ) ; ≤ 250 A | Set of 2 | LV429247 |
|  |                      |   | Set of 3 | LV429259 |
|  |                      |   | Set of 4 | LV429260 |
|  |                      | 1 x (120 to 240 mm <sup>2</sup> ) ; ≤ 250 A | Set of 3 | LV429244 |
|  |                      | Set of 4                                    | LV429245 |          |

|                      |  |           |          |
|----------------------|--|-----------|----------|
| Clips for connectors |  | Set of 10 | LV429241 |
|----------------------|--|-----------|----------|

|  |  |          |          |
|--|--|----------|----------|
| Aluminium connectors for 2 cables <sup>[1]</sup> | 2 x (50 to 120 mm <sup>2</sup> ) ; ≤ 250 A | Set of 3 | LV429218 |
|  |  | Set of 4 | LV429219 |





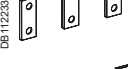
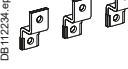
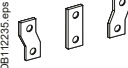
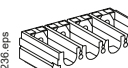
|  |  |          |          |
|--|--|----------|----------|
| Aluminium connectors <sup>[1]</sup> for 6 cables | 6 x (1.5 to 35 mm <sup>2</sup> ) ; ≤ 250 A | Set of 3 | LV429248 |
|  |  | Set of 4 | LV429249 |

|  |  |           |          |
|--|--|-----------|----------|
| 6.35 mm voltage tap for aluminium connectors for 1 or 2 cables |  | Set of 10 | LV429348 |
|--|--|-----------|----------|

#### Lineryg DX and Lineryg DP distribution block (for bare cable)

|  |   |    |       |
|--|---|----|-------|
|  | 160 A (40 °C) 6 cables S ≤ 10 mm <sup>2</sup> | 1P | 04031 |
|  | 250 A (40 °C) 9 cables S ≤ 10 mm <sup>2</sup> | 3P | 04033 |
|  |   | 4P | 04034 |

#### Terminal extensions

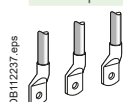
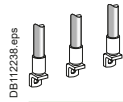
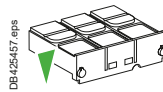
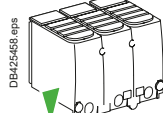
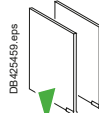
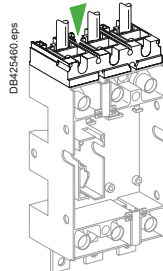
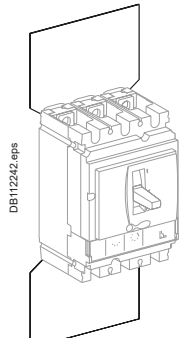
|  |   |          |          |
|--|---|----------|----------|
|  | 45° terminal extension <sup>[1]</sup>           | Set of 3 | LV429223 |
|  |   | Set of 4 | LV429224 |
|  | Edgewise terminal extensions <sup>[1]</sup>     | Set of 3 | LV429308 |
|  |   | Set of 4 | LV429309 |
|  | Right-angle terminal extensions <sup>[1]</sup>  | Set of 2 | LV429250 |
|  |   | Set of 3 | LV429261 |
|  |   | Set of 4 | LV429262 |
|  | Straight terminal extensions <sup>[1]</sup>     | Set of 2 | LV429251 |
|  |   | Set of 3 | LV429263 |
|  |   | Set of 4 | LV429264 |
|  | Double-L terminal extensions <sup>[1]</sup>     | Set of 3 | LV429221 |
|  |   | Set of 4 | LV429222 |
|  | Spreaders from 35 to 45 mm pitch <sup>[1]</sup> | 3P       | LV431563 |
|  |   | 4P       | LV431564 |
|  | One-piece spreader from 35 to 45 mm pitch       | 3P       | LV431060 |
|  |   | 4P       | LV431061 |
|  | Front alignment base (for one-piece spreader)   | 3P/4P    | LV431064 |

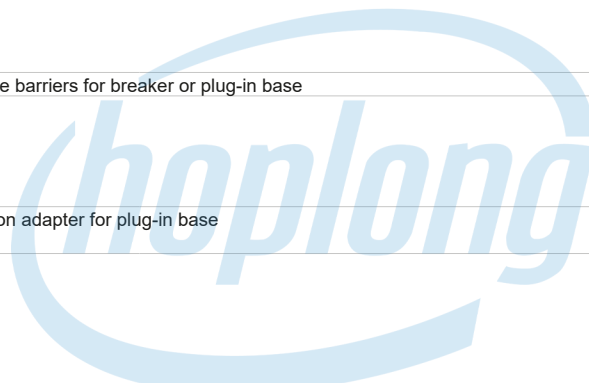
[1] Supplied with 2 or 3 interphase barriers.



## Accessories and auxiliaries

### ComPact NSX100/160/250 with/without Vigi add-on

| Crimp lugs for copper cable <sup>[1]</sup>  |   |          |          |
|---|---|----------|----------|
| <br>DB112237.eps   | For cable 120 mm <sup>2</sup>                       | Set of 3 | LV429252 |
|   |   | Set of 4 | LV429256 |
|   | For cable 150 mm <sup>2</sup>                       | Set of 3 | LV429253 |
|   |   | Set of 4 | LV429257 |
|   | For cable 185 mm <sup>2</sup>                       | Set of 3 | LV429254 |
|   |   | Set of 4 | LV429258 |
| Crimp lugs for aluminium cable <sup>[1]</sup>   |   |          |          |
| <br>DB112238.eps   | For cable 150 mm <sup>2</sup>                       | Set of 3 | LV429504 |
|   |   | Set of 4 | LV429505 |
|   | For cable 185 mm <sup>2</sup>                       | Set of 3 | LV429506 |
|   |   | Set of 4 | LV429507 |
| Insulation accessories  |   |          |          |
| <br>DB425457.eps   | 1 short terminal shield for breaker or plug-in base | 3P       | LV429515 |
|   |   | 4P       | LV429516 |
| <br>DB425458.eps   | 1 long terminal shield for breaker or plug-in base  | 3P       | LV429517 |
|   |   | 4P       | LV429518 |
| <br>DB425459.eps   | Interphase barriers for breaker or plug-in base     | Set of 6 | LV429329 |
|   |   |          |          |
| <br>DB425460.eps | Connection adapter for plug-in base                 | 3P       | LV429306 |
|   |   | 4P       | LV429307 |
| <br>DB112242.eps | 2 insulating screens for breaker (45 mm pitch)      | 3P       | LV429330 |
|   |   | 4P       | LV429331 |



## INDUSTRIAL AUTOMATION

<sup>[1]</sup> Supplied with 2 or 3 interphase barriers.



# Accessories and auxiliaries

## ComPact NSX100/160/250 with/without Vigi add-on

### Electrical auxiliaries

#### Auxiliary contacts (changeover)

|                  |   |                 |
|------------------|---|-----------------|
| DB112254.eps<br> | OF or SD or SDE or SDV                                      | <b>29450</b>    |
|                  | OF or SD or SDE or SDV low level                            | <b>29452</b>    |
|                  | SDE adapter, mandatory for trip unit TM, MA or MicroLogic 2 | <b>LV429451</b> |

#### SDx output module for MicroLogic

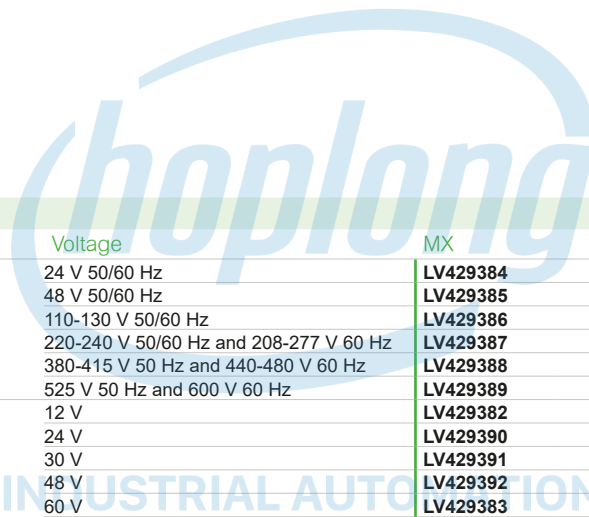
|                  |                           |                 |
|------------------|---------------------------|-----------------|
| DB112275.eps<br> | SDx module 24/415 V AC/DC | <b>LV429532</b> |
|------------------|---------------------------|-----------------|

#### SDTAM contactor tripping module (early-break thermal fault signal) for MicroLogic 2.2 M/6.2 E-M

|                  |  |                 |
|------------------|--|-----------------|
| DB112276.eps<br> | SDTAM 24/415 V AC/DC overload fault indication | <b>LV429424</b> |
|------------------|--|-----------------|

#### Voltage releases

|                  | Voltage   | MX  | MN              |                 |
|------------------|---|---|-----------------|-----------------|
| DB111454.eps<br> | AC  |   |                 |                 |
|                  |   | 24 V 50/60 Hz                                 | <b>LV429384</b> | <b>LV429404</b> |
|                  |   | 48 V 50/60 Hz                                 | <b>LV429385</b> | <b>LV429405</b> |
|                  |   | 110-130 V 50/60 Hz                            | <b>LV429386</b> | <b>LV429406</b> |
|                  |   | 220-240 V 50/60 Hz and 208-277 V 60 Hz        | <b>LV429387</b> | <b>LV429407</b> |
|                  |   | 380-415 V 50 Hz and 440-480 V 60 Hz           | <b>LV429388</b> | <b>LV429408</b> |
| DB115631.eps<br> | DC  |   |                 |                 |
|                  |   | 525 V 50 Hz and 600 V 60 Hz                   | <b>LV429389</b> | <b>LV429409</b> |
|                  |   | 12 V  | <b>LV429382</b> | <b>LV429402</b> |
|                  |   | 24 V  | <b>LV429390</b> | <b>LV429410</b> |
|                  |   | 30 V  | <b>LV429391</b> | <b>LV429411</b> |
|                  |   | 48 V  | <b>LV429392</b> | <b>LV429412</b> |
|                  |   | 60 V  | <b>LV429383</b> | <b>LV429403</b> |
|                  |   | 125 V   | <b>LV429393</b> | <b>LV429413</b> |
|                  |   | 250 V   | <b>LV429394</b> | <b>LV429414</b> |
|                  |   | <b>MN 48 V 50/60 Hz with fixed time delay</b> |                 |                 |
| Composed of:     | MN 48 V DC  |   | <b>LV429412</b> |                 |
|                  | Delay unit 48 V 50/60 Hz                                      |   | <b>LV429426</b> |                 |
|                  | <b>MN 220-240 V 50/60 Hz with fixed time delay</b>            |   |                 |                 |
| Composed of:     | MN 250 V DC   |   | <b>LV429414</b> |                 |
|                  | Delay unit 220-240 V 50/60 Hz                                 |   | <b>LV429427</b> |                 |
|                  | <b>MN 48 V DC/AC 50/60 Hz with adjustable time delay</b>      |   |                 |                 |
| Composed of:     | MN 48 V DC  |   | <b>LV429412</b> |                 |
|                  | Delay unit 48 V DC/AC 50/60 Hz                                |   | <b>33680</b>    |                 |
|                  | <b>MN 110-130 V DC/AC 50/60 Hz with adjustable time delay</b> |   |                 |                 |
| Composed of:     | MN 125 V DC   |   | <b>LV429413</b> |                 |
|                  | Delay unit 100-130 V DC/AC 50/60 Hz                           |   | <b>33681</b>    |                 |
|                  | <b>MN 220-250 V DC/AC 50/60 Hz with adjustable time delay</b> |   |                 |                 |
| Composed of:     | MN 250 V DC   |   | <b>LV429414</b> |                 |
|                  | Delay unit 200-250 V DC/AC 50-60 Hz                           |   | <b>33682</b>    |                 |



F

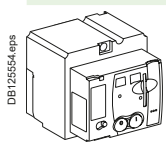


## Accessories and auxiliaries

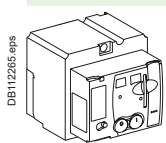
### ComPact NSX100/160/250 with/without Vigi add-on

#### Motor mechanism

##### Motor mechanism module supplied with SDE adapter

|   |                        |                  |           |          |
|---|------------------------|------------------|-----------|----------|
|  | AC                     | Voltage          | MT100/160 | MT250    |
|   |                        | 48-60 V 50/60 Hz | LV429440  | LV431548 |
|   | 110-130 V 50/60 Hz     | LV429433         | LV431540  |          |
|   | 220-240 V 50/60 Hz and | LV429434         | LV431541  |          |
|   | 208-277 V 60 Hz        |                  |           |          |
|   | 380-415 V 50/60 Hz and | LV429435         | LV431542  |          |
|   | 440-480 V 60 Hz        |                  |           |          |
|   | DC                     | 24-30 V          | LV429436  | LV431543 |
|   | 48-60 V                | LV429437         | LV431544  |          |
|   | 110-130 V              | LV429438         | LV431545  |          |
| 250 V   | LV429439               | LV431546         |           |          |

##### Communicating motor mechanism module supplied with SDE adapter

|   |                        |             |                    |          |
|---|------------------------|-------------|--------------------|----------|
|  | Motor mechanism module | MTc 100/160 | 220-240 V 50/60 Hz | LV429441 |
|   |                        | MTc 250     | 220-240 V 50/60 Hz | LV431549 |

|   |   |      |          |
|---|---|------|----------|
| + | Breaker and Status Communication Module | BSCM | LV434205 |
|---|---|------|----------|

|   |          |                                     |          |
|---|----------|-------------------------------------|----------|
| + | NSX cord | Wire length L = 0.35 m              | LV434200 |
|   |          | Wire length L = 1.3 m               | LV434201 |
|   |          | Wire length L = 3 m                 | LV434202 |
|   |          | U > 480 V AC wire length L = 0.35 m | LV434204 |

INDUSTRIAL AUTOMATION



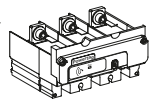
# Accessories and auxiliaries

## ComPact NSX100/160/250 with/without Vigi add-on

### Indication and measurement modules

#### PowerLogic PowerTag NSX

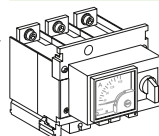
DB43062.eps



|            |  |  |                 |
|------------|--|--|-----------------|
| Rating (A) |  |  | 250             |
| 3P         |  |  | <b>LV434020</b> |
| 3P+N       |  |  | <b>LV434021</b> |

#### Ammeter module

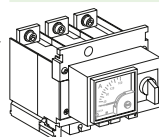
DB11256.eps



|            |                 |                 |                 |
|------------|-----------------|-----------------|-----------------|
| Rating (A) | 100             | 160             | 250             |
| 3P         | <b>LV429455</b> | <b>LV430555</b> | <b>LV431565</b> |
| 4P         | <b>LV429456</b> | <b>LV430556</b> | <b>LV431566</b> |

#### I max. ammeter module

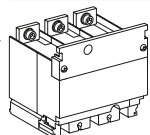
DB11256.eps



|            |                 |                 |                 |
|------------|-----------------|-----------------|-----------------|
| Rating (A) | 100             | 160             | 250             |
| 3P         | <b>LV434849</b> | <b>LV434850</b> | <b>LV434851</b> |

#### Current transformer module

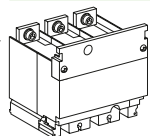
DB11257.eps



|            |                 |                 |                 |
|------------|-----------------|-----------------|-----------------|
| Rating (A) | 100             | 150             | 250             |
| 3P         | <b>LV429457</b> | <b>LV430557</b> | <b>LV431567</b> |
| 4P         | <b>LV429458</b> | <b>LV430558</b> | <b>LV431568</b> |

#### Current transformer module and voltage output

DB11257.eps



|            |                 |                 |                 |
|------------|-----------------|-----------------|-----------------|
| Rating (A) | 125             | 150             | 250             |
| 3P         | <b>LV429461</b> | <b>LV430561</b> | <b>LV431569</b> |
| 4P         | <b>LV429462</b> | <b>LV430562</b> | <b>LV431570</b> |

#### Voltage presence indicator

DB11258.eps



|       |                 |
|-------|-----------------|
| 3P/4P | <b>LV429325</b> |
|-------|-----------------|

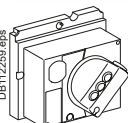
hoplong

INDUSTRIAL AUTOMATION

### Rotary handles

#### Direct rotary handle

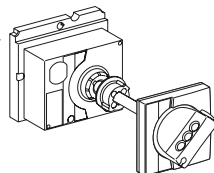
DB11259.eps



|                                 |                 |
|---------------------------------|-----------------|
| With black handle               | <b>LV429337</b> |
| With red handle on yellow front | <b>LV429339</b> |
| MCC conversion accessory        | <b>LV429341</b> |
| CNOMO conversion accessory      | <b>LV429342</b> |

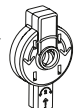
#### Extended rotary handle

DB11260.eps



|  |                 |
|--|-----------------|
| With black handle                              | <b>LV429338</b> |
| With red handle on yellow front                | <b>LV429340</b> |
| With telescopic handle for withdrawable device | <b>LV429343</b> |

DB421689.eps



|                          |                 |
|--------------------------|-----------------|
| Open door shaft operator | <b>LV426937</b> |
|--------------------------|-----------------|

#### Accessories for direct or extended rotary handle

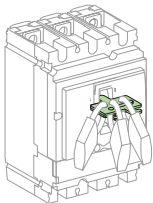
|                      |                       |                 |
|----------------------|-----------------------|-----------------|
| Indication auxiliary | 1 early-break contact | <b>LV429345</b> |
|                      | 2 early-make contacts | <b>LV429346</b> |

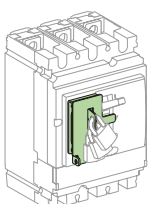
# Accessories and auxiliaries

## ComPact NSX100/160/250 with/without Vigi add-on

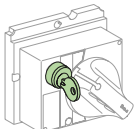
### Locks

#### Toggle locking device for 1 to 3 padlocks

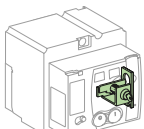
|              |   |                     |              |
|--------------|---|---------------------|--------------|
| DB425402.eps |  | By removable device | <b>29370</b> |
|--------------|---|---------------------|--------------|

|              |   |  |                 |
|--------------|---|--|-----------------|
| DB425403.eps |  | By fixed device for 3P-4P (open or close position) | <b>LV429371</b> |
|              |   | By fixed device for 3P-4P (open position only)     | <b>LV429370</b> |

#### Locking of rotary handle

|              |   |   |                 |
|--------------|---|---|-----------------|
| DB425404.eps |  | Keylock adapter (keylock not included)  | <b>LV429344</b> |
|              |   | Keylock (keylock adapter not included)  | <b>41940</b>    |
|              |   | Ronis 1351B.500<br>Profalux KS5 B24 D4Z | <b>42888</b>    |

#### Locking of motor mechanism module

|              |   |   |                 |
|--------------|---|---|-----------------|
| DB425405.eps |  | Keylock adapter + Ronis keylock (special) | <b>LV429449</b> |
|--------------|---|---|-----------------|

INDUSTRIAL AUTOMATION

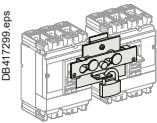
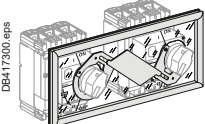


# Accessories and auxiliaries

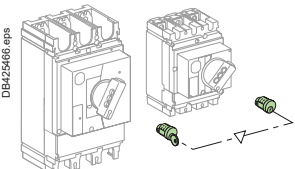
## ComPact NSX100/160/250 with/without Vigi add-on

### Interlocking

#### Mechanical interlocking for circuit breakers

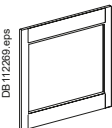
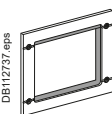
|  |                     |          |
|--|---------------------|----------|
|  <p>DB417299.eps</p> | With toggles        | LV429354 |
|  | With rotary handles | LV429369 |
|  <p>DB417300.eps</p> |                     |          |

#### Interlocking with key (2 keylocks / 1 key) for rotary handles

|  |   |                      |       |
|--|---|----------------------|-------|
|  <p>DB425686.eps</p> | Keylock kit (keylock not included) <sup>[1]</sup> | LV429344             |       |
|  | 1 set of 2 keylocks                               | Ronis 1351B.500      | 41950 |
|  | (1 key only, keylock kit not included)            | Profalux KS5 B24 D4Z | 42878 |

### Installation accessories


#### Front-panel escutcheons

|  |   |          |
|--|---|----------|
|  <p>DB112619.eps</p> <p>IP30</p>  | IP30 escutcheon for all control types             | LV429525 |
|  | IP30 trip unit access escutcheon for toggle       | LV429526 |
|  | IP30 escutcheon for Vigi add-on                   | LV429527 |
|  <p>DB112737.eps</p> <p>IP40</p> | IP40 escutcheon for all control types             | LV429317 |
|  | IP40 escutcheon for Vigi add-on                   | LV429316 |
|  | IP40 escutcheon for Vigi add-on or ammeter module | LV429318 |

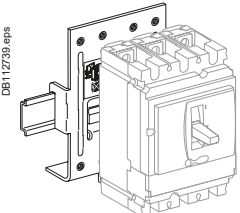
#### IP43 rubber toggle cover

|  |                |          |
|--|----------------|----------|
|  <p>DB112738.eps</p> | 1 toggle cover | LV429319 |
|--|----------------|----------|

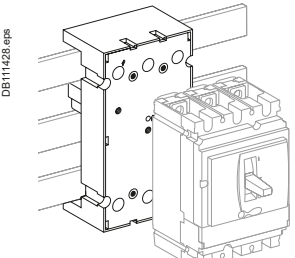
#### Lead-sealing accessories

|  |                    |          |
|--|--------------------|----------|
|  <p>DB115615.eps</p> | Bag of accessories | LV429375 |
|--|--------------------|----------|

#### Din rail adapter

|  |           |          |
|--|-----------|----------|
|  <p>DB112739.eps</p> | 1 adapter | LV429305 |
|--|-----------|----------|

#### 60 mm plate

|  |                                 |          |
|--|---------------------------------|----------|
|  <p>DB111428.eps</p> | Plate 3P ComPact NSX100/250 IEC | LV429372 |
|  | Plate 4P ComPact NSX100/250 IEC | LV429373 |

[1] For only 1 device.

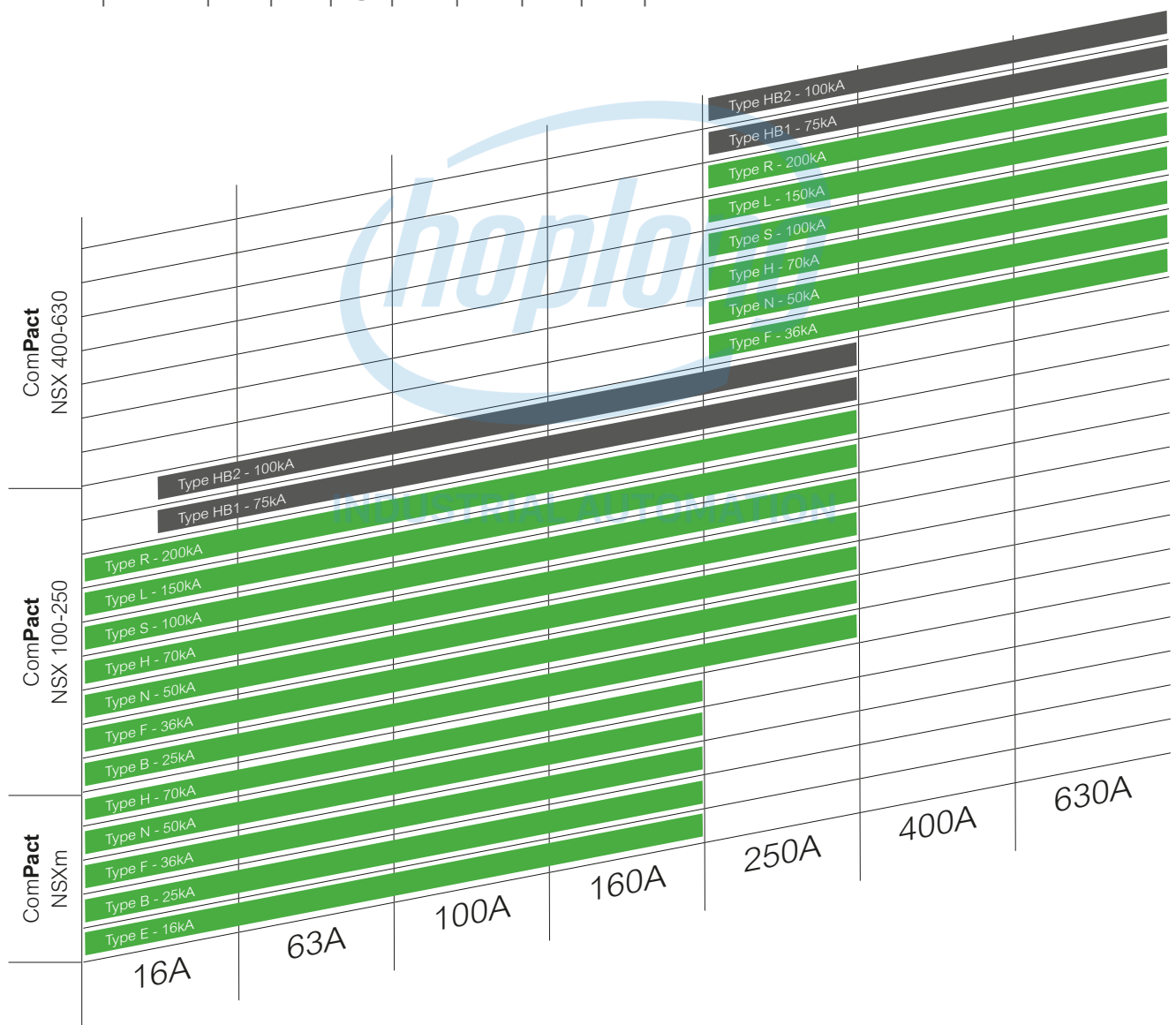
# ComPact NSX and NSXm, even more innovative and efficient

ComPact circuit breakers feature Schneider Electric's exclusive Roto-Active Breaking System; it reduces the effects of short circuits of your installation.

Today, the ComPact range is optimized with a high level of breaking capacities, outstanding selectivity and cascading. It offers more advanced functions and ergonomic designs for easy installation and operations.

## Ten performance levels

HB2 | HB1 | R | L | S | H | N | F | B | E



Icu = (kA rms) at 690V AC  
 Icu = (kA rms) at 415V AC



# Characteristics and performance

## ComPact NSX switch-disconnectors from 100 to 630 A NA

A

### Common characteristics

|          |              |                                       |                       |
|----------|--------------|---------------------------------------|-----------------------|
| Control  | Manual       | With toggle                           | <input type="radio"/> |
|          |              | With direct or extended rotary handle | <input type="radio"/> |
| Versions | Electrical   | With remote control                   | <input type="radio"/> |
|          | Fixed        |                                       | <input type="radio"/> |
|          | Withdrawable | Plug-in base                          | <input type="radio"/> |
|          |              | Chassis                               | <input type="radio"/> |

| NSX100NA              | NSX160NA              | NSX250NA              | NSX400NA              | NSX630NA              |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <b>100</b>            | <b>160</b>            | <b>250</b>            | <b>400</b>            | <b>630</b>            |
| 2 [1], 3, 4           | 2 [1], 3, 4           | 2 [1], 3, 4           | 3, 4                  | 3, 4                  |
| <b>AC22A / AC23A</b>  | <b>AC22A / AC23A</b>  | <b>AC22A / AC23A</b>  | <b>AC22A / AC23A</b>  | <b>AC22A / AC23A</b>  |
| 100                   | 160                   | 250                   | 400                   | 630                   |
| 100                   | 160                   | 250                   | 400                   | 630                   |
| 100                   | 160                   | 250                   | 400                   | 630                   |
| 100                   | 160                   | 250                   | 400                   | 630                   |
| 100                   | 160                   | 250                   | 400                   | 630                   |
| <b>DC22A / DC23A</b>  | <b>DC22A / DC23A</b>  | <b>DC22A / DC23A</b>  | -                     | -                     |
| 100                   | 160                   | 250                   | -                     | -                     |
| 100                   | 160                   | 250                   | -                     | -                     |
| 100                   | 160                   | 250                   | -                     | -                     |
| 2.6                   | 3.6                   | 4.9                   | 7.1                   | 8.5                   |
| 330                   | 330                   | 330                   | 330                   | 330                   |
| 1800                  | 2500                  | 3500                  | 5000                  | 6000                  |
| 1800                  | 2500                  | 3500                  | 5000                  | 6000                  |
| 690                   | 960                   | 1350                  | 1930                  | 2320                  |
| 50000                 | 40000                 | 20000                 | 15000                 | 15000                 |
| <b>AC22A / AC23A</b>  | <b>AC22A / AC23A</b>  | <b>AC22A / AC23A</b>  | <b>AC22A / AC23A</b>  | <b>AC22A / AC23A</b>  |
| 35000                 | 30000                 | 15000                 | 10000                 | 6000                  |
| 20000                 | 15000                 | 7500                  | 5000                  | 3000                  |
| 15000                 | 10000                 | 6000                  | 5000                  | 3000                  |
| 8000                  | 5000                  | 3000                  | 2500                  | 1500                  |
| 10000                 | 10000                 | 10000                 | -                     | -                     |
| 5000                  | 5000                  | 5000                  | -                     | -                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3                     | 3                     | 3                     | 3                     | 3                     |
| <input type="radio"/> |                       |                       | <input type="radio"/> |                       |
| <input type="radio"/> |                       |                       | <input type="radio"/> |                       |
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| <input type="radio"/> |                       |                       | <input type="radio"/> |                       |
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| <input type="radio"/> |                       |                       | <input type="radio"/> |                       |
| <input type="radio"/> |                       |                       | <input type="radio"/> |                       |
| <input type="radio"/> |                       |                       | <input type="radio"/> |                       |
| <input type="radio"/> |                       |                       | <input type="radio"/> |                       |
| 105 x 161 x 86        |                       |                       | 140 x 255 x 110       |                       |
| 140 x 161 x 86        |                       |                       | 185 x 255 x 110       |                       |
| 1.5 to 1.8            |                       |                       | 5.2                   |                       |
| 2.0 to 2.2            |                       |                       | 6.8                   |                       |
| <input type="radio"/> |                       |                       | <input type="radio"/> |                       |
| <input type="radio"/> |                       |                       | <input type="radio"/> |                       |

# Accessories and auxiliaries


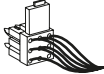

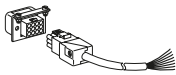
## ComPact NSX100/160/250 with/without Vigi add-on

### Plug-in/withdrawable version accessories




#### Insulation accessories

|   |                                       |    |          |
|---|---------------------------------------|----|----------|
| DB117159.eps<br> | 1 connection adapter for plug-in base | 3P | LV429306 |
|   |                                       | 4P | LV429307 |

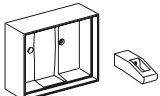



#### Auxiliary connections

|   |  |  |          |
|---|--|--|----------|
| DB117160.eps<br> | 1 9-wire fixed connector (for base)                |  | LV429273 |
| DB117161.eps<br> | 1 9-wire moving connector (for circuit breaker)    |  | LV429274 |
| DB117162.eps<br> | 1 support for 2 moving connectors                  |  | LV429275 |
| DB115885.eps<br> | 9-wire manual auxiliary connector (fixed + moving) |  | LV429272 |

#### Plug-in base accessories

|   |  |              |          |
|---|--|--------------|----------|
| DB43265.eps<br>    | 2 long insulated right angle terminal extensions | Set of 2     | LV429276 |
| DB117165.eps<br> | 2 IP40 shutters for base                         |              | LV429271 |
| DB117166.eps<br> | Base   | 2P (3P base) | LV429265 |
|   |  | 3P           | LV429266 |
| DB117167.eps<br> | Base   | 4P           | LV429267 |
| DB117168.eps<br> | 2 power connections                              | 2/3/4P       | LV429268 |
| DB117169.eps<br> | 1 short terminal shield                          | 2/3P         | LV429515 |
| DB117170.eps<br> | 1 short terminal shield                          | 4P           | LV429516 |
| DB117171.eps<br> | 1 safety trip interlock                          | 2/3/4P       | LV429270 |

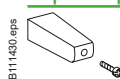

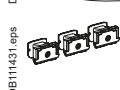
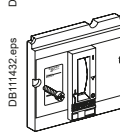
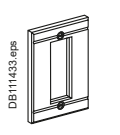

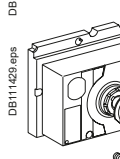

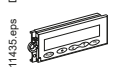
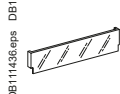
#### Chassis accessories

|   |  |  |   |
|---|--|--|---|
| DB117172.eps<br> | Escutcheon collar  | Toggle                                 | LV429284                                |
|   |  | Vigi add-on                            | LV429285                                |
| DB117173.eps<br> | Escutcheon collar  |  | LV429286                                |
| DB117163.eps<br> | Locking kit (keylock not included)                               |  | LV429286                                |
|   |  | Keylock (keylock adapter not included) | Ronis 1351B.500<br>Profalux KS5 B24 D4Z |
| DB11426.eps<br>  | 2 carriage switches (connected/disconnected position indication) |  | LV429287                                |

# Accessories and auxiliaries

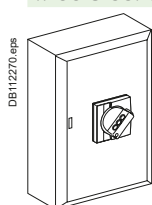
## ComPact NSX100/160/250 with/without Vigi add-on

### Spare parts

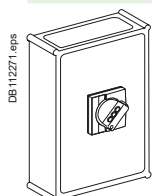
|  |                                      |  |   |
|--|--------------------------------------|--|---|
|    | 5 spare toggle extensions (NSX250)   |  | <b>LV429313</b>                                       |
|    | Bag of screws                        |  | <b>LV429312</b>                                       |
|    | 12 snap-in nuts (fixed/FC)           | M6 for NSX100N/H/L<br>M8 for NSX160/250N/H/L     | <b>LV429234</b><br><b>LV430554</b>                    |
|    | NS retrofit escutcheon               | Small cut-out                                    | <b>LV429528</b>                                       |
|    | IP40 toggle escutcheon               | ComPact NS type/small cut-out                    | <b>29315</b>  |
|    | 1 set of 10 identification labels    |  | <b>LV429226</b>                                       |
|   | 1 base for extended rotary handle    |  | <b>LV429502</b>                                       |
|  | Torque limiting screws (set of 12)   | 3P/4P ComPact NSX100-250                         | <b>LV429513</b>                                       |
|  | LCD display for electronic trip unit | MicroLogic 5<br>MicroLogic 6<br>MicroLogic 6 E-M | <b>LV429483</b><br><b>LV429484</b><br><b>LV429486</b> |
|  | 5 transparent covers for trip unit   | TM, MA, NA<br>MicroLogic 2<br>MicroLogic 5/6     | <b>LV429481</b><br><b>LV429481</b><br><b>LV429478</b> |

### Individual enclosures

#### IP55 steel enclosure

|  |   |                 |
|--|---|-----------------|
|  | ComPact NSX100/160 with black extended rotary handle  | <b>LV431215</b> |
|  | ComPact NSX100/160 with red and yellow extended rotary handle                               | <b>LV431216</b> |
|  | ComPact NSX250 or ComPact NSX100-250 Vigi add-on with black extended rotary handle          | <b>LV431217</b> |
|  | ComPact NSX250 or ComPact NSX100-250 Vigi add-on with red and yellow extended rotary handle | <b>LV431218</b> |

#### IP55 insulating enclosure

|  |  |                 |
|--|--|-----------------|
|  | ComPact NSX100/160 with black extended rotary handle             | <b>LV429465</b> |
|  | ComPact NSX100/160 Vigi add-on with black extended rotary handle | <b>LV429466</b> |
|  | ComPact NSX250 with black extended rotary handle                 | <b>LV431573</b> |
|  | ComPact NSX250 Vigi add-on with black extended rotary handle     | <b>LV431574</b> |

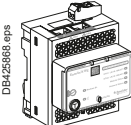
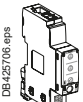

### Visible break disconnect function

See catalog dealing with "ComPact INV products (visible break)" and the associated accessories.  
The visible break disconnection function is compatible with fixed front-connected/rear-connected ComPact NSX devices.

# Accessories and auxiliaries

## ComPact NSX100/160/250 with/without Vigi add-on

### Communication option

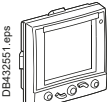
|   |                                   |  |            |
|---|-----------------------------------|--|------------|
|  | IFE                               | Ethernet interface for LV breaker              | LV434001   |
|   |                                   | Ethernet interface for LV breakers and gateway | LV434002   |
|  | IFM Modbus-SL interface module    |  | LV434000   |
|  | I/O application module            |  | LV434063   |
|   | User guide IFE                    |  | DOCA0084EN |
|   | User guide I/O application module |  | DOCA0055EN |

### Monitoring and control (remote operation)

#### Circuit breaker accessories

|   |                               |                     |          |
|---|-------------------------------|---------------------|----------|
|  | Breaker Status Control Module | BSCM <sup>[1]</sup> | LV434205 |
|---|-------------------------------|---------------------|----------|

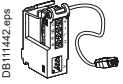

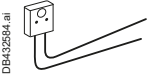





#### ULP display module<sup>[2]</sup>

|  |   |  |          |
|--|---|--|----------|
|  | Switchboard front display module FDM121 |  | TRV00121 |
|  | FDM mounting accessory (diameter 22 mm) |  | TRV00128 |

#### Ethernet display module

|   |   |  |          |
|---|---|--|----------|
|  | Switchboard front display module FDM128 |  | LV434128 |
|---|---|--|----------|

#### ULP wiring accessories

|   |  |  |                            |
|---|--|--|----------------------------|
|  | NSX cord L = 0.35 m  |  | LV434200                   |
|   | NSX cord L = 1.3 m   |  | LV434201                   |
|   | NSX cord L = 3 m   |  | LV434202                   |
|   | NSX cord for U > 480 V AC L = 1.3 m                        |  | LV434204                   |
|  | 10 stacking connectors for communication interface modules |  | TRV00217                   |
|  | 2 Modbus line terminators                                  |  | VW3A8306DRC <sup>[3]</sup> |
|  | Connector Modbus adaptor                                   |  | LV434211                   |
|  | RS 485 roll cable (4 wires, length 60 m)                   |  | 50965                      |
|  | 5 RJ45 connectors female/female                            |  | TRV00870                   |
|  | 10 ULP line terminators                                    |  | TRV00880                   |
|  | 10 RJ45/RJ45 male cord L = 0.3 m                           |  | TRV00803                   |
|   | 10 RJ45/RJ45 male cord L = 0.6 m                           |  | TRV00806                   |
|   | 5 RJ45/RJ45 male cord L = 1 m                              |  | TRV00810                   |
|   | 5 RJ45/RJ45 male cord L = 2 m                              |  | TRV00820                   |
|   | 5 RJ45/RJ45 male cord L = 3 m                              |  | TRV00830                   |
|   | 1 RJ45/RJ45 male cord L = 5 m                              |  | TRV00850                   |

[1] SDE adapter mandatory for trip unit TM, MA or MicroLogic 2 (LV429451).


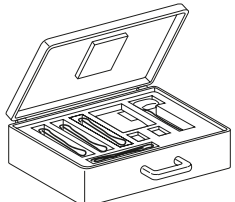

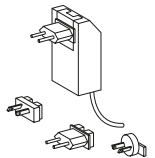



[2] For measurement display with MicroLogic A and E or status display with BSCM.

[3] www.schneider-electric.com.

# Accessories and auxiliaries

## ComPact NSX100/160/250 with/without Vigi add-on

### Test tool, software, demo

| Test tool   |  |                         |
|---|--|-------------------------|
|    | Pocket battery for MicroLogic NSX100-630   | LV434206                |
|    | Maintenance case<br>Comprising:<br>- USB maintenance interface<br>- Power supply<br>- MicroLogic cord<br>- USB cord<br>- RJ45/RJ45 male cord | TRV00910                |
|    | Spare USB maintenance interface  | TRV00911                |
|   | Spare power supply 110-240 V AC  | TRV00915                |
|  | Spare MicroLogic cord for USB maintenance interface  | TRV00917                |
|  | Bluetooth/Modbus option for USB maintenance interface  | VW3A8114 <sup>[1]</sup> |
| Software  |  |                         |
|  | Configuration and setting EcoStruxure Power Commission software  | LV4ST100 <sup>[2]</sup> |
|   | Test software LTU  | LV4ST121 <sup>[2]</sup> |
|   | Monitoring EcoStruxure Power Commission software   | LV4SM100 <sup>[2]</sup> |
| Demo tool   |  |                         |
|   | Demo case for ComPact NSX  | LV434207                |

[1] See Telemecanique catalog.

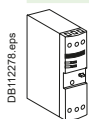
[2] Downloadable from <http://schneider-electric.com>.

## Accessories and auxiliaries

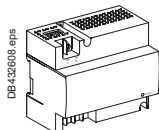
### ComPact NSX100/160/250 with/without Vigi add-on

#### Accessories

##### Power supply modules

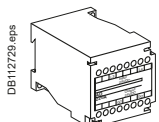


|  |                     |     |
|--|---------------------|-----|
| External power supply module 100-240 V AC 110-230 V DC / 24 V DC-3 A class 2 | <b>ABL8RPS24030</b> | [1] |
|--|---------------------|-----|



|   |                 |  |
|---|-----------------|--|
| External power supply module 24 V DC-1 A OVC IV |                 |  |
| 24-30 V DC                                      | <b>LV454440</b> |  |
| 48-60 V DC                                      | <b>LV454441</b> |  |
| 100-125 V DC                                    | <b>LV454442</b> |  |
| 110-130 V AC                                    | <b>LV454443</b> |  |
| 200-240 V AC                                    | <b>LV454444</b> |  |

##### Battery module



|                        |              |  |
|------------------------|--------------|--|
| 24 V DC battery module | <b>54446</b> |  |
|------------------------|--------------|--|

[1] See Telemecanique catalog.



INDUSTRIAL AUTOMATION

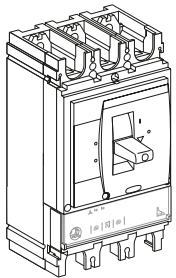


# Complete fixed device

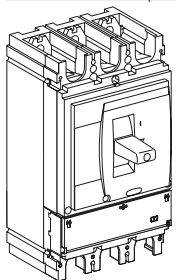
## ComPact NSX400/630F (36 kA 380/415 V)

### ComPact NSX400/630F

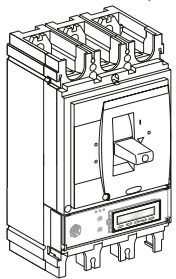
Electronic trip unit MicroLogic 2.3 (LS<sub>o</sub>I protection)

|   |                                      |       |              |                            |
|---|--------------------------------------|-------|--------------|----------------------------|
|  |                                      |       | <b>3P 3d</b> | <b>4P 3d, 4d, 3d + N/2</b> |
|   | ComPact NSX400F (36 kA at 380/415 V) | 250 A | LV432682     | LV432683                   |
|   |                                      | 400 A | LV432676     | LV432677                   |
|   | ComPact NSX630F (36 kA at 380/415 V) | 630 A | LV432876     | LV432877                   |

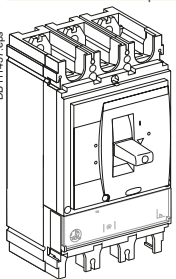
Electronic trip unit MicroLogic Vigi 4.3 (LS<sub>o</sub>IR protection)

|   |                                      |       |              |                       |
|---|--------------------------------------|-------|--------------|-----------------------|
|  |                                      |       | <b>3P 3d</b> | <b>4P 4d 3d + N/2</b> |
|   | ComPact NSX400F (36 kA at 380/415 V) | 400 A | LV433934     | LV433936              |
|   | ComPact NSX400F (36 kA at 380/415 V) | 570 A | LV433935     | LV433937              |

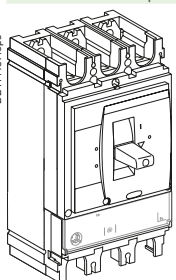
Electronic trip unit MicroLogic 5.3 A (LSI protection, ammeter)

|  |                                      |       |              |                                      |
|--|--------------------------------------|-------|--------------|--------------------------------------|
|  |                                      |       | <b>3P 3d</b> | <b>4P 3d, 4d, 3d + N/2, 3d + OSN</b> |
|  | ComPact NSX400F (36 kA at 380/415 V) | 400 A | LV432678     | LV432679                             |
|  | ComPact NSX630F (36 kA at 380/415 V) | 630 A | LV432878     | LV432879                             |

Electronic trip unit MicroLogic 1.3 M (I motor protection)

|   |   |       |              |  |
|---|---|-------|--------------|--|
|  |   |       | <b>3P 3d</b> |  |
|   | ComPact NSX400F 1.3 M (36 kA at 380/415V) | 320 A | LV432748     |  |
|   | ComPact NSX630F 1.3 M (36 kA at 380/415V) | 500 A | LV432948     |  |

Electronic trip unit MicroLogic 2.3 M (LS<sub>o</sub>I motor protection)

|   |   |       |              |  |
|---|---|-------|--------------|--|
|  |   |       | <b>3P 3d</b> |  |
|   | ComPact NSX400F 2.3 M (36 kA at 380/415V) | 320 A | LV432775     |  |
|   | ComPact NSX630F 2.3 M (36 kA at 380/415V) | 500 A | LV432975     |  |

With electronic trip unit MicroLogic 5.3 E (LSI protection, energy meter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

With electronic trip unit MicroLogic 6.3 A (LSIG protection, ammeter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

With electronic trip unit MicroLogic 6.3 E (LSIG protection, energy meter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

With electronic trip unit MicroLogic 6.3 E-M (LSIG motor protection, energy meter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

F





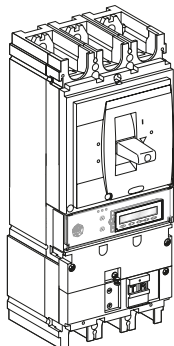
# Complete fixed device

## ComPact NSX400/630F Vigi add-on (36 kA 380/415 V)

### ComPact NSX400/630F Vigi add-on

Electronic trip unit MicroLogic 2.3 (LS<sub>0</sub>I protection)

DB111458.eps



|  |       |                 |                            |
|--|-------|-----------------|----------------------------|
|  |       | <b>3P 3d</b>    | <b>4P 3d, 4d, 3d + N/2</b> |
| ComPact NSX400F Vigi add-on (36 kA at 380/415 V) | 400 A | <b>LV432731</b> | <b>LV432732</b>            |
| ComPact NSX630F Vigi add-on (36 kA at 380/415 V) | 630 A | <b>LV432931</b> | <b>LV432932</b>            |

With electronic trip unit MicroLogic 5.3 E (LSI protection, energy meter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

With electronic trip unit MicroLogic 6.3 A (LSIG protection, ammeter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

With electronic trip unit MicroLogic 6.3 E (LSIG protection, energy meter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

With electronic trip unit MicroLogic 6.3 E-M (LSIG motor protection, energy meter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit

INDUSTRIAL AUTOMATION

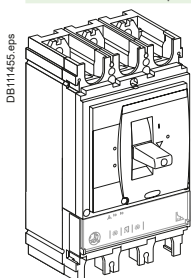


# Complete fixed device

## ComPact NSX400/630N (50 kA 380/415 V)

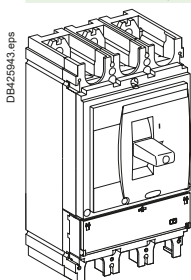
### ComPact NSX400/630N

Electronic trip unit MicroLogic 2.3 (LS<sub>0</sub>I protection)



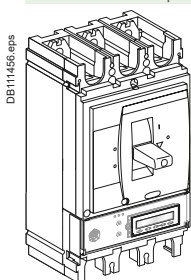
|                                      |       |                   |                                 |
|--------------------------------------|-------|-------------------|---------------------------------|
| ComPact NSX400N (50 kA at 380/415 V) | 250 A | 3P 3d<br>LV432707 | 4P 3d, 4d, 3d + N/2<br>LV432708 |
|                                      | 400 A | LV432693          | LV432694                        |
| ComPact NSX630N (50 kA at 380/415 V) | 630 A | LV432893          | LV432894                        |

Electronic trip unit MicroLogic Vigi 4.3 (LS<sub>0</sub>IR protection)



|                                      |                                      |                   |                            |
|--------------------------------------|--------------------------------------|-------------------|----------------------------|
| ComPact NSX400N (50 kA at 380/415 V) | 400 A                                | 3P 3d<br>LV433938 | 4P 4d 3d + N/2<br>LV433940 |
|                                      | ComPact NSX630N (50 kA at 380/415 V) | 570 A             | LV433939                   |

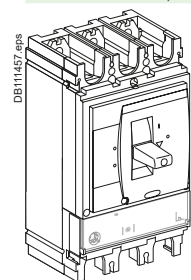
Electronic trip unit MicroLogic 5.3 A (LSI protection, ammeter)



|                                      |                                      |                   |   |
|--------------------------------------|--------------------------------------|-------------------|---|
| ComPact NSX400N (50 kA at 380/415 V) | 400 A                                | 3P 3d<br>LV432699 | 4P 3d, 4d, 3d + N/2, 3d + OSN<br>LV432700 |
|                                      | ComPact NSX630N (50 kA at 380/415 V) | 630 A             | LV432899                                  |

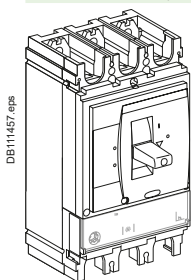
## INDUSTRIAL AUTOMATION

Electronic trip unit MicroLogic 1.3 M A (I motor protection)



|   |   |                   |          |
|---|---|-------------------|----------|
| ComPact NSX400N 1.3 M (50 kA at 380/415V) | 320 A                                     | 3P 3d<br>LV432749 |          |
|   | ComPact NSX630N 1.3 M (50 kA at 380/415V) | 500 A             | LV432949 |

Electronic trip unit MicroLogic 2.3 M (LS<sub>0</sub>I motor protection)



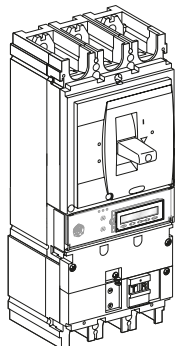
|   |   |                   |          |
|---|---|-------------------|----------|
| ComPact NSX400N 2.3 M (50 kA at 380/415V) | 320 A                                     | 3P 3d<br>LV432776 |          |
|   | ComPact NSX630N 2.3 M (50 kA at 380/415V) | 500 A             | LV432976 |

Complete fixed device  
ComPact NSX400/630N Vigi add-on (50 kA 380/415 V)

**ComPact NSX400/630N Vigi add-on**

Electronic trip unit MicroLogic 2.3 (LS<sub>0</sub>I protection)

DB111458.eps



|  |                 |              |                            |
|--|-----------------|--------------|----------------------------|
|  |                 | <b>3P 3d</b> | <b>4P 3d, 4d, 3d + N/2</b> |
| ComPact NSX400N Vigi add-on (50 kA at 380/415 V) 400 A | <b>LV432733</b> |              | <b>LV432734</b>            |
| ComPact NSX630N Vigi add-on (50 kA at 380/415 V) 630 A | <b>LV432933</b> |              | <b>LV432934</b>            |

With electronic trip unit MicroLogic 5.3 E (LSI protection, energy meter)

To be ordered with 2 catalog numbers: 1 basic frame + 1 trip unit



INDUSTRIAL AUTOMATION

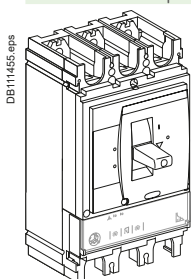


# Complete fixed device

## ComPact NSX400/630H (70 kA 380/415 V)

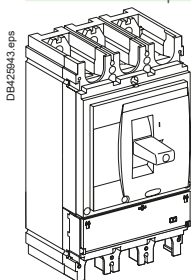
### ComPact NSX400/630H

Electronic trip unit MicroLogic 2.3 (LS<sub>o</sub>I protection)



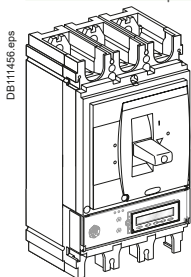
|                                      |       | 3P 3d    | 4P 3d, 4d, 3d + N/2 |
|--------------------------------------|-------|----------|---------------------|
| ComPact NSX400H (70 kA at 380/415 V) | 250 A | LV432709 | LV432710            |
|                                      | 400 A | LV432695 | LV432696            |
| ComPact NSX630H (70 kA at 380/415 V) | 630 A | LV432895 | LV432896            |

Electronic trip unit MicroLogic Vigi 4.3 (LS<sub>o</sub>IR protection)



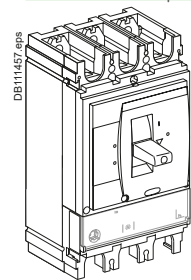
|                                      |       | 3P 3d    | 4P 4d 3d + N/2 |
|--------------------------------------|-------|----------|----------------|
| ComPact NSX400H (70 kA at 380/415 V) | 400 A | LV433942 | LV433944       |
| ComPact NSX630H (70 kA at 380/415 V) | 570 A | LV433943 | LV433945       |

Electronic trip unit MicroLogic 5.3 A (LSI protection, ammeter)



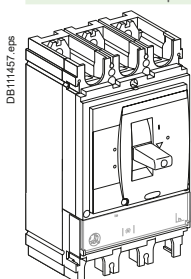
|                                      |       | 3P 3d    | 4P 3d, 4d, 3d + N/2, 3d + OSN |
|--------------------------------------|-------|----------|-------------------------------|
| ComPact NSX400H (70 kA at 380/415 V) | 400 A | LV432701 | LV432702                      |
| ComPact NSX630H (70 kA at 380/415 V) | 630 A | LV432901 | LV432902                      |

Electronic trip unit MicroLogic 1.3 M (I motor protection)



|   |       | 3P 3d    |
|---|-------|----------|
| ComPact NSX400H 1.3 M (70 kA at 380/415V) | 320 A | LV432750 |
| ComPact NSX630H 1.3 M (70 kA at 380/415V) | 500 A | LV432950 |

Electronic trip unit MicroLogic 2.3 M (LS<sub>o</sub>I motor protection)



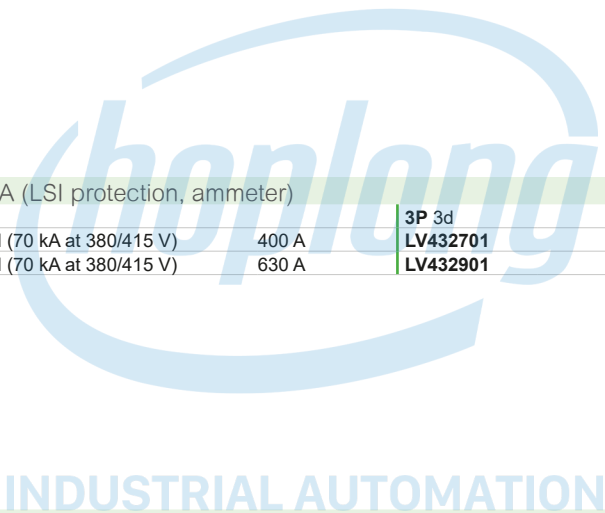
|   |       | 3P 3d    |
|---|-------|----------|
| ComPact NSX400H 2.3 M (70 kA at 380/415V) | 320 A | LV432777 |
| ComPact NSX630H 2.3 M (70 kA at 380/415V) | 500 A | LV432977 |

With electronic trip unit MicroLogic 6.3 E (LSIG protection, energy meter)

Only available as separate components.

With electronic trip unit MicroLogic 6.3 E-M (LSIG motor protection, energy meter)

Only available as separate components.



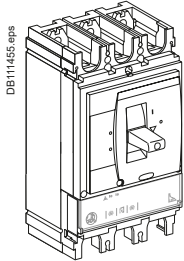
F

# Complete fixed device

## ComPact NSX400/630R (200 kA 380/415 V - 45 kA 690 V)

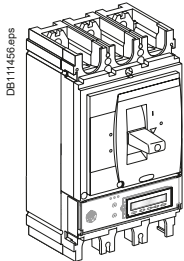
### ComPact NSX400/630R

Electronic trip unit MicroLogic 2.3 (LS<sub>0</sub>I protection)



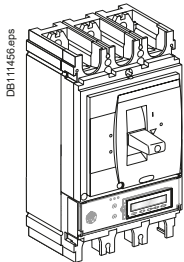
|             |  |  |       |                 |                            |
|-------------|--|--|-------|-----------------|----------------------------|
| DB11455.eps |  | NSX400R (200 kA at 380/415 V - 45 kA at 690 V) | 250 A | <b>3P 3d</b>    | <b>4P 3d, 4d, 3d + N/2</b> |
|             |  |  | 400 A | <b>LV433600</b> | <b>LV433601</b>            |
|             |  | NSX630R (200 kA at 380/415 V - 45 kA at 690 V) | 630 A | <b>LV433602</b> | <b>LV433603</b>            |
|             |  |  |       | <b>LV433700</b> | <b>LV433701</b>            |

Electronic trip unit MicroLogic 5.3 E (LSI protection, energy meter)



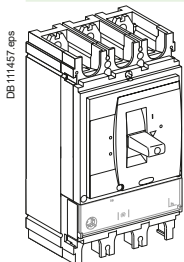
|             |  |  |       |                 |                                      |
|-------------|--|--|-------|-----------------|--------------------------------------|
| DB11456.eps |  | NSX400R (200 kA at 380/415 V - 45 kA at 690 V) | 400 A | <b>3P 3d</b>    | <b>4P 3d, 4d, 3d + N/2, 3d + OSN</b> |
|             |  |  | 630 A | <b>LV433606</b> | <b>LV433607</b>                      |
|             |  | NSX630R (200 kA at 380/415 V - 45 kA at 690 V) | 630 A | <b>LV433704</b> | <b>LV433705</b>                      |

Electronic trip unit MicroLogic 6.3 E (LSIG protection, energy meter)



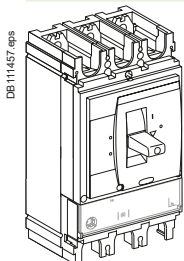
|             |  |  |       |                 |                                      |
|-------------|--|--|-------|-----------------|--------------------------------------|
| DB11456.eps |  | NSX400R (200 kA at 380/415 V - 45 kA at 690 V) | 400 A | <b>3P 3d</b>    | <b>4P 3d, 4d, 3d + N/2, 3d + OSN</b> |
|             |  |  | 630 A | <b>LV433608</b> | <b>LV433609</b>                      |
|             |  | NSX630R (200 kA at 380/415 V - 45 kA at 690 V) | 630 A | <b>LV433706</b> | <b>LV433707</b>                      |

Electronic trip unit MicroLogic 1.3 M (I motor protection)



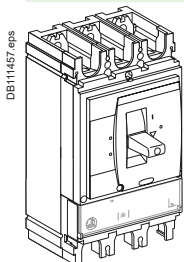
|             |  |  |       |                 |  |
|-------------|--|--|-------|-----------------|--|
| DB11457.eps |  | NSX400R (200 kA at 380/415 V - 45 kA at 690 V) | 320 A | <b>3P 3d</b>    |  |
|             |  |  | 500 A | <b>LV433604</b> |  |
|             |  | NSX630R (200 kA at 380/415 V - 45 kA at 690 V) | 500 A | <b>LV433702</b> |  |

Electronic trip unit MicroLogic 2.3 M (LS<sub>0</sub>I motor protection)



|             |  |  |       |                 |  |
|-------------|--|--|-------|-----------------|--|
| DB11457.eps |  | NSX400R (200 kA at 380/415 V - 45 kA at 690 V) | 320 A | <b>3P 3d</b>    |  |
|             |  |  | 500 A | <b>LV433605</b> |  |
|             |  | NSX630R (200 kA at 380/415 V - 45 kA at 690 V) | 500 A | <b>LV433703</b> |  |

With electronic trip unit MicroLogic 6.3 E-M (LSIG motor protection, energy meter)



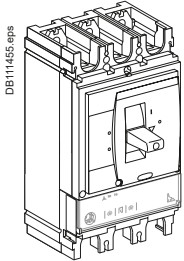
|             |  |  |       |                 |  |
|-------------|--|--|-------|-----------------|--|
| DB11457.eps |  | NSX400R (200 kA at 380/415 V - 45 kA at 690 V) | 320 A | <b>3P 3d</b>    |  |
|             |  |  | 500 A | <b>LV433610</b> |  |
|             |  | NSX630R (200 kA at 380/415 V - 45 kA at 690 V) | 500 A | <b>LV433708</b> |  |

# Complete fixed device

## ComPact NSX400/630HB1 (85 kA 500 V - 75 kA 690 V)

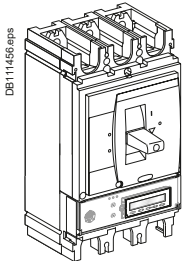
### ComPact NSX400/630HB1

Electronic trip unit MicroLogic 2.3 (LS<sub>0</sub>I protection)



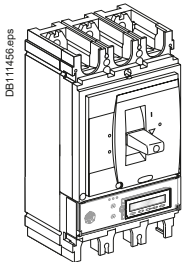
|   |       |                          |  |
|---|-------|--------------------------|--|
| NSX400HB1 (85 kA at 500 V - 75 kA at 690 V) | 250 A | <b>3P 3d</b><br>LV433620 | <b>4P 3d, 4d, 3d + N/2</b><br>LV433621 |
|   | 400 A | LV433622                 | LV433623                               |
| NSX630HB1 (85 kA at 500 V - 75 kA at 690 V) | 630 A | LV433720                 | LV433721                               |

Electronic trip unit MicroLogic 5.3 E (LSI protection, energy meter)



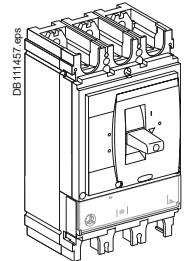
|   |       |                          |  |
|---|-------|--------------------------|--|
| NSX400HB1 (85 kA at 500 V - 75 kA at 690 V) | 400 A | <b>3P 3d</b><br>LV433626 | <b>4P 3d, 4d, 3d + N/2, 3d + OSN</b><br>LV433627 |
| NSX630HB1 (85 kA at 500 V - 75 kA at 690 V) | 630 A | LV433724                 | LV433725   |

Electronic trip unit MicroLogic 6.3 E (LSIG protection, energy meter)



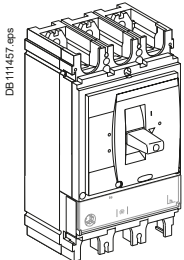
|   |       |                          |  |
|---|-------|--------------------------|--|
| NSX400HB1 (85 kA at 500 V - 75 kA at 690 V) | 400 A | <b>3P 3d</b><br>LV433628 | <b>4P 3d, 4d, 3d + N/2, 3d + OSN</b><br>LV433629 |
| NSX630HB1 (85 kA at 500 V - 75 kA at 690 V) | 630 A | LV433726                 | LV433727   |

Electronic trip unit MicroLogic 1.3 M (I motor protection)



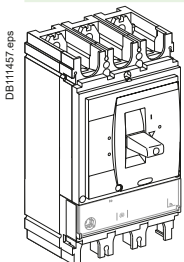
|   |       |                          |  |
|---|-------|--------------------------|--|
| NSX400HB1 (85 kA at 500 V - 75 kA at 690 V) | 320 A | <b>3P 3d</b><br>LV433624 |  |
| NSX630HB1 (85 kA at 500 V - 75 kA at 690 V) | 500 A | LV433722                 |  |

Electronic trip unit MicroLogic 2.3 M (LS<sub>0</sub>I motor protection)



|   |       |                          |  |
|---|-------|--------------------------|--|
| NSX400HB1 (85 kA at 500 V - 75 kA at 690 V) | 320 A | <b>3P 3d</b><br>LV433625 |  |
| NSX630HB1 (85 kA at 500 V - 75 kA at 690 V) | 500 A | LV433723                 |  |

With electronic trip unit MicroLogic 6.3 E-M (LSIG motor protection, energy meter)



|   |       |                          |  |
|---|-------|--------------------------|--|
| NSX400HB1 (85 kA at 500 V - 75 kA at 690 V) | 320 A | <b>3P 3d</b><br>LV433630 |  |
| NSX630HB1 (85 kA at 500 V - 75 kA at 690 V) | 500 A | LV433728                 |  |

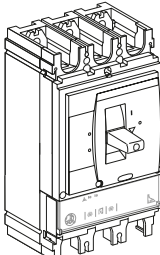
F

# Complete fixed device

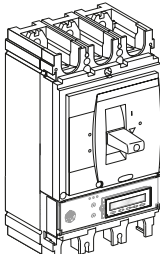
## ComPact NSX400/630HB2 (85 kA 500 V - 100 kA 690 V)

### ComPact NSX400/630HB2

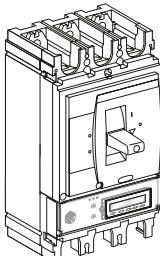
#### Electronic trip unit MicroLogic 2.3 (LS<sub>0</sub>I protection)

|  |  |       |              |                 |                            |
|--|--|-------|--------------|-----------------|----------------------------|
| DB11455.eps<br> | NSX400HB2 (85 kA at 500 V - 100 kA at 690 V) | 250 A | <b>3P 3d</b> | <b>LV433640</b> | <b>4P 3d, 4d, 3d + N/2</b> |
|  |  | 400 A |              | <b>LV433642</b> | <b>LV433643</b>            |
|  | NSX630HB2 (85 kA at 500 V - 100 kA at 690 V) | 630 A |              | <b>LV433740</b> | <b>LV433741</b>            |
|  |  |       |              |                 |                            |

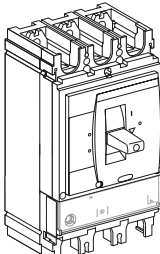
#### Electronic trip unit MicroLogic 5.3 E (LSI protection, energy meter)

|  |  |       |              |                 |                                      |
|--|--|-------|--------------|-----------------|--------------------------------------|
| DB11456.eps<br> | NSX400HB2 (85 kA at 500 V - 100 kA at 690 V) | 400 A | <b>3P 3d</b> | <b>LV433646</b> | <b>4P 3d, 4d, 3d + N/2, 3d + OSN</b> |
|  | NSX630HB2 (85 kA at 500 V - 100 kA at 690 V) | 630 A |              | <b>LV433744</b> | <b>LV433745</b>                      |
|  |  |       |              |                 |                                      |
|  |  |       |              |                 |                                      |

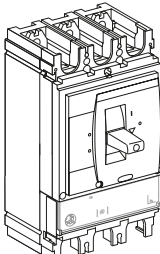
#### Electronic trip unit MicroLogic 6.3 E (LSIG protection, energy meter)

|   |  |       |              |                 |                                      |
|---|--|-------|--------------|-----------------|--------------------------------------|
| DB11456.eps<br> | NSX400HB2 (85 kA at 500 V - 100 kA at 690 V) | 400 A | <b>3P 3d</b> | <b>LV433648</b> | <b>4P 3d, 4d, 3d + N/2, 3d + OSN</b> |
|   | NSX630HB2 (85 kA at 500 V - 100 kA at 690 V) | 630 A |              | <b>LV433746</b> | <b>LV433749</b>                      |
|   |  |       |              |                 |                                      |
|   |  |       |              |                 |                                      |

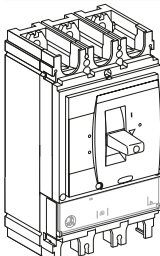
#### Electronic trip unit MicroLogic 1.3 M (I motor protection)

|  |  |       |              |                 |  |
|--|--|-------|--------------|-----------------|--|
| DB11457.eps<br> | NSX400HB2 (85 kA at 500 V - 100 kA at 690 V) | 320 A | <b>3P 3d</b> | <b>LV433644</b> |  |
|  | NSX630HB2 (85 kA at 500 V - 100 kA at 690 V) | 500 A |              | <b>LV433742</b> |  |
|  |  |       |              |                 |  |
|  |  |       |              |                 |  |

#### Electronic trip unit MicroLogic 2.3 M (LS<sub>0</sub>I motor protection)

|  |  |       |              |                 |  |
|--|--|-------|--------------|-----------------|--|
| DB11457.eps<br> | NSX400HB2 (85 kA at 500 V - 100 kA at 690 V) | 320 A | <b>3P 3d</b> | <b>LV433645</b> |  |
|  | NSX630HB2 (85 kA at 500 V - 100 kA at 690 V) | 500 A |              | <b>LV433743</b> |  |
|  |  |       |              |                 |  |
|  |  |       |              |                 |  |

#### With electronic trip unit MicroLogic 6.3 E-M (LSIG motor protection, energy meter)

|  |  |       |              |                 |  |
|--|--|-------|--------------|-----------------|--|
| DB11457.eps<br> | NSX400HB2 (85 kA at 500 V - 100 kA at 690 V) | 320 A | <b>3P 3d</b> | <b>LV433650</b> |  |
|  | NSX630HB2 (85 kA at 500 V - 100 kA at 690 V) | 500 A |              | <b>LV433748</b> |  |
|  |  |       |              |                 |  |
|  |  |       |              |                 |  |



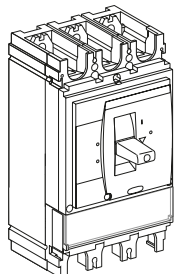


Complete fixed device  
Com**Pact** NSX400/630NA

Com**Pact** NSX400/630 NA switch-disconnector

With NA switch-disconnector unit

DB111459.eps



|  | 3P       | 4P       |
|--|----------|----------|
| Com <b>Pact</b> NSX400 NA              | LV432756 | LV432757 |
| Com <b>Pact</b> NSX630 NA, 45 mm pitch | LV432956 | LV432957 |



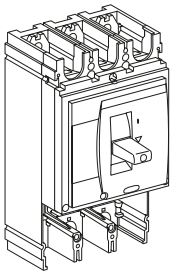
INDUSTRIAL AUTOMATION

F

# Based on separate components

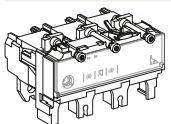
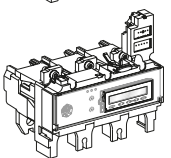
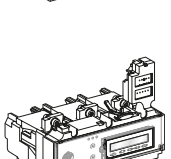
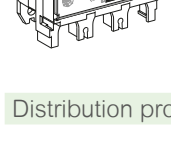
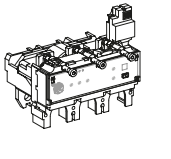
## ComPact NSX and ComPact NSX Vigi add-on

### Basic frame

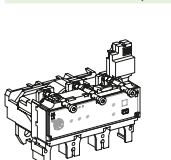
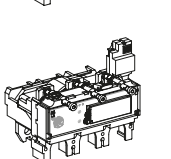
|  |                            |           |           |
|--|----------------------------|-----------|-----------|
| DB11460.eps<br> | <b>ComPact NSX400</b>      |           |           |
|  | NSX400F (36 kA 380/415 V)  | <b>3P</b> | <b>4P</b> |
|  |                            | LV432413  | LV432415  |
|  | NSX400N (50 kA 380/415 V)  | LV432403  | LV432408  |
|  | NSX400H (70 kA 380/415 V)  | LV432404  | LV432409  |
|  | NSX400S (100 kA 380/415 V) | LV432414  | LV432416  |
|  | NSX400L (150 kA 380/415 V) | LV432405  | LV432410  |
|  | <b>ComPact NSX630</b>      |           |           |
|  |                            | <b>3P</b> | <b>4P</b> |
|  | NSX630F (36 kA 380/415 V)  | LV432813  | LV432815  |
| NSX630N (50 kA 380/415 V)  | LV432803                   | LV432808  |           |
| NSX630H (70 kA 380/415 V)  | LV432804                   | LV432809  |           |
| NSX630S (100 kA 380/415 V)   | LV432814                   | LV432816  |           |
| NSX630L (150 kA 380/415 V)   | LV432805                   | LV432810  |           |

### + Trip unit

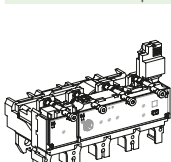
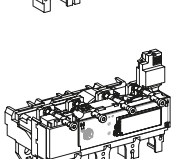
#### Distribution protection

|  |   |              |                                      |
|--|---|--------------|--------------------------------------|
| DB11461.eps<br>   | <b>MicroLogic 2.3 (LS<sub>0</sub>I protection)</b>      |              |                                      |
|  | Rating  | <b>3P 3d</b> | <b>4P 3d, 4d, 3d + N/2</b>           |
|  | MicroLogic 2.3 250 A                                    | LV432082     | LV432086                             |
|  | MicroLogic 2.3 400 A                                    | LV432081     | LV432085                             |
|  | LV432080  | LV432084     |                                      |
| DB11462.eps<br>  | <b>MicroLogic 5.3 A (LSI protection, ammeter)</b>       |              |                                      |
|  | Rating  | <b>3P 3d</b> | <b>4P 3d, 4d, 3d + N/2, 3d + OSN</b> |
|  | MicroLogic 5.3 A 400 A                                  | LV432091     | LV432094                             |
|  | MicroLogic 5.3 A 630 A                                  | LV432090     | LV432093                             |
| DB11462.eps<br> | <b>MicroLogic 5.3 E (LSI protection, energy meter)</b>  |              |                                      |
|  | Rating  | <b>3P 3d</b> | <b>4P 3d, 4d, 3d + N/2, 3d + OSN</b> |
|  | MicroLogic 5.3 E 400 A                                  | LV432097     | LV432100                             |
|  | MicroLogic 5.3 E 630 A                                  | LV432096     | LV432099                             |
| DB11462.eps<br> | <b>MicroLogic 6.3 A (LSIG protection, ammeter)</b>      |              |                                      |
|  | Rating  | <b>3P 3d</b> | <b>4P 3d, 4d, 3d + N/2, 3d + OSN</b> |
|  | MicroLogic 6.3 A 400 A                                  | LV432103     | LV432106                             |
|  | MicroLogic 6.3 A 630 A                                  | LV432102     | LV432105                             |
| DB11462.eps<br> | <b>MicroLogic 6.3 E (LSIG protection, energy meter)</b> |              |                                      |
|  | Rating  | <b>3P 3d</b> | <b>4P 3d, 4d, 3d + N/2, 3d + OSN</b> |
|  | MicroLogic 6.3 E 400 A                                  | LV432109     | LV432112                             |
|  | MicroLogic 6.3 E 630 A                                  | LV432108     | LV432111                             |

#### Distribution protection with embedded earth leakage protection

|   |  |              |                       |
|---|--|--------------|-----------------------|
| DB425617.eps<br> | <b>With electronic trip unit MicroLogic Vigi 4.3 (LS<sub>0</sub>IR protection)</b> |              |                       |
|   | Rating   | <b>3P 3d</b> | <b>4P 4d 3d + N/2</b> |
|   | 400 A  | LV433930     | LV433932              |
|   | 570 A  | LV433931     | LV433933              |
| DB425618.eps<br> | <b>With electronic trip unit MicroLogic Vigi 7.3 E (LSIR protection)</b>           |              |                       |
|   | Rating   | <b>3P 3d</b> | <b>4P 4d 3d + N/2</b> |
|   | 400 A  | LV433950     | LV433952              |
|   | 570 A  | LV433951     | LV433953              |

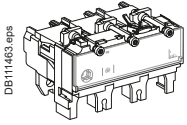
#### Distribution protection with embedded earth leakage protection alarm

|   |  |              |                       |
|---|--|--------------|-----------------------|
| DB425619.eps<br> | <b>With electronic trip unit MicroLogic Vigi 4.3 AL (LS<sub>0</sub>I protection + earth leakage alarm)</b> |              |                       |
|   | Rating   | <b>3P 3d</b> | <b>4P 4d 3d + N/2</b> |
|   | 400 A  | LV433960     | LV433962              |
|   | 570 A  | LV433961     | LV433963              |
| DB425620.eps<br> | <b>With electronic trip unit MicroLogic Vigi 7.3 E AL (LSI protection + earth leakage alarm)</b>           |              |                       |
|   | Rating   | <b>3P 3d</b> | <b>4P 4d 3d + N/2</b> |
|   | 400 A  | LV433965     | LV433967              |
|   | 570 A  | LV433966     | LV433968              |

Based on separate components  
Com**Pact** NSX400/630

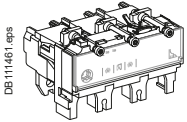
+ Trip unit

Motor protection



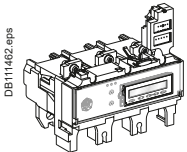
MicroLogic 1.3 M (I protection)

|                        |          |          |
|------------------------|----------|----------|
| Rating                 | 3P 3d    | 4P 3d    |
| MicroLogic 1.3 M 320 A | LV432069 | LV432078 |
| MicroLogic 1.3 M 500 A | LV432068 | LV432077 |



MicroLogic 2.3 M (LS<sub>0</sub>I protection)

|                        |          |
|------------------------|----------|
| Rating                 | 3P 3d    |
| MicroLogic 2.3 M 320 A | LV432072 |
| MicroLogic 2.3 M 500 A | LV432071 |



MicroLogic 6.3 E-M (LSIG protection, energy meter)

|                          |          |
|--------------------------|----------|
| Rating                   | 3P 3d    |
| MicroLogic 6.3 E-M 320 A | LV432075 |
| MicroLogic 6.3 E-M 500 A | LV432074 |

Protection of public distribution systems

MicroLogic 2.3 AB (LS<sub>0</sub>I protection)

|                      |                     |
|----------------------|---------------------|
| Rating               | 4P 3d, 4d, 3d + N/2 |
| MicroLogic 2.3 400 A | LV434557            |

16 Hz 2/3 network protection

MicroLogic 5.3 A-Z (LSI protection, ammeter)

|                          |          |
|--------------------------|----------|
| Rating                   | 3P 3d    |
| MicroLogic 5.3 A-Z 630 A | LV432089 |

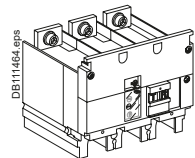
Earth Leakage protection of public distribution systems

MicroLogic Vigi 4.3 AB distribution protections

|        |                |
|--------|----------------|
| Rating | 4P 4d 3d + N/2 |
| 400 A  | LV433948       |

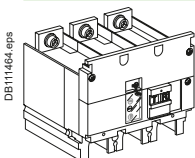
+ Vigi add-on or Vigi add-on Alarm

Vigi add-on



|   |              |          |          |
|---|--------------|----------|----------|
| Type MB   | 200 to 440 V | 3P       | 4P       |
|   | 440 to 550 V | LV432455 | LV432456 |
| Connection for a 4P Vigi add-on on a 3P breaker |              | LV432453 | LV432454 |
|   |              |          | LV432457 |

Vigi add-on Alarm



|  |          |          |
|--|----------|----------|
| 200 to 440 V AC  | 3P       | 4P       |
| Connection for a 4P insulation monitoring module on a 3P breaker | LV432659 | LV432660 |
|  |          | LV432457 |

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# Trip unit accessories

## ComPact NSX400/630 with/without Vigi add-on

### Trip unit accessories

|              |  |  |  |
|--------------|--|--|--|
| DB112277.eps | External neutral CT for 3 pole breaker with MicroLogic 5/6 | 400-630 A  | LV432575   |
| DB112730.eps | 24 V DC wiring accessory for MicroLogic 5/6                | 24 V DC power supply connector   | LV434210   |
| DB115665.eps | ZSI accessory for NS630b-NW with NSX                       | ZSI module   | LV434212   |
| DB452038.eps | External power supply module (24 V DC - 1 A), class 4      | 24-30 V DC<br>48-60 V DC<br>100-125 V DC<br>110-130 V AC<br>200-240 V AC | LV454440<br>LV454441<br>LV454442<br>LV454443<br>LV454444 |
| DB112729.eps | Battery module   | 24 V DC battery module   | 54446  |

INDUSTRIAL AUTOMATION



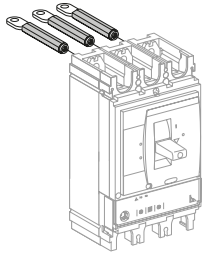
# Installation and connection

## ComPact NSX and ComPact NSX400/630 Vigi add-on

Fixed/RC device = fixed/FC device + rear connection kit

### Mixed RC kit

DB111465.eps

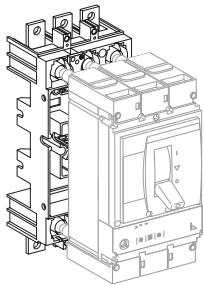


|        |           |     |                 |
|--------|-----------|-----|-----------------|
| Kit 3P | Short RCs | 2 x | <b>LV432475</b> |
|        | Long RCs  | 1 x | <b>LV432476</b> |
| Kit 4P | Short RCs | 2 x | <b>LV432475</b> |
|        | Long RCs  | 2 x | <b>LV432476</b> |

Plug-in version = fixed/FC device + plug-in kit

### Kit for ComPact NSX

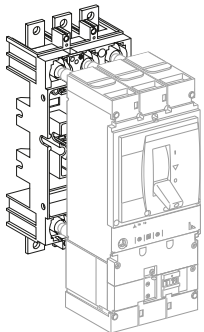
DB111467.eps



| Plug-in kit<br>Comprising: | 3P                               | 4P                               |
|----------------------------|----------------------------------|----------------------------------|
|                            | Base                             | <b>LV432538</b>                  |
| Power connections          | = 1 x LV432516<br>+ 3 x LV432518 | = 1 x LV432517<br>+ 4 x LV432518 |
| Short terminal shields     | + 2 x LV432591                   | + 2 x LV432592                   |
| Safety trip interlock      | + 1 x LV432520                   | + 1 x LV432520                   |

### Kit for ComPact NSX Vigi add-on

DB111469.eps



| ComPact NSX Vigi add-on plug-in kit<br>Comprising: | 3P                               | 4P                               |
|--|----------------------------------|----------------------------------|
|  | Base                             | <b>LV432540</b>                  |
| Power connections                                  | = 1 x LV432516<br>+ 3 x LV432519 | = 1 x LV432517<br>+ 4 x LV432519 |
| Short terminal shields                             | + 2 x LV432591                   | + 2 x LV432592                   |
| Safety trip interlock                              | + 1 x LV432520                   | + 1 x LV432520                   |

**INDUSTRIAL AUTOMATION**

[1] Supplied with 2 or 3 interphase barriers.

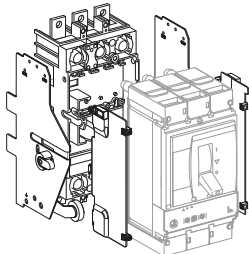
# Installation and connection

## ComPact NSX and ComPact NSX400/630 Vigi add-on

Withdrawable version = fixed/FC device + withdrawable kit

**Kit for ComPact NSX**

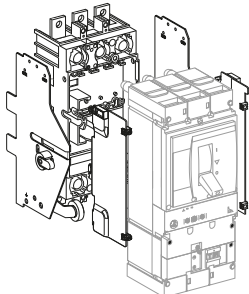
DB111468.eps



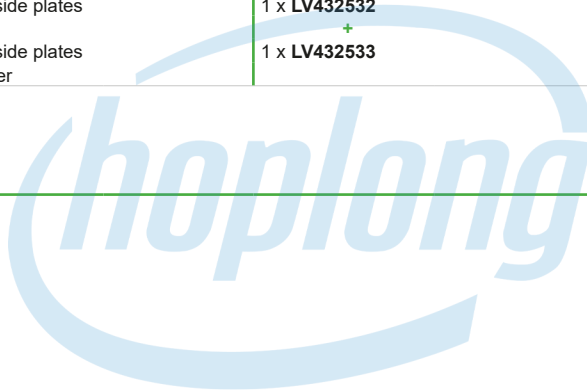
|                                 | 3P                         | 4P                         |
|---------------------------------|----------------------------|----------------------------|
|                                 | <b>Kit for ComPact NSX</b> | <b>Kit for ComPact NSX</b> |
|                                 | =                          | =                          |
| Plug-in kit:                    | 1 x LV432538               | 1 x LV432539               |
|                                 | +                          | +                          |
| Chassis side plates for base    | 1 x LV432532               | 1 x LV432532               |
|                                 | +                          | +                          |
| Chassis side plates for breaker | 1 x LV432533               | 1 x LV432533               |

**Kit for ComPact NSX Vigi add-on**

DB117174.eps



|                                 | 3P                                     | 4P                                     |
|---------------------------------|--|--|
|                                 | <b>Kit for ComPact NSX Vigi add-on</b> | <b>Kit for ComPact NSX Vigi add-on</b> |
|                                 | =                                      | =                                      |
| Plug-in kit:                    | 1 x LV432540                           | 1 x LV432541                           |
|                                 | +                                      | +                                      |
| Chassis side plates for base    | 1 x LV432532                           | 1 x LV432532                           |
|                                 | +                                      | +                                      |
| Chassis side plates for breaker | 1 x LV432533                           | 1 x LV432533                           |



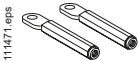
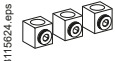





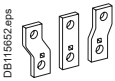
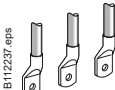
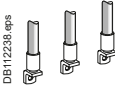
INDUSTRIAL AUTOMATION



# Accessories and auxiliaries

## ComPact NSX400/630 with/without Vigi add-on

### Connection accessories (Cu or Al)

| Rear connections   |  |                                  |           |          |
|--|--|----------------------------------|-----------|----------|
|    | 2 short  |                                  |           | LV432475 |
|  | 2 long   |                                  |           | LV432476 |
| Bare cable connectors <sup>[1]</sup>   |  |                                  |           |          |
|    | Aluminium connectors   | 1 x (35 to 300 mm <sup>2</sup> ) | Set of 3  | LV432479 |
|  |  |                                  | Set of 4  | LV432480 |
|    | Aluminium connectors for 2 cables                              | 2 x (35 to 240 mm <sup>2</sup> ) | Set of 3  | LV432481 |
|  |  |                                  | Set of 4  | LV432482 |
|    | 6.35 mm voltage tap for aluminium connectors for 1 or 2 cables |                                  | Set of 10 | LV429348 |
| Terminal extensions <sup>[1]</sup>   |  |                                  |           |          |
|    | 45° terminal extensions  |                                  | Set of 3  | LV432586 |
|  |  |                                  | Set of 4  | LV432587 |
|    | Edgewise terminal extensions                                   |                                  | Set of 3  | LV432486 |
|  |  |                                  | Set of 4  | LV432487 |
|   | Right-angle terminal extensions                                |                                  | Set of 3  | LV432484 |
|  |  |                                  | Set of 4  | LV432485 |
|  | Spreaders  | 52.5 mm                          | 3P        | LV432490 |
|  |  |                                  | 4P        | LV432491 |
|  |  | 70 mm                            | 3P        | LV432492 |
|  |  |                                  | 4P        | LV432493 |
| Crimp lugs for copper cable <sup>[1]</sup>   |  |                                  |           |          |
|  | For cable 240 mm <sup>2</sup>                                  |                                  | Set of 3  | LV432500 |
|  |  |                                  | Set of 4  | LV432501 |
|  | For cable 300 mm <sup>2</sup>                                  |                                  | Set of 3  | LV432502 |
|  |  |                                  | Set of 4  | LV432503 |
| Crimp lugs for aluminium cable <sup>[1]</sup>                                      |  |                                  |           |          |
|  | For cable 240 mm <sup>2</sup>                                  |                                  | Set of 3  | LV432504 |
|  |  |                                  | Set of 4  | LV432505 |
|  | For cable 300 mm <sup>2</sup>                                  |                                  | Set of 3  | LV432506 |
|  |  |                                  | Set of 4  | LV432507 |
| Supplied with 2 or 3 interphase barriers   |  |                                  |           |          |

[1] Supplied with 2 or 3 interphase barriers.

F



# Accessories and auxiliaries

## ComPact NSX400/630 with/without Vigi add-on

**Insulation accessories**

|                     |  |          |          |
|---------------------|--|----------|----------|
| <p>DB425487.eps</p> | Short terminal shield, 45 mm (1 piece)   | 3P       | LV432591 |
|                     |  | 4P       | LV432592 |
| <p>DB117163.eps</p> | Short terminal shield > 500 V (1 piece)  | 3P       | LV433693 |
|                     |  | 4P       | LV433694 |
| <p>DB425468.eps</p> | Long terminal shield, 45 mm (1 piece)  | 3P       | LV432593 |
|                     |  | 4P       | LV432594 |
| <p>DB425469.eps</p> | Long terminal shield for spreaders, 52.5 mm (1 piece) (supplied with insulating plate) | 3P       | LV432595 |
|                     |  | 4P       | LV432596 |
| <p>DB425470.eps</p> | Interphase barriers  | Set of 6 | LV432570 |
| <p>DB425471.eps</p> | Connection adapter for plug-in base  | 3P       | LV432584 |
|                     |  | 4P       | LV432585 |
| <p>DB115228.eps</p> | 2 insulating screens (70 mm pitch)   | 3P       | LV432578 |
|                     |  | 4P       | LV432579 |



# Accessories and auxiliaries

## ComPact NSX400/630 with/without Vigi add-on

### Electrical auxiliaries

#### Auxiliary contacts (changeover)

|                 |                                  |       |
|-----------------|----------------------------------|-------|
| DB11254.eps<br> | OF or SD or SDE or SDV           | 29450 |
|                 | OF or SD or SDE or SDV low level | 29452 |

#### SDx output module for MicroLogic electronic trip unit

|                 |                           |          |
|-----------------|---------------------------|----------|
| DB11275.eps<br> | SDx module 24/415 V AC/DC | LV429532 |
|-----------------|---------------------------|----------|

#### SDTAM contactor tripping module (early-break thermal fault signal) for MicroLogic 2.3 M/6.3 E-M

|                 |  |          |
|-----------------|--|----------|
| DB11276.eps<br> | SDTAM 24/415 V AC/DC overload fault indication | LV429424 |
|-----------------|--|----------|

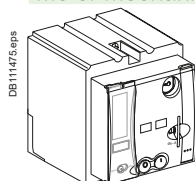
#### Voltage releases

|  | Voltage                             | MX                                     | MN                       |          |          |
|--|-------------------------------------|--|--------------------------|----------|----------|
| DB11454.eps<br>  | AC                                  | 24 V 50/60 Hz                          | LV429384                 | LV429404 |          |
|  |                                     | 48 V 50/60 Hz                          | LV429385                 | LV429405 |          |
|  |                                     | 110-130 V 50/60 Hz                     | LV429386                 | LV429406 |          |
|  |                                     | 220-240 V 50/60 Hz and 208-277 V 60 Hz | LV429387                 | LV429407 |          |
|  |                                     | 380-415 V 50 Hz and 440-480 V 60 Hz    | LV429388                 | LV429408 |          |
|  |                                     | 525 V 50 Hz and 600 V 60 Hz            | LV429389                 | LV429409 |          |
| DB11454.eps<br>  | DC                                  | 12 V                                   | LV429382                 | LV429402 |          |
|  |                                     | 24 V                                   | LV429390                 | LV429410 |          |
|  |                                     | 30 V                                   | LV429391                 | LV429411 |          |
|  |                                     | 48 V                                   | LV429392                 | LV429412 |          |
|  |                                     | 60 V                                   | LV429383                 | LV429403 |          |
|  |                                     | 125 V                                  | LV429393                 | LV429413 |          |
|  |                                     | 250 V                                  | LV429394                 | LV429414 |          |
|  |                                     | MN 48 V 50/60 Hz with fixed time delay |                          |          |          |
|  |                                     | Composed of:                           | MN 48 V DC               |          | LV429412 |
|  |                                     |  | Delay unit 48 V 50/60 Hz |          | LV429426 |
| MN 220-240 V 50/60 Hz with fixed time delay            |                                     |  |                          |          |          |
| Composed of:   | MN 250 V DC                         |  | LV429414                 |          |          |
|  | Delay unit 220-240 V 50/60 Hz       |  | LV429427                 |          |          |
| MN 48 V DC/AC 50/60 Hz with adjustable time delay      |                                     |  |                          |          |          |
| Composed of:   | MN 48 V DC                          |  | LV429412                 |          |          |
|  | Delay unit 48 V DC/AC 50/60 Hz      |  | 33680                    |          |          |
| MN 110-130 V DC/AC 50/60 Hz with adjustable time delay |                                     |  |                          |          |          |
| Composed of:   | MN 125 V DC                         |  | LV429413                 |          |          |
|  | Delay unit 100-130 V DC/AC 50/60 Hz |  | 33681                    |          |          |
| MN 220-250 V DC/AC 50/60 Hz with adjustable time delay |                                     |  |                          |          |          |
| Composed of:   | MN 250 V DC                         |  | LV429414                 |          |          |
|  | Delay unit 200-250 V DC/AC 50-60 Hz |  | 33682                    |          |          |

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**Motor mechanism**

Motor mechanism module

|   |    |  |           |
|---|----|--|-----------|
|  | AC | Voltage                                | MT400-630 |
|   |    | 48-60 V 50/60 Hz                       | LV432639  |
|   |    | 110-130 V 50/60 Hz                     | LV432640  |
|   |    | 220-240 V 50/60 Hz and 208-277 V 60 Hz | LV432641  |
|   |    | 380-415 V 50 Hz                        | LV432642  |
|   | DC | 440-480 V 60 Hz                        | LV432647  |
|   |    | 24-30 V                                | LV432643  |
|   |    | 48-60 V                                | LV432644  |
|   |    | 110-130 V                              | LV432645  |
|   |    | 250 V                                  | LV432646  |
| Operation counter   |    |  | LV432648  |


Communicating motor mechanism module

|   |                        |             |                    |          |
|---|------------------------|-------------|--------------------|----------|
|  | Motor mechanism module | MTc 400/630 | 220-240 V 50/60 Hz | LV432652 |
|---|------------------------|-------------|--------------------|----------|

+

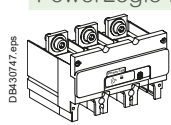
|   |                                     |      |          |
|---|-------------------------------------|------|----------|
|  | Breaker status Communication Module | BSCM | LV434205 |
|---|-------------------------------------|------|----------|

+

|   |          |                        |          |
|---|----------|------------------------|----------|
|  | NSX cord | Wire length L = 0.35 m | LV434200 |
| Wire length L = 1.3 m   |          | LV434201               |          |
| Wire length L = 3 m   |          | LV434202               |          |
| U > 480 V AC wire length L = 0.35 m   |          | LV434204               |          |

**Indication and measurement modules**

PowerLogic PowerTag NSX

|   |            |          |
|---|------------|----------|
|  | Rating (A) | 630      |
|   | 3P         | LV434022 |
|   | 3P+N       | LV434023 |

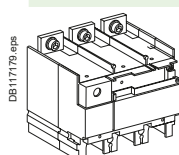
Ammeter module

|   |            |          |          |
|---|------------|----------|----------|
|  | Rating (A) | 400      | 630      |
|   | 3P         | LV432655 | LV432855 |
|   | 4P         | LV432656 | LV432856 |

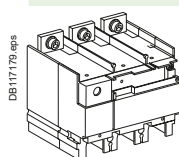
I max. ammeter module

|   |            |          |          |
|---|------------|----------|----------|
|  | Rating (A) | 400      | 630      |
|   | 3P         | LV434852 | LV434853 |


Current transformer module

|   |            |          |          |
|---|------------|----------|----------|
|  | Rating (A) | 400      | 630      |
|   | 3P         | LV432657 | LV432857 |
|   | 4P         | LV432658 | LV432858 |

Current transformer module and voltage output

|   |            |          |          |
|---|------------|----------|----------|
|  | Rating (A) | 400      | 600      |
|   | 3P         | LV432653 | LV432861 |
|   | 4P         | LV432654 | LV432862 |

Voltage presence indicator

|   |       |          |
|---|-------|----------|
|  | 3P/4P | LV432566 |
|---|-------|----------|

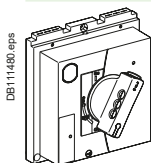


# Accessories and auxiliaries

## ComPact NSX400/630 with/without Vigi add-on

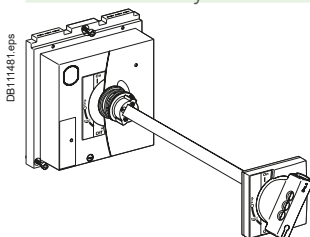
### Rotary handles

#### Direct rotary handle



|                                 |          |
|---------------------------------|----------|
| With black handle               | LV432597 |
| With red handle on yellow front | LV432599 |
| MCC conversion accessory        | LV432606 |
| CNOMO conversion accessory      | LV432602 |

#### Extended rotary handle



|  |          |
|--|----------|
| With black handle                              | LV432598 |
| With red handle on yellow front                | LV432600 |
| With telescopic handle for withdrawable device | LV432603 |



|                          |          |
|--------------------------|----------|
| Open door shaft operator | LV426937 |
|--------------------------|----------|

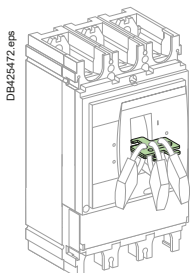
#### Accessories for direct or extended rotary handle

|                      |                       |          |
|----------------------|-----------------------|----------|
| Indication auxiliary | 1 early-break contact | LV432605 |
|                      | 2 early-make contacts | LV429346 |

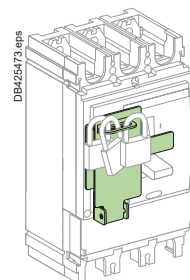
### Locks

#### Toggle locking device for 1 to 3 padlocks

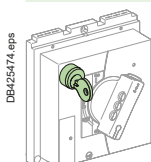
|                     |       |
|---------------------|-------|
| By removable device | 29370 |
|---------------------|-------|



|   |          |
|---|----------|
| By fixed device for 3P, 4P (open or close position) | LV432631 |
| By fixed device for 3P, 4P (for open position only) | LV432630 |

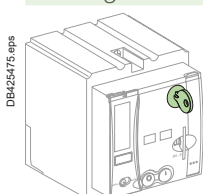


#### Locking of rotary handle



|  |                      |       |
|--|----------------------|-------|
| Keylock adapter (keylock not included) | LV432604             |       |
| Keylock (keylock adapter not included) | Ronis 1351B.500      | 41940 |
|  | Profalux KS5 B24 D4Z | 42888 |

#### Locking of motor mechanism module



|  |                      |       |
|--|----------------------|-------|
| Keylock adapter (keylock not included) | LV432649             |       |
| Keylock (keylock adapter not included) | Ronis 1351B.500      | 41940 |
|  | Profalux KS5 B24 D4Z | 42888 |



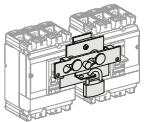
F

# Accessories and auxiliaries

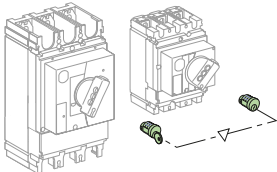
## ComPact NSX400/630 with/without Vigi add-on

### Interlocking

#### Mechanical interlocking for circuit breakers

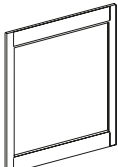
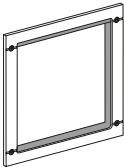
|   |                     |                 |
|---|---------------------|-----------------|
| DB417299.eps<br> | With toggles        | <b>LV432614</b> |
|   | With rotary handles | <b>LV432621</b> |

#### Interlocking with key (2 keylocks / 1 key) for rotary handles

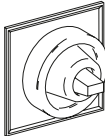
|   |   |                      |                 |
|---|---|----------------------|-----------------|
| DB425076.eps<br> | Keylock kit (keylock not included) <sup>[1]</sup> |                      | <b>LV432604</b> |
|   | 1 set of 2 keylocks                               | Ronis 1351B.500      | <b>41950</b>    |
|   | (1 key only, keylock kit not included)            | Profalux KS5 B24 D4Z | <b>42878</b>    |

### Installation accessories


#### Front-panel escutcheons

|   |   |                 |
|---|---|-----------------|
| DB111489.eps<br>  | IP30 escutcheon for all control types             | <b>LV432557</b> |
|   | IP30 trip unit access escutcheon for toggle       | <b>LV432559</b> |
|   | IP30 escutcheon for Vigi add-on                   | <b>LV429527</b> |
| DB111489.eps<br> | IP40 escutcheon for all control types             | <b>LV432558</b> |
|   | IP40 escutcheon for Vigi add-on                   | <b>LV429316</b> |
|   | IP40 escutcheon for Vigi add-on or ammeter module | <b>LV429318</b> |

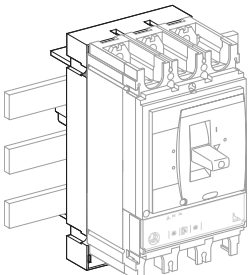
#### IP43 rubber toggle cover

|   |                |                 |
|---|----------------|-----------------|
| DB111490.eps<br> | 1 toggle cover | <b>LV432560</b> |
|---|----------------|-----------------|

#### Lead-sealing accessories

|   |                    |                 |
|---|--------------------|-----------------|
| DB115615.eps<br> | Bag of accessories | <b>LV429375</b> |
|---|--------------------|-----------------|

#### 60 mm plate

|   |                                 |                 |
|---|---------------------------------|-----------------|
| DB111491.eps<br> | Plate 3P ComPact NSX400/630 IEC | <b>LV432623</b> |
|   | Plate 4P ComPact NSX400/630 IEC | <b>LV432624</b> |

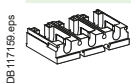
[1] For only 1 device.

# Accessories and auxiliaries

## ComPact NSX400/630 with/without Vigi add-on

### Plug-in/withdrawable version accessories

#### Insulation accessories

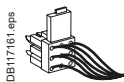


|                                     |    |          |
|-------------------------------------|----|----------|
| Connection adapter for plug-in base | 3P | LV432584 |
|                                     | 4P | LV432585 |

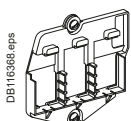
#### Auxiliary connections



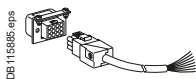
|                                     |  |          |
|-------------------------------------|--|----------|
| 1 9-wire fixed connector (for base) |  | LV429273 |
|-------------------------------------|--|----------|



|   |  |          |
|---|--|----------|
| 1 9-wire moving connector (for circuit breaker) |  | LV432523 |
|---|--|----------|

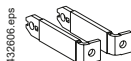


|                                   |  |          |
|-----------------------------------|--|----------|
| 1 support for 3 moving connectors |  | LV432525 |
|-----------------------------------|--|----------|



|  |  |          |
|--|--|----------|
| 9-wire manual auxiliary connector (fixed + moving) |  | LV429272 |
|--|--|----------|

#### Plug-in base accessories



|  |          |          |
|--|----------|----------|
| Long insulated right angle terminal extensions | Set of 2 | LV432526 |
|--|----------|----------|



|                          |  |          |
|--------------------------|--|----------|
| 2 IP40 shutters for base |  | LV432521 |
|--------------------------|--|----------|



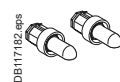
|      |    |          |
|------|----|----------|
| Base | 3P | LV432516 |
|------|----|----------|



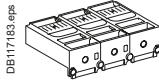
|      |    |          |
|------|----|----------|
| Base | 4P | LV432517 |
|------|----|----------|



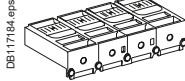
|                   |      |          |
|-------------------|------|----------|
| Power connections | 3/4P | LV432518 |
|-------------------|------|----------|



|   |    |          |
|---|----|----------|
| Short terminal shields                  | 3P | LV432591 |
| Short terminal shield > 500 V (1 piece) | 3P | LV433693 |



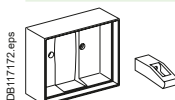
|   |    |          |
|---|----|----------|
| Short terminal shields                  | 4P | LV432592 |
| Short terminal shield > 500 V (1 piece) | 4P | LV433694 |



|                       |      |          |
|-----------------------|------|----------|
| Safety trip interlock | 3/4P | LV432520 |
|-----------------------|------|----------|



#### Chassis accessories



|                   |        |          |
|-------------------|--------|----------|
| Escutcheon collar | Toggle | LV432534 |
|-------------------|--------|----------|



|                   |             |          |
|-------------------|-------------|----------|
| Escutcheon collar | Vigi add-on | LV429285 |
|-------------------|-------------|----------|

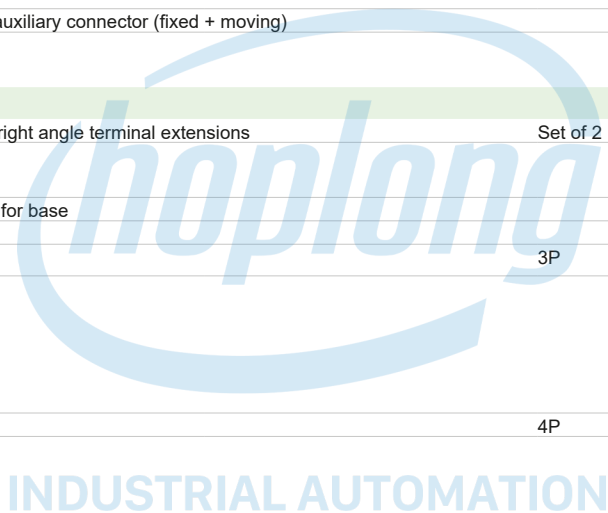


|                                    |  |          |
|------------------------------------|--|----------|
| Locking kit (keylock not included) |  | LV429286 |
|------------------------------------|--|----------|



|  |                      |       |
|--|----------------------|-------|
| Keylock (keylock adapter not included) | Ronis 1351B.500      | 41940 |
|  | Profalux KS5 B24 D4Z | 42888 |

|  |  |          |
|--|--|----------|
| 2 carriage switches (connected/disconnected position indication) |  | LV429287 |
|--|--|----------|

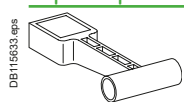
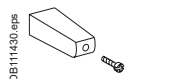
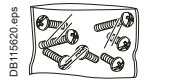
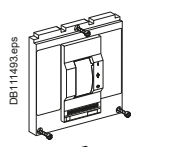
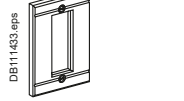
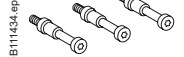

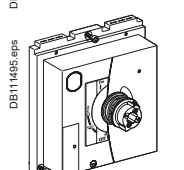
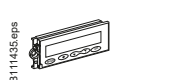
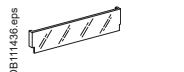


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# Accessories and auxiliaries

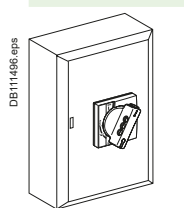
## ComPact NSX400/630 with/without Vigi add-on

### Spare parts

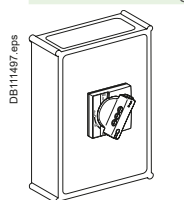
|   |   |  |   |
|---|---|--|---|
|    | Additional toggle extension for NSX400/630    |  | <b>32595</b>  |
|    | 5 spare toggle extensions                     |  | <b>LV432553</b>                                       |
|    | Bag of screws                                 |  | <b>LV432552</b>                                       |
|    | ComPact NS retrofit escutcheon                | Small cut-out                                  | <b>LV432571</b>                                       |
|    | IP40 toggle escutcheon                        | ComPact NS type/small cut-out                  | <b>32556</b>  |
|    | Torque limiting screws (set of 12)            | 3P/4P ComPact NSX400-630                       | <b>LV432513</b>                                       |
|   | 1 set of 10 identification labels             |  | <b>LV429226</b>                                       |
|  | 1 base for extended rotary handle             |  | <b>LV432498</b>                                       |
|  | LCD display for electronic trip unit          | MicroLogic 5<br>MicroLogic 6<br>MicroLogic E-M | <b>LV429483</b><br><b>LV429484</b><br><b>LV429486</b> |
|  | 5 transparent covers for electronic trip unit | MicroLogic 5/6<br>MicroLogic 2                 | <b>LV432459</b><br><b>LV432461</b>                    |

### Individual enclosures

#### IP55 steel enclosure

|   |   |                 |
|---|---|-----------------|
|  | ComPact NSX400 with black extended rotary handle  | <b>LV431219</b> |
|   | ComPact NSX400 with red and yellow extended rotary handle                                   | <b>LV431220</b> |
|   | ComPact NSX630 or ComPact NSX400/630 Vigi add-on with black extended rotary handle          | <b>LV431221</b> |
|   | ComPact NSX630 or ComPact NSX400/630 Vigi add-on with red and yellow extended rotary handle | <b>LV431222</b> |

#### IP55 insulating enclosure

|   |  |                 |
|---|--|-----------------|
|  | ComPact NSX400/630 with black extended rotary handle             | <b>LV432665</b> |
|   | ComPact NSX400/630 Vigi add-on with black extended rotary handle | <b>LV432666</b> |

### Visible break disconnect function

See catalog dealing with "ComPact INV products (visible break)" and the associated accessories.  
The visible break disconnection function is compatible with fixed front-connected/rear-connected ComPact NSX devices.

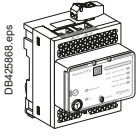
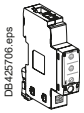
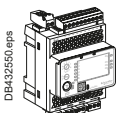




# Communication, monitoring and control

## ComPact NSX400/630 with/without Vigi add-on

### Communication option

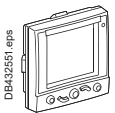
|  |                                   |  |            |
|--|-----------------------------------|--|------------|
|  | IFE                               | Ethernet interface for LV breaker              | LV434001   |
|  |                                   | Ethernet interface for LV breakers and gateway | LV434002   |
|  | IFM Modbus-SL interface module    |  | LV434000   |
|  | I/O application module            |  | LV434063   |
|  | User guide IFE                    |  | DOCA0084EN |
|  | User guide I/O application module |  | DOCA0055EN |

### Monitoring and control (remote operation)

#### Circuit breaker accessories

|  |                               |                     |          |
|--|-------------------------------|---------------------|----------|
|  | Breaker Status Control Module | BSCM <sup>[1]</sup> | LV434205 |
|--|-------------------------------|---------------------|----------|

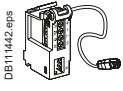

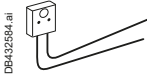

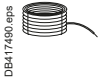



#### ULP display module<sup>[2]</sup>

|   |   |  |          |
|---|---|--|----------|
|  | Switchboard front display module FDM121 |  | TRV00121 |
|   | FDM mounting accessory (diameter 22 mm) |  | TRV00128 |

#### Ethernet display module

|  |   |  |          |
|--|---|--|----------|
|  | Switchboard front display module FDM128 |  | LV434128 |
|--|---|--|----------|

#### ULP wiring accessories

|  |  |  |                            |
|--|--|--|----------------------------|
|  | NSX cord L = 0.35 m  |  | LV434200                   |
|  | NSX cord L = 1.3 m   |  | LV434201                   |
|  | NSX cord L = 3 m   |  | LV434202                   |
|  | NSX cord for U > 480 V AC L = 1.3 m                        |  | LV434204                   |
|  | 10 stacking connectors for communication interface modules |  | TRV00217                   |
|  | 2 Modbus line terminators                                  |  | VW3A8306DRC <sup>[3]</sup> |
|  | Connector Modbus adaptor                                   |  | LV434211                   |
|  | RS 485 roll cable (4 wires, length 60 m)                   |  | 50965                      |
|  | 5 RJ45 connectors female/female                            |  | TRV00870                   |
|  | 10 ULP line terminators                                    |  | TRV00880                   |
|  | 10 RJ45/RJ45 male cord L = 0.3 m                           |  | TRV00803                   |
|  | 10 RJ45/RJ45 male cord L = 0.6 m                           |  | TRV00806                   |
|  | 5 RJ45/RJ45 male cord L = 1 m                              |  | TRV00810                   |
|  | 5 RJ45/RJ45 male cord L = 2 m                              |  | TRV00820                   |
|  | 5 RJ45/RJ45 male cord L = 3 m                              |  | TRV00830                   |
|  | 1 RJ45/RJ45 male cord L = 5 m                              |  | TRV00850                   |

[1] SDE adapter mandatory for trip unit TM, MA or MicroLogic 2 (LV429451).

[2] For measurement display with MicroLogic A and E or status display with BSCM.

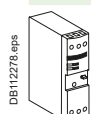
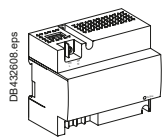
[3] www.schneider-electric.com.

# Monitoring and control, accessories

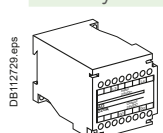
## ComPact NSX400/630 with/without Vigi add-on

### Accessories

#### Power supply modules


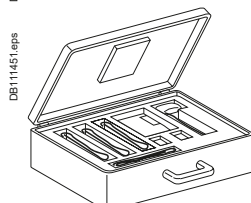
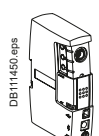
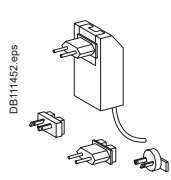


|   |  |                     |     |
|---|--|---------------------|-----|
|  | External power supply module 100-240 V AC 110-230 V DC / 24 V DC-3 A class 2 | <b>ABL8RPS24030</b> | [1] |
|  | External power supply module 24 V DC-1 A OVC IV                              |                     |     |
|   | 24-30 V DC   | <b>LV454440</b>     |     |
|   | 48-60 V DC   | <b>LV454441</b>     |     |
|   | 100-125 V DC   | <b>LV454442</b>     |     |
|   | 110-130 V AC   | <b>LV454443</b>     |     |
|   | 200-240 V AC   | <b>LV454444</b>     |     |

#### Battery module


|   |                        |              |  |
|---|------------------------|--------------|--|
|  | 24 V DC battery module | <b>54446</b> |  |
|---|------------------------|--------------|--|

### Test tool, software, demo

#### Test tool

|   |  |                 |     |
|---|--|-----------------|-----|
|    | Pocket battery for MicroLogic NSX100-630   | <b>LV434206</b> |     |
|   | Maintenance case<br>Comprising:<br>- USB maintenance interface<br>- Power supply<br>- MicroLogic cord<br>- USB cord<br>- RJ45/RJ45 male cord | <b>TRV00910</b> |     |
|  | Spare USB maintenance interface  | <b>TRV00911</b> |     |
|  | Spare power supply 110-240 V AC  | <b>TRV00915</b> |     |
|  | Spare MicroLogic cord for USB maintenance interface  | <b>TRV00917</b> |     |
|  | Bluetooth/Modbus option for USB maintenance interface  | <b>VW3A8114</b> | [1] |

#### Software

|   |   |                 |     |
|---|---|-----------------|-----|
|  | Configuration and setting EcoStruxure Power Commission software | <b>LV4ST100</b> | [2] |
|   | Test software LTU   | <b>LV4ST121</b> | [2] |
|   | Monitoring EcoStruxure Power Commission software                | <b>LV4SM100</b> | [2] |

#### Demo tool

|   |                           |                 |  |
|---|---------------------------|-----------------|--|
|  | Demo case for ComPact NSX | <b>LV434207</b> |  |
|---|---------------------------|-----------------|--|

[1] See Telemecanique catalog.

[2] Downloadable from <http://schneider-electric.com>.

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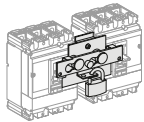
# Source-changeover systems for 2 devices

## ComPact NSX100 to NSX630

### Manual source-changeover

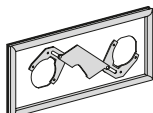
#### Mechanical interlocking

DB417269.eps



|  |              |                 |
|--|--------------|-----------------|
| For toggle controlled circuit breakers | NSX100...250 | <b>LV429354</b> |
|  | NSX400...630 | <b>LV432614</b> |

DB418508.eps

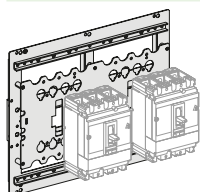


|                                     |              |                 |
|-------------------------------------|--------------|-----------------|
| For rotary handled circuit breakers | NSX100...250 | <b>LV429369</b> |
|                                     | NSX400...630 | <b>LV432621</b> |

#### Interlocking on base plate

For 2 devices side by side

DB417459.eps

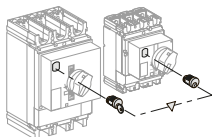


**29349**  
**32609**

#### Keylock interlocking

For rotary handled or remote controlled circuit breakers  
2 locks, 1 key  
Ronis 1351B.500  
Profalux KS5 B24 D4Z

DB417201.eps

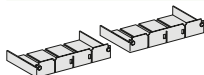


**41950**  
**42878**

### Connection accessories

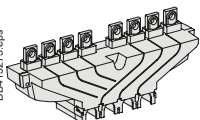
#### Downstream coupling accessories

DB101022.eps



+

DB413272.eps

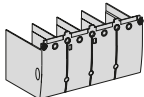


Short terminal shields (1 pair) + "S1" source/"S2" source

|                                  | 3P              | 4P              |
|----------------------------------|-----------------|-----------------|
| NSX100...250/NSX100...250/ 250 A | <b>LV429358</b> | <b>LV429359</b> |
| NSX400...630/NSX400...630/ 630 A | <b>LV432619</b> | <b>LV432620</b> |

Long terminal shields (1 pair)

DB403921.eps



|   |                 |                 |
|---|-----------------|-----------------|
| NSX100...250/NSX100...250                             |                 | <b>LV429518</b> |
| NSX400...630/NSX400...630                             |                 | <b>LV432594</b> |
| Long terminal shield for spreaders, 52.5 mm (1 piece) | <b>LV432596</b> | <b>LV432596</b> |

#### Terminal extensions

DB115622.eps



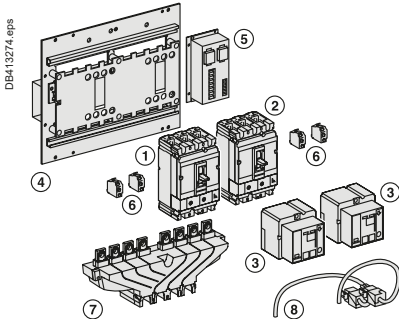
|           |         |    |                 |
|-----------|---------|----|-----------------|
| Spreaders | 52.5 mm | 4P | <b>LV432491</b> |
|-----------|---------|----|-----------------|

# Source-changeover systems for 2 devices

## ComPact NSX100 to NSX630

### Typical composition of source-changeover system

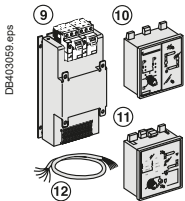
#### Remote source-changeover



- 1 normal device N (1)
- + 1 replacement device R (2)
- + 2 remote controls (3)
- + 1 plate with interlocking (4) with IVE (5) and its wiring (8)
- + 2 plug-in kits (if plug-in version)
- + 1 adaptor kit for NSX100...250 plug-in (if NSX400...630 with NSX100...250)
- + auxiliary switches (6)
- 2 x (1 OF + 1 SDE) for ComPact NSX100...630
- + 1 downstream coupling accessory (7) for ComPact NSX100...630 (option)
- + long RC (if back connection)

IVE and remote controls must have the same voltage.

#### Associated controller

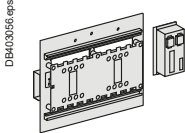


- 1 source changeover without associated controller
- + 1 ACP (9) with BA controller (10)
- Or + 1 ACP (9) with UA controller (11)
- Or + 1 ACP (9) with UA150 controller (11)
- + extension (12) for remote UA/BA connection on front of switchboard

IVE + remote control + ACP + BA or UA must have the same voltage.

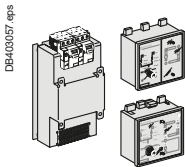
### Automatic source-changeover

#### Mechanical and electrical interlocking



| Source "normal"/source "replacement" (identical voltages) | 24 to 250 V DC   | 48 to 415 V AC 50/60 Hz<br>440 V 60 Hz |
|---|------------------|--|
| <b>NSX100...250/NSX100...250</b>                          |                  |  |
| Plate + IVE   | <b>29351</b>     | <b>29350</b>                           |
| Plate   | <b>29349</b>     | <b>29349</b>                           |
| IVE   | <b>29356</b>     | <b>29352</b>                           |
| Auxiliary switches 2 OF + 2 SDE                           | 4 x <b>29450</b> | 4 x <b>29450</b>                       |
| Spare wiring system (device/IVE)                          | <b>29365</b>     | <b>29365</b>                           |
| Back sockets option add: Only long RC                     | [2]              | [2]                                    |
| Plug in base option add: Plug in kit                      | [2]              | [2]                                    |
| <b>NSX400...630/NSX100...630</b>                          |                  |  |
| Plate + IVE   | <b>32611</b>     | <b>32610</b>                           |
| Plate   | <b>32609</b>     | <b>32609</b>                           |
| IVE   | <b>29356</b>     | <b>29352</b>                           |
| Auxiliary switches 2 OF + 2 SDE                           | 4 x <b>29450</b> | 4 x <b>29450</b>                       |
| Spare wiring system (device/IVE)                          | <b>29365</b>     | <b>29365</b>                           |
| Back sockets option add: Only long RC                     | [2]              | [2]                                    |
| Plug in base option add: Plug in kit                      | [2]              | [2]                                    |
| Adaptator kit for NSX100...250                            | 1 x <b>32618</b> | 1 x <b>32618</b>                       |

#### Controller



|                         | 110/127 V AC 50/60 Hz | 220/240 V AC 50/60 Hz | 380/415 V AC 50/60 Hz<br>440 V 60 Hz |
|-------------------------|-----------------------|-----------------------|--------------------------------------|
| ACP + controller BA [1] |                       | <b>29470</b>          | <b>29471</b>                         |
| Plate ACP               |                       | <b>29363</b>          | <b>29364</b>                         |
| Controller BA           |                       | <b>29376</b>          | <b>29377</b>                         |
| ACP + controller UA [1] | <b>29448</b>          | <b>29472</b>          | <b>29473</b>                         |
| Plate ACP               | <b>29447</b>          | <b>29363</b>          | <b>29364</b>                         |
| Controller UA           | <b>29446</b>          | <b>29378</b>          | <b>29380</b>                         |

#### Wiring cable between BA/UA and ACP/IVE

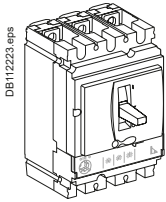
|                          |              |              |
|--------------------------|--------------|--------------|
| Wiring cable (1.5 meter) | <b>29368</b> | <b>29368</b> |
|--------------------------|--------------|--------------|

[1] The supply voltages BA/UA controller, ACP plate, IVE and the remote control must be identical whatever the source-changeover type.  
 [2] See products pages.

# NSX100/400 for utilities, "tarif jaune" public distribution

## Complete fixed/FC device without accessories

### ComPact NSX with MicroLogic AB

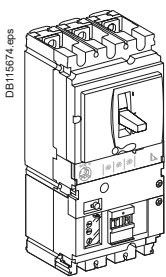


#### ComPact NSX

|                       | Rating | 4P       |
|-----------------------|--------|----------|
| NSX100F MicroLogic AB | 100    | LV434562 |
| NSX160F MicroLogic AB | 160    | LV434563 |
| NSX250F MicroLogic AB | 240    | LV434564 |
| NSX400F MicroLogic AB | 400    | LV434565 |

| Comprising:                 | Basic frame | MicroLogic AB |
|-----------------------------|-------------|---------------|
| NSX100F + MicroLogic AB 100 | LV429008    | LV434550      |
| NSX160F + MicroLogic AB 160 | LV430408    | LV434551      |
| NSX250F + MicroLogic AB 240 | LV431408    | LV434554      |
| NSX400F + MicroLogic AB 400 | LV432415    | LV434557      |

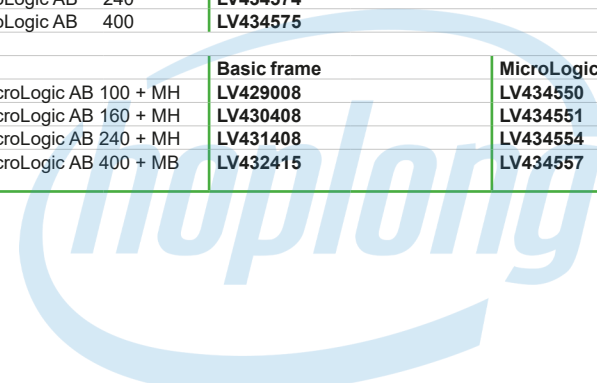
### ComPact NSX Vigi add-on with MicroLogic AB



#### ComPact NSX Vigi add-on

|                       | Rating | 4P       |
|-----------------------|--------|----------|
| NSX100F MicroLogic AB | 100    | LV434572 |
| NSX160F MicroLogic AB | 160    | LV434573 |
| NSX250F MicroLogic AB | 240    | LV434574 |
| NSX400F MicroLogic AB | 400    | LV434575 |

| Comprising:                      | Basic frame | MicroLogic AB | Vigi add-on MH/MB |
|----------------------------------|-------------|---------------|-------------------|
| NSX100F + MicroLogic AB 100 + MH | LV429008    | LV434550      | LV429211          |
| NSX160F + MicroLogic AB 160 + MH | LV430408    | LV434551      | LV429211          |
| NSX250F + MicroLogic AB 240 + MH | LV431408    | LV434554      | LV431536          |
| NSX400F + MicroLogic AB 400 + MB | LV432415    | LV434557      | LV432456          |



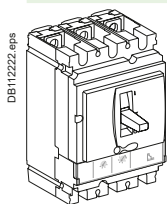
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# NSX100/400 for utilities, "tarif jaune" public distribution

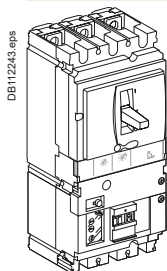
**Complet fixed/FC device without accessories**

**ComPact NSX with normal trip unit**



| ComPact NSX100F |          |          |
|-----------------|----------|----------|
| Rating          | 4P 3d    | 4P 4d    |
| TM40D           | LV429644 | LV429654 |
| TM63D           | LV429642 | LV429652 |
| TM80D           | LV429641 | LV429651 |
| TM100D          | LV429640 | LV429650 |
| ComPact NSX160F |          |          |
| Rating          | 4P 3d    | 4P 4d    |
| TM80D           | LV430643 | LV430653 |
| TM100D          | LV430642 | LV430652 |
| TM125D          | LV430641 | LV430651 |
| TM160D          | LV430640 | LV430650 |
| ComPact NSX250F |          |          |
| Rating          | 4P 3d    | 4P 4d    |
| TM125D          | LV431643 | LV431653 |
| TM160D          | LV431642 | LV431652 |
| TM200D          | LV431641 | LV431651 |
| TM250D          | LV431640 | LV431650 |
| ComPact NSX400F |          |          |
| Rating          | 4P 3d    | 4P 4d    |
| MicroLogic 2.3  | LV432677 | LV432677 |

**ComPact NSX with normal trip unit**

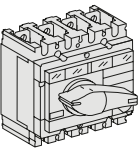
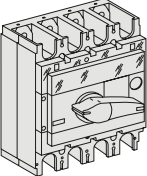


| ComPact NSX100F Vigi add-on |          |          |
|-----------------------------|----------|----------|
| Rating                      | 4P 3d    | 4P 4d    |
| TM40D                       | LV429944 | LV429954 |
| TM63D                       | LV429942 | LV429952 |
| TM80D                       | LV429941 | LV429951 |
| TM100D                      | LV429940 | LV429950 |
| ComPact NSX160F Vigi add-on |          |          |
| Rating                      | 4P 3d    | 4P 4d    |
| TM80D                       | LV430943 | LV430953 |
| TM100D                      | LV430942 | LV430952 |
| TM125D                      | LV430941 | LV430951 |
| TM160D                      | LV430940 | LV430950 |
| ComPact NSX250F Vigi add-on |          |          |
| Rating                      | 4P 3d    | 4P 4d    |
| TM125D                      | LV431943 | LV431953 |
| TM160D                      | LV431942 | LV431952 |
| TM200D                      | LV431941 | LV431951 |
| TM250D                      | LV431940 | LV431950 |
| ComPact NSX400F Vigi add-on |          |          |
| Rating                      | 4P 3d    | 4P 4d    |
| MicroLogic 2.3              | LV432732 | LV432732 |

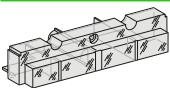


# NSX100/400 for utilities, "tarif jaune" public distribution Visible break

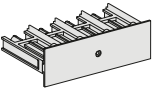
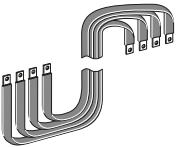
## ComPact INV100 to INV630 standard version

|   |                |                    |              |
|---|----------------|--------------------|--------------|
| DB40051.eps<br>  | ComPact INV100 | For ComPact NSX100 | <b>4P</b>    |
|   | ComPact INV160 | For ComPact NSX160 | <b>31161</b> |
|   | ComPact INV200 | For ComPact NSX250 | <b>31163</b> |
|   | ComPact INV250 | For ComPact NSX250 | <b>31167</b> |
| DB403052.eps<br> | ComPact INV320 | For ComPact NSX400 | <b>4P</b>    |
|   | ComPact INV400 | For ComPact NSX400 | <b>31169</b> |
|   |                |                    | <b>31171</b> |

## Spare viewport

|   |                   |              |
|---|-------------------|--------------|
| DB403061.eps<br> | For INV100 to 250 | <b>31089</b> |
|   | For INV320/400    | <b>31090</b> |

## Combination with ComPact NSX devices

|   |  |              |
|---|--|--------------|
| DB403062.eps<br>   | INV100 to 250 - NSX250 combination assembly  | <b>31066</b> |
|   | INV320/400 - NSX250 combination assembly   | <b>31067</b> |
|   | Front alignment base for INV320/400 - NSX250 combination assembly                            | <b>31064</b> |
|   | INV320/400 - NSX400 combination assembly   | <b>31068</b> |
| DB403063.eps<br> | Flexible connection assembly for vertical INV100 to 250 with NSX horizontal N <sup>[1]</sup> | <b>04443</b> |
|   | Flexible connection assembly for vertical INV100 to 250 with NSX horizontal V <sup>[1]</sup> | <b>04444</b> |
|   | Flexible connection assembly for vertical INV320 to 630 with NSX horizontal N <sup>[1]</sup> | <b>04445</b> |
|   | Flexible connection assembly for vertical INV320 to 630 with NSX horizontal V <sup>[1]</sup> | <b>04446</b> |
|   | Flexible connection assembly for vertical INV100 to 250 with vertical NSX250 beside          | <b>31071</b> |
|   | Flexible connection assembly for vertical INV320 to 630 with vertical NSX400/630 beside      | <b>31072</b> |
|   | Flexible connection assembly for vertical INV320 to 630 with vertical NSX250 beside          | <b>31093</b> |

[1] Product sold by MGA and valid for new Prisma only.

INDUSTRIAL AUTOMATION



# NSX100/400 for utilities, "tarif jaune" public distribution

## Installation and connection with or without the visible break function

### Conventional installation

#### Combination assembly

#### Upstream and downstream connection

|   |   |   |  |          |
|---|---|---|--|----------|
| INV100 to 250 -<br>NSX100/160/250                       | 4 snap-on bare cable connectors for cables: | 1.5 to 95 mm <sup>2</sup> ; ≤ 160 A                     | 2x   | LV429243 |
|   |   | 10 to 185 mm <sup>2</sup> ; ≤ 250 A                     | 2x   | LV429260 |
|   | 10 clips for bare cable connector           |   | 1x   | LV429241 |
|   | 4 right-angle terminal extensions           |   | 2x   | LV429262 |
|   | 2 long terminal shields                     |   | 1x   | LV429518 |
| INV320/400 - NSX100/160/250                             | 4 bare cable connectors:                    | For 1 cable, 35 mm <sup>2</sup> to 300 mm <sup>2</sup>  | 1x   | LV432480 |
|   |   | For 2 cables, 35 mm <sup>2</sup> to 240 mm <sup>2</sup> | 1x   | LV432482 |
|   | 4 right-angle terminal extensions           |   | 1x   | LV432485 |
|   | 1 long terminal shield                      |   | 1x   | LV432594 |
|   | 4 snap-on bare cable connectors for cables: | 1.5 to 95 mm <sup>2</sup> ; ≤ 160 A                     | 1x   | LV429243 |
|   |   | 10 to 185 mm <sup>2</sup> ; ≤ 250 A                     | 1x   | LV429260 |
|   | 10 clips for bare cable connector           |   | 1x   | LV429241 |
|   | 4 right-angle terminal extensions           |   | 1x   | LV429262 |
|   | 1 long terminal shield                      |   | 1x   | LV429518 |
|   | INV320/400 - NSX400                         | 4 bare cable connectors:                                | For 1 cable, 35 mm <sup>2</sup> to 300 mm <sup>2</sup> | 2x       |
| For 2 cables, 35 mm <sup>2</sup> to 240 mm <sup>2</sup> |   |   | 2x   | LV432482 |
| 4 right-angle terminal extensions                       |   |   | 2x   | LV432485 |
| 1 long terminal shield                                  |   |   | 1x   | LV432594 |

### Installation in cabinet or enclosure

#### Combination assembly (mounting in duct)

#### Flexible connection assembly (mounting in cubicle)

#### Upstream and downstream connection

|                                   |   |   |    |          |
|-----------------------------------|---|---|----|----------|
| INV100 to 250 -<br>NSX100/160/250 | 4 snap-on bare cable connectors for cables: | 1.5 to 95 mm <sup>2</sup> ; ≤ 160 A                     | 2x | LV429243 |
|                                   |   | 10 to 185 mm <sup>2</sup> ; ≤ 250 A                     | 2x | LV429260 |
|                                   | 1 short terminal shield                     |   | 1x | LV429516 |
| INV320/400 - NSX100/160/250       | 4 bare cable connectors:                    | For 1 cable, 35 mm <sup>2</sup> to 300 mm <sup>2</sup>  | 1x | LV432480 |
|                                   |   | For 2 cables, 35 mm <sup>2</sup> to 240 mm <sup>2</sup> | 1x | LV432482 |
|                                   | 1 short terminal shield                     |   | 1x | LV432592 |
|                                   | 4 snap-on bare cable connectors for cables: | 1.5 to 95 mm <sup>2</sup> ; ≤ 160 A                     | 1x | LV429243 |
|                                   |   | 10 to 185 mm <sup>2</sup> ; ≤ 250 A                     | 1x | LV429260 |
| INV320/400 - NSX400               | 4 bare cable connectors:                    | For 1 cable, 35 mm <sup>2</sup> to 300 mm <sup>2</sup>  | 2x | LV432480 |
|                                   |   | For 2 cables, 35 mm <sup>2</sup> to 240 mm <sup>2</sup> | 2x | LV432482 |
|                                   | 1 short terminal shield                     |   | 1x | LV432592 |

# ComPact NSX100 to NSX630 order form

Name of customer: .....  
 Address for delivery: .....  
 Requested delivery date: .....  
 Customer order no.: .....

To indicate your choices, check the applicable square boxes   
 or note the quantity

and enter the appropriate information in the rectangles

### Circuit breaker or switch-disconnector

ComPact type  **NSX100/160/250 - 160A not available with R, HB1 or HB2**  
 **NSX400/630**

Rating **A**

Circuit breaker **B, F, N, H, S, L, R, HB1, HB2**

Switch-disconnector **NA**

Number of poles **1, 2, 3 or 4**

Number of poles protected **2d, 3d or 4d**

Fixed device  Front connections

Plug-in/withdr.  Plug-in  Withdrawable

Earth-leakage protection **ME, MH, MB (not available with R, HB1 or HB2)**

Vigi add-on Voltage < 550 V  V   
 4P option on 3P NSX

### Trip unit

**Thermal-mag.**  **TMD** rating (16 ... 250 A) (40 ... 250 A) with R, HB1 and (63...250 A) with HB2  
 **TMG** rating (16 ... 250 A) - not available with R, HB1 or HB2  
 **MA** rating (2.5 ... 220 A) (12.5 ... 220 A) with R, HB1 and HB2

### Electronic

\* Not available with R, HB1 or HB2

|   |   |
|---|---|
| <input type="checkbox"/> MicroLogic 2.2         | <input type="checkbox"/> MicroLogic 2.3           |
| <input type="checkbox"/> MicroLogic 2.2 G*      | <input type="checkbox"/> MicroLogic 2.3 AB*       |
| <input type="checkbox"/> MicroLogic 2.2 AB*     | <input type="checkbox"/> MicroLogic Vigi 4.3      |
| <input type="checkbox"/> MicroLogic Vigi 4.2    | <input type="checkbox"/> MicroLogic Vigi 4.3 AL   |
| <input type="checkbox"/> MicroLogic Vigi 4.2 AL | <input type="checkbox"/> MicroLogic Vigi 4.3 AB   |
| <input type="checkbox"/> MicroLogic Vigi 4.2 AB | <input type="checkbox"/> MicroLogic 5.3 A*        |
| <input type="checkbox"/> MicroLogic 5.2 A*      | <input type="checkbox"/> MicroLogic 5.3 E         |
| <input type="checkbox"/> MicroLogic 5.2 E       | <input type="checkbox"/> MicroLogic 5.3 A-Z*      |
| <input type="checkbox"/> MicroLogic 5.2 A-Z*    | <input type="checkbox"/> MicroLogic 6.3 A*        |
| <input type="checkbox"/> MicroLogic 6.2 A*      | <input type="checkbox"/> MicroLogic 6.3 E         |
| <input type="checkbox"/> MicroLogic 6.2 E       | <input type="checkbox"/> MicroLogic Vigi 7.3 E    |
| <input type="checkbox"/> MicroLogic Vigi 7.2 E  | <input type="checkbox"/> MicroLogic Vigi 7.3 E AL |
| <input type="checkbox"/> MicroLogic Vigi 7.2 AL | <input type="checkbox"/> MicroLogic 1.3 M         |
| <input type="checkbox"/> MicroLogic 2.2 M       | <input type="checkbox"/> MicroLogic 2.3 M         |
| <input type="checkbox"/> MicroLogic 6.2 E-M     | <input type="checkbox"/> MicroLogic 6.3 E-M       |

**SDTAM Module**

External neutral CT

24 V DC power supply connector

ZSI connector accessory for plug-in and withdrawable

ZSI wiring accessory for NS630b / MTZ

External power supply module 24 V DC

|              |                          |              |                          |
|--------------|--------------------------|--------------|--------------------------|
| 24-30 V DC   | <input type="checkbox"/> | 48-60 V DC   | <input type="checkbox"/> |
| 100-125 V AC | <input type="checkbox"/> | 110-130 V AC | <input type="checkbox"/> |
| 200-240 V AC | <input type="checkbox"/> |              |                          |

### Battery module

**Connection**

Rear-connection kit  Short  Long

Mixed

NSX100/250 connectors

Snap-on 1.5<sup>□</sup> to 95<sup>□</sup> (< 160 A)  
 Snap-on 25<sup>□</sup> to 95<sup>□</sup> (< 250 A)  
 Snap-on 120<sup>□</sup> to 185<sup>□</sup> (< 250 A)  
 Distribution 6 x 1.5<sup>□</sup> to 35<sup>□</sup>  
 Aluminium 1 cable 25 to 95  
 Aluminium 1 cable 120 to 185  
 Aluminium 1 cable 120 to 250  
 Aluminium 2 cables 50<sup>□</sup> to 120<sup>□</sup>

NSX400/630 connectors

1 cable 35<sup>□</sup> to 300<sup>□</sup>  
 2 cables 35<sup>□</sup> to 240<sup>□</sup>

Right-angle terminal extensions

Straight extensions  NSX100/250

Edgewise extensions  45° terminal extension  Double-L terminal extensions

Spreader  NSX100/250 (one piece)  (45 mm)  
 NSX400/630 (52.5 mm)  (70 mm)

Cu cable lugs  NSX100/250 120<sup>□</sup>  150<sup>□</sup>  185<sup>□</sup>  
 NSX400/630 240<sup>□</sup>  300<sup>□</sup>

Al cable lugs  NSX100/250 150<sup>□</sup>  185<sup>□</sup>  
 NSX400/630 240<sup>□</sup>  300<sup>□</sup>

Voltage measurement  For lugs NSX100/250 ≤ 185<sup>□</sup>  
 Input for connector For lugs NSX400/630

Terminal shields  NSX100/250 Short  Long   
 NSX400/630 Short  Long   
 Short ≥ 500 V  Long for 52.5 mm spreaders

Interphase barriers  Set of 6

2 insulating screens:  NSX100/250  
 NSX400/630 70 pitch

### Test tool

Pocket battery for MicroLogic  Power supply 110-240 V AC

Maintenance case  Spare MicroLogic cord

USB maintenance interface

### Indication and measurement

PowerLogic PowerTag NSX  3P  4P

Ammeter module  standard  3P  4P   
 I max  3P  4P

Current-transformer module  3P  4P

Current-transformer module + TCU  3P  4P

Insulation-monitoring module - not available with HB1 or HB2  3P  4P

Voltage-presence indicator - not available with HB1 or HB2

Auxiliary contact  OF, SD, SDE or SDV  Standard  Low level

SDE adapter (TM, MA or MicroLogic 2 trip units)

SDX module

### Remote operation

Electrical operation  Motor mechanism  AC  DC  V

Voltage releases  Instantaneous  MX  AC  DC  V   
 MN  AC  DC  V   
 Fixed time delay  MN  AC  DC  V   
 Adjust. time delay  MN  AC  DC  V

### Rotary handles

Direct  Black  Red and yellow front   
 MCC conversion access.  CNOMO conversion access.   
 Black  Red and yellow front

Extended  Telescopic handle for withdrawable device   
 Open door shaft operator

Indication auxiliary  1 early-break switch  2 early-make switches

### Locking

Toggle (1 to 3 padlocks)  Removable  Fixed

Rotary handle  Keylock adapter (keylock not included)  Profalux KS5 B24 D4Z  
 Keylocks Ronis 1351B.500

Motor mechanism  Keylock adapter + keylock Ronis (special)  NSX100/250  
 Keylock adapter (keylock not included)  NSX400/630  
 Keylocks Ronis 1351B.500  Profalux KS5 B24 D4Z

### Interlocking

Mechanical  Toggle operated  Rotary Handle

By key (2 keylocks, 1 key)  Locking kit without locks

For rotary handle  Keylocks Ronis 1351B.500  Profalux KS5 B24 D4Z

### Installation accessories

IP30 escutcheon for all types (toggle/rotary handle/motor mechanism)

IP30 escutcheon (with access to toggle + trip unit)

IP30 escutcheon for Vigi add-on

IP40 escutcheon for all types (toggle/rotary handle/motor mechanism)

IP40 escutcheon for Vigi add-on

IP40 escutcheon for Vigi add-on or ammeter module

Toggle cover

Sealing accessories

DIN rail adapter  NSX100/250

3P 60 mm busbar adapter

### Plug-in / withdrawable configuration accessories

Auxiliary connections  1 automatic connector fixed part with 9 wires (for base)   
 1 automatic connector moving part with 9 wires (for circuit breaker)   
 1 support for 3 automatic connector moving parts  1 support for 2 automatic connector   
 9-wire manual auxiliary connector (fixed + moving)

Plug-in base accessories  Long insulated terminals  Set of 2   
 2 IP4 shutters for base

Chassis accessories  Escutcheon collar  Toggle  Vigi   
 Locking kit (keylock not included)   
 2 carriage switches (conn./disconnected position indication)

Parts or plug-in  Plug-in base FC/RC  2P  3P  4P

Withdrawable kits  Set of two power connections  Standard  Vigi   
 Safety trip for advanced opening   
 For 3P/4P chassis  Moving part  Fixed part

Adapter for plug-in base (for terminal shield or interphase barriers)

### Communication

NSX Cord L = 0.35 m  NSX Cord L = 1.3 m   
 NSX Cord U > 480 V AC L = 0.35 m  NSX Cord L = 3 m

### BSCM

Communicating motor mechanism 220-240 V

Switchboard front display module FDM121

FDM mounting accessory

Ethernet Interface + Gateway

Ethernet Interface

Modbus interface

I/O Application Module  Qty 1  Qty 2

Stacking accessory

ULP line termination

RJ45 connectors female/female  Wire length RJ45 L = 0.3 m  Wire length RJ45 L = 0.6 m   
 Wire length RJ45 L = 1 m  Wire length RJ45 L = 2 m   
 Wire length RJ45 L = 3 m  Wire length RJ45 L = 5 m