Compact

Catalogue 2018
Switch-disconnectors
INS/INV40 to 2500 A

schneider-electric.com

Life Is On | Schneider Electric

Green Premium™

Endorsing eco-friendly products in the industry

Green Premium™
Product

Green Premium is the only label that allows you to effectively develop and promote an environmental policy whilst preserving your business efficiency. This ecolabel guarantees compliance with up-to-date environmental regulations, but it does more than this.

Over 75% of Schneider Electric manufactured products have been awarded the Green Premium ecolabel

Discover what we mean by green …

Check your products!

Schneider Electric's Green Premium ecolabel is committed to offering transparency, by disclosing extensive and reliable information related to the environmental impact of its products:

RoHS

Schneider Electric products are subject to RoHS requirements at a worldwide level, even for the many products that are not required to comply with the terms of the regulation. Compliance certificates are available for products that fulfil the criteria of this European initiative, which aims to eliminate hazardous substances.

REACh

Schneider Electric applies the strict REACh regulation on its products at a worldwide level, and discloses extensive information concerning the presence of SVHC (Substances of Very High Concern) in all of its products.

PEP: Product Environmental Profile

Schneider Electric publishes complete set of environmental data, including carbon footprint and energy consumption data for each of the lifecycle phases on all of its products, in compliance with the ISO 14025 PEP ecopassport program. PEP is especially useful for monitoring, controlling, saving energy, and/or reducing carbon emissions.

EoLI: End of Life Instructions

Available at the click of a button, these instructions provide:

- Recyclability rates for Schneider Electric products.
- Guidance to mitigate personnel hazards during the dismantling of products and before recycling operations.
- Parts identification for recycling or for selective treatment, to mitigate environmental hazards/ incompatibility with standard recycling processes.

Compact INS/INV

Optimize your solution with field-proven & high-performance switch-disconnectors

Standards

Compact INS/INV Switch Disconnectors comply with

- International Standards:
  - IEC/EN 60947-1: General rules
  - IEC/EN 60947-3: Switch-disconnectors
- Marine certifications:
  - American Bureau of Shipping
  - Bureau Veritas
  - Det Norske Veritas - Germanischer Lloyd
  - Lloyd's Register of Shipping
  - Nippon Kaiji Kyokai
  - China Classification Societies
  - Registro Italiano Navale
  - Korean Register of shipping
  - Russian Maritime Registers of Shipping
- UL489 and CSA C22.2 N°5-02 & N°5-13 standards. INSE and INSJ versions only.

High performances

- No derating for all performances in accordance with IEC60947-3 criteria:
  - Ith = Ithe = Ie up to 60°

Functions and characteristics

www.schneider-electric.com

Switch-disconnector selection

Compact INS40 to 160

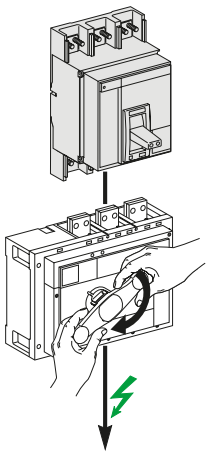
A

Compact INS40 to 80 switch-disconnector.

Compact INS switch-disconnectors			
Number of poles			
Electrical characteristics as defined by IEC 60947-1 / 60947-3 and EN 60947-1 / 60947-3			
Conventional thermal current (A)	**Ith**	at 60 °C	
Conventional thermal current in enclosure	**Ithe**	at 60 °C	
Rated insulation level (V)	**Ui**	AC 50/60 Hz	
Impulse-withstand voltage (kV)	**Uimp**		
Rated operational voltage (V)	**Ue**	AC 50/60 Hz	
		DC	
Rated operational voltage AC20 and DC20 (V)		AC 50/60 Hz	
Rated operational current (A)	**Ie**	**Electrical AC**	**50/60 Hz**

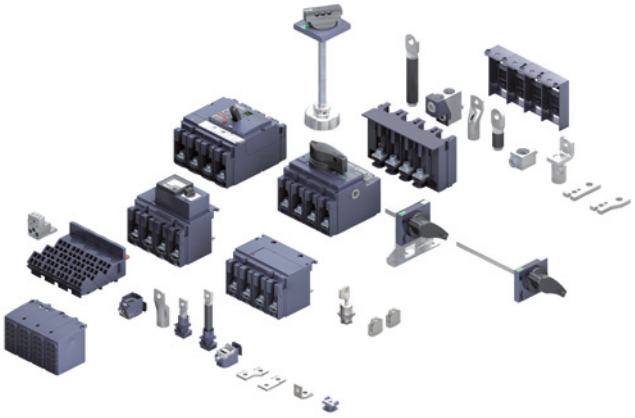
Total coordination with Masterpact MTZ, NT, NW, Compact NS, Compact NSX and Compact NSXm

- The switch must be chosen according to:
  - the characteristics of the network on which it is installed,
  - the location and the application,
  - coordination with the upstream protection devices (in particular overload and short-circuit).



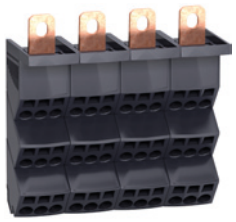
Design easy-to-install solutions

Large range of accessories

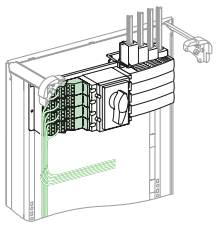


- Positive contact indication or Visible break
- Rotary, front and lateral, direct and extended handles
- locking and interlocking functions
- Installation accessories on symetrical rails and backplate
- Connection accessories to cables or bars
- Enclosures
- Complete source-changeover assembly

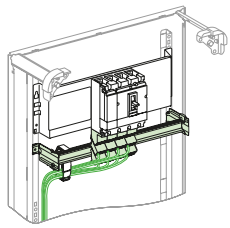
Easy to connect to Linergy devices



Quick distribution blocks for direct installation on the mounting plates

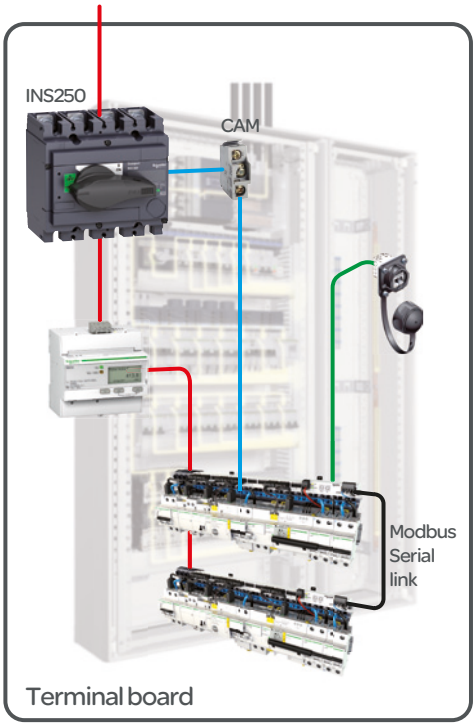


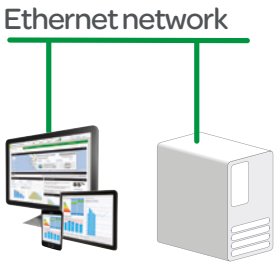
Horizontally



Vertically

Compatible with Smart Panels





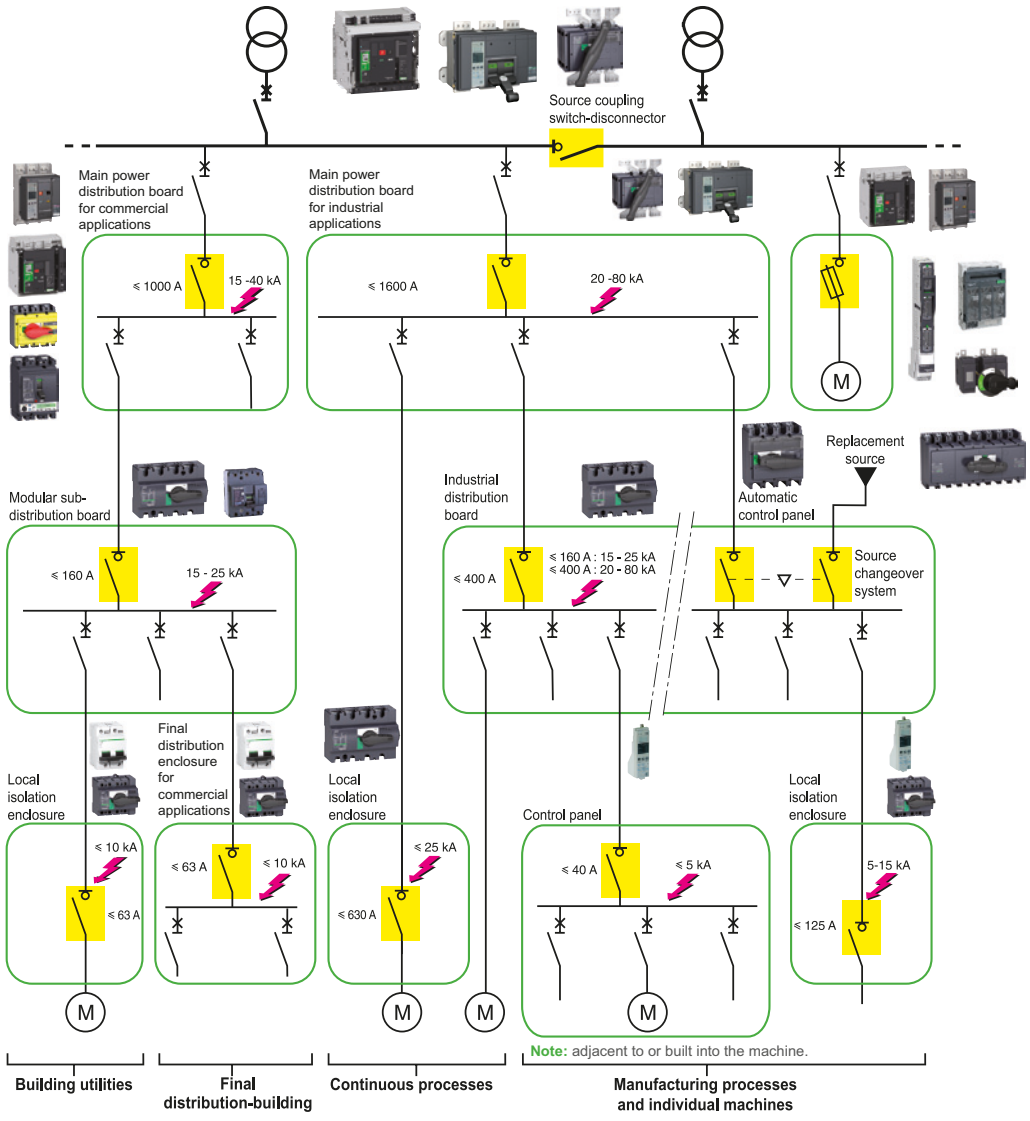
Ethernet
Modbus
Supply
Communication

Indications & measurements auxiliaries and connection to Smart Panels:

- Compact is an internal part of EcoStruxure™ Power - Schneider's open, interoperable, Iot-enabled system architecture.

Grow your business with better solutions

Choose the installation that best suits your needs



Less stock space needed

- Common accessories for Compact INS/INV and Compact NSX
- Less product references

Energy availability thanks to the power-system protection

- Isolation of components under fault

Overview

The complete range	40 A	63 A	80 A	100 A	125 A	160 A	200 A	250 A	
Modular profile	INS40	INS63	INS80PV	INS100	INS125	INS160			
				INS250-100	INS250-160		INS250-200	INS250	
	INSE 40-80								

Compact INS

Switch-disconnectors with positive contact indication




Emergency-off switch-disconnectors with positive contact indication



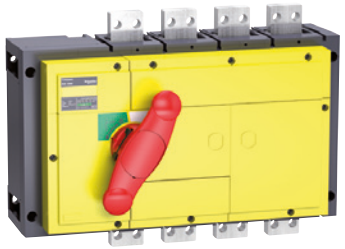
Mounting on backplate				INV100		INV160	INV200	INV250	

Compact INV

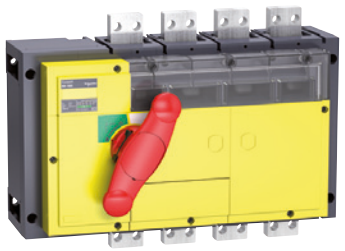
Switch-disconnectors with visible break

Emergency-off switch-disconnectors with visible break

	320 A	400 A	500 A	630 A	630b A	800 A	1000 A	1250 A	1600 A	2000 A	2500 A
	INS320	INS400	INS500	INS630	INS630b	INS800	INS1000	INS1250	INS1600	INS2000	INS2500
		INSJ400									



	INV320	INV400	INV500	INV630	INV630b	INV800	INV1000	INV1250	INV1600	INV2000	INV2500



Who else covers ...

PF569394-28_i.eps

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Local isolation enclosures

- Current ratings: up to 63 A for commercial and 630 A for industrial applications
  - Schneider Electric switch-disconnectors
  - Compact INS40 to 160 and I modular switches
  - Compact INS/INV
  - Schneider Electric switch-disconnectors
- Vario 12 to 175 A

PB111566.eps

Control panels

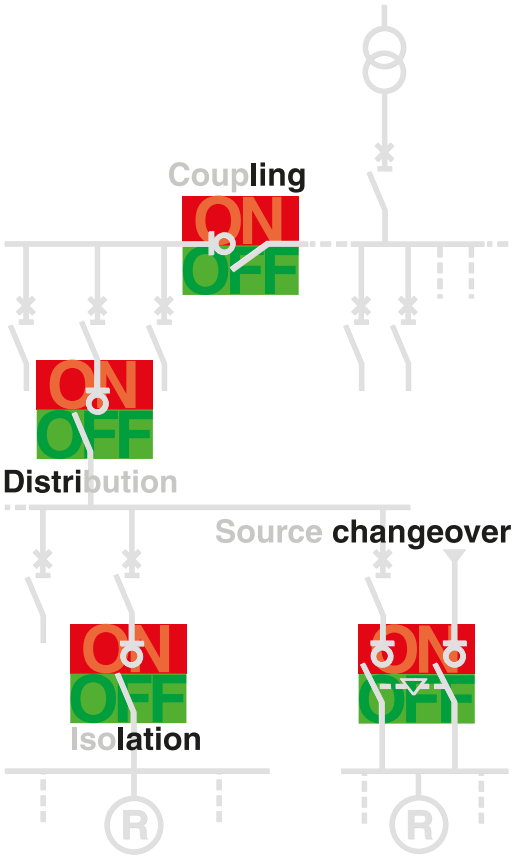
- Current ratings: up to 63/80 A
- Schneider Electric switch-disconnectors:
  - Compact INS
- Schneider Electric switch-disconnectors
  - Vario

DB404205.eps

Sub-distribution boards

- Current ratings: up to 160 A
- Schneider Electric switch-disconnectors:
  - Compact INS/INV
  - Compact NSXm

DB106821.eps



Local isolation
Industrial or commercial

Final distribution

Sub-distribution

Power distribution

...so many applications?

PD095007_L70_SE.eps

Industrial switchboards and automatic control panels

- Current ratings: up to 400 A
- Schneider Electric switch-disconnectors:
  - Compact INS/INV

PB111807_104.eps

Main power distribution boards for commercial and industrial applications

- Current ratings:
  - 400 to 1000 A for commercial applications
  - 400 to 1600 A for industrial applications
- Schneider Electric switch-disconnectors:
  - Compact INS/INV
  - Compact NSX NA
  - Compact NS NA
  - Masterpact MTZ1 HA, MTZ2 NA/HA/HA10, MTZ3 HA

A complete offering ...

Power Distribution Incomers for Critical Applications

Masterpact MTZ2

Masterpact MTZ1

Micrologic 5.0 X

Power Distribution Incomers for Large Buildings

DB404184.eps

Compact NS1600NA

PB111518_42.eps

Compact INS2000

Compact NS2000

...for all your needs

Sub Distribution Incomers for Mid Size Buildings

PB104826.eps

Compact
NSX400NA

PB111489_43.eps

Transferpact FMX (complete
source-changeover assembly)

PB111484_L20.eps

Compact INV400

Compact INS400

Fupact ISFL

Fupact ISFT

Fupact INF

Final Distribution Outgoers and Local isolation and control devices for Small Buildings

PB104825.eps

Compact NSX250NA

PB114894_L441.eps

NSXmNA

9262_SE_20.eps

Vario

PB107917-17.eps

Acti 9

PB111439_22.eps

Compact INV250

PB111402_15.eps

Compact INS80


20Q1
GENERAL
20QF1
DEPART 1
Life Is On
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Select and order your Compact INS/INV

1 I design

Ecodial software

Optimize the choice of equipment-sizing installations with several and different types of power supplies

2 I configure

Ecoreal software (supports switchboards up to 630 A)

Configure your switchboard with the devices that match your criteria

Generate a quote with a bill of materials, price and 3D views of the configured switchboard

Eplan software

Compact INS/INV are available in Unity Software with Eplan.

3 I build

Easy installation

Simple and flexible installation with field-installable accessories and auxiliaries

4 I operate and maintain

More security

Isolation ensured when locked by up to three padlocks or lead-sealed in the OFF position

More continutity of service

Total coordination ensured with Compact, Acti9 and Masterpact products.

Ethernet-ready Smart Panels

Smart Panels digitized by Enerlin'X

Ethernet-ready Smart Panels enable electrical distribution control and expertise. 'Protect' - 'Measure' - 'Connect' are the 3 pillars of their technology.

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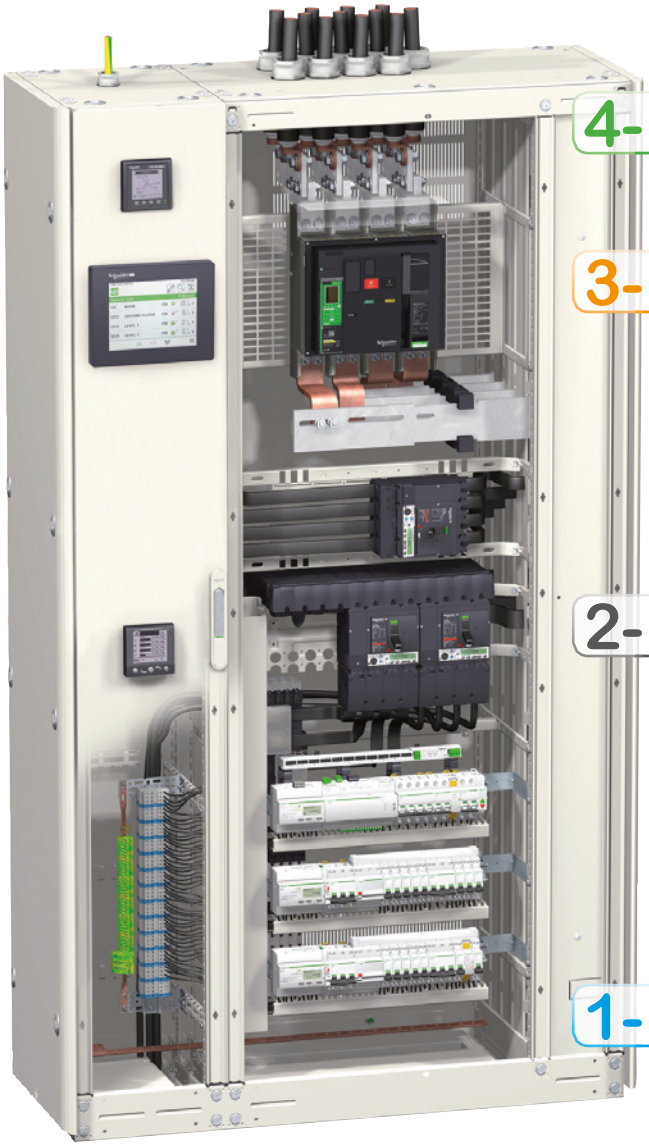


4- Act

3- Connect

Give a voice to the panel

Secured Ethernet network data transmission is now part of the intrinsic design of protection and metering devices.

2- Measure

Keeping a close eye on energy flows

The switchboard plays a key role in capturing building-related data, by gathering the critical protection and metering components.

1- Protect

Electrical protection is at the core of Smart Panel

Reliable and high-performance technology is present in every breaker and every residual current device.

Future savings, peace-of-mind

Access to Smart Panel status, values, is essential for taking advantages of monitoring and management services, locally or remotely.

Act in small/medium buildings

with FDM 128, Com'X 510, Power View, EcoStruxure™ Facility Expert

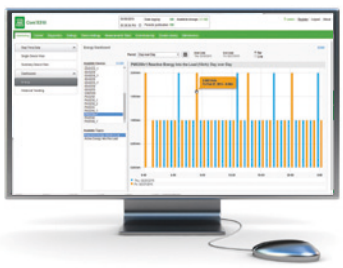
PB111801-60.eps

Electrical device monitoring and control with FDM 128, locally

Optimizing energy-efficiency

- Visualize, record energy consumption and WAGES.
- Comply with regulation.

DD385918.ai



Com'X 510 web pages direct display, or Cloud based pages from other devices with Power View.

Improving continuity of service

- Get instant notifications.
- Manage with assets-maintenance platform.
- Get and analyze data for quick crisis-recovery.

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DB423056.ai

Distance management with EcoStruxure™ Facility Expert on Smartphone, tablet, PC

Increasing maintenance efficiency

- Operate preventive maintenance tools.
- Follow maintenance & planning.
- Provide business owner instant access to maintenance reports.

Day-to-day energy management

For simply dealing with building user's needs and energy constraints.
EcoStruxure™ Building Management provides electrical management, monitoring and energy accounting.

Act in large non-critical buildings

with EcoStruxure™ Energy Expert

DB425660.ai

Managing equipment & key assets

- Check operating status, faults on custom on-line diagrams.

DB425661.ai

Monitoring electrical network

- Observe voltage disturbances, harmonics on graphics.
- Read power factor.

DB425334.ai

Accounting energy

- Record power meter data on dashboards.
- Allocate energy consumption with costs.
- Follow conservation goals.

Power availability & quality, energy performance

Energy decisions are often crucial in large critical buildings, they must be informed.
EcoStruxure™ Power Monitoring Expert (software for PC) collects Smart Panels values to provide expert analysis.

Act in large critical buildings

with EcoStruxure™ Power Monitoring Expert [1]

DB425667.ai

Analysing Power Events

- Speed up downtime crisis recovery.
- Determine incident root cause, events sequence.
- Troubleshoot power quality issues.

DB425658.ai

Monitoring Power quality

- Be alerted of equipment affected by power quality issue.
- Compare power quality against industry standards.
- Collect facts for future discussion with Utility.

DB425659.ai

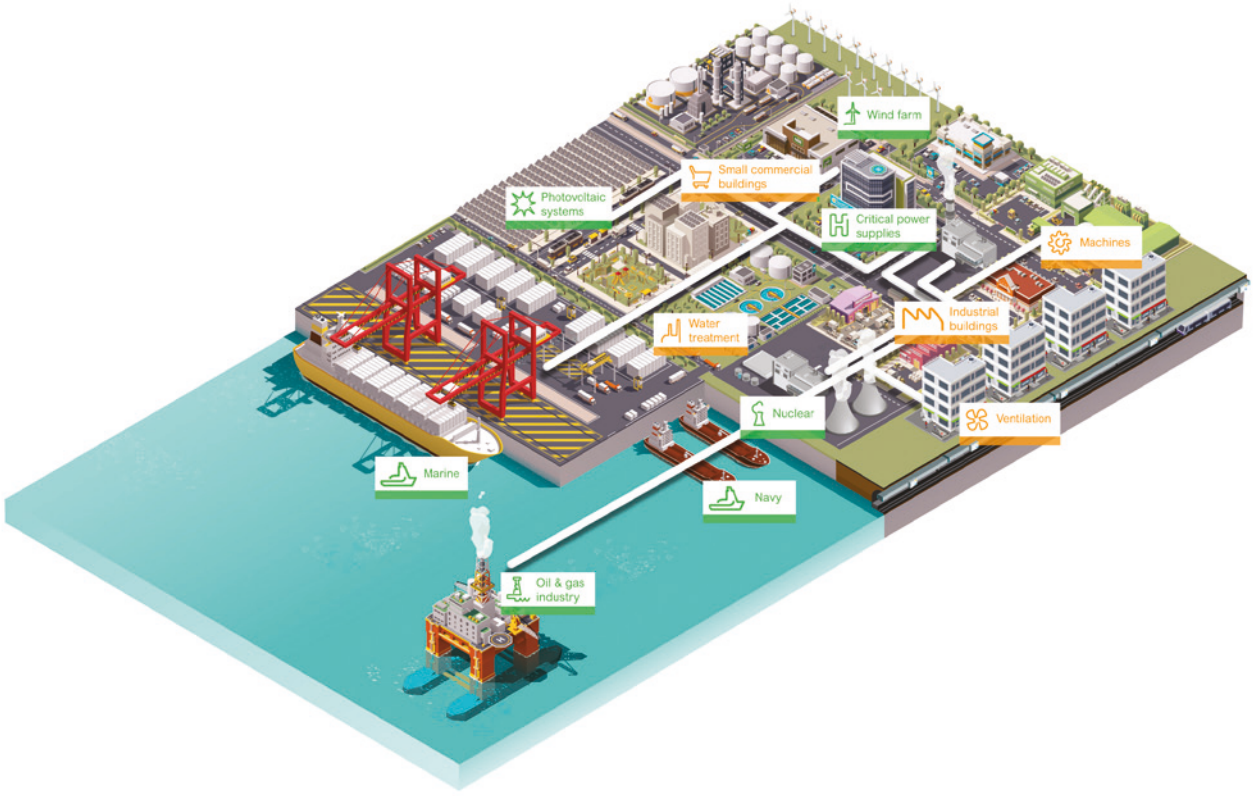
Analysing Energy Performance

- Evaluate building energy saving performance.
- Identify underperforming loads.
- Analyze Energy Conservation Measures (ECMs) according to ISO 50001 program.

[1] EcoStruxure™ Power Monitoring Expert, **http://pmedemo.biz/web/**
ID: demo & Password: demo

Compact INS/INV, NS, NSX and NSXm
Overview of applications

The Compact range circuit breakers, swith-disconnectors and source-changeovers are the best choice for all standards and specific applications.



> Compact NS

LVPED211021EN

> Compact NSXm & NSX

LVPED217032EN

> Transferpact (Source-changeover systems)

LVPED216028EN

> Compact NSX, Compact INS/INV, Masterpact NW DC - DC PV

LVPED208006EN

> Fupact

LVPED216031EN

> Complementary technical information

LVPED308005EN

Compact INS/INV

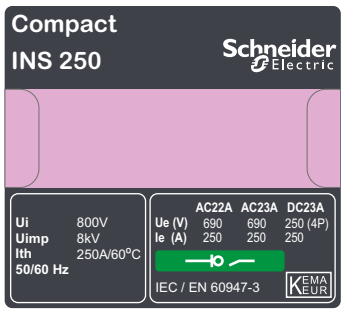
General contents

Functions and characteristics

A

General characteristics

The Compact INS and INV switches are non-automatic switches with rotary handles.
Note: non-automatic switches do not provide overcurrent or short circuit protection and therefore must be protected by a suitable circuit breaker or fuse.



Ith: conventional thermal current.
Ui: rated insulation voltage.
Uimp: rated impulse-withstand voltage.
Ue: rated operational voltage.
Ie: rated operational current.
suitable for isolation.

Conformity with standards

■ Compact INS/INV switch-disconnectors and auxiliaries comply with the following standards and international recommendations:
□ IEC 60947-1: general rules
□ IEC 60947-3: switches, disconnectors, switch-disconnectors, etc.
□ IEC 60947-5.1 and following: control-circuit devices and switching elements; automatic-control components.
In that these standards and recommendations are applied in most countries, Compact INS/INV switch-disconnectors and auxiliaries comply with European (EN 60947-1, EN 60947-3, EN 60947-5-1)
□ CCC (China)
□ EAC (Customs Union)

■ the specifications of the Marine Classification companies (American Bureau of Shipping, Bureau Veritas, Det Norske Veritas –Germanisher Lloyd, Lloyd Register of Shipping, Nippon Kaiji Kyokai, China Classification Societes, Registro Italiano Navale, Korean Register of shipping, Russian Maritime registers of Shipping) .

■ Compact INS/INV switch-disconnectors and auxiliaries are suitable for the control of machine-tools in that they comply with the recommendations issues by the CNOMO organization.

Easy Rotary Handle Operation

Rotary handles are designed to offer easy operation, yet high performance in interruption of currents. The handle is front-mounted with optional handle extensions.

Installation in class II switchboards

All Compact INS/INV switch-disconnectors are class II front-face devices. They may be installed through the door of class II switchboards (as per standard IEC 60664) without downgrading switchboard insulation. Installation requires no special operations even when the switch-disconnector is equipped with rotary handles.

Environmental withstand capacity (tropicalisation)

Compact INS/INV switch-disconnectors meet the environmental requirements of the following standards:
■ IEC 60068-2-1 - dry cold (-55 °C)
■ IEC 60068-2-1 - dry heat (+85 °C)
■ IEC 60068-2-30 - damp heat (95 % relative humidity at +55 °C)
■ IEC 68-2-52 (level 2) - salt mist.

Degree of pollution

The Compact INS/INV range is certified for operation in pollution-degree 3 environments as defined by IEC standard 60947 for industrial environments.

Ambient temperature

Operating-temperature range
■ Compact INS/INV switch-disconnectors may be used between -25 °C and +70 °C.
■ Switch-disconnectors should be put into service under the normal, ambient operating temperatures indicated above. Exceptionally, they may be put into service when the ambient temperature is between -35 °C and -25 °C.

Storage-temperature range
Compact INS/INV switch-disconnectors may be stored in their original packing between -50 °C and +85 °C.

Environmental protection

Compact INS/INV switch-disconnectors take into account important concerns for environmental protection. Most components are recyclable. Insulating parts making up the Compact INS/INV switch-disconnectors are marked as specified in applicable environmental standards.

A

Altitude

Compact INS/INV switch-disconnectors are designed to operate at their rated values at altitudes under 2000 metres.
Above 2000 metres, the changes in the characteristics of the ambient air (electrical resistance, cooling capacity) result in a reduction of the characteristics below.

Altitude (m)	2000	3000	4000	5000
Dielectric resistance voltage (V)	3500	3150	2500	2100
Rated insulation voltage (V)	750	700	600	500
Maximum utilisation voltage (V)	690	550	480	420
Rated current (A) at 60 °C	1 x In	0.96 In	0.93 In	0.9 In

Vibrations

Compact INS/INV switch-disconnectors are guaranteed against electromagnetic or mechanical vibrations.
Tests are carried out in compliance with standard IEC 68-2-6 for the levels required by merchant-marine inspection organisations (Veritas, Lloyd's, etc.):
- 2 to 13.2 Hz: amplitude ±1 mm
- 13.2 to 100 Hz: constant acceleration 0.7 g.

Excessive vibration may cause tripping, breaks in connections or damage to mechanical parts.

Electromagnetic compatibility

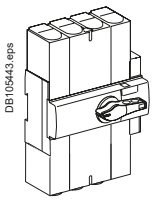
Compact INS/INV switch-disconnectors are protected against:
- overvoltages caused by devices that generate electromagnetic disturbances
- overvoltages caused by atmospheric disturbances or by a distribution-system outage (e.g. failure of a lighting system) and devices emitting radio waves (radios, walkie-talkies, radar, etc.).

Degree of protection

Compact INS/INV switch-disconnectors offer the following protection characteristics depending on the installation conditions:
- IP: degree of protection (standard IEC 60529)

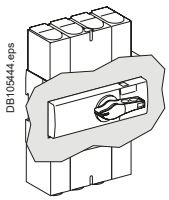
IK: protection against external mechanical impacts (standard EN 50102).

IP40 IK07



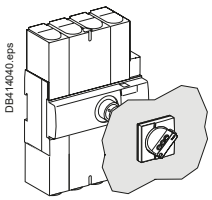
Bare switch-disconnector with terminal shields.

IP40 IK07



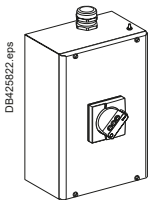
Switch-disconnector in cabinet or enclosure (direct handle).

IP55 IK08



Switch-disconnector in cabinet or enclosure (extended handle).

IP66 IK10



Switch-disconnector in dedicated enclosure with specific handle.

Switch-disconnector in dedicated enclosure IP66 with specific extended handle

General characteristics

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Suitable for isolation with positive contact indication.

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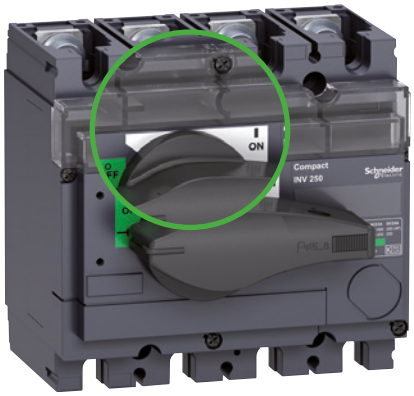

Suitable for isolation with visible break.

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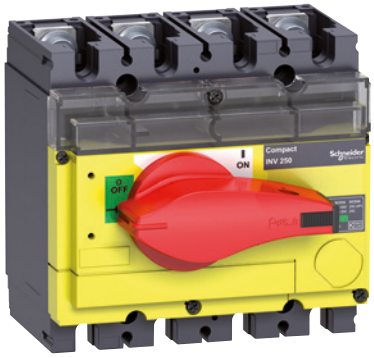
INS250 emergency-off switch-disconnector.

PB111443_47.eps



INV250 emergency-off switch-disconnector.

Suitable for isolation with positive contact indication

DB424307.eps

All Compact INS/INV switch-disconnectors are suitable for isolation as defined in IEC standards 60947-1 and 3. The mechanical design of Compact switches ensures the position of the handle always reflects the position of the main contacts:
- the isolation position corresponds to the O (OFF) position
- the operating handle cannot indicate the OFF position unless the contacts are actually open
- padlocking in the OFF position is not possible unless the contacts are actually open.

Installation of an extended handle does not alter the suitability for isolation. The isolation function is certified by tests guaranteeing:
- the mechanical reliability of the position-indication system
- the absence of leakage currents
- overvoltage withstand capacity between upstream and downstream connections.

The Compact switch-disconnector range can be used as disconnecting mean.

Suitable for isolation with visible break

The physical separation of the main contacts is directly visible through a transparent cover.
The Compact INV range offers both positive contact indication and visible break.

Emergency-off switch-disconnector

This switch-disconnector can be used as an emergency-off device. For this application, it must be easily visible, accessible and identifiable (see standards and rules concerning the safety of machines VDE 0660, VDE 0113, CNOMO, etc.).
For easy identification, the emergency-off switch-disconnector uses special colours stipulated by the standards and different from those of the standard version:
- yellow for the front face of the device
- red for the handle.

The electrical and mechanical performance characteristics of Compact INS/INV emergency-off switch-disconnector are the same as those of the standard version.
The emergency-off switch-disconnectors are available in positive contact indication and visible-break versions.

OEM application

The INSE/INSJ circuit breakers are ideal for industrial and OEM applications. They are UL489 and CSA C22.2 N°5-02 for INSE and C22.2 N°5-13 for INSJ certified.

Photovoltaic application

No matter the size or scale of the project, Schneider Electric, has a photovoltaic solution to fit your needs. Fast ROI, high efficiency – it's all a part of our offer as the world leader in energy management.

The INS PV-1 is a direct current switch-disconnector dedicated to array isolation and control with Voc until 600 V DC.

Product used			
Description	**Current**	**Reference**	**Weight (kg)**
INS PV-1 switch-disconnector	40 A	**28907**	0.657

Compact			INS80 PV
Number of poles			4 serial poles
Electrical characteristics			
Conventional thermal current (A)	Ith		
Conventional thermal current in enclosure (A)	Ithe		
Rated insulation level (DC V)	Ui		
Impulse-withstand voltage (kV)	Uimp		
Rated operational voltage (DC V)	Ue		
Rated operational voltage DC21B (V)			
Rated operational current (A)	Ie	Electrical DC	
	DC21B	600	
	DC21B	500	
	DC21B	400	
	DC21B	300	
Rated duties		Uninterrupted duty	-
		Intermittent duty	Class 120 - 60 %
Short-circuit making capacity (kA peak)	Icm		
Short-time withstand current (A rms)	Icw		
Suitability for isolation			Yes
Durability (O-C cycles)		Mechanical	20000
		Electrical DC	
		600 V	1500
Positive contact indication			Yes
Visible break			-
Emergency-off switch-disconnector			Yes
Degree of pollution			3

High performances applications (tunnel...)

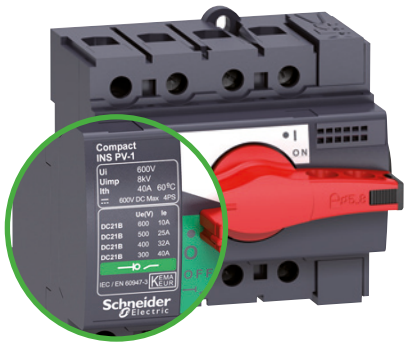
- Well suited to harsh environment
- The enclosed switch-disconnector compact INS250-200A 3P offers IP66 and IK10 degrees of protection in both versions steel and stainless stell.
- The switch-disconnector has been successfully tested by third party F200 (during more than 2 hours at 200 °C) according with European Fire Regulation EN12101-3:20002. After the heating test, the current carrying path is still operating ensuring power supply even in case of fire.
- The individual enclosure is equipped with:
  - cover, screwed
  - 2 cable-gland M50 up and down for power supply
  - provides location for 2 cable-gland M20 for electrical auxiliaries early break and make outputs (provided within the enclosure)
  - 4 adjustable fixing brackets
  - IP66 extended rotary handle.


PB111410_L35.eps

Compact INSE80.


PB111487_L39.eps

Compact INSJ400.



PB111408_42.eps

Compact INS PV-1.


PB104853.eps


PB115814.eps

Switch-disconnector selection
Compact INS40 to 160

PB111402_30.eps

Compact INS40 to 80 switch-disconnector.

PB111403_30.eps

Compact INS40 to 80 emergency-off switch-disconnector.

PB111406_42.eps

Compact INS100 to 160 switch-disconnector.

PB111407_42.eps

Compact INS100 to 160 emergency-off switch-disconnector.

Compact INS switch-disconnectors

Number of poles			
Electrical characteristics as defined by IEC 60947-1 / 60947-3 and EN 60947-1 / 6094			
Conventional thermal current (A)	**Ith**	at 60 °C	
Conventional thermal current in enclosure	**Ithe**	at 60 °C	
Rated insulation level (V)	**Ui**	AC 50/60 Hz	
Impulse-withstand voltage (kV)	**Uimp**		
Rated operational voltage (V)	**Ue**	AC 50/60 Hz	
		DC	
Rated operational voltage AC20 and DC20 (V)		AC 50/60 Hz	
Rated operational current (A)	**Ie**	**Electrical AC**	**50/60 Hz**
			220-240 V
			380-415 V
			440-480 V
			500 V
			660-690 V
		Electrical DC	
			125 V (2P in series)
			250 V (4P in series)
Rated operational power AC23 (kW)		**Electrical AC**	**50/60 Hz**
			220-240 V
			380-415 V
			440 V
			500-525 V
			660-690 V
Rated duties		Uninterrupted duty	
		Intermittent duty	
Short-circuit making capacity (kA peak)	**Icm**	Min. (switch-disconnector alone)	
		Max. (with upstream protection circuit breaker)	
Short-time withstand current (A rms)	**Icw**	1 s	
		3 s	
		20 s	
		30 s	
Suitability for isolation			
Durability (O-C cycles)		Mechanical	
		Electrical AC	**50/60 Hz**
			220-240 V
			380-415 V
			440 V
			500 V
			690 V
		Electrical DC	
			250 V
Positive contact indication			
Visible break			
Emergency-off switch-disconnector			
Degree of pollution			
Upstream protection			
See the “Complementary technical information” page D-1.			

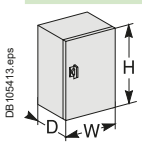
Switch-disconnector selection
Compact INS40 to 160

	INS40		INS63		INS80		INS100		INS125		INS160	
	3-4		3-4		3-4		3-4		3-4		3-4	
47-3												
	40		63		80		100		125		160	
	40		63		80		100		125		160	
	690		690		690		800		800		800	
	8		8		8		8		8		8	
	500		500		500		690		690		690	
	250		250		250		250		250		250	
	690		690		690		750		750		750	
	AC22A	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**
	40	40	63	63	80	80	100	100	125	125	160	160
	40	40	63	63	80	72	100	100	125	125	160	160
	40	40	63	63	80	63	100	100	125	125	160	160
	40	32	63	40	80	40	100	100	125	125	160	160
	-	-	-	-	-	-	100	63	125	80	160	100
	DC22A	**DC23A**	**DC22A**	**DC23A**	**DC22A**	**DC23A**	**DC22A**	**DC23A**	**DC22A**	**DC23A**	**DC22A**	**DC23A**
	40	40	63	63	80	80	100	100	125	125	160	160
	40	40	63	63	80	80	100	100	125	125	160	160
	11		15		22		22		37		45	
	20		30		37		45		55		75	
	22		30		37		55		55		90	
	18,5		22		22		55		75		110	
	-		-		-		55		75		90	
	◉		◉		◉		◉		◉		◉	
	Class 120 - 60 %		Class 120 - 60 %		Class 120 - 60 %		Class 120 - 60 %		Class 120 - 60 %		Class 120 - 60 %	
	15		15		15		20		20		20	
	75		75		75		154		154		154	
	3000		3000		3000		5500		5500		5500	
	1730		1730		1730		3175		3175		3175	
	670		670		670		1230		1230		1230	
	550		550		550		1000		1000		1000	
	◉		◉		◉		◉		◉		◉	
	20000		20000		20000		15000		15000		15000	
	AC22A	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**
	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
	-	-	-	-	-	-	1500	1500	1500	1500	1500	1500
	DC22A	**DC23A**	**DC22A**	**DC23A**	**DC22A**	**DC23A**	**DC22A**	**DC23A**	**DC22A**	**DC23A**	**DC22A**	**DC23A**
	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
	◉		◉		◉		◉		◉		◉	
	-		-		-		-		-		-	
	◉		◉		◉		◉		◉		◉	
	3		3		3		3		3		3	
	-		-		-		-		-		-	

Switch-disconnector selection
Compact INS40 to 160

A

Compact INS switch-disconnectors		
Installation		
Fixed, front connection		
Fixed, rear connection		
On symmetrical rails		
On a backplate		
Connection		
By cables	To bare cable connectors	
By cables with lugs	Directly to terminals	
	To spreaders	
	To vertical-connection adapters via cable-lug adapters	
Flat-facing bars	Directly to terminals	
	To spreaders	
Edgewise bars	To vertical-connection adapters	
Indication and measurement auxiliaries		
Auxiliary contacts		
Voltage-presence indicator		
Current-transformer module		
Ammeter module		
Control, locking and interlocking		
Control	Direct front rotary handle	
	Extended front rotary handle	
	Direct lateral rotary handle	
	Extended lateral rotary handle	
Locking	By keylock	
	By padlocks	
Interlocking	By keylock	
	Mechanical	
Complete source-changeover assembly		
Operating torque (Nm) (typical value for 3-4 poles with front handle)		
Installation and connection accessories		
Bare cable connectors		
Rear connectors		
Terminal extensions		
Spreaders		
One-piece spreader		
Terminal shrouds		
Terminal shields		
Interphase-barrier		
Front panel escutcheons		
Coupling accessories		
Tightening torque for electrical connections (Nm)		
Dimensions and weights		
Overall dimensions H x W x D (mm)	3 poles	
	4 poles	
Approximate weight (kg)	3 poles	
	4 poles	
Enclosure dimensions for Ithe		
	H x W x D (mm)	



Switch-disconnector selection
Compact INS40 to 160

INS40	INS63	INS80	INS100	INS125	INS160
◉	◉	◉	◉	◉	◉
-	-	-	◉	◉	◉
◉	◉	◉	-	-	-
◉	◉	◉	◉	◉	◉
◉	◉	◉	◉	◉	◉
-	-	-	◉	◉	◉
-	-	-	-	-	-
-	-	-	-	-	-
◉	◉	◉	◉	◉	◉
-	-	-	-	-	-
-	-	-	-	-	-
◉	◉	◉	◉	◉	◉
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
◉	◉	◉	◉	◉	◉
◉	◉	◉	◉	◉	◉
◉	◉	◉	◉	◉	◉
◉	◉	◉	◉	◉	◉
-	-	-	-	-	-
◉	◉	◉	◉	◉	◉
-	-	-	-	-	-
◉	◉	◉	◉	◉	◉
-	-	-	-	-	-
0.7 < Nm < 1.3	0.7 < Nm < 1.3	0.7 < Nm < 1.3	1.4 < Nm < 2	1.4 < Nm < 2	1.4 < Nm < 2
◉	◉	◉	◉	◉	◉
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
◉	◉	◉	◉	◉	◉
◉	◉	◉	◉	◉	◉
◉	◉	◉	◉	◉	◉
-	-	-	-	-	-
-	-	-	-	-	-
5	5	5	8	8	8
85 x 90 x 62.5	85 x 90 x 62.5	85 x 90 x 62.5	100 x 135 x 62.5	100 x 135 x 62.5	100 x 135 x 62.5
85 x 90 x 62.5	85 x 90 x 62.5	85 x 90 x 62.5	100 x 135 x 62.5	100 x 135 x 62.5	100 x 135 x 62.5
0.5	0.5	0.5	0.8	0.8	0.8
0.6	0.6	0.6	0.9	0.9	0.9
190 x 115 x 55	190 x 115 x 55	190 x 115 x 55	260 x 160 x 55	260 x 160 x 55	260 x 160 x 55

Switch-disconnector selection
Compact INS250-100 to 630

PB111440_52.eps

Compact INS250 switch-disconnector.

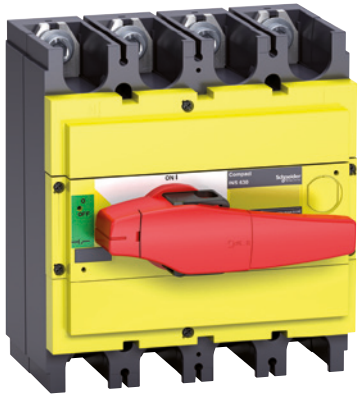
PB111441_47.eps

Compact INS250 emergency-off switch-disconnector.

PB111482_L49.eps

Compact INS630 switch-disconnector.

PB111483_L49.eps



Compact INS630 emergency-off switch-disconnector.

Compact INS switch-disconnectors

Number of poles			
Electrical characteristics as defined by IEC 60947-1 / 60947-3 and EN 60947-1 / 60947-3			
Conventional thermal current (A)	**Ith**	at 60 °C	
Conventional thermal current in enclosure	**Ithe**	at 60 °C	
Rated insulation level (V)	**Ui**	AC 50/60 Hz	
Impulse-withstand voltage (kV)	**Uimp**		
Rated operational voltage (V)	**Ue**	AC 50/60 Hz	
		DC	
Rated operational voltage AC20 and DC20 (V)		AC 50/60 Hz	
Rated operational current (A)	**Ie**	**Electrical AC**	**50/60 Hz**
			220-240 V
			380-415 V
			440-480 V
			500-525 V
			660-690 V
		Electrical DC	
			125 V (2P in series)
			250 V (4P in series)
Rated operational power AC23 (kW)		**Electrical AC**	**50/60 Hz**
			220-240 V
			380-415 V
			440 V
			500-525 V
			660-690 V
Rated duties		Uninterrupted duty	
		Intermittent duty	
Short-circuit making capacity (kA peak)	**Icm**	Min. (switch-disconnector alone)	
		Max. (with upstream protection circuit breaker)	
Short-time withstand current (A rms)	**Icw**	1 s	
		3 s	
		20 s	
		30 s	
Suitability for isolation			
Durability (O-C cycles)		Mechanical	
		Electrical AC	**50/60 Hz**
			440 V
			500 V
			690 V
		Electrical DC	
			250 V
Positive contact indication			
Visible break			
Emergency-off switch-disconnector			
Degree of pollution			
Upstream protection			
See the “Complementary technical information” page D-1.			

[1] 550 A (DC).

Switch-disconnector selection

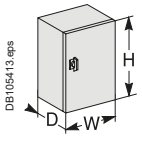
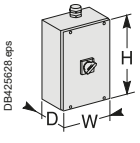
Compact INS250-100 to 630

INS250-100		INS250-160		INS250-200		INS250		INS320		INS400		INS500		INS630		
3-4		3-4		3-4		3-4		3-4		3-4		3-4		3-4		
100		160		200		250		320		400		500		630		
100		160		200		250		320		400		500		630 [1]		
800		800		800		800		800		800		800		800		
8		8		8		8		8		8		8		8		
690		690		690		690		690		690		690		690		
250		250		250		250		250		250		250		250		
750		750		750		750		750		750		750		750		
AC22A	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	
100	100	160	160	200	200	250	250	320	320	400	400	500	500	630	630	
100	100	160	160	200	200	250	250	320	320	400	400	500	500	630	630	
100	100	160	160	200	200	250	250	320	320	400	400	500	500	630	630	
100	100	160	160	200	200	250	250	320	320	400	400	500	500	630	630	
100	100	160	160	200	200	250	250	320	320	400	400	500	500	630	630	
DC22A	**DC23A**	**DC22A**	**DC23A**	**DC22A**	**DC23A**	**DC22A**	**DC23A**	**DC22A**	**DC23A**	**DC22A**	**DC23A**	**DC22A**	**DC23A**	**DC22A**	**DC23A**	**DC23B**
100	100	160	160	200	200	250	250	320	320	400	400	500	500	550	550	630
100	100	160	160	200	200	250	250	320	320	400	400	500	500	550	550	630
22		45		55		75		90		110		132		200		
45		75		90		132		160		200		250		315		
55		90		110		150		185		220		250		400		
55		110		132		160		220		250		355		400		
55		90		160		210		250		400		500		560		
◉		◉		◉		◉		◉		◉		◉		◉		
Class 120 - 60 %		Class 120 - 60 %		Class 120 - 60 %		Class 120 - 60 %		Class 120 - 60 %		Class 120 - 60 %		Class 120 - 60 %		Class 120 - 60 %		
30		30		30		30		50		50		50		50		
330		330		330		330		330		330		330		330		
8500		8500		8500		8500		20000		20000		20000		20000		
4900		4900		4900		4900		11500		11500		11500		11500		
2200		2200		2200		2200		4900		4900		4900		4900		
1800		1800		1800		1800		4000		4000		4000		4000		
◉		◉		◉		◉		◉		◉		◉		◉		
15000		15000		15000		15000		10000		10000		10000		10000		
AC22A	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	**AC22A**	**AC23A**	
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	
DC22A	**DC23A**	**DC22A**	**DC23A**	**DC22A**	**DC23A**	**DC22A**	**DC23A**	**DC23A**	**DC23B**	**DC23A**	**DC23B**	**DC23A**	**DC23B**	**DC23A**	**DC23B**	
1500	1500	1500	1500	1500	1500	1500	1500	1000	-	1000	-	1000	-	1000	200	
◉		◉		◉		◉		◉		◉		◉		◉		
-		-		-		-		-		-		-		-		
◉		◉		◉		◉		◉		◉		◉		◉		
3		3		3		3		3		3		3		3		
-		-		-		-		-		-		-		-		

Switch-disconnector selection
Compact INS250-100 to 630

A

Compact INS switch-disconnectors

Installation	
Fixed, front connection	
Fixed, rear connection	
On symmetrical rails	
On a backplate	
Connection	
By cables	To bare cable connectors
By cables with lugs	Directly to terminals
	To spreaders
	To vertical-connection adapters via cable-lug adapters
Flat-facing bars	Directly to terminals
	To spreaders
Edgewise bars	To vertical-connection adapters
Indication and measurement auxiliaries	
Auxiliary contacts	
Voltage-presence indicator	
Current-transformer module	
Ammeter module	
Control, locking and interlocking	
Control	Direct front rotary handle
	Extended front rotary handle
	Direct lateral rotary handle
	Extended lateral rotary handle
Locking	By keylock
	By padlocks
Interlocking	By keylock
	Mechanical
Complete source-changeover assembly	
Operating torque (Nm) (typical value for 3-4 poles with front handle)	
Installation and connection accessories	
Bare cable connectors	
Rear connectors	
Terminal extensions	
Spreaders	
One-piece spreader	
Terminal shrouds	
Terminal shields	
Interphase-barrier	
Front panel escutcheons	
Coupling accessories	
Tightening torque for electrical connections (Nm)	
Dimensions and weights	
Overall dimensions H x W x D (mm)	3 poles
	4 poles
Approximate weight (kg)	3 poles
	4 poles
Enclosure dimensions for Ithe	
 	H x W x D (mm)
	H x W x D (mm) (IP66) Enclosed switch-disconnectors Compact INS 250-200 3P IP66 for tight performances application [1]

[1] Available in August 2017 for Nordic countries.

Switch-disconnector selection
Compact INS250-100 to 630

	INS250-100	INS250-160	INS250-200	INS250	INS320	INS400	INS500	INS630
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	-	-	-	-
	◉	◉	◉	◉	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	5 < Nm < 6.2	5 < Nm < 6.2	5 < Nm < 6.2	5 < Nm < 6.2	13.5 < Nm < 16.5	13.5 < Nm < 16.5	13.5 < Nm < 16.5	13.5 < Nm < 16.5
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	-	-	-	-
	-	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	15	15	15	15	50	50	50	50
	136 x 140 x 96	136 x 140 x 96	136 x 140 x 96	136 x 140 x 96	205 x 185 x 130	205 x 185 x 130	205 x 185 x 130	205 x 185 x 130
	136 x 140 x 96	136 x 140 x 96	136 x 140 x 96	136 x 140 x 96	205 x 185 x 130	205 x 185 x 130	205 x 185 x 130	205 x 185 x 130
	2	2	2	2	4.6	4.6	4.6	4.6
	2.2	2.2	2.2	2.2	4.9	4.9	4.9	4.9
	400 x 300 x 200	400 x 300 x 200	400 x 300 x 200	400 x 300 x 200	600 x 400 x 200	600 x 400 x 200	600 x 400 x 200	600 x 400 x 200
	-	-	553 x 300 x 264	-	-	-	-	-

Switch-disconnector selection
Compact INS630b to 2500

PB111510_45.eps

Compact INS1600 switch-disconnector.

PB111511_45.eps

Compact INS1600 emergency-off switch-disconnector.

PB111518_72.eps

Compact INS2500 switch-disconnector.

Compact INS switch-disconnectors

Number of poles			
Electrical characteristics as defined by IEC 60947-1 / 60947-3 and EN 60947-1 / 60947-3			
Conventional thermal current (A)	**Ith**	at 60 °C	
Conventional thermal current in enclosure	**Ithe**	at 60 °C	
Rated insulation level (V)	**Ui**	AC 50/60 Hz	
Impulse-withstand voltage (kV)	**Uimp**		
Rated operational voltage (V)	**Ue**	AC 50/60 Hz	
		DC	
Rated operational voltage AC20 and DC20 (V)		AC 50/60 Hz	
Rated operational current (A)	**Ie**	**Electrical AC**	**50/60 Hz**
			220-240 V
			380-415 V
			440-480 V
			500-525 V
			660-690 V
		Electrical DC	
			125 V (2P in series)
			250 V (4P in series)
Rated operational power AC23 (kW)		**Electrical AC**	**50/60 Hz**
			220-240 V
			380-400 V
			415 V
			500-525 V
			660-690 V
Rated duties		Uninterrupted duty	
		Intermittent duty	
Short-circuit making capacity (kA peak)	**Icm**	Min. (switch-disconnector alone)	
		Max. (with upstream protection circuit breaker)	
Short-time withstand current (kA rms)	**Icw**	0.5 s	
		0.8 s	
		1 s	
		3 s	
		20 s	
		30 s	
Suitability for isolation			
Durability (O-C cycles)		Mechanical	
		Electrical AC	**50/60 Hz**
			220-240 V
			380-415 V
			440-480 V
			500-525 V
			660-690 V
		Electrical DC	
			125 V (2P)
			250 V (4P)
Positive contact indication			
Visible break			
Emergency-off switch-disconnector			
Degree of pollution			

Upstream protection

See the "Complementary technical information" page D-1.

[1] For vertical connection busbars only. For horizontal connection busbars, see derating charts in “Installation recommendations” see page B-22.

Switch-disconnector selection

Compact INS630b to 2500

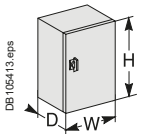
	INS630b			INS800			INS1000			INS1250			INS1600			INS2000			INS2500		
	3-4			3-4			3-4			3-4			3-4			3-4			3-4		
	630			800			1000			1250			1600 [1]			2000			2500		
	630			800			1000			1250			1600 [1]			2000			2500		
	1000			1000			1000			1000			1000			1000			1000		
	12			12			12			12			12			12			12		
	690			690			690			690			690			690			690		
	250			250			250			250			250			250			250		
	800			800			800			800			800			800			800		
	AC21A	**AC22A**	**AC23A**	**AC21A**	**AC22A**	**AC23A**	**AC21A**	**AC22A**	**AC23A**	**AC21A**	**AC22A**	**AC23A**	**AC21B** **AC21A**	**AC22B** **AC22A**	**AC23A**	**AC21B**	**AC22B**	**AC23B**	**AC21B**	**AC22B**	**AC23B**
	630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600 1450	1600 1450	1250	2000	2000	-	2500	2500	-
	630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600 1450	1600 1450	1250	2000	2000	-	2500	2500	-
	630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600 1250	1600 1250	1250	2000	2000	-	2500	2500	-
	630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600 1250	1600 1250	1250	2000	2000	-	2500	2500	-
	630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600 1250	1600 1250	1250	2000	2000	-	2500	2500	-
	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21B	DC22B	DC23B	DC21B	DC22B	DC23B
	630/2	630/2	630/2	800/2	800/2	800/2	1000/2	1000/2	1000/2	1250/2	1250/2	1250/2	1600/2	1600/2	1600/2	2000/2	2000/2	-	2500/2	2500/2	-
	630/4	630/4	630/4	800/4	800/4	800/4	1000/4	1000/4	1000/4	1250/4	1250/4	1250/4	1600/4	1600/4	1600/4	2000/4	2000/4	-	2500/4	2500/4	-
	250			250			315			400			400			-			-		
	400			400			560			710			710			-			-		
	500			500			630			800			800			-			-		
	560			560			710			900			900			-			-		
	710			710			900			-			-			-			-		
	●			●			●			●			●			●			●		
	Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %		
	75			75			75			75			75			105			105		
	330			330			330			330			330			330			330		
	50			50			50			50			50			50			50		
	42			42			42			42			42			50			50		
	35			35			35			35			35			50			50		
	20			20			20			20			20			30			30		
	10			10			10			10			10			13			13		
	8			8			8			8			8			11			11		
	●			●			●			●			●			●			●		
	5000			3000			3000			3000			3000			3000			3000		
	AC21A	**AC22A**	**AC23A**	**AC21A**	**AC22A**	**AC23A**	**AC21A**	**AC22A**	**AC23A**	**AC21A**	**AC22A**	**AC23A**	**AC21B** **AC21A**	**AC22B** **AC22A**	**AC23A**	**AC21B**	**AC22B**	**AC23B**	**AC21B**	**AC22B**	**AC23B**
	1000	1000	1000	500	500	500	500	500	500	500	500	500	100 500	100 500	500	100	100	-	100	100	-
	1000	1000	1000	500	500	500	500	500	500	500	500	500	100 500	100 500	500	100	100	-	100	100	-
	1000	1000	1000	500	500	500	500	500	500	500	500	500	100 500	100 500	500	100	100	-	100	100	-
	1000	1000	1000	500	500	500	500	500	500	500	500	500	100 500	100 500	500	100	100	-	100	100	-
	1000	1000	1000	500	500	500	500	500	500	500	500	500	100 500	100 500	500	100	100	-	100	100	-
	DC21A	**DC22A**	**DC23A**	**DC21A**	**DC22A**	**DC23A**	**DC21A**	**DC22A**	**DC23A**	**DC21A**	**DC22A**	**DC23A**	**DC21A**	**DC22A**	**DC23B**	**DC21B**	**DC22B**	**DC23B**	**DC21B**	**DC22B**	**DC23B**
	1000	1000	1000	500	500	500	500	500	500	500	500	500	500	500	500	100	100	-	100	100	-
	1000	1000	1000	500	500	500	500	500	500	500	500	500	500	500	500	100	100	-	100	100	-
	●			●			●			●			●			●			●		
	-			-			-			-			-			-			-		
	●			●			●			●			●			-			-		
	3			3			3			3			3			3			3		
	-			-			-			-			-			-			-		

A

Switch-disconnector selection
Compact INS630b to 2500

Compact INS switch-disconnectors

Installation		
Fixed, front connection		
Fixed, rear connection		
On symmetrical rails		
On a backplate		
Connection		
By cables	To bare cable connectors	
By cables with lugs	Directly to terminals	
	To spreaders	
	To vertical-connection adapters via cable-lug adapters	
Flat-facing bars	Directly to terminals	
	To spreaders	
Edgewise bars	To vertical-connection adapters	
Indication and measurement auxiliaries		
Auxiliary contacts		
Voltage-presence indicator		
Current-transformer module		
Ammeter module		
Control, locking and interlocking		
Control	Direct front rotary handle	
	Extended front rotary handle	
	Direct lateral rotary handle	
	Extended lateral rotary handle	
Locking	By keylock	
	By padlocks	
Interlocking	By keylock	
	Mechanical	
Complete source-changeover assembly		
Operating torque (Nm) (typical value for 3-4 poles with front handle)		
Installation and connection accessories		
Bare cable connectors		
Rear connectors		
Terminal extensions		
Spreaders		
One-piece spreader		
Terminal shrouds		
Terminal shields		
Interphase-barrier		
Front panel escutcheons		
Coupling accessories		
Tightening torque for electrical connections (Nm)		
Dimensions and weights		
Overall dimensions H x W x D (mm)	3 poles	
	4 poles	
Approximate weight (kg)	3 poles	
	4 poles	
Enclosure dimensions for Ithe		
	H x W x D (mm)	



Switch-disconnector selection
Compact INS630b to 2500

	INS630b	INS800	INS1000	INS1250	INS1600	INS2000	INS2500
	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-
	-	-	-	-	-	◉	◉
	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	-	-
	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	-	-
	◉	◉	◉	◉	◉	-	-
	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	30	30	30	30	30	60	60
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-
	50	50	50	50	50	50	50
	300 x 340 x 146.5	300 x 340 x 146.5	300 x 340 x 146.5	300 x 340 x 146.5	300 x 340 x 146.5	440 x 347.5 x 227.5	440 x 347.5 x 227.5
	300 x 410 x 146.5	300 x 410 x 146.5	300 x 410 x 146.5	300 x 410 x 146.5	300 x 410 x 146.5	440 x 462.5 x 227.5	440 x 462.5 x 227.5
	14	14	14	14	14	35	35
	18	18	18	18	18	45	45
	-	-	-	-	-	-	-

Switch-disconnector selection
Compact INSE80 and INSJ400

PB111410_L35.eps

Compact INSE80.

PB111487_L39.eps

Compact INSJ400.

INSE/INSJ switch specifications

Reverse Connection
Compact INSE/INSJ switches may be wired with the supply power coming from either side with no reduction in performance.

Neutral Pole Position
In Compact switches, the neutral pole is located on the left-hand side.
On the INSE/INSJ switch, the four poles are identical and the neutral pole can therefore be located on the right-hand side by masking the existing label and adding an appropriate label on the right.

Electrical characteristics

Compact INSE/INSJ	
Number of poles	
UL489 - Electrical characteristic	
Rated operational voltage	
Impulse-withstand voltage	
Short circuit rating when protected by any protective device	600 V AC
Short circuit rating when protected by circuit breaker	240 V AC 480 V AC 600 V AC
Short circuit rating when protected by fuses	600 V AC
Current rating	at 60 °C
Positive contact indication	
Endurance (operation O-CO)	Total Electrical Mechanical
Connection	
Front connection Busbar or compression lug	
Bare wire connector	1 cable 1-2 cables
Rear connection Busbar or compression lug	
Cable range temperature	
Cable range for base wire	1 cable 1-2 cables
Torques	
Terminal shrouds	
Terminal shields	
Phase barriers	
Mounting	
Mounting on 35 mm symmetrical rail	
Mounting on backplate	
Accessories	
Auxiliary contacts [1]	
Rotary handle	Direct front Extented front Direct lateral Extented lateral
Locking	By padlocks By keylock
Escutcheons	
Dimensions and Weight	
Overall dimensions H x W x D (mm)	3 poles/4 poles
Approximate weight (kg)	3 poles 4 poles

[1] Common points changeover contact.
[2] CAM (early break or early make) common point changeover contact.

Switch-disconnector selection
Compact INSE80 and INSJ400

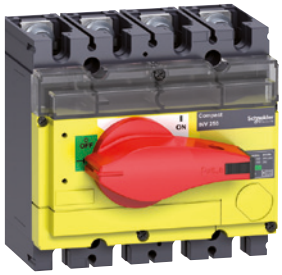
	INSE80-40 A	INSE80-60 A	INSE80-80 A	INSJ400-250 A	INSJ400-400 A
	3-4			3-4	
	600 V AC			600 V AC	
	8 kV			8 kV	
	10 kA rms			20 kA rms	
	100 kA rms			150 kA rms	
	65 kA rms			100 kA rms	
	18 kA rms			25 kA rms	
	Schneider Electric circuit breaker PowerPact H 100 A			Schneider Electric circuit breaker PowerPact L 400 A	
	50 kA rms. specific class T or RK 100 A			50 kA rms. specific class T or RK 400 A	
	40 A	60 A	80 A	250 A	400 A
	◉			◉	
	10000			6000	
	6000 full load			1000 full load	
	4000			5000	
	◉			◉	
	◉			◉	
	-			◉	
	-			◉	
	Al/Cu 75 °C and 90 °C			Al/Cu 75 °C and 90 °C	
	14 to 4 AWG Cu/Al			2 AWG to 600 kcmil Cu	
	3 to 2 AWG Cu/Al			2 AWG to 500 kcmil Al	
	-			4/0 AWG à / to 350 kcmil Cu	
	-			4/0 AWG à / to 500 kcmil Al	
	10 Nm/88 lb-in			32 Nm/275 lb-in	
	Option			-	
	Option			Option	
	Option			Option	
	◉			-	
	◉			◉	
	◉ 2 OF [1]			◉ 3 OF [1] + 1 CAM [2]	
	◉			◉	
	Option			Option	
	◉			-	
	Option			-	
	Standard, up to 3 padlocks, position OFF only			Standard, up to 3 padlocks, position OFF only	
	-			Option	
	-			◉	
	100 x 135 x 62,5 (without direct handle)			205 x 185 x 130 (without direct handle)	
	3.94 x 5.31 x 2.46 in.			8.07 x 7.28 x 5.12 in.	
	0,8 (1.76 lbs)			4,6 (10.12 lbs)	
	0,9 (1.98 lbs)			4,9 (10.78 lbs)	

Switch-disconnector selection
Compact INV100 to 630

PB111442_52.eps

Compact INV250 switch-disconnector.

PB111443_47.eps

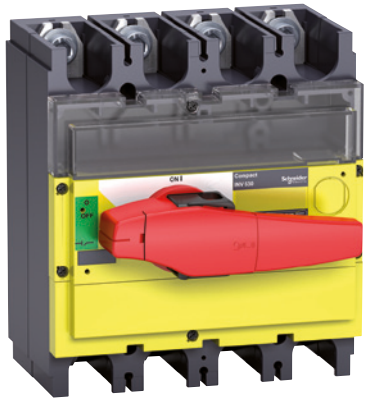


Compact INV250 emergency-off switch-disconnector.

PB111484_L49.eps

Compact INV630 switch-disconnector.

PB111485_L49.eps



Compact INV630 emergency-off switch-disconnector.

Compact INV switch-disconnectors

Number of poles			
Electrical characteristics as defined by IEC 60947-1 / 60947-3 and EN 60947-1 / 60947-3			
Conventional thermal current (A)	**Ith**	at 60 °C	
Conventional thermal current in enclosure	**Ithe**	at 60 °C	
Rated insulation level (V)	**Ui**	AC 50/60 Hz	
Impulse-withstand voltage (kV)	**Uimp**		
Rated operational voltage (V)	**Ue**	AC 50/60 Hz	
		DC	
Rated operational voltage AC20 and DC20 (V)		AC 50/60 Hz	
Rated operational current (A)	**Ie**	**Electrical AC**	**50/60 Hz**
			220-240 V
			380-415 V
			440-480 V
			500-525 V
			660-690 V
		Electrical DC	
			125 V (2P in series)
			250 V (4P in series)
Rated operational power AC23 (kW)		**Electrical AC**	**50/60 Hz**
			220-240 V
			380-415 V
			440 V
			500-525 V
			660-690 V
Rated duties		Uninterrupted duty	
		Intermittent duty	
Short-circuit making capacity (kA peak)	**Icm**	Min. (switch-disconnector alone)	
		Max. (with upstream protection circuit breaker)	
Short-time withstand current (A rms)	**Icw**	1 s	
		3 s	
		20 s	
		30 s	
Suitability for isolation			
Durability (O-C cycles)		Mechanical	
		Electrical AC	**50/60 Hz**
			440 V
			500 V
			690 V
		Electrical DC	
			250 V
Positive contact indication			
Visible break			
Emergency-off switch-disconnector			
Degree of pollution			

Upstream protection

See the “Complementary technical information” page D-1.

[1] 550 A (DC).

Switch-disconnector selection

Compact INV100 to 630

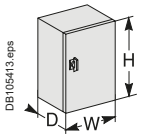
	INV100			INV160			INV200			INV250			INV320			INV400			INV500			INV630		
	3-4			3-4			3-4			3-4			3-4			3-4			3-4			3-4		
	100			160			200			250			320			400			500			630		
	100			160			200			250			320			400			500			630 [1]		
	800			800			800			800			800			800			800			800		
	8			8			8			8			8			8			8			8		
	690			690			690			690			690			690			690			690		
	250			250			250			250			250			250			250			250		
	750			750			750			750			750			750			750			750		
	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A
	100	100	100	160	160	160	200	200	200	250	250	250	320	320	320	400	400	400	500	500	500	630	630	630
	100	100	100	160	160	160	200	200	200	250	250	250	320	320	320	400	400	400	500	500	500	630	630	630
	100	100	100	160	160	160	200	200	200	250	250	250	320	320	320	400	400	400	500	500	500	630	630	630
	100	100	100	160	160	160	200	200	200	250	250	250	320	320	320	400	400	400	500	500	500	630	630	630
	100	100	100	160	160	160	200	200	200	250	250	250	320	320	320	400	400	400	500	500	500	630	630	630
	DC21A	DC22A	DC23B	DC21A	DC22A	DC23B	DC21A	DC22A	DC23B	DC21A	DC22A	DC23B	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A/ DC23B
	100	100	100	160	160	160	200	200	200	250	250	250	320	320	320	400	400	400	500	500	500	550	550	550/630
	100	100	100	160	160	160	200	200	200	250	250	250	320	320	320	400	400	400	500	500	500	550	550	550/630
	22			45			55			75			90			110			132			200		
	45			75			90			132			160			200			250			315		
	55			90			110			150			185			220			250			400		
	55			110			132			132			220			250			355			400		
	55			90			160			160			250			400			500			560		
	◉			◉			◉			◉			◉			◉			◉			◉		
	Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %		
	30			30			30			30			50			50			50			50		
	330			330			330			330			330			330			330			330		
	8500			8500			8500			8500			20000			20000			20000			20000		
	4900			4900			4900			4900			11500			11500			11500			11500		
	2200			2200			2200			2200			4900			4900			4900			4900		
	1800			1800			1800			1800			4000			4000			4000			4000		
	◉			◉			◉			◉			◉			◉			◉			◉		
	15000			15000			15000			15000			10000			10000			10000			10000		
	AC22A	AC23A		AC22A	AC23A		AC22A	AC23A		AC22A	AC23A		AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A	AC21A	AC22A	AC23A/ AC23B
	1500	1500		1500	1500		1500	1500		1500	1500		1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
	1500	1500		1500	1500		1500	1500		1500	1500		1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000/200
	1500	1500		1500	1500		1500	1500		1500	1500		1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000/200
	DC22A	DC23A		DC22A	DC23A		DC22A	DC23A		DC22A	DC23A		DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A	DC21A	DC22A	DC23A/ DC23B
	1500	1500		1500	1500		1500	1500		1500	1500		1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000/200
	◉			◉			◉			◉			◉			◉			◉			◉		
	◉			◉			◉			◉			◉			◉			◉			◉		
	◉			◉			◉			◉			◉			◉			◉			◉		
	3			3			3			3			3			3			3			3		
	-			-			-			-			-			-			-			-		

Switch-disconnector selection
Compact INV100 to 630

A

Compact INV switch-disconnectors

Installation		
Fixed, front connection		
Fixed, rear connection		
On symmetrical rails		
On a backplate		
Connection		
By cables	To bare cable connectors	
By cables with lugs	Directly to terminals	
	To spreaders	
	To vertical-connection adapters via cable-lug adapters	
Flat-facing bars	Directly to terminals	
	To spreaders	
Edgewise bars	To vertical-connection adapters	
Indication and measurement auxiliaries		
Auxiliary contacts		
Voltage-presence indicator		
Current-transformer module		
Ammeter module		
Control, locking and interlocking		
Control	Direct front rotary handle	
	Extended front rotary handle	
	Direct lateral rotary handle	
	Extended lateral rotary handle	
Locking	By keylock	
	By padlocks	
Interlocking	By keylock	
	Mechanical	
Complete source-changeover assembly		
Operating torque (Nm) (typical value for 3-4 poles with front handle)		
Installation and connection accessories		
Bare cable connectors		
Rear connectors		
Terminal extensions		
Spreaders		
One-piece spreader		
Terminal shrouds		
Terminal shields		
Interphase-barrier		
Front panel escutcheons		
Coupling accessories		
Tightening torque for electrical connections (Nm)		
Dimensions and weights		
Overall dimensions H x W x D (mm)	3 poles	
	4 poles	
Approximate weight (kg)	3 poles	
	4 poles	
Enclosure dimensions for Ithe		
		H x W x D (mm)



Switch-disconnector selection
Compact INV100 to 630

	INV100	INV160	INV200	INV250	INV320	INV400	INV500	INV630
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	-	-	-	-
	◉	◉	◉	◉	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-	-
	5 < Nm < 6.2	5 < Nm < 6.2	5 < Nm < 6.2	5 < Nm < 6.2	13.5 < Nm < 16.5	13.5 < Nm < 16.5	13.5 < Nm < 16.5	13.5 < Nm < 16.5
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉	◉
	15	15	15	15	50	50	50	50
	136 x 140 x 96	136 x 140 x 96	136 x 140 x 96	136 x 140 x 96	205 x 185 x 130	205 x 185 x 130	205 x 185 x 130	205 x 185 x 130
	136 x 140 x 96	136 x 140 x 96	136 x 140 x 96	136 x 140 x 96	205 x 185 x 130	205 x 185 x 130	205 x 185 x 130	205 x 185 x 130
	2	2	2	2	4.6	4.6	4.6	4.6
	2.2	2.2	2.2	2.2	4.9	4.9	4.9	4.9
	400 x 300 x 200	400 x 300 x 200	400 x 300 x 200	400 x 300 x 200	600 x 400 x 200	600 x 400 x 200	600 x 400 x 200	600 x 400 x 200

Switch-disconnector selection
Compact INV630b to 2500

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Compact INV1600 switch-disconnector.

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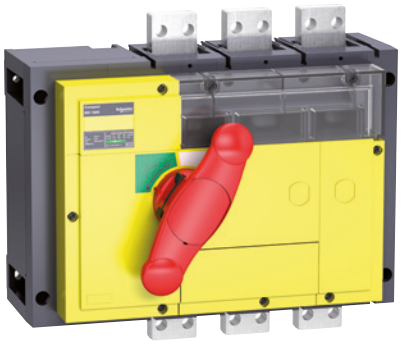

Compact INV1600 emergency-off switch-disconnector.

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Compact INV2500 switch-disconnector.

Compact INV switch-disconnectors

Number of poles			
Electrical characteristics as defined by IEC 60947-1 / 60947-3 and EN 60947-1 / 60947-3			
Conventional thermal current (A)	**Ith**	at 60 °C	
Conventional thermal current in enclosure	**Ithe**	at 60 °C	
Rated insulation level (V)	**Ui**	AC 50/60 Hz	
Impulse-withstand voltage (kV)	**Uimp**		
Rated operational voltage (V)	**Ue**	AC 50/60 Hz	
		DC	
Rated operational voltage AC20 and DC20 (V)		AC 50/60 Hz	
Rated operational current (A)	**Ie**	**Electrical AC**	**50/60 Hz**
			220-240 V
			380-415 V
			440-480 V
			500-525 V
			660-690 V
		Electrical DC	
			125 V (2P in series)
			250 V (4P in series)
Rated operational power AC23 (kW)		**Electrical AC**	**50/60 Hz**
			220-240 V
			380-400 V
			415 V
			500-525 V
			660-690 V
Rated duties		Uninterrupted duty	
		Intermittent duty	
Short-circuit making capacity (kA peak)	**Icm**	Min. (switch-disconnector alone)	
		Max. (with upstream protection circuit breaker)	
Short-time withstand current (kA rms)	**Icw**	0.5 s	
		0.8 s	
		1 s	
		3 s	
		20 s	
		30 s	
Suitability for isolation			
Durability (O-C cycles)		Mechanical	
		Electrical AC	**50/60 Hz**
			220-240 V
			380-415 V
			440-480 V [1]
			500-525 V
			660-690 V
		Electrical DC	
			125 V (2P)
			250 V (4P)
Positive contact indication			
Visible break			
Emergency-off switch-disconnector			
Degree of pollution			

Upstream protection

See the "Complementary technical information" page D-1.

[1] For vertical connection busbars only. For horizontal connection busbars, see derating charts in “Installation recommendations” page B-24.

Switch-disconnector selection

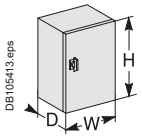
Compact INV630b to 2500

	INV630b			INV800			INV1000			INV1250			INV1600			INV2000			INV2500		
	3-4			3-4			3-4			3-4			3-4			3-4			3-4		
	630			800			1000			1250			1600 [1]			2000			2500		
	630			800			1000			1250			1600 [1]			2000			2500		
	1000			1000			1000			1000			1000			1000			1000		
	12			12			12			12			12			12			12		
	690			690			690			690			690			690			690		
	250			250			250			250			250			250			250		
	800			800			800			800			800			800			800		
	AC21A	**AC22A**	**AC23A**	**AC21A**	**AC22A**	**AC23A**	**AC21A**	**AC22A**	**AC23A**	**AC21A**	**AC22A**	**AC23A**	**AC21B AC21A**	**AC22B AC22A**	**AC23A**	**AC21B**	**AC22B**	**AC23B**	**AC21B**	**AC22B**	**AC23B**
	630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600 1450	1600 1450	1250	2000	2000	-	2500	2500	-
	630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600 1450	1600 1450	1250	2000	2000	-	2500	2500	-
	630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600 1250	1600 1250	1250	2000	2000	-	2500	2500	-
	630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600 1250	1600 1250	1250	2000	2000	-	2500	2500	-
	630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600 1250	1600 1250	1250	2000	2000	-	2500	2500	-
	DC21A	**DC22A**	**DC23A**	**DC21A**	**DC22A**	**DC23A**	**DC21A**	**DC22A**	**DC23A**	**DC21A**	**DC22A**	**DC23A**	**DC21A**	**DC22A**	**DC23A**	**DC21B**	**DC22B**	**DC23B**	**DC21B**	**DC22B**	**DC23B**
	630/2	630/2	630/2	800/2	800/2	800/2	1000/2	1000/2	1000/2	1250/2	1250/2	1250/2	1600/2	1600/2	1600/2	2000/2	2000/2	-	2500/2	2500/2	-
	630/4	630/4	630/4	800/4	800/4	800/4	1000/4	1000/4	1000/4	1250/4	1250/4	1250/4	1600/4	1600/4	1600/4	2000/4	2000/4	-	2500/4	2500/4	-
	250			250			315			400			400			-			-		
	400			400			560			710			710			-			-		
	500			500			630			800			800			-			-		
	560			560			710			900			900			-			-		
	710			710			900			-			-			-			-		
	●			●			●			●			●			●			●		
	Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %			Class 120 - 60 %		
	75			75			75			75			75			105			105		
	330			330			330			330			330			330			330		
	50			50			50			50			50			50			50		
	42			42			42			42			42			50			50		
	35			35			35			35			35			50			50		
	20			20			20			20			20			30			30		
	10			10			10			10			10			13			13		
	8			8			8			8			8			11			11		
	●			●			●			●			●			●			●		
	5000			3000			3000			3000			3000			3000			3000		
	AC21A	**AC22A**	**AC23A**	**AC21A**	**AC22A**	**AC23A**	**AC21A**	**AC22A**	**AC23A**	**AC21A**	**AC22A**	**AC23A**	**AC21B AC21A**	**AC22B AC22A**	**AC23A**	**AC21B**	**AC22B**	**AC23B**	**AC21B**	**AC22B**	**AC23B**
	1000	1000	1000	500	500	500	500	500	500	500	500	500	100 500	100 500	500	100	100	-	100	100	-
	1000	1000	1000	500	500	500	500	500	500	500	500	500	100 500	100 500	500	100	100	-	100	100	-
	1000	1000	1000	500	500	500	500	500	500	500	500	500	100 500	100 500	500	100	100	-	100	100	-
	1000	1000	1000	500	500	500	500	500	500	500	500	500	100 500	100 500	500	100	100	-	100	100	-
	1000	1000	1000	500	500	500	500	500	500	500	500	500	100 500	100 500	500	100	100	-	100	100	-
	DC21A	**DC22A**	**DC23A**	**DC21A**	**DC22A**	**DC23A**	**DC21A**	**DC22A**	**DC23A**	**DC21A**	**DC22A**	**DC23A**	**DC21A**	**DC22A**	**DC23B**	**DC21B**	**DC22B**	**DC23B**	**DC21B**	**DC22B**	**DC23B**
	1000	1000	1000	500	500	500	500	500	500	500	500	500	500	500	500	100	100	-	100	100	-
	1000	1000	1000	500	500	500	500	500	500	500	500	500	500	500	500	100	100	-	100	100	-
	●			●			●			●			●			●			●		
	●			●			●			●			●			●			●		
	●			●			●			●			●			-			-		
	3			3			3			3			3			3			3		
	-			-			-			-			-			-			-		

Switch-disconnector selection
Compact INV630b to 2500

A

Compact INV switch-disconnectors		
Installation		
Fixed, front connection		
Fixed, rear connection		
On symmetrical rails		
On a backplate		
Connection		
By cables	To bare cable connectors	
By cables with lugs	Directly to terminals	
	To spreaders	
	To vertical-connection adapters via cable-lug adapters	
Flat-facing bars	Directly to terminals	
	To spreaders	
Edgewise bars	To vertical-connection adapters	
Indication and measurement auxiliaries		
Auxiliary contacts		
Voltage-presence indicator		
Current-transformer module		
Ammeter module		
Control, locking and interlocking		
Control	Direct front rotary handle	
	Extended front rotary handle	
	Direct lateral rotary handle	
	Extended lateral rotary handle	
Locking	By keylock	
	By padlocks	
Interlocking	By keylock	
	Mechanical	
Complete source-changeover assembly		
Operating torque (Nm) (typical value for 3-4 poles with front handle)		
Installation and connection accessories		
Bare cable connectors		
Rear connectors		
Terminal extensions		
Spreaders		
One-piece spreader		
Terminal shrouds		
Terminal shields		
Interphase-barrier		
Front panel escutcheons		
Coupling accessories		
Tightening torque for electrical connections (Nm)		
Dimensions and weights		
Overall dimensions H x W x D (mm)	3 poles	
	4 poles	
Approximate weight (kg)	3 poles	
	4 poles	
Enclosure dimensions for lthe		
	H x W x D (mm)	



Switch-disconnector selection
Compact INV630b to 2500

	INV630b	INV800	INV1000	INV1250	INV1600	INV2000	INV2500
	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-
	-	-	-	-	-	◉	◉
	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	-	-
	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	-	-
	◉	◉	◉	◉	◉	-	-
	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	30	30	30	30	30	60	60
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉
	◉	◉	◉	◉	◉	◉	◉
	-	-	-	-	-	-	-
	50	50	50	50	50	50	50
	300 x 340 x 146.5	300 x 340 x 146.5	300 x 340 x 146.5	300 x 340 x 146.5	300 x 340 x 146.5	440 x 347.5 x 227.5	440 x 347.5 x 227.5
	300 x 410 x 146.5	300 x 410 x 146.5	300 x 410 x 146.5	300 x 410 x 146.5	300 x 410 x 146.5	440 x 462.5 x 227.5	440 x 462.5 x 227.5
	14	14	14	14	14	35	35
	18	18	18	18	18	45	45
	-	-	-	-	-	-	-

Electrical and mechanical accessories
Compact INS40 to 80

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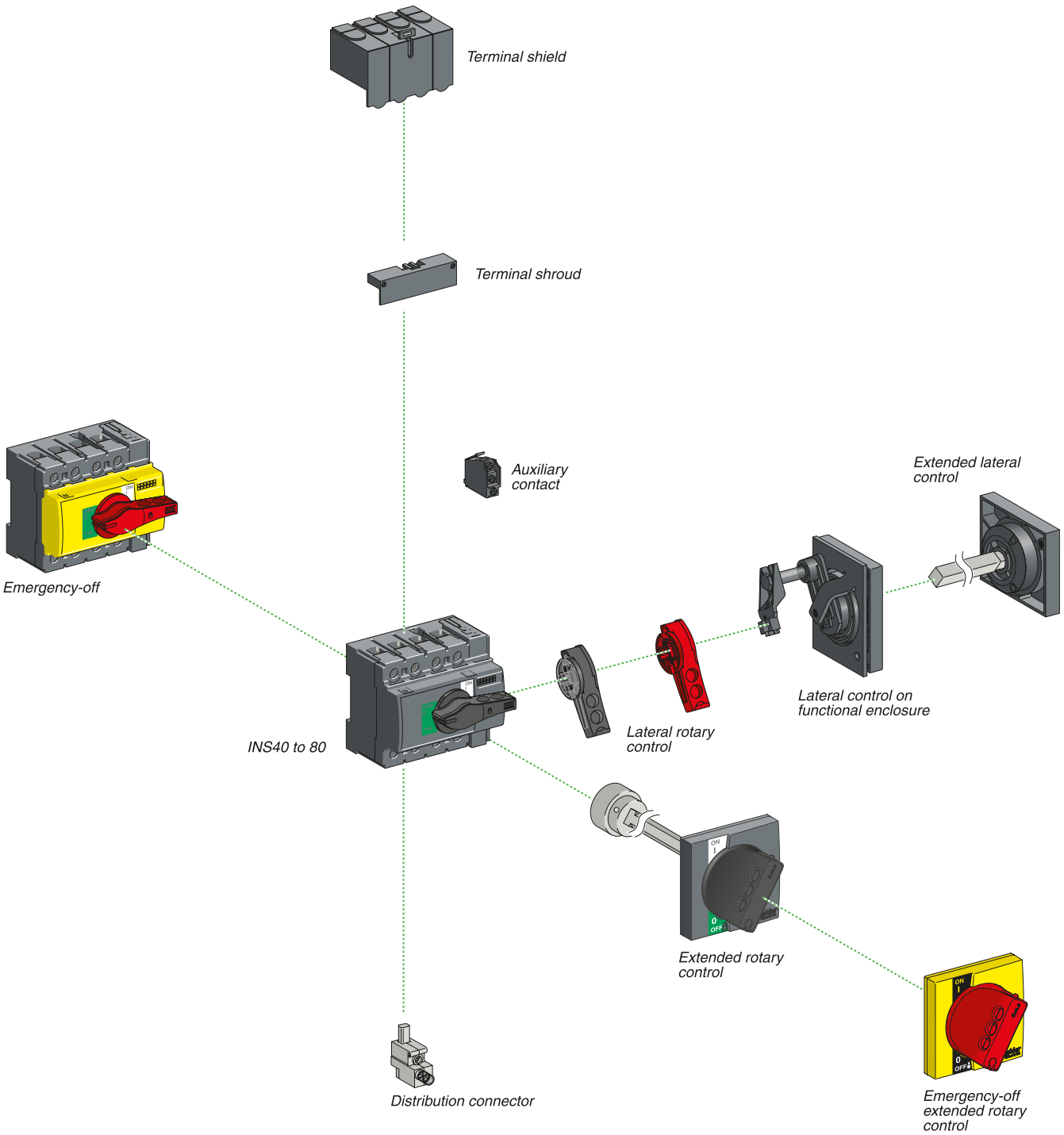
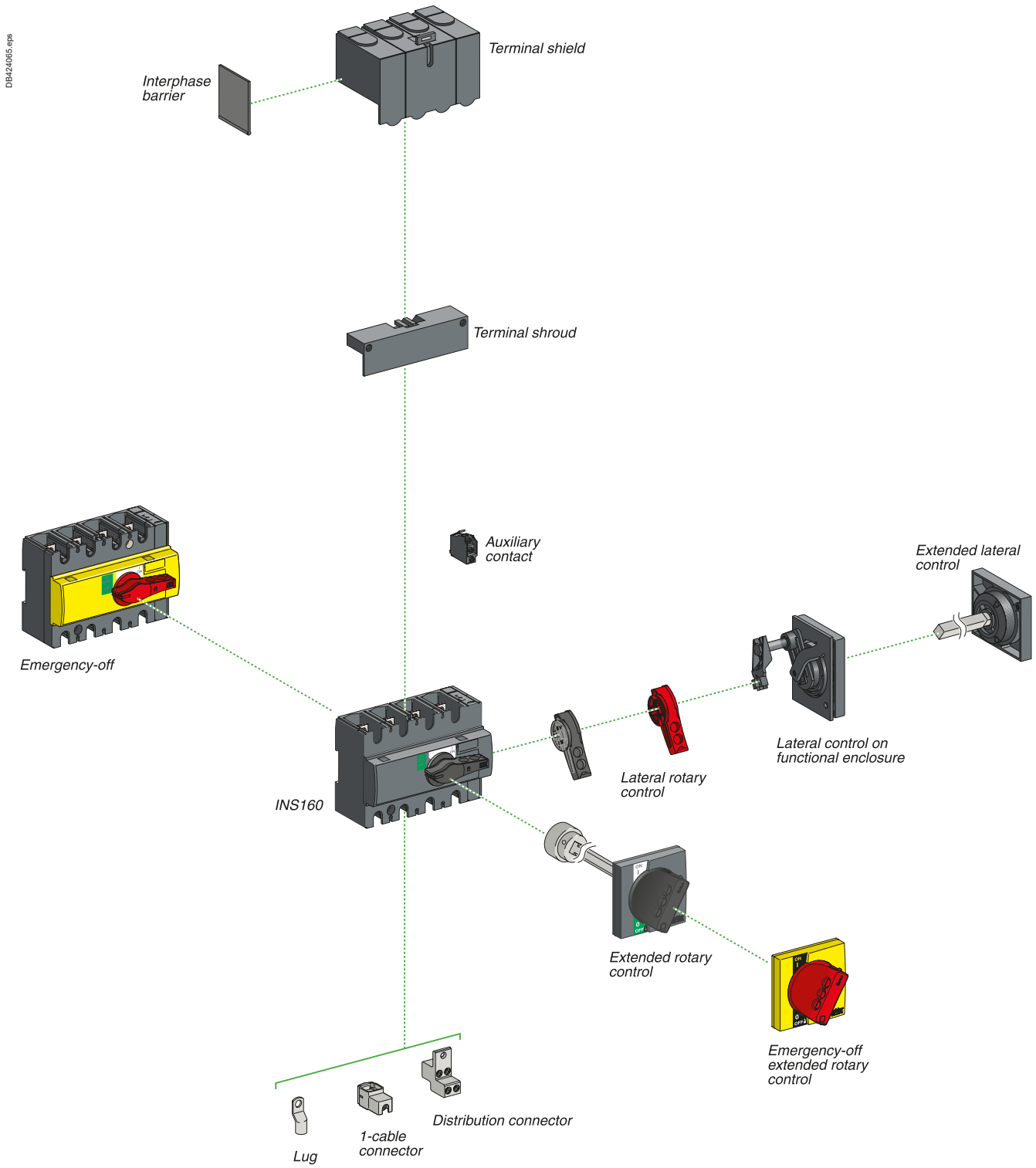
A



Electrical and mechanical accessories

Compact INS100 to 160



Electrical and mechanical accessories

Compact INS250-100 to 630
Compact INV100 to 630

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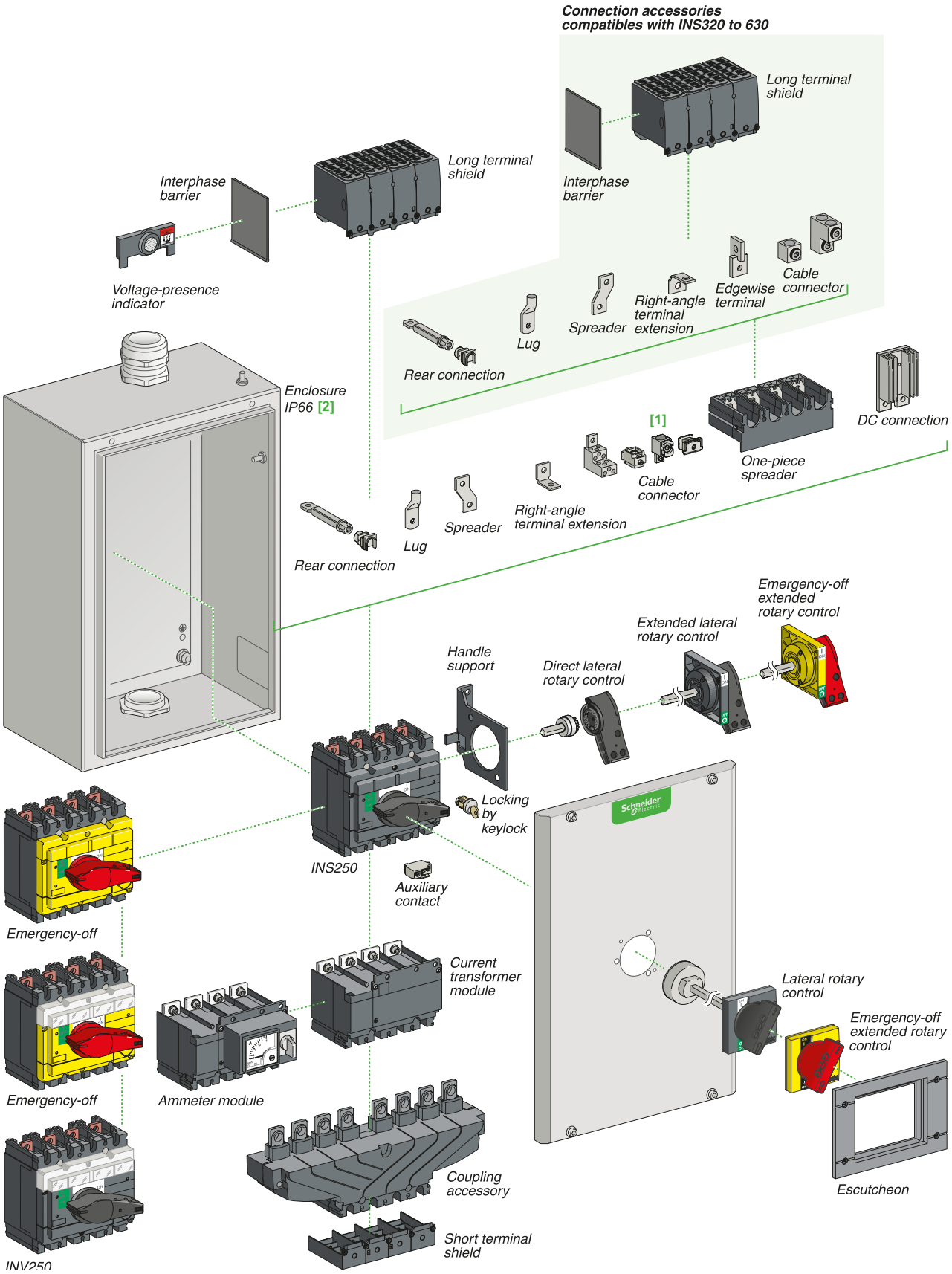
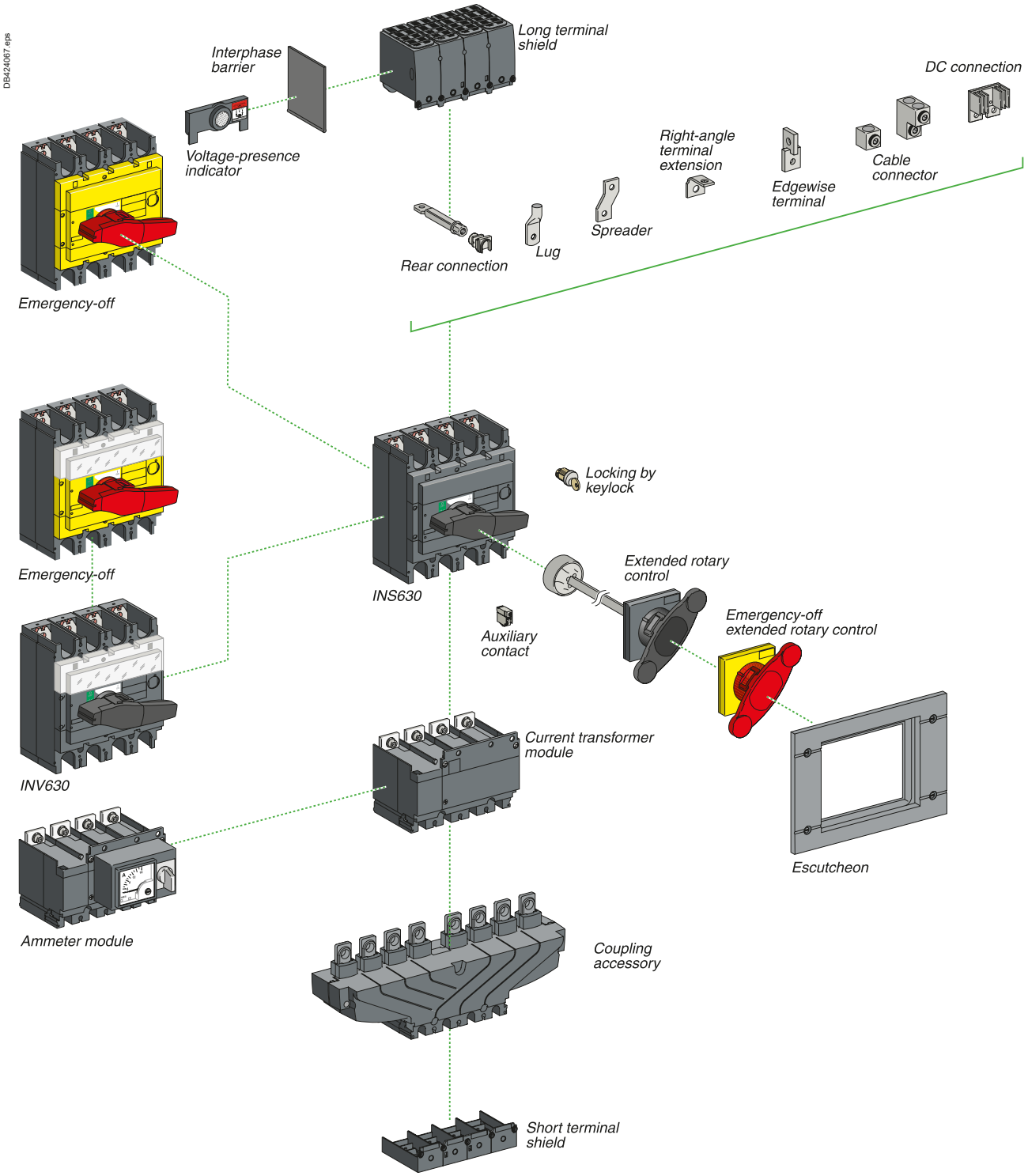


[1] Connectors 240 mm² INS (only for 250) /INV 100 to 250.
[2] IP66 enclosed switch 200A.

Electrical and mechanical accessories

Compact INS320 to 630
Compact INV320 to 630



Electrical and mechanical accessories
Compact INS630b to 1600
Compact INV630b to 1600

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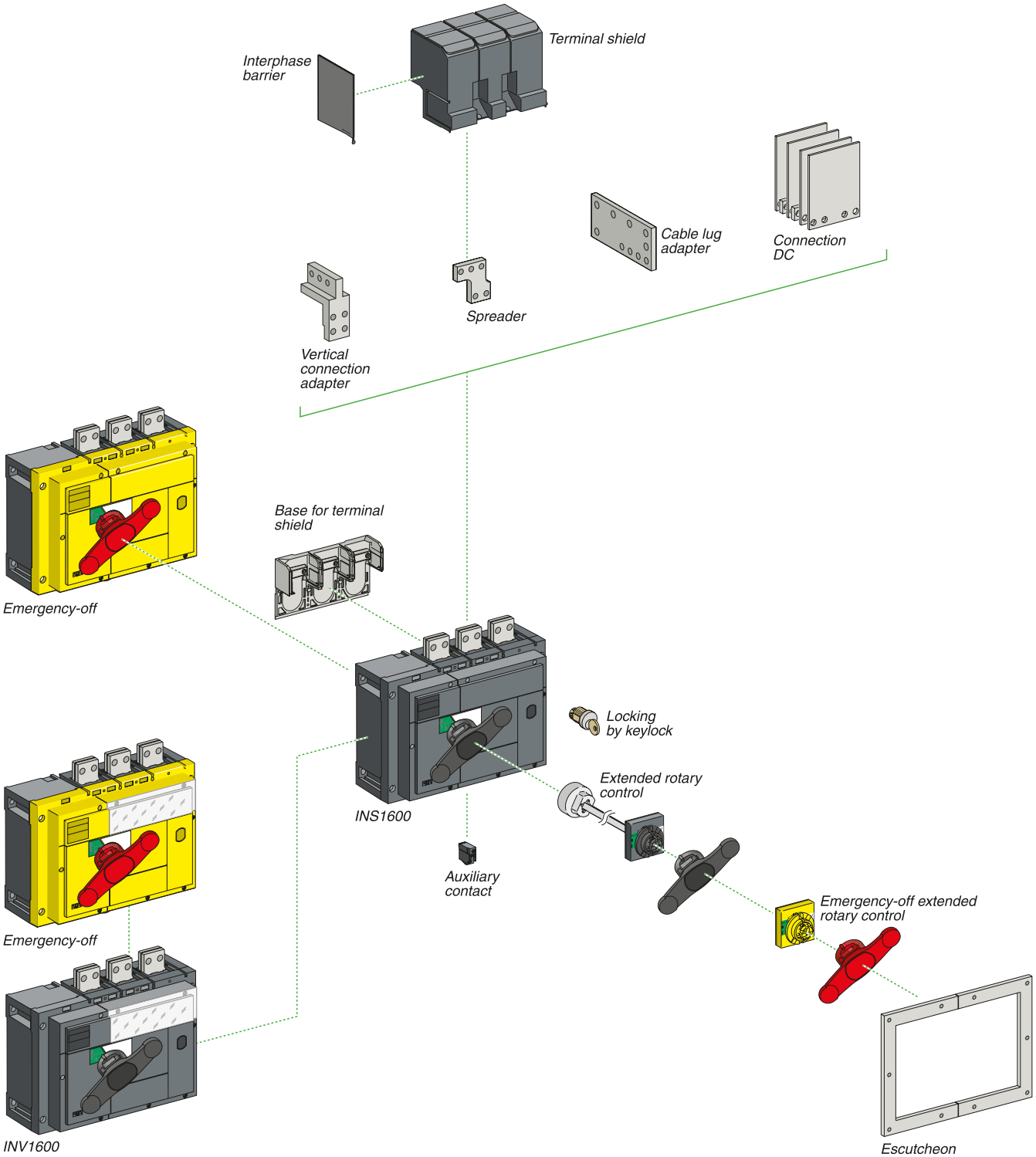

Electrical and mechanical accessories

Compact INS2000 to 2500
Compact INV2000 to 2500

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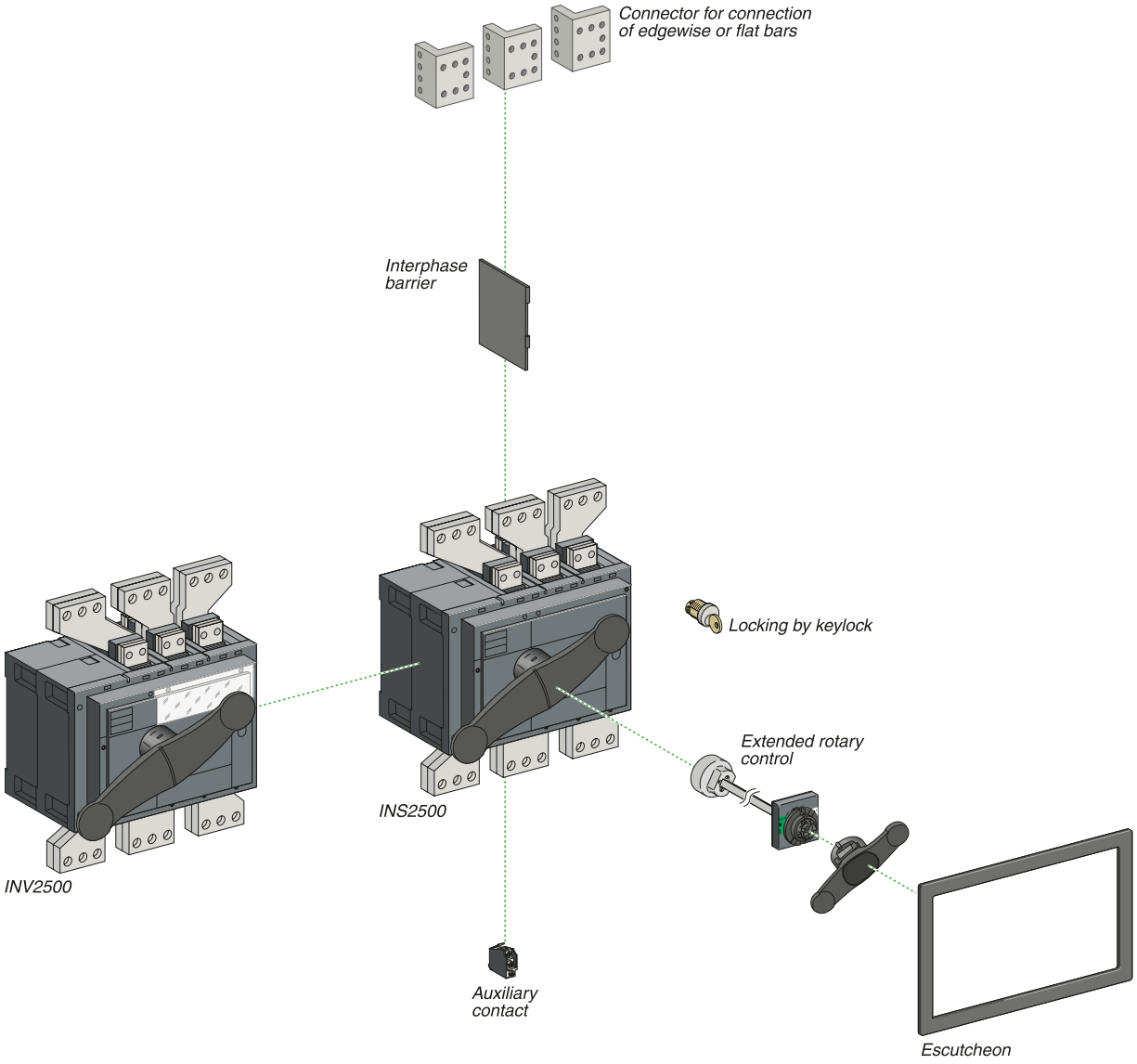

Electrical and mechanical accessories

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Compact INV250 with ammeter module.

Indications and measurement

Ammeter module

For Compact INS250 to 630 and INV100 to 630.

Function
Measures and displays the current of each phase (phase selection by a three-position switch on the front) on a dial-type ammeter.

Installation
- Connects directly to the downstream terminals of the switch-disconnector (except on a INS250 with a direct handle).
- Ammeter clips into module in any of four 90° positions, i.e. can be installed of devices mounted both vertically and horizontally.
- Degree of protection: IP40, IK04.
- Class II insulation between front and power circuits.

Electrical characteristics
Accuracy: class 4.5.

Current-transformer module

For Compact INS250 to 630 and INV100 to 630.

Function
The module enables direct connection of a measurement device such as an ammeter or a Digipact power meter (not supplied).

Installation
- Connects directly to the downstream terminals of the switch-disconnector.
- Degree of protection: IP40, IK07.
- Class II insulation between front and power circuits.
- Connection via six built-in terminals for cables with a cross-sectional area of 2.5 mm².

Electrical characteristics
- Current transformer with 5 A secondary winding.
- Class 3 for the following values of consumed output power.

Accuracy:
- 100 A rating: 1.6 VA
- 150 A rating: 3 VA
- 250 A rating: 5 VA
- 400/630 A rating: 8 VA.

Current-transformer module with voltage measurement outputs

For direct connection of a digital power monitoring unit: Power Meter PM700, PM800, etc. (not supplied).

Installation
- Mounts directly on the downstream terminals of the circuit breaker.
- Degree of protection: IP40, IK04.
- Class II insulation of front with respect to the power circuits.
- Built-in connectors for cables from 1.5 to 2.5 mm².

Electrical characteristics
- Rated operational voltage Ue: 530 V.
- Frequencies of measured values: 50... 60 Hz.
- Three CTs with 5 A secondary windings for the rated primary current $I_{N.}$
- class 0.5 to 1 for rated power consumption values at the output:
  - 125 A, 150 A and 250 A ratings: class 1 for 1.1 VA
  - 400/600 A rating: class 0.5 for 2 VA
- use a cable of 2.5 mm² section up to 2.5 m long.
- Four voltage measurement outputs including protection with automatic reset
- voltage measurement output impedance 3500 W ±25 %, maximum current 1 mA.

Voltage presence indicator

The indicator detects and indicates that circuit breaker terminals are supplied with power.

Installation
- In the long or short terminal shields, via the knockouts.
- Upstream or downstream of the circuit breaker.
- Degree of protection: IP40, IK04.

Electrical characteristics
Operates on all networks with voltages ranging from 220 et 550 V AC.

A

Auxiliary contacts

Compact INS and INV

One or four common-point changeover contacts can be used to remote switch-disconnector status information for indications, electrical interlocking, relays, etc.

Functions

Each contact may be used for the following functions:

- OF (ON/OFF): indicates the position of the switch-disconnector poles
- CAM (early-make or early-break function): indicates the position of the handle.

Used in particular for:

- CAO early-break switch (auxiliary contacts open before the main contacts), used, for example, to automatically open a circuit breaker or a contactor before opening the Compact INS
- CAF early-make switch (auxiliary contacts close before the main contacts)
- switching of very small loads. A "low-level" version of the auxiliary contacts exists for switching very small loads (for example, to control a PLC or electronic circuits).

Standards

The auxiliary contacts comply with international standard IEC 60947-5.1.

Installation

They simply snap in under the auxiliaries cover (supplied as standard) of the switch-disconnector.

Insulation

Sealable auxiliary shield to protect against direct contact with power circuits.

Electrical characteristics of auxiliary contacts for Compact INS and INV

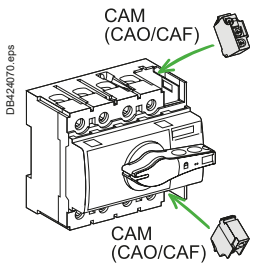
Contact		Standard				Low level			
Rated thermal current (A)		6				5			
Minimum load		100 mA at 24 V				1 mA at 4 V			
		AC		DC		AC		DC	
Utilisation category (IEC 60947-5-1)		AC12	AC15	DC12	DC14	AC12	AC15	DC12	DC14
Operational current (A)	24 V	6	6	6	1	5	3	5	1
	48 V	6	6	2.5	0.2	5	3	2.5	0.2
	110 V	6	5	0.6	0.05	5	2.5	0.6	0.05
	200/240 V	6	4	-	-	5	2	-	-
	250 V	-	-	0.3	0.03	5	-	0.3	0.03
	380/440 V	6	2	-	-	5	1.5	-	-
	480 V	6	1.5	-	-	5	1	-	-
	660/690 V	6	0.1	-	-	-	-	-	-

Compact INS40 to 2500, INV100 to 2500

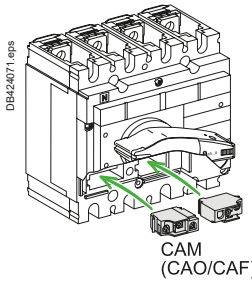
Possible combinations

Compact	OF block		CAM block (CAO/CAF)
INS40 to 160	-		2
INS250	-		2
INS400 to 630	3	and	1
INS630b to 1600	3	and	1
INS2000 to 2500	3	and	1

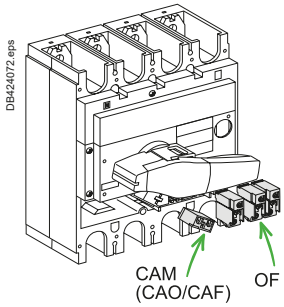
Auxiliary contacts for Compact INS and INV



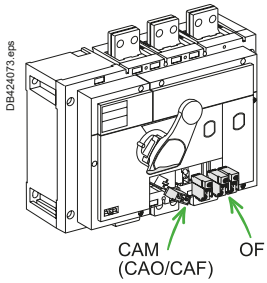
Compact INS40 to 160.



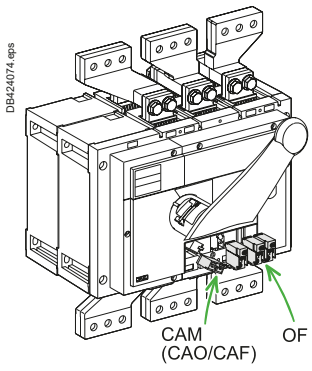
Compact INS250 and INV100 to 250.



Compact INS/INV320 to 630.



Compact INS/INV800 to 1600.



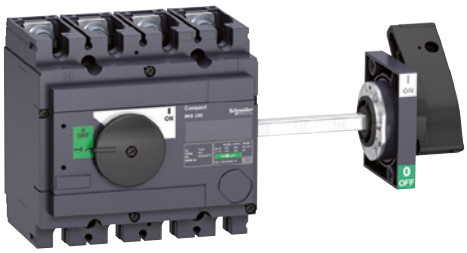
Compact INS/INV2000 to 2500.

Electrical and mechanical accessories

PB111554.eps

Compact INS160 with lateral direct rotary handle.

PB111561_L65.eps



Compact INS250 with lateral extended rotary handle.

PB115818.eps

Compact INS250 with front extended rotary handle.

PB111564_75.eps

Compact INS630 with front extended rotary handle.

PB111441_37.eps

Compact INS250 emergency-off version with front direct rotary handle.

Rotary handle

Compact INS and INV

There are two types of rotary handle:
- direct rotary handle
- extended rotary handle.

There are two models:
- standard with a black handle
- with a red handle and yellow front for machine-tool control, in accordance with VDE standard.

	INS40-160	INS250 INV100-250	INS/INV 320-630	INS/INV 630b-1600	INS/INV 2000-2500
Standard rotary handle					
Front direct	Standard	Standard	Standard	Standard	Standard
Lateral direct	Standard	With conversion	No	No	No
Front extended	Optional	Optional	Optional	Optional	Optional
Lateral extended	Optional [1]	Optional	No	No	No
Red and yellow rotary handle for emergency-off switch-disconnectors					
Front direct	Standard	Standard	Standard	Standard	No [2]
Lateral direct	Standard	With conversion	No	No	No
Front extended	Optional	Optional	Optional	Optional	No [2]
Lateral extended	Optional [1] [3]	Optional [3]	No	No	No

[1] Two models for universal enclosures and for Prisma G enclosures.
[2] Emergency-off versions not available for INS/INV2000-2500.
[3] The basic switch-disconnector must be the emergency-off (red and yellow) version.

Direct rotary handle
- Degree of protection IP40.IK07.
- The switch-disconnector may be locked in the OFF position by one to three padlocks, hasp diameter 5 to 8 mm (not supplied).

Models
- Standard switch-disconnector: with black handle.
- Emergency-off version with red handle and yellow front for machine-tool control.

Extended rotary handle
- Makes it possible to operate the switch-disconnector, installed inside a switchboard, from the front or side of the switchboard. The extended rotary handle may be installed on the front or the side of the switch-disconnector. Degree of protection IP55.IK08.
- IP66, IK08 specific extended front rotary handle for INS250-200A.

Operation
- Suitability for isolation is maintained.
- Door opening is prevented when the switch-disconnector is in ON position (for front handle only).
- The switch-disconnector may be locked in the OFF position by one to three padlocks, hasp diameter 5 to 8 mm (not supplied). Locking prevents opening of the switchboard door (for front handle only).

Models
- Standard switch-disconnector: with black handle.
- Emergency-off: with red handle and yellow front for machine-tool control.

Installation

The extended rotary handle is made up of:
- An assembly that replaces the direct rotary handle on the Compact INS/INV switch-disconnector (secured by screws).
- An assembly (handle and front plate) to be mounted on the door or the side of the switchboard. This assembly is always secured in the same position, whether the switch-disconnector is installed vertically or horizontally.
- An adjustable extension shaft (see page C-5 to page C-9).

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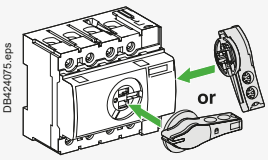

Direct rotary handle on INS40 to 160.

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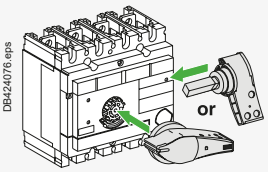

Direct rotary handle on INS250 and INV100 to 250.

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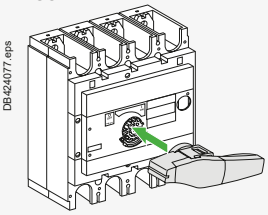

Direct rotary handle on INS/INV320 to 630.

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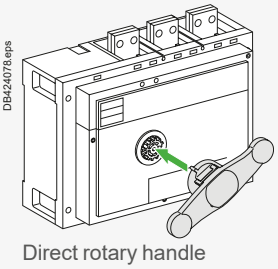


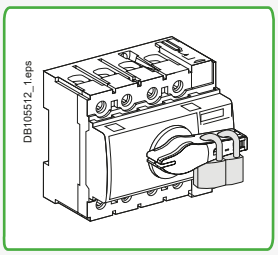
Direct rotary handle on INS/INV630 to 1600.

Disabling device closing

Padlocking

- INS40 to 2500 A.
- INV100 to 2500 A.

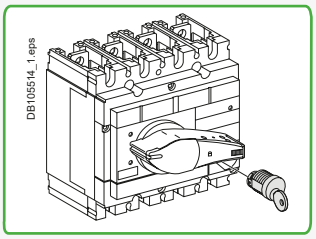
Switch-disconnectors may be locked in the OFF position
The handle is designed for locking by up to three padlocks (not supplied).
Locking in the OFF position guarantees isolation as defined by the IEC 60947-3 standard. The handle may also be lead-sealed in the OFF position.



Keylocking

- INS250-100 to 2500 A.
- INV100 to 2500 A.

INS250 to 630, INV100 to 630 or INV1000 to 2500 switch-disconnectors may be locked in the OFF position using a keylock (optional) that may be installed in the hole prepared for that purpose on the front of the devices.
The key may not be removed when the switch-disconnector is in the ON position.
Keylocks can also be fitted on switch-disconnectors equipped with extended rotary handles.



Padlocked Compact INS250 switch-disconnector.

A

INS/INV switch-disconnectors

	INS40 to 80		INS80 to 160		INS250-100 to 250 INV100 to 250		INS320 to 630 INV320 to 630		INS630b to 1600 INV630b to 1600		INV2000 to 2500 INS2000 to 2500	
	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON
Locking by padlocks	◉	○	◉	○	◉	○	◉	○	◉	○	◉	○
Locking by keylock	-	-	-	-	◉	○	◉	○	◉	○	◉	○
Door locking [1]	-	◉	-	◉	-	◉	-	◉	-	◉	-	◉
Door lock defeat [1]	-	◉ [2]	-	◉ [2]	-	◉ [2]	-	◉ [2]	-	◉ [2]	-	◉ [2]
Door locking device padlocked [1]	◉	-	◉	-	◉	-	◉	-	◉	-	◉	-
Lead-sealable handle	◉	○	◉	○	◉	○	◉	○	◉	○	◉	○

◉ Standard. ○ By simple modification of the standard rotary handle.
[1] With extended rotary control. **[2]** Using a special tool.

Electrical and mechanical accessories
UL489/CSA22.2 standards

PB111410_L35.eps

Compact INSE80.

PB111497_L39.eps

Compact INSJ400.

Electrical and mechanical accessories

Auxiliary contacts
Two to four common-point changeover contacts can be used to remote switch-disconnector status information for indications, electrical interlocking, relays, etc.

Ammeter module
Measures and displays the current of each phase (phase selection by a threeposition switch on the front) on a dial-type ammeter.

Current-transformer module
Measure phase currents for display by an ammeter or a Digipact module.

Rotary handles (standard)
Suitability for isolation is maintained.

Direct rotary handle
The switch-disconnector may be locked in the OFF position by one to three padlocks, hasp diameter 5 to 8 mm (not supplied).
Standard models: black handle.

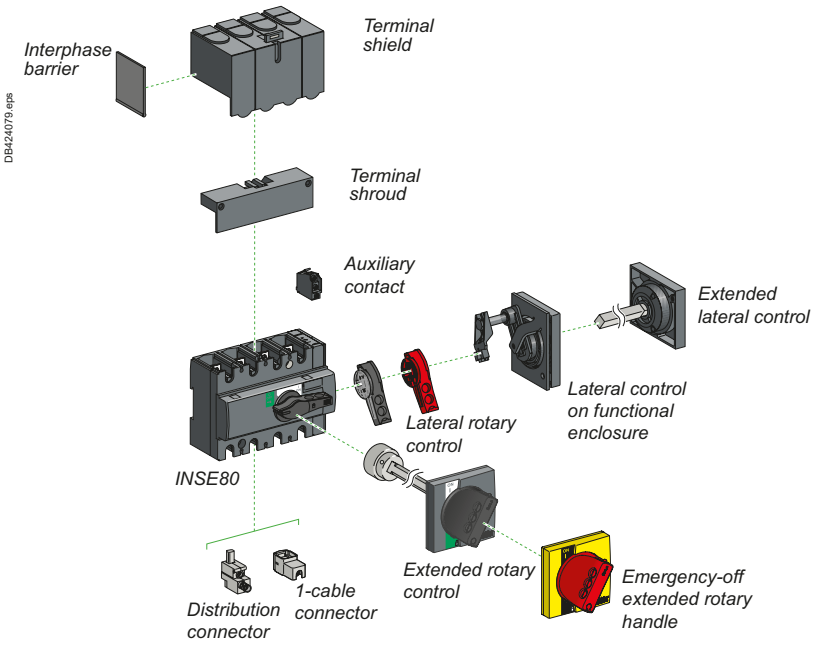
Extended rotary handle
Makes it possible to operate the switch-disconnector, installed inside a switchboard, from the front or side of the switchboard.
The extended rotary handle may be installed on the front or the side of the switchdisconnector.

Insulation accessories

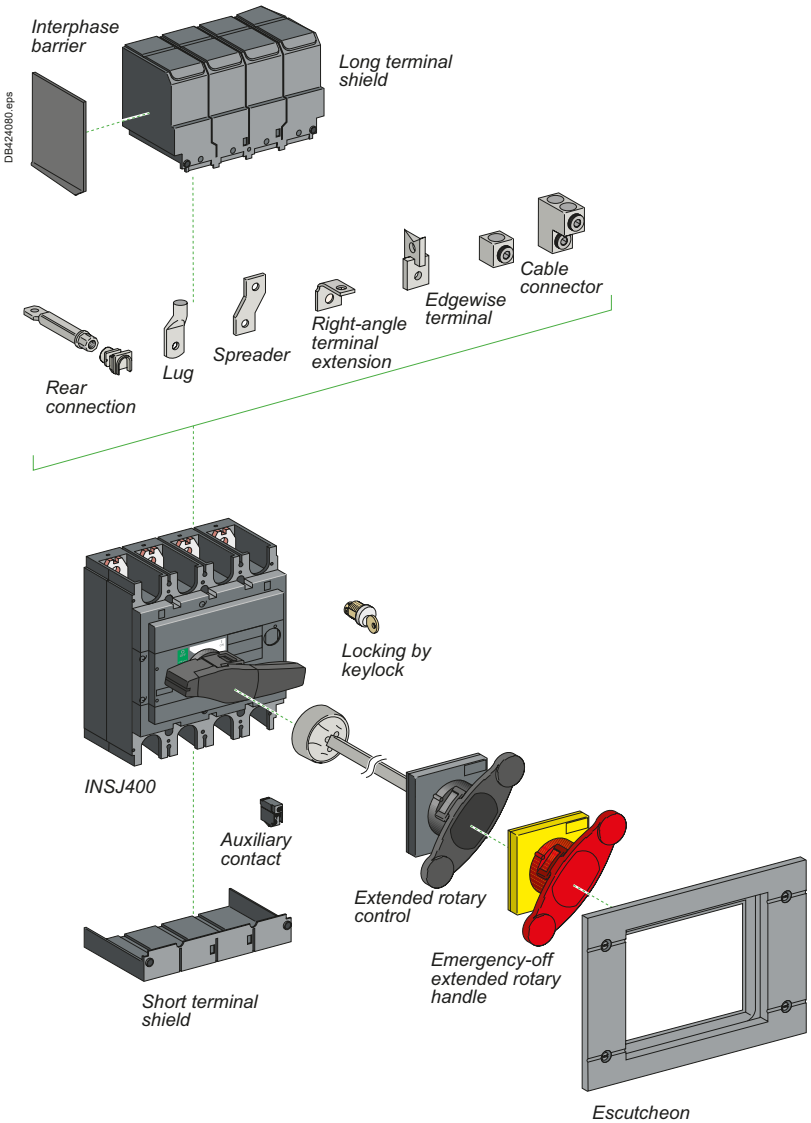
Compact INSE/INSJ may be equiped with insulation accessories in option:
- terminal shrouds
- terminal shields
- interphase barriers.

Electrical and mechanical accessories
UL489/CSA22.2 standards

Compact INSE80

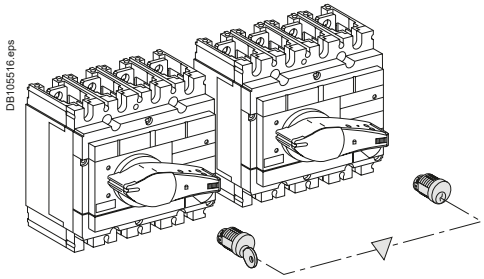


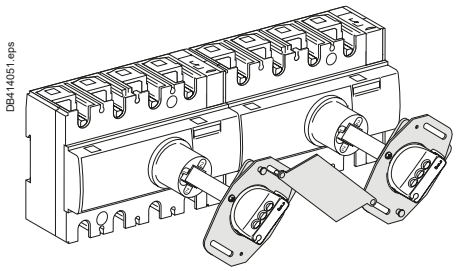
Compact INSJ400

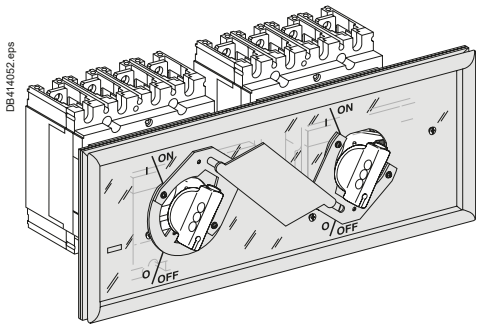


Manual source-changeover systems

A source-changeover system is made up of two switch-disconnectors or circuit breakers that are mechanically interlocked.
The mechanism prevents the simultaneous connection (even transient) of both sources. Switching from one source to the other can be achieved by:
- a keylock-type interlocking system
- a mechanical interlocking system
- a complete source-changeover assembly.







Possible positions

Normal	1	0	0
Replacement	0	1	0

Source-changeover	INS40…160	INS250 INV100…250	INS320…630 INV320…630	INS630b…2500
By keylock	-	◉	◉	◉
Mechanical	◉	◉	◉	-
Complete assembly	-	◉	◉	-

Interlocking of two devices using keylocks and a captive key

Interlocking is based on two identical keylocks with a single key and a keylock adapter (different for each device). This solution enables interlocking between two devices that are physically distant or that have very different characteristics.

Interlocking of two devices with rotary handles

The direct or extended rotary handles are padlocked with the devices in the OFF position. The mechanism prevents simultaneous closing of the devices, but allows them to be opened.

Possible combinations of "Normal" and "Replacement" source INS40 to 160 switch-disconnectors

"Normal N"	"Replacement" R					
Compact INS [1]	INS40	INS63	INS80	INS100	INS125	INS160
INS40						
Ratings 40 A	◉	◉	◉	◉	◉	◉
INS63						
Ratings 63 A	◉	◉	◉	◉	◉	◉
INS80						
Ratings 80 A	◉	◉	◉	◉	◉	◉
INS100						
Ratings 100 A	◉	◉	◉	◉	◉	◉
INS125						
Ratings 125 A	◉	◉	◉	◉	◉	◉
INS160						
Ratings 160 A	◉	◉	◉	◉	◉	◉

[1] With extended rotary handles only.

Possible combinations of "Normal" and "Replacement" source INS/INV100 to 250 switch-disconnectors

"Normal N"	"Replacement" R			
Compact INS /INV [2]	INS250-100 INV100	INS250-160 INV160	INS250-200 INV200	INS250-250 INV250
INS250-100/INV100				
Ratings 100 A	◉	◉	◉	◉
INS250-160/INV160				
Ratings 160 A	◉	◉	◉	◉
INS250-200/INV200				
Ratings 200 A	◉	◉	◉	◉
INS250-250/INV250				
Ratings 250 A	◉	◉	◉	◉
INS320/INV320				
Ratings 320 A	○			○
INS400/INV400				
Ratings 400 A				
INS500/INV500				
Ratings 500 A				
INS630/INV630				
Ratings 630 A	○			○

○ 250 A and 630 A ratings can be mixed by using INS320/630 rotary handle interlocking system.
[2] Possible with INV, but visible-break function is significantly impaired.

A

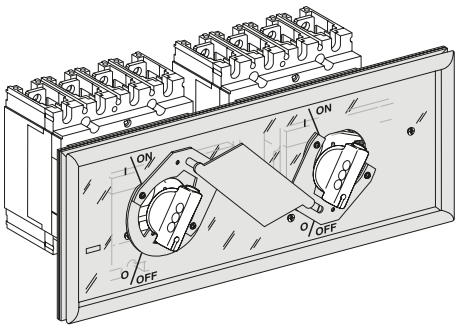
Interlocking of two devices with rotary handles

Possible combinations of "Normal" and "Replacement" source INS/INV320 to 630 switch-disconnectors

"Normal N"	"Replacement" R			
Compact INS /INV [1]	**INS320 INV320**	**INS400 INV400**	**INS500 INV500**	**INS630 INV630**
INS250-100/INV100				
Ratings 100 A	○	○	○	
INS250-160/INV160				
Ratings 160 A				
INS250-200/INV200				
Ratings 200 A				
INS250-250/INV250				
Ratings 250 A	○			○
INS320/INV320				
Ratings 320 A	◉	◉	◉	◉
INS400/INV400				
Ratings 400 A	◉	◉	◉	◉
INS500/INV500				
Ratings 500 A	◉	◉	◉	◉
INS630/INV630				
Ratings 630 A	◉	◉	◉	◉

○ 250 A and 630 A ratings can be mixed by using INS320/630 rotary handle interlocking system.

[1] Possible with INV, but visible-break function is significantly impaired.



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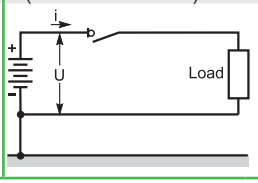
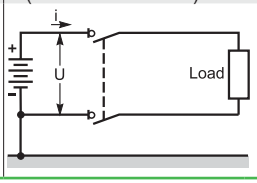
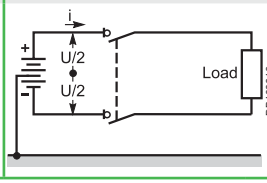
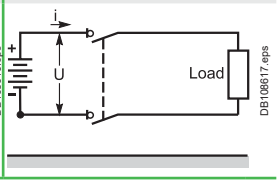
Selection guide for DC switch-disconnectors

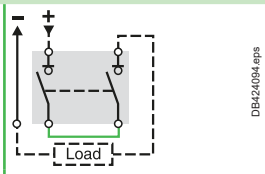
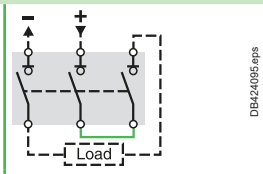
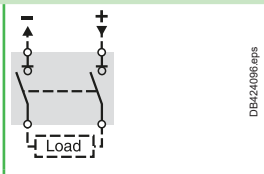
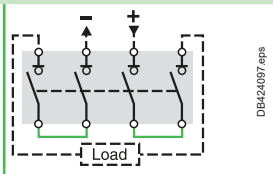
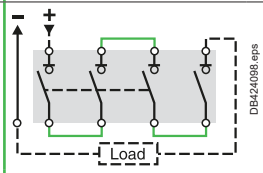
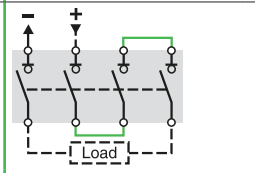
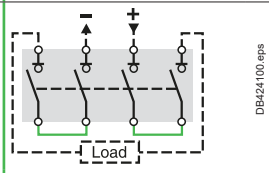
Solutions depending on the distribution system and the voltage

Type of distribution system

Type	Earthed		Mid-point connected to earth	Isolated
Source	One polarity (negative here) connected to earth (or exposed conductive parts)			Isolated polarities
Protected polarities	1 (disconnection of 1P)	2 (disconnection of 2P)	2	2
Diagrams, connection method				

Series connection of poles

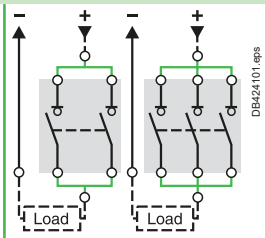
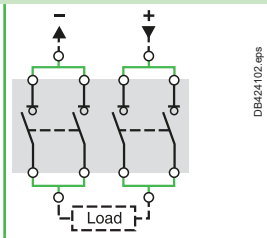
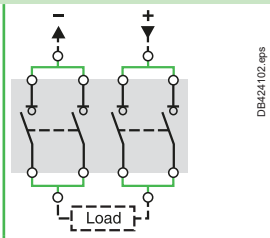
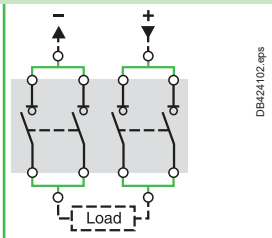
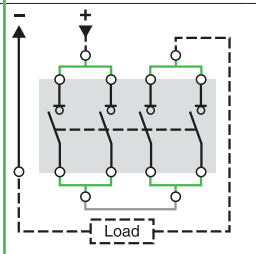
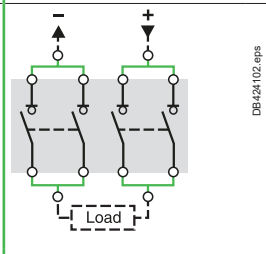
Selection of switch-disconnectors and pole connection

Compact INS/INV				
24 V ⩽ Un ⩽ 125 V	 Two-pole [1].	 Three-pole.	 Two-pole [2].	 Four-pole.
125 V < Un ⩽ 250 V	 Four-pole.	 Four-pole.	 Four-pole.	Not applicable

[1] A 3P switch-disconnectors can be used if a 2P version does not exist. In this case, connect pole 1 and pole 2, or pole 2 and pole 3 with dedicated connection accessory.
[2] A 3P switch-disconnectors can be used if a 2P version does not exist. In this case, connection accessory is not necessary and the central pole is not connected.

Parallel connection of poles

Selection of switch-disconnectors and pole connection

Compact INS/INV				
Un ⩽ 63 V	 Two, three-pole, 2, 3P in parallel, four-pole, 4P in parallel.	 Four-pole, 2 x 2P in parallel.	 Four-pole, 2 x 2P in parallel.	 Four-pole, 2 x 2P in parallel.
63 V < Un ⩽ 125 V	 Four-pole, 2 x 2P in parallel, connected in series.	Not applicable	 Four-pole, 2 x 2P in parallel.	Not applicable

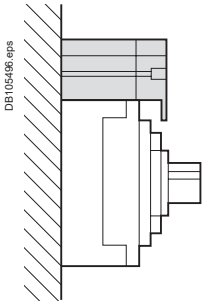
One-piece spreader

Connection of large cables may require an increase in the distance between the switch-disconnector terminals. The one-piece spreader is an accessory that can also be fitted on Compact circuit breakers. It offers the following features:
- increases the pitch of the switch-disconnector terminals to correspond to that of the upstream device
- compatible with all the connection and insulation accessories available for the upstream device (connectors, terminal extensions, etc.)
- enhances insulation between phases in comparison with standard spreaders.

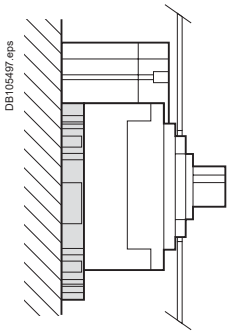
	INS250 INV100 to 250	INS320 to 630 INV320 to 630
Pitch **without** spreaders (mm)	35	45
Pitch **with** standard spreaders (mm)	45	52.5 or 70
Pitch **with** one-piece spreader (mm)	45	-

Mounting

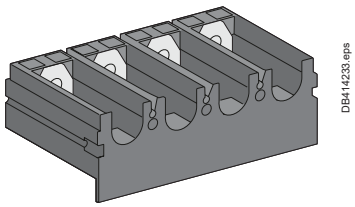
When equipped with a one-piece spreader, INS and INV switch-disconnectors may be installed either at the back of a switchboard or on the front panel with a front alignment base.
- Devices with different frame sizes can thus be aligned in the switchboard.
- The same mounting plate can be used for all devices (including Compact circuit breakers).



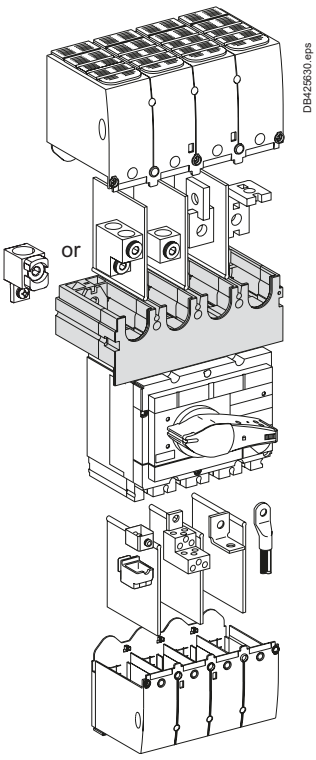
Mounting at the back of a switchboard.



Mounting on the front panel with a front alignment base.



One-piece spreader.



Connection and insulation accessories are identical to those for Compact.

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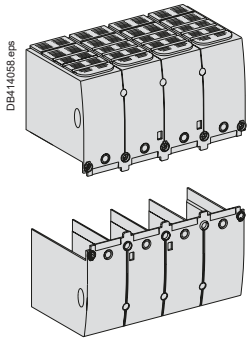
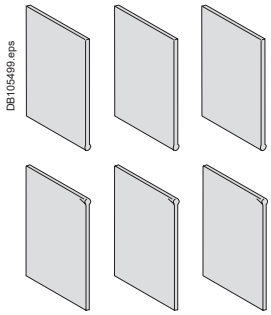
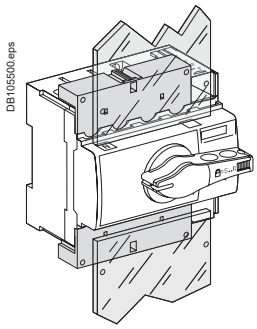


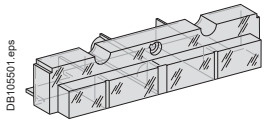
Terminal shields
for Compact INS and INV.



Interphase-barrier
for Compact INS and INV.



Terminal shrouds
for Compact INS40 to 160
(with insulating plate to
avoid contact with the
conductors).



Spare viewport
for Compact INV.

Insulation of live parts

Terminal shields for INS and INV switch-disconnectors

Lead-sealable insulation accessories used to protect against direct contact with power circuits.

- Degree of protection: IP40, IK07.
- Supplied with lead-sealing accessories.

Interphase-barrier for INS/INV

- Safety accessories providing maximum insulation between the phases of the power connection.
- Easy installation by snapping into the case.
- May be combined with all other connection accessories, except the terminal shields and terminal shrouds.

Terminal shrouds for INS40 to INS160

These insulation accessories are used for protection against direct contact with live connection screws. It is also possible to attach an insulating plate (not supplied) to the shrouds to avoid any contact with the power conductors.

Spare viewport for Compact INV switch-disconnectors

Viewports are darkened by the electrical arc. A new viewport may be installed to maintain the visible-break function.

Note: If 500 V ⩽ U ⩽ 690 V, interphase-barrier or long terminal shields are mandatory.

Coupling accessory for complete source-changeover assembly

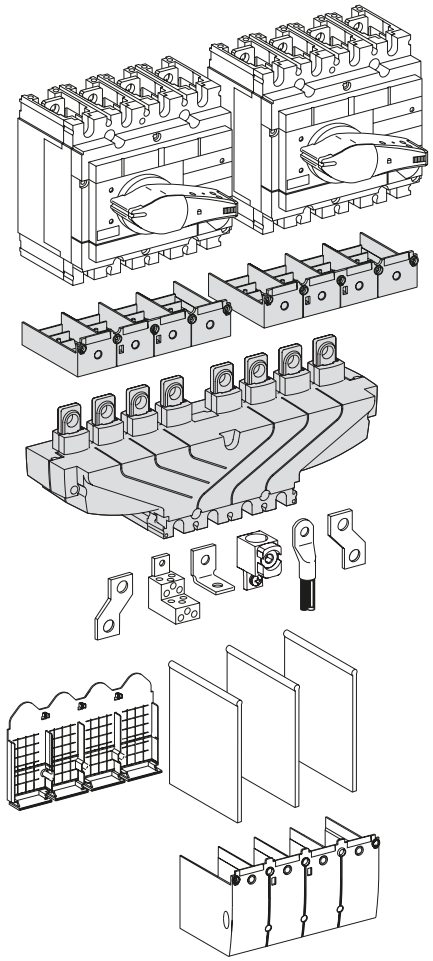
This accessory simplifies connection of bars or cables with lugs when coupling two Compact INS/INV100 to 630 switch-disconnectors of the same size.
Pitch between outgoing terminals:

- Compact INS250 and INV100 to 250: 35 mm
- Compact INS/INV320 to 630: 45 mm.

Connection and insulation accessories

The coupling accessory may be fitted with the same connection and insulation accessories as the coupled circuit breakers or switch-disconnectors.

Possible combinations	Downstream coupling	
	Possible	Pitch of outgoing terminals (mm)
Manual source-changeover		
INS250 (100 to 250 A) with rotary handle	◉	35
INS400/630 (320 to 630 A) with rotary handle	◉	45



DB425566.eps

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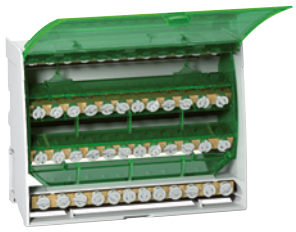
Linergy DS
Screw distribution blocks

PB111254-30_1.eps



PB111253-30_1.eps

IEC/EN 60947-7-1,
IEC/EN 61439-1 & 2 (inside Prisma System)

Description

- Single-pole or four-pole distribution block that can be installed on a standard DIN rail or on a mounting plate.
- Compatible with Prisma G and P, Pragma, Mini Pragma and Resbo series switchboards.
- Incomers and feeders are connected to screw terminals that accept rigid or flexible cables with ferrule.
- Optional: additional neutral terminal strip for four-pole distribution block.

Advantages

- Simplified power supply for main incomers.
- Easy phase balancing.
- Easy, effortless cabling due to excellent accessibility.
- Visible cabling.
- Insulation between phases.
- The single-pole distribution blocks are adjacent and bridgeable via the second incoming hole for parallel connection.

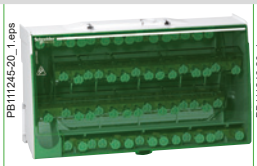
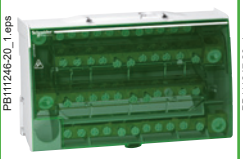
Screw distribution blocks

Number of poles	1P			4P
	PB111250-20_1.eps 	PB111251-20_1.eps 	PB111252-20_1.eps 	PB111243-20_1.eps 
Rated operational current	125 A	160 A	250 A	100 A
Total connections capacity	10	13	14	4 x 7
Terminal capacity				
Diameter	2 x Ø9.5 mm	2 x Ø12 mm	1 x Ø15.3 mm	2 x Ø7.5 mm
	2 x Ø7.5 mm	3 x Ø7.5 mm	1 x Ø10 mm	5 x Ø5.5 mm
	6 x Ø5.8 mm	8 x Ø5.8 mm	4 x Ø6 mm	-
	-	-	8 x Ø7.5 mm	-
Rated peak withstand current (Ipk) Ipk/60 ms	25 kÂ	36 kÂ	60 kÂ	14 kÂ
Ipk/6 ms	-	-	-	24 kÂ
Rated short-time withstand current (Icw) (IEC/EN 60947-7-1)	4.2 kA rms/1 s	8.4 kA rms/1 s	14.4 kA rms/1 s	3 kA rms/1 s
Width (number of 9 mm pitches)	3	4	5	8
Dimension (H x W x D)	85 x 27 x 50.5	85 x 36 x 50.5	85 x 45 x 50.5	100 x 71 x 50.5
Weight (g)	125	163	239	210
Neutral terminal strip (optional)	-	-	-	LGYN1007
Catalogue numbers	**LGY112510**	**LGY116013**	**LGY125014**	**LGY410028**

On LGY412560 and LGY416048 references.
Input cabling facilitated by side terminals.

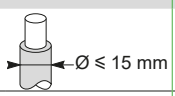
Technical data

Common characteristics	
To IEC/EN 60947-7-1 and IEC/EN 61439-1 & 2	
Rated insulation voltage (Ui)	500 V AC
Rated operational voltage (Ue)	230 V AC (L/N) 440 V AC (L/L)
Rated impulse withstand voltage (Uimp)	8 kV
Rated conditional short-circuit current of an assembly	Up to the breaking capacity of Schneider Electric feeder circuit breakers, even in cascading configuration
Network frequency	50/60 Hz
Pollution degree	3
Overvoltage category	III
Additional technical characteristics	
Reference temperature	40 °C
Operating temperature	-25 °C to 55 °C
Dielectric withstand (IEC/EN 60947-1)	2500 V AC

				Neutral terminal strip		
						
	125 A		160 A	100 A	125 A	
	4 x 12	4 x 15	4 x 12	7	12	15
	1 x Ø9 mm	1 x Ø9.5 mm	1 x Ø12 mm	2 x Ø7.5 mm	1 x Ø9 mm	1 x Ø9.5 mm
	7 x Ø7.5 mm	3 x Ø8.5 mm	3 x Ø9 mm	5 x Ø5.5 mm	7 x Ø7.5 mm	3 x Ø8.5 mm
	4 x Ø6.5 mm	11 x Ø6.5 mm	8 x Ø7.5 mm	-	4 x Ø6.5 mm	11 x Ø6.5 mm
	-	-	-	-	-	-
	18 kÂ	18 kÂ	22 kÂ	-	-	-
	26 kÂ	28 kÂ	36 kÂ	-	-	-
	4.2 kA rms/1 s	4.2 kA rms/1 s	8.4 kA rms/1 s	-	-	-
	14	20	18	7	14	17
	100 x 126 x 50.5	100 x 162 x 50.5	100 x 174 x 50.5	20 x 70 x 35	20 x 125 x 35	20 x 155 x 35
	390	559	567	63	111	149
	LGYN12512	LGYN12515	LGYN12512	-	-	-
	LGY412548	**LGY412560**	**LGY416048**	**LGYN1007**	**LGYN12512**	**LGYN12515**

Terminal technical data

Type	**PZ2 screw**							
Diameter	Ø5.5 mm	Ø5.8 mm	Ø6 mm	Ø6.5 mm	Ø7.5 mm	Ø8.5 mm	Ø9 mm	Ø9.5 mm
Section rigid cable	1.5 to 16 mm²	1.5 to 16 mm²	1.5 to 16 mm²	1.5 to 16 mm²	2.5 to 25 mm²	6 to 35 mm²	10 to 35 mm²	10 to 35 mm²
Section flexible cable or with ferrule	1.5 to 10 mm²	1.5 to 10 mm²	1.5 to 10 mm²	1.5 to 10 mm²	1.5 to 16 mm²	4 to 25 mm²	4 to 25 mm²	6 to 35 mm²
Tightening torque	2 N.m	2 N.m	2 N.m	2 N.m	2 N.m	2 N.m	2.5 N.m	2.5 N.m

Type	**Hc screw**				
Diameter	Ø9.5 mm	Ø10 mm	Ø12 mm		Ø15.3 mm
Section rigid cable	10 to 35 mm²	1.5 to 50 mm²	25 to 70 mm² 		35 to 120 mm²
Section flexible cable or with ferrule	6 to 35 mm²	1.5 to 35 mm²	16 to 50 mm²		25 to 95 mm²
Tightening torque	8 N.m	4 N.m	1P: 10 N.m	4P: 5 N.m	14 N.m

Linergy DX
Quick distribution blocks


PB104499-7.eps


PB111415-19_r.eps

IEC 60947-7-1,
IEC 61439-2 (inside Prisma System)

Description

- Downstream circuits are connected from the front, to spring terminals.
- Contact pressure automatically adapts to the size of the conductor.
- Contacts are insensitive to vibrations and thermal variations.
- Only one cable (flexible or rigid) can be inserted per terminal.

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Quick distribution blocks

Number of poles		4P, incomers from top	4P, incomers from bottom
		 PB104499-6.eps	 PB104500-6.eps
Rated operational current at 40 °C	(Ie)	63 A	63 A
Rated conditional short-circuit current of an assembly	(Isc)	The reinforced breaking capacity due to cascading in circuit breaker combinations is maintained. The worst-case situations have been tested.	The reinforced breaking capacity due to cascading in circuit breaker combinations is maintained. The worst-case situations have been tested.
Rated peak withstand current	(Ipk)	-	-
Rated insulation voltage	(Ui)	500 V AC	500 V AC
Rated operational voltage	(Ue)	440 V AC	440 V AC
Rated impulse withstand voltage	(Uimp)	6 kV	6 kV
Rated short-time withstand current	(Icw)	-	-
Thermal stress	($A^2.s$)	-	-
Rated operational frequency		50/60 Hz	50/60 Hz
Degree of protection		IPxxB	IPxxB
Incoming terminals		1 tunnel terminal 25²/phase	1 tunnel terminal 25²/phase
Total connection capacity, outgoing terminals		24 connections: 4 x 6²/phase 12 x 6²/neutral	24 connections: 4 x 6²/phase 12 x 6²/neutral
Dimensions (H x W x D)		96.5 x 72 x 62 8 x 9 mm pitch	96.5 x 72 x 62 8 x 9 mm pitch
Installation		Clipped onto a DIN rail	Clipped onto a DIN rail
Other			
Standard for installation inside Prisma		IEC 61439-2	IEC 61439-2
Glow-wire 60695-2-11		960 °C	960 °C
Degree of pollution		3	3
Catalogue numbers		**04040**	**04041**

Accessories

Catalogue numbers		-	-

Advantages

- A reliable electrical connection, no maintenance required (tightness guaranteed over time).
- Quick connection.
- Easy phase balancing.
- Ease of rewiring if the switchboard is expanded or modified.

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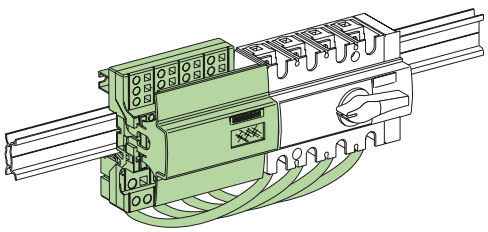
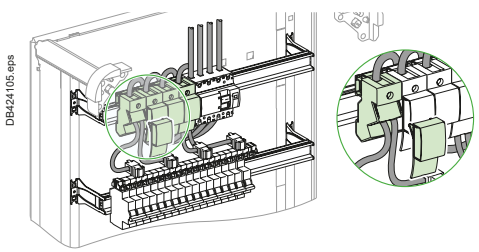
	4P		1P
	PB111415-19_r.eps 	PD400106.eps 	PB111463-8-r.eps 
	125 A	160 A	160 A
	20 kA/60 ms max according to IEC 61439-1	20 kA/60 ms max according to IEC 61439-1	32 kA
	20 kÂ	20 kÂ	24 kÂ
	750 V AC	750 V AC	750 V AC
	690 V AC	690 V AC	690 V AC
	8 kV	8 kV	8 kV
	4.5 kA rms/1 s	4.5 kA rms/1 s	5.5 kA rms/1 s
	2.025 x 10^7	2.025 x 10^7	3.025 x 10^7
	50/60 Hz	50/60 Hz	50/60 Hz
	IPxxB	IPxxB	IPxxB
	1 tunnel terminal 35²/phase	Supplied with a prefabricated flexible connection (with lugs) designed for INS100/160 switch-disconnector installed on the left or right	1 tunnel terminal 70²/phase
	52 connections: 7 x 4²/phase 3 x 6²/phase 2 x 10²/phase 1 x 16²/phase (screw terminal)	52 connections: 7 x 4²/phase 3 x 6²/phase 2 x 10²/phase 1 x 16²/phase (screw terminal)	6 connections: 6 x 16²/phase
	127 x 108 x 48 8 x 9 mm pitch	127 x 108 x 48 8 x 9 mm pitch	95 x 36 x 70 4 x 9 mm pitch
	Screwed to plain or slotted backplate or onto DIN rail	Screwed to plain or slotted backplate or onto DIN rail	Onto DIN rail
	Possible to combine 2 terminal blocks (2nd terminal block supplied from enclosed terminals in the 1st, Imax of 2nd terminal block: 80 A)		
	IEC 61439-2	IEC 61439-2	IEC 61439-2
	960 °C	960 °C	960 °C
	3	3	3
	04045	**04046**	**04031**

	4 x 125 A flexible connections, L = 210 mm with 1 end fitting for tunnel terminal and 1 end 45 ° angle lug		4 x 160 A flexible connections, L = 380 mm with 2 x 45 mm² end fittings for tunnel terminals
	04047	-	**04149**

DB424104.eps 

DB424105.eps 

Linergy DP
Quick distribution blocks

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IEC 60947-7-1, IEC 61439-1 & 2 (inside Prisma System)

Description

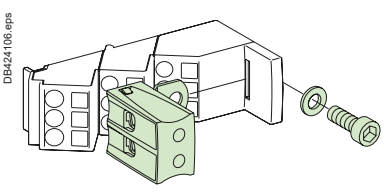
■ The Linergy DP quick distribution block is designed for installation directly downstream of Compact NSX and INS up to 250 A. It can also be clipped onto a modular rail.

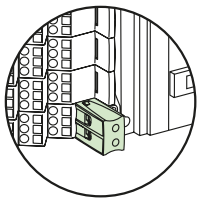
Avantages

■ It is quick to mount in the horizontal position. Electrical connections are made directly to the device terminals.
■ It is the same width as the devices and does not take up any additional space in the switchboard.
■ The connection terminals are slanted to facilitate cable entry and avoid exceeding the bending radius of the flexible and rigid cables.

Quick distribution blocks for Compact devices					
Number of poles		**3P**	**4P**	**3P**	**4P**
					
Rated operational current	(Ie)	250 A	250 A	250 A	250 A
Rated peak withstand current	(Ipk)	30 kA	30 kA		
Rated short-time current	(Icw)	8.5 kA rms/1 s	8.5 kA rms/1 s		
Thermal stress	($A^2.s$)	7.225 x 10^7	7.225 x 10^7		
Total connection capacity, outgoing terminals		27 connections: 4 x 10^2/phase 6 x 16^2/phase	36 connections: 4 x 10^2/phase 6 x 16^2/phase	2 connections: 2 x 35^2/pole	2 connections: 2 x 35^2/pole
Incomer terminals		1 cable lug 120 mm^2 per pole			
Dimensions (H x W x D)		105 x 138 x 63	140 x 138 x 64		
Installation		On mounting plate or DIN rail		On mounting plate	
Product certifications		ASEFA - KEMA			
Standard for installation inside Prisma		IEC 61439-1-2			
Glow-wire 60695-2-11		960 °C			
Catalogue numbers		**04033**	**04034**	**04155**	**04156**

Additional block		
		
Description	2 x 35^2 3P for Linergy DP 250 A	2 x 35^2 4P for Linergy DP 250 A
Catalogue numbers	**04155**	**04156**

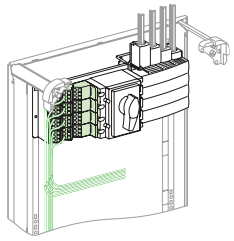




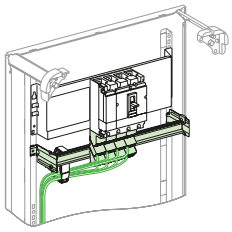
Technical data

Common characteristics		
Rated conditional short-circuit current of an assembly	(Isc)	The reinforced breaking capacity due to cascading in circuit-breaker combinations is maintained. The worst-case situations have been tested.
Rated insulation voltage	(Ui)	750 V AC
Rated operational voltage	(Ue)	690 V AC
Rated impulse withstand voltage	(Uimp)	8 kV
Network frequency		50/60 Hz
Degree of protection		IPxxB
Degree of pollution		3
Overvoltage category		III
Additional technical characteristics		
Reference temperature		40 °C
Operating temperature		-25 °C to 55 °C

Installation



Directly on the mounting plates of horizontally mounted Compact **NSX100/250** and Compact **INS250** devices in the enclosures.



It can also be mounted downstream of vertically mounted Compact **NSX100/250** and Compact **INS250** devices in the enclosures.
In this case, the Linergy DP is mounted on a depth-adjustable modular rail.

A

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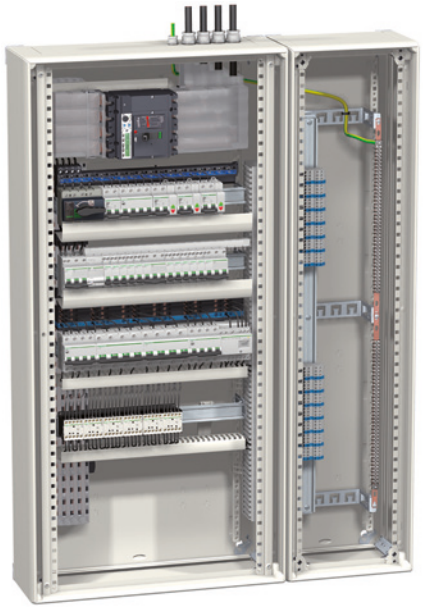
Local isolation enclosure.

PD3902276R_SE.eps



Power distribution incomer in a Prisma G enclosure.

PD3902404R_SE.eps

Power distribution incomer in a Prisma G IP30 enclosure.

Compact INS and INV switch-disconnectors offer a number of rational installation solutions to optimise available space inside enclosures. They may be installed in individual enclosures or as incomers in power distribution or control panels.

■ Compact INS40 to 160 switch-disconnectors have a standard 45 mm high front and may be clipped onto a Multifix or symmetrical rail. They may be installed in all modular enclosures, including Pragma, Prisma, etc.

■ Compact INS250 to 630 and INV100 to 630 switch-disconnectors may be installed on mounting plates or rails. Installation as incomers in Prisma power distribution cubicles is very flexible:

□ the mounting plates are the same as those used for Compact NSX circuit breakers and are identical for direct and extended handles

□ installation in 300 mm ducts is possible for ratings up to 630 A.

Individual enclosures

■ Each individual enclosure includes:

□ a door with a cut-out

□ a mounting plate

□ accessories required for extended front or lateral rotary handle

□ removable plates (without holes) for cable entry.

The Compact INS switch-disconnector must be order separately.

Pragma modular enclosures

■ The enclosures in the Pragma range are:

□ made of self-extinguishing insulating material

□ supplied with all accessories (terminal blocks, blanking plates, etc.)

□ rated class 2.

Prisma G metal enclosures

■ The metal enclosures in the Prisma G range are highly adaptable to the type of installation:

□ basic enclosure

□ multifix rail

□ modular front plates

□ distribution accessories

□ ducts for running cables or installing terminals

□ plain or transparent doors.

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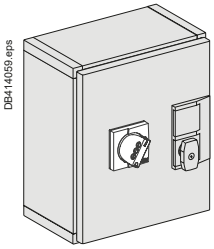

Heavy-duty individual enclosure (sheet metal or plastic).

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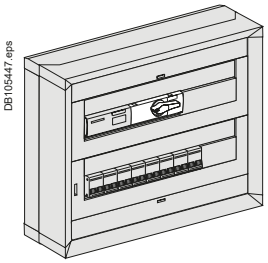

Compact INS40 on a symmetrical rail.

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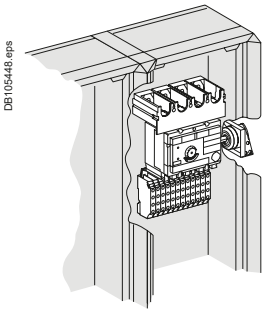


Installation in a 300 mm duct.

Front-panel escutcheons

Escutcheons for switch-disconnectors and ammeter modules
Mounted on switchboard panel from the front using four screws.

Identification labels

Compact INS40 to 160 switch-disconnectors may receive Telemecanique prefabricated labels, catalogue number AB1- (eight characters). Compact INS250 to 630 and INV100 to 630 switch-disconnectors are supplied as standard with a clip-on label for handwritten indications.
These devices also come with a nameplate into which a label can be inserted.

Individual enclosures

Compact INS and INV switch-disconnectors equipped with a front handle may be installed in individual enclosures.
All fixed, front connections are possible, except right-angle and edgewise terminal extensions. Spreaders may be installed in the enclosures intended for Compact INS250 to 630 and INV100 to 630 switch-disconnectors.

Heavy-duty steel (or stainless steel) individual enclosure for Compact INS250 (IP66, IK10)
- Steel (or stainless steel) cover,
- Screwed
- Extended front rotary handle IP66
- 2 CAM (early make or break function) wired with terminal bloc NSY.

(see page A-5).

Heavy-duty metal individual enclosure for Compact INS (IP55, IK08)
- Metal enclosure.
- Door with keylock and cut-out for switch-disconnector rotary handle.
- Extended rotary front handle.
- Device mounting plate.
- Removable plate (without holes) for cable entry through bottom.

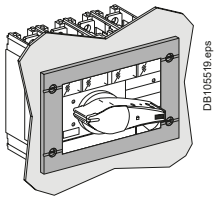
Heavy-duty insulating individual enclosure for Compact INS and INV (IP55, IK08)
- Thermoplastic enclosure.
- Transparent cover, screwed, lead sealable, with cut-out for switch-disconnector rotary handle.
- Extended rotary front handle.
- Device mounting plate.
- Removable plates (without holes) for cable entry through bottom and/or top.

Dimensions

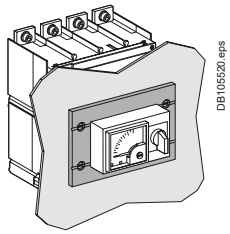
Steel - Stainless steel IP66	H x W x D
Compact INS250-200	445 x 300 x 200

Metal enclosures	H x W x D
Compact INS40 to 160	350 x 350 x 260
Compact INS250 Compact INV100 to 250	450 x 350 x 260
Compact INS320 to 630 Compact INV320 to 630	650 x 350 x 260

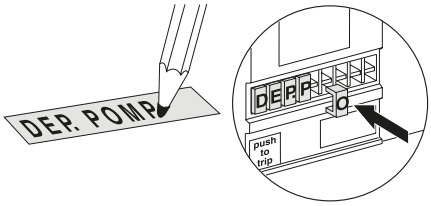
Insulating enclosures	H x W x D
Compact INS40 to 160	180 x 270 x 185
Compact INS250 Compact INV100 to 250	360 x 270 x 235
Compact INS320 to 630 Compact INV320 to 630	720 x 360 x 235



Escutcheon for switch-disconnectors.



Escutcheon for ammeter modules.



A

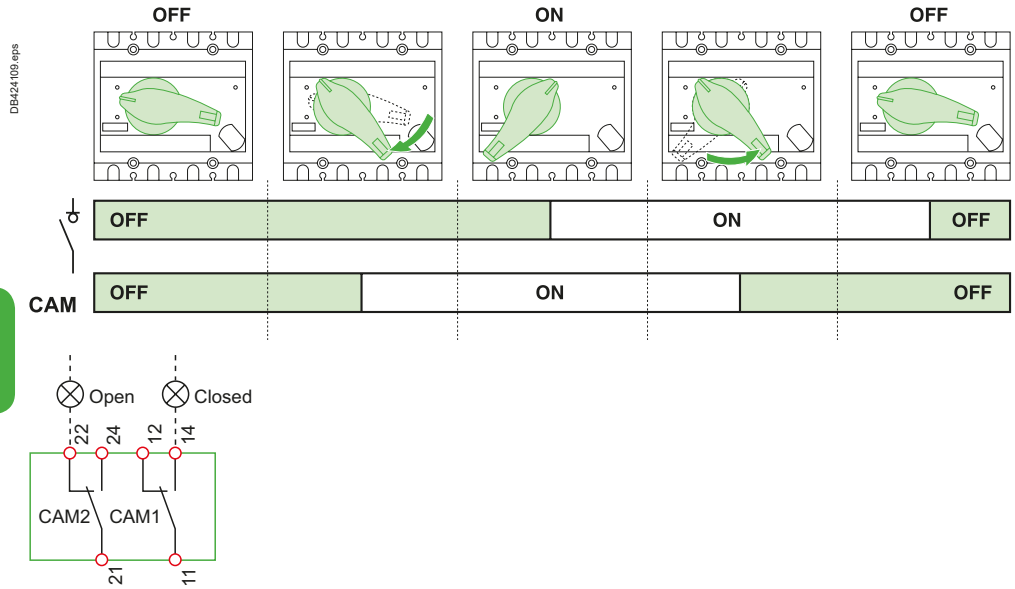
Installation recommendations

B

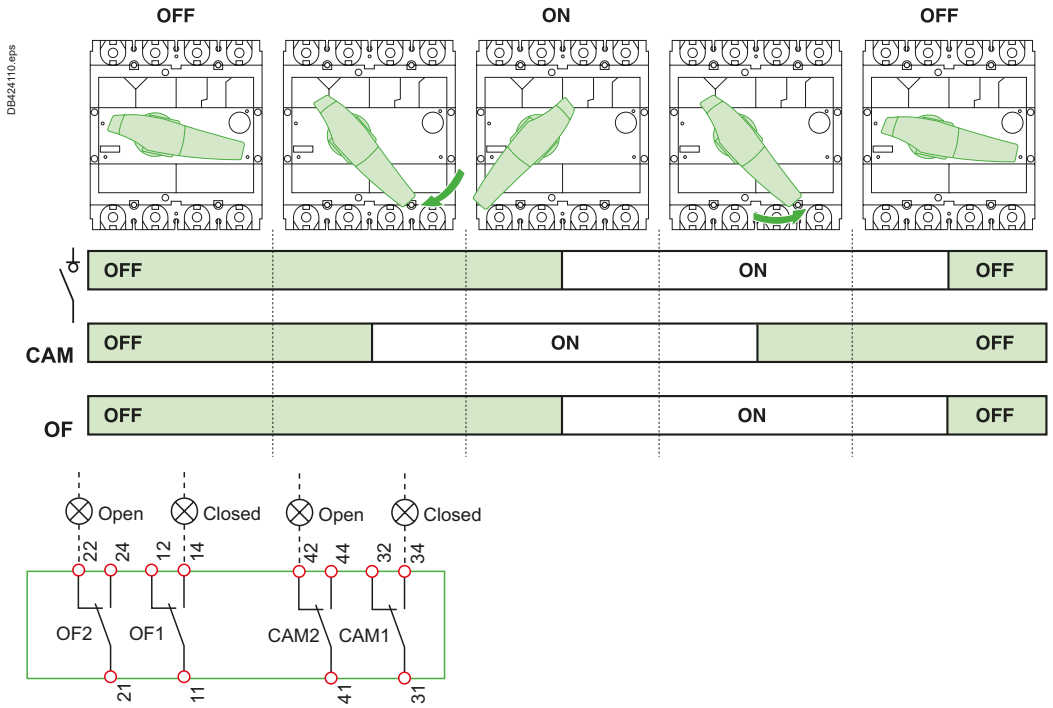
Other chapters
Functions and characteristics..... A-1
Dimensions and connection..... C-1
Complementary technical information..... D-1
Catalogue numbers..... E-1

Operating principle

INS40 to 250 - INV100 to 250

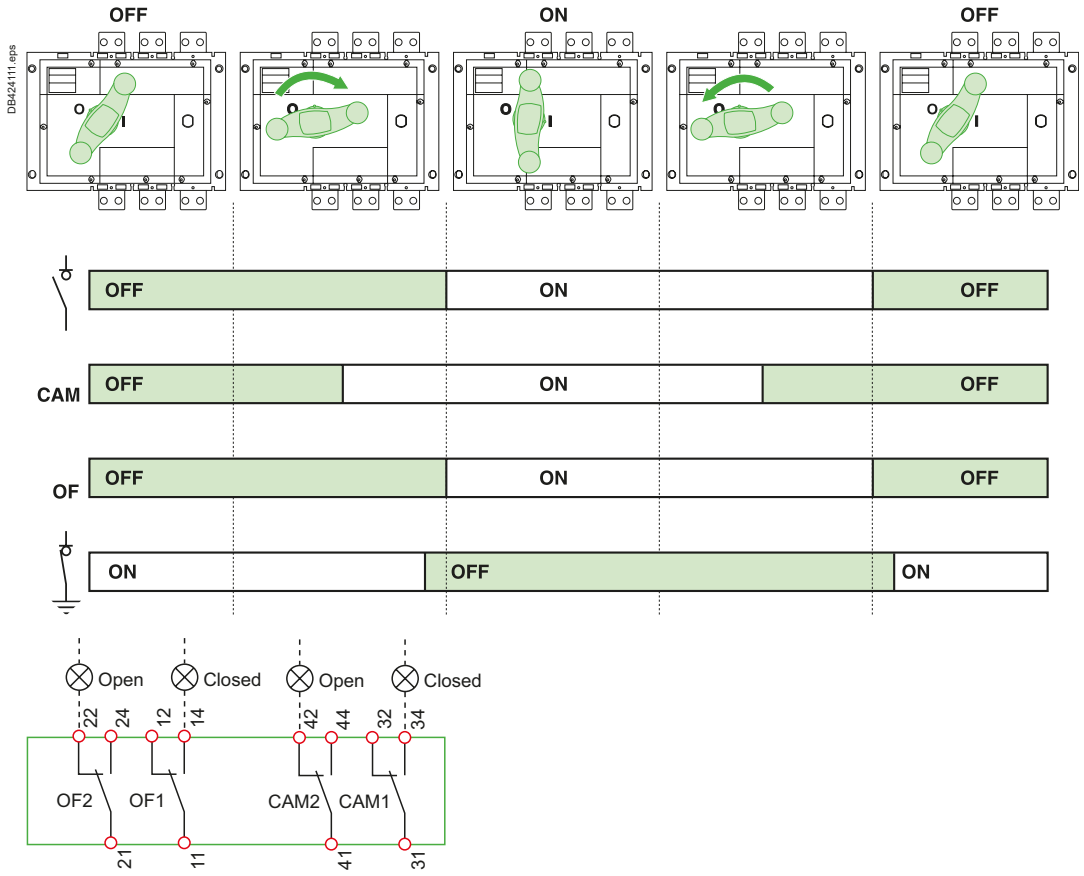


INS320 to 630 - INV320 to 630



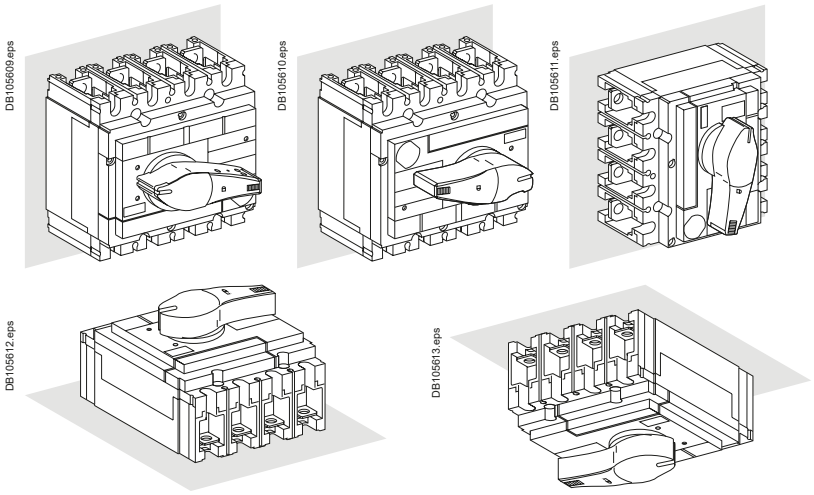
Operating principle

INS630b to 2500 - INV630b to 2500



Possible installation positions and mounting techniques

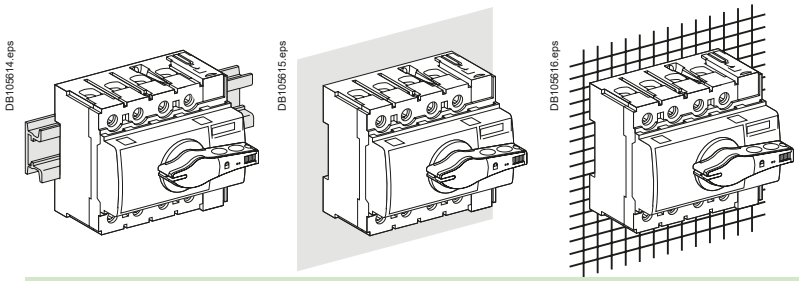
Possible installation positions



Possible mounting

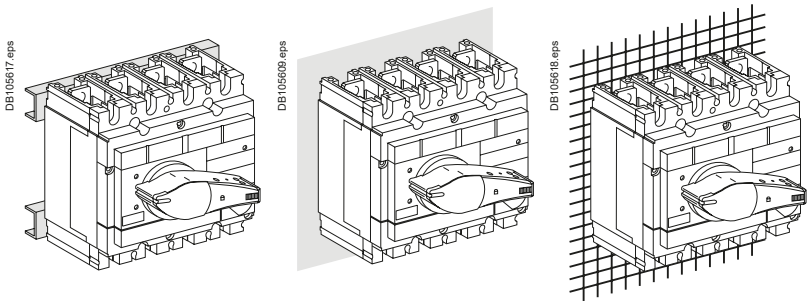
INS40 to 160

Symmetrical rail | **Plain mounting plate** | **Slotted mounting plate**



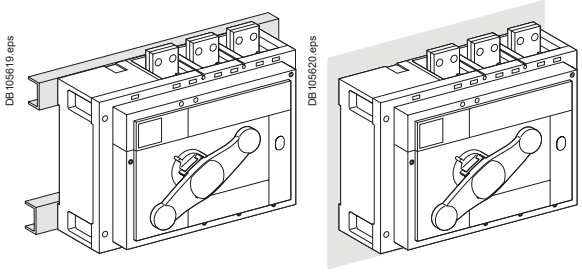
INS250-100 to 630 - INV100 to 630

Rails | **Plain mounting plate** | **Slotted mounting plate**



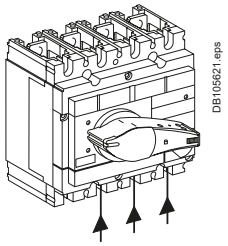
INS/INV630b to 2500

Rails | **Plain mounting plate**



Reverse supply

Compact INS/INV switch-disconnectors may be supplied indifferently via the top or bottom terminals, without any reduction in performance.

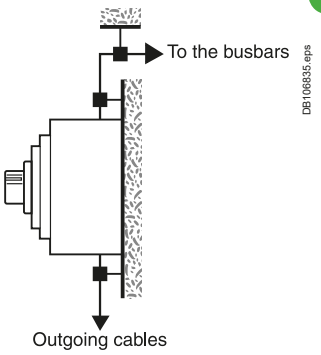


Neutral pole position

On Schneider Electric switch-disconnectors, the neutral pole is traditionally located on the left-hand side. On the INS and INV ranges, the four poles are identical and the neutral pole can therefore be located on the right-hand side simply by adding an appropriate label.

Conductor materials and electrodynamic forces

Compact INS/INV switch-disconnectors may be connected using either bare copper, tinned copper or tinned aluminium conductors (flexible or rigid bars, cables).
In the event of a short-circuit, thermal and electrodynamic forces are exerted on the conductors. The conductors must therefore be adequately sized and suitably supported.
Note that the terminals of electrical devices (switch-disconnectors, contactors, circuit breakers, etc.) should not be considered to contribute to the support of the conductors.

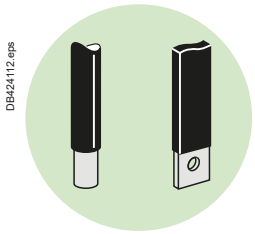


Cables ties and flexible bars

The table below indicates the maximum distances between cable ties depending on the prospective short-circuit current.
Care must be taken not to exceed a distance of 400 mm between ties mechanically secured to the switchboard frame.

Type of tie	"Panduit" type Width: 4.5 mm Max. load: 22 kg Colour: white					"Sarel" type Width: 9 mm Max. load: 90 kg Colour: black		
Max. distance between ties (mm)	200	100	50	350	200	100	70	50 (double ties)
Short-circuit current (kA rms)	10	15	20	20	27	35	45	100

Note: for cables ⩾ 50 mm², 9 mm wide ties must be used.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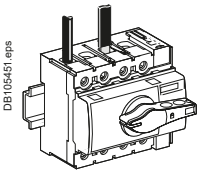
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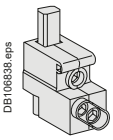
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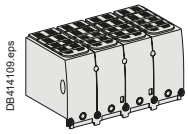
Distribution connector.

B

If 500 V ⩽ U ⩽ 690 V, long terminal shields are mandatory.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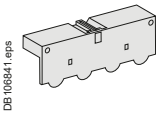
Terminal shields.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Terminal shrouds.

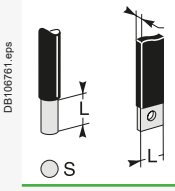
Front connection of bare copper and aluminium cables

Compact INS40 to INS80 switch-disconnectors are equipped as standard with connectors for bare copper or aluminium cables (1.5 to 50 mm² rigid cables, 1.5 to 35 mm² flexible cables)

Distribution connector
This connector screws directly into the switch-disconnector terminals for connection of three cables of the following types:
- 1 to 10 mm² flexible cables [1]
- 1.5 to 16 mm² rigid cables.

Pole pitch

18 mm



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		Standard device	With distribution connector
Bars	e (mm)	⩽ 15	-
	L (mm)	13	13
Lugs	L (mm)	⩽ 10	⩽ 10
	S (mm²)	1.5 to 50 rigid	1.5 to 16 rigid
	Cu / Al	1.5 to 35 flexible	1 to 10 flexible [1]
Torque	(Nm)	5	2

[1] Connection of 1.5 to 4 mm² flexible cables requires crimped or auto-crimping ferrules.

Insulation of live parts

- With long terminal shields.
- With terminal shrouds.

Front connection of insulated bars and cables with crimped lugs

Compact INS100 to INS160 switch-disconnectors are equipped as standard with terminals comprising nuts with M6 screws for direct connection of insulated bars or cables with lugs.

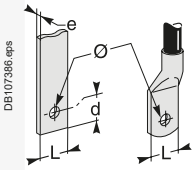
Lugs

The special lugs for copper cables may be used for cables with cross-sectional areas up to 95 mm². Secure the lugs by hexagonal crimping or punching. Lugs are supplied with interphase-barrier and are compatible with the terminal shields.

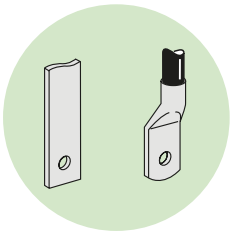
Pole pitch

30 mm

Dimensions



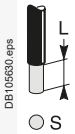
Bars	d (mm)	⩽ 10
	e (mm)	2…6.4
	L (mm)	⩽ 21
Lugs	L (mm)	15
	Ø (mm)	⩾ 6.2
Torque	(Nm)	8



Lug.

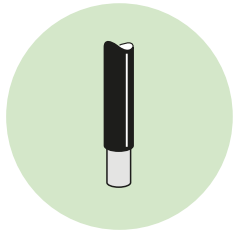
Front connection of bare copper and aluminium cables

- 1-cable connectors snap directly onto the device terminals (1 to 10 mm² flexible cables [1])
- Distribution connectors for 4 flexible cables (1.5 to 25 mm² rigid cables or 1.5 to 16 mm² flexible cables [1]) are screwed directly to the device terminals. These connectors are supplied with interphase-barrier (mandatory installation) which may be replaced by long terminal shields
- Linergy DX distribution block supplied via tunnel terminals. Provides 12 screwless spring type and 1 screw type outgoing terminals.

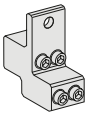


		1-cable connector		Distribution connector
Lugs	L (mm)	15		15
	S (mm²) Cu / Al	1.5 to 35 rigid	50 to 95 rigid	1.5 to 25 rigid
		1.5 to 35 flexible [1]	50 to 95 flexible	1.5 to 16 flexible [1]
Torque	(Nm)	10	12	3
Linergy DX				
Torque	(Nm)	Supply: 5 Nm		
		Distribution: 3 Nm		

[1] Connection of 1.5 to 4 mm² flexible cables requires crimped or auto-crimping ferrules.

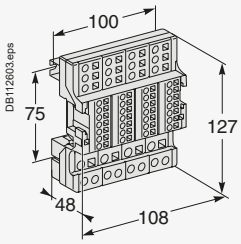


1-cable connector.

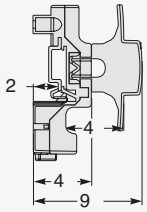


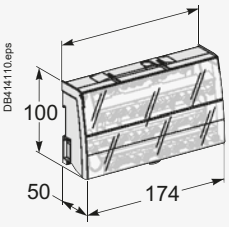
Distribution connector.

Connectors 240 mm².



Linergy DX 125 and 160 A.



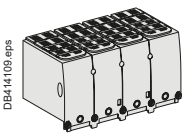


Multi-stage distribution block (e.g. LGY416048).

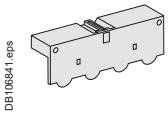
Insulation of live parts

- With long terminal shields.
- With terminal shrouds.
- Interphase-barrier:
  - distribution blocks, lugs, right-angle/straight/edgewise terminal extensions and spreaders are supplied with interphase-barrier
  - interphase-barrier may be positioned horizontally or vertically
  - they may be replaced by long terminal shields.

If 500 V ⩽ U ⩽ 690 V, interphase-barrier or long terminal shields are mandatory.



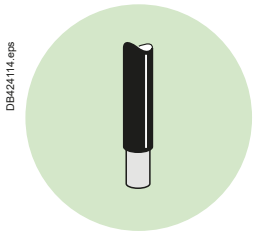
Terminal shields.

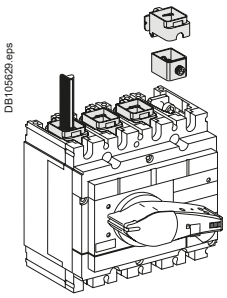


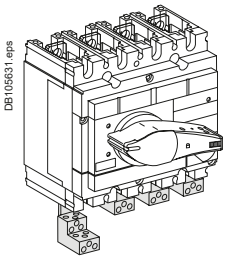
Terminal shrouds.

Interphase-barrier.

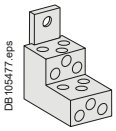
Compact INS250-100 to 250 Compact INV100 to 250





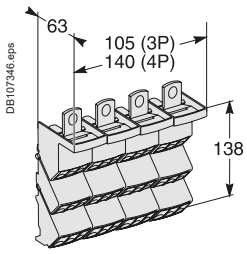


1-cable connector.

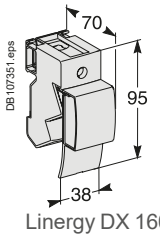


Distribution connector.

Connectors 240 mm².



Linergy DP 250 A distribution block.



Linergy DX 160 A.

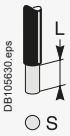
Front connection of bare copper and aluminium cables

Bare-cable connectors for Compact INS/INV switch-disconnectors may be used for both copper and aluminium cables.

1-cable connectors
The connectors snap directly on to the device terminals or clip onto right-angle and straight terminal extensions as well as spreaders. These connectors are supplied with interphase-barrier.
Material: steel connector I ⩽ 160 A and tinned aluminium connector I ⩽ 250 A.

6-cable distribution connectors
These connectors are screwed directly to device terminals. These connectors are supplied with interphase-barrier (mandatory installation) which may be replaced by long terminal shields. Each connector can receive six cables with cross-sectional areas ranging from 1.5 to 35 mm² each.
Material: tinned aluminium.

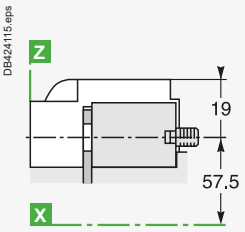
Linergy DP distribution blocks, for 6 or 9 rigid or flexible cables
The Linergy DP connects directly to the device terminals and is used to connect up to six or nine flexible or rigid cables with cross-sectional areas not exceeding 10 mm², to each pole. Connection is made to spring terminals without screws.

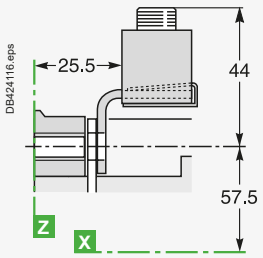


	1-cable connector	Steel ⩽ 160 A	Aluminium ⩽ 250 A		
	L (mm)	20	20		
	S (mm²) Cu / Al	1.5…95 [1]	25…50	70…95	120…185
	Torque (Nm)	12	20	26	26
	Distribution connector, 6 cables Cu or Al				
	L (mm)	15 or 30			
	S (mm²) Cu / Al	1.5…6 [1]	8…35		
	Torque (Nm)	4	6		
	Linergy DP distribution block, 6 or 9 cables				
	L (mm)	12			
	S (mm²) Cu / Al	1.5…10			

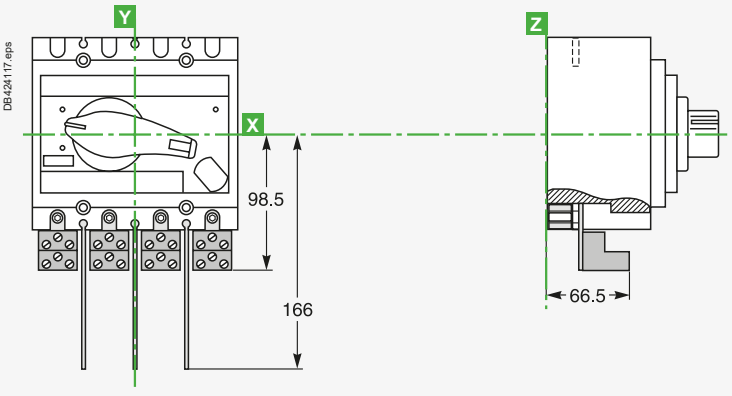
[1] Connection of 1.5 to 4 mm² flexible cables requires crimped or auto-crimping ferrules.

Dimensions
1-cable connector





Distribution connector, 6 cables



Compact INS250-100 to 250 Compact INV100 to 250

Front connection of insulated bars and cables with crimped lugs

Compact INS250-100 to INS250 and INV100 to 250 switch-disconnectors are equipped as standard with terminals receiving snap-in nuts and M8 screws for direct connection of insulated bars or cables with lugs.

Lugs

- The small lugs for copper cables may be used for cables with the following cross-sectional areas 120, 150 or 185 mm² (secure the lugs by hexagonal crimping or punching).
- The small lugs for aluminium cables may be used for cables with the following cross-sectional areas 150 or 185 mm² (secure the lugs by hexagonal crimping).

Pole pitch

35 mm

Dimensions

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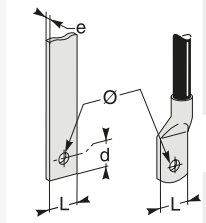
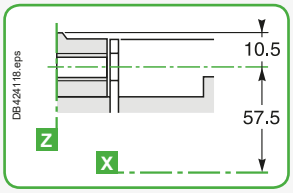


Bars	d (mm)	≤ 10
	e (mm)	≤ 6
	L (mm)	≤ 25
	Ø (mm)	≥ 10
Lugs	L (mm)	≤ 25
	Ø (mm)	≥ 10
Torque	(Nm)	15

Dimensions

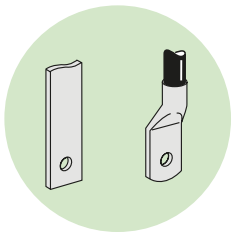
DB424118.eps



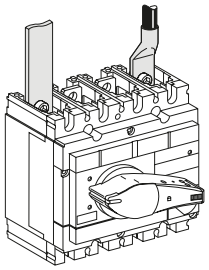
Insulation of live parts

- With short or long terminal shields.
- Interphase-barrier:
  - distribution blocks, lugs, right-angle/straight/edgewise terminal extensions and spreaders are supplied with interphase-barrier
  - interphase-barrier may be positioned horizontally or vertically
  - they may be replaced by long terminal shields.
- One-piece spreader: the one-piece spreader increases the pitch to correspond to that of the upstream device and provides protection against direct contact (see page A-43).

DB424113.eps



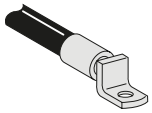
DB105635.eps



DB105455.eps

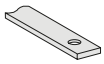
Small lugs for copper cables.

DB105469.eps



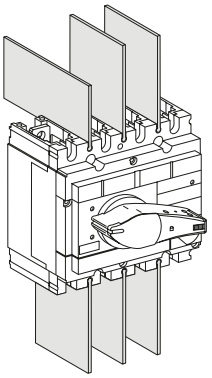
Small lugs for aluminium cables.

DB105626.eps



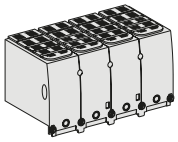
Bar.

If 500 V ≤ U ≤ 690 V, interphase-barrier or short or long terminal shields are mandatory.



Interphase-barrier.

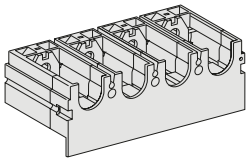
DB105637.eps



DB414109.eps

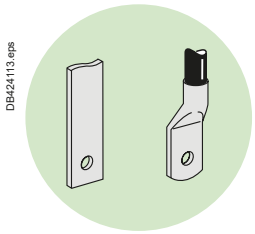
Terminal shields.

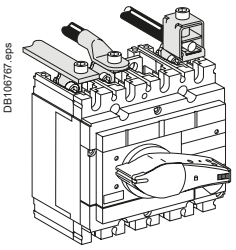
DB105471.eps



One-piece spreader.

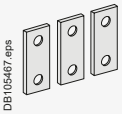
Compact INS250-100 to 250 Compact INV100 to 250

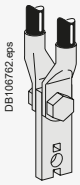




Front connection with accessories

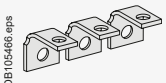
Straight terminal extensions
Material: tinned copper.





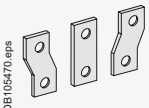
Connection of two cables with lugs.

Right-angle extensions
Material: tinned copper.

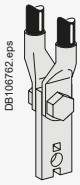


Insulation stripping lengths and tightening torques for cables, bare bars and cables with lugs are identical to those for direct connection to devices.

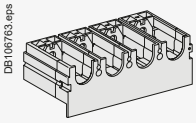
Spreader
Material: tinned copper.



Separate parts.



Connection of two cables with lugs.

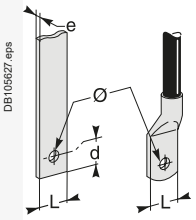


One-piece spreader.

Pole pitch

45 mm

Dimensions



Bars	d (mm)	≤ 10
	e (mm)	≤ 6
	L (mm)	≤ 25
	Ø (mm)	8.5
Lugs	L (mm)	≤ 25
	Ø (mm)	8.5
Torque	(Nm)	15 [1]

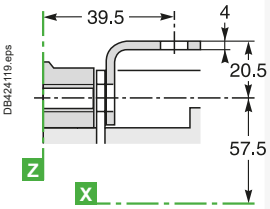
[1] Tightening torque for spreader.

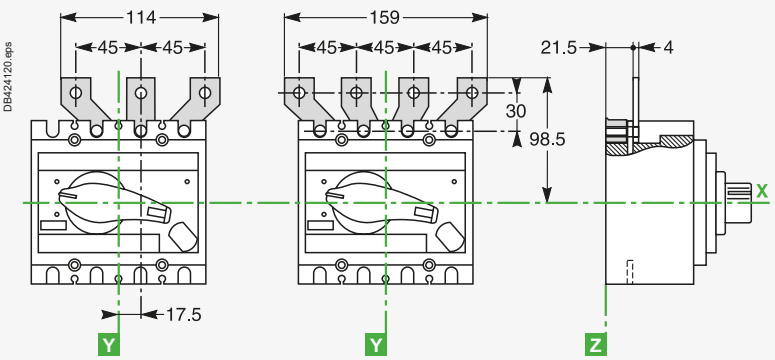
Spreaders, straight terminal extensions and right-angle terminal extensions are supplied with interphase-barrier.

Dimensions

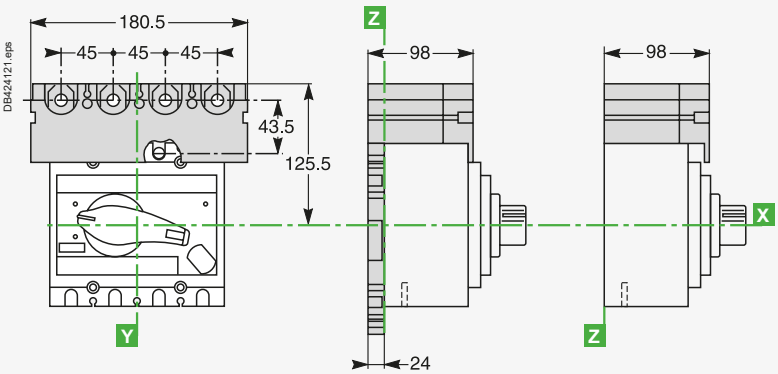
Spreader and straight terminal extensions

Right-angle terminal extensions





One-piece spreader 3P/4P



Compact INS250-100 to 250 Compact INV100 to 250

Rear connection

The rear connections are simply fitted to the device connection terminals. All combinations of rear connection lengths and positions are possible on a given switch-disconnector. The switch-disconnector is mounted on a backplate.
For the connection of cables without lugs, the 1-cable connectors for Compact INS100-250 to INS250 and INV100 to 250 may be simply clipped onto the rear connections.

Bars or cables with crimped lugs

Compact INS250-100 to INS250 and INV100 to 250 switch-disconnectors may be equipped with long or short rear connections, or a mix of the two. The connections may be positioned flat, on edge or at 45° angles, or any combination thereof.
Material of rear connections: tinned copper.

Pole pitch

35 mm

Dimensions

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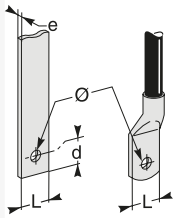
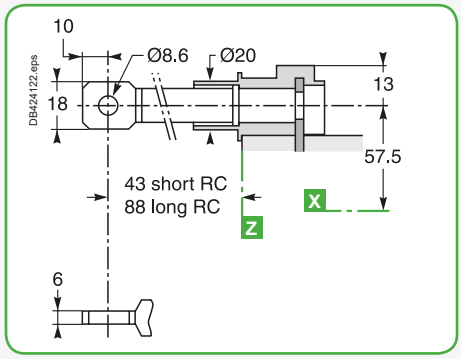


Bars	d (mm)	≤ 10
	e (mm)	≤ 6
	L (mm)	≤ 25
	Ø (mm)	≥ 8
Lugs	L (mm)	≤ 25
	Ø (mm)	≥ 8
Torque	(Nm)	5 [1]

[1] Tightening torque for rear connections.

Dimensions

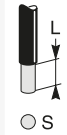
DB424122.eps



Bare cables (copper or aluminium)

The rear connections may be equipped with 1-cable connectors secured by clips.

DB105630.eps

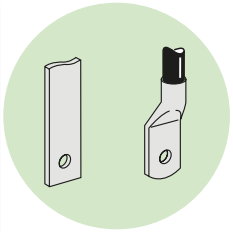


	1-cable connector	Steel ≤ 160 A	Aluminium ≤ 250 A
	L (mm)	20	20
	S (mm²) Cu / Al	1.5…95 [1]	120…185
	Torque (Nm)	12	26
	Distribution connector, 6 cables Cu or Al		
	L (mm)	15 or 30	
	S (mm²) Cu / Al	1.5…6 [1]	8…35
	Torque (Nm)	4	6

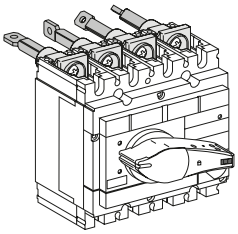
[1] Connection of 1.5 to 4 mm² flexible cables requires crimped or auto-crimping ferrules.

Insulation stripping lengths and tightening torques for cables, bare bars and cables with lugs are identical to those for direct connection to devices.

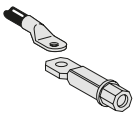
DB424113.eps



DB106768.eps

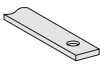


DB106769.eps



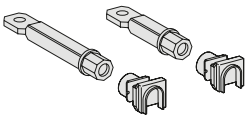
Connection of bars or cables with lugs.

DB105626.eps



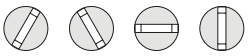
Bar.

DB105480.eps



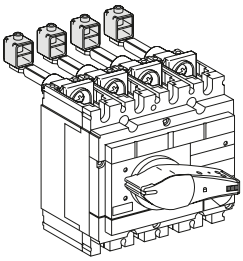
Two lenghts.

DB106855.eps

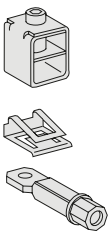


Four positions.

DB106773.eps



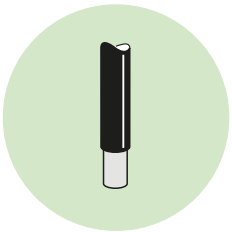
DB106772.eps



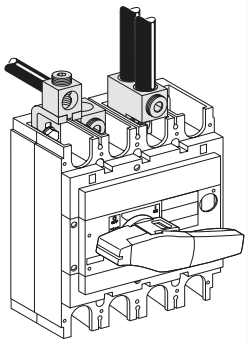
Rear connection with bar.

Compact INS320 to 630 Compact INV320 to 630

DB424114.eps



DB106774.eps



DB105475.eps

1-cable connector.

DB105476.eps

2-cable connector.

Front connection of bare copper and aluminium cables

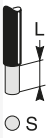
Bare-cable connectors for Compact INS/INV switch-disconnectors may be used for both copper and aluminium cables.

1-cable and 2-cable connectors

1-cable and 2-cable connectors, made of tinned aluminium for copper and aluminium cables, are screwed to the device terminals or to right-angle terminal extensions. These connectors are supplied with interphase-barrier.

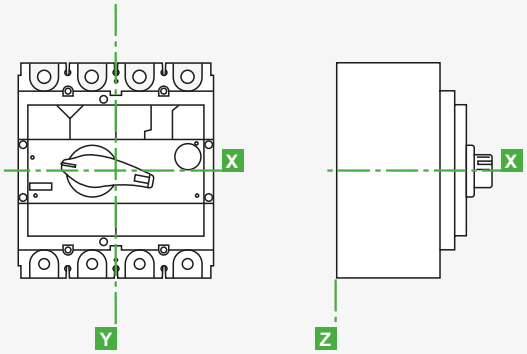
	1-cable connector	2-cable connector
Torque (Nm)	31	31

DB105630.eps



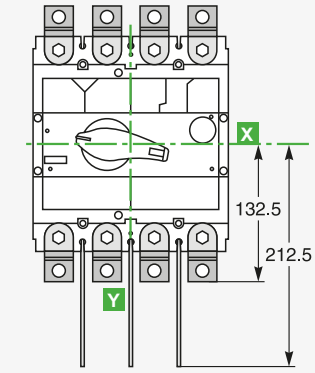
Dimensions

DE424424.eps



1-cable connector

DB424123.eps



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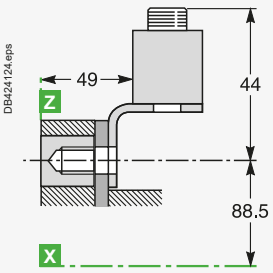
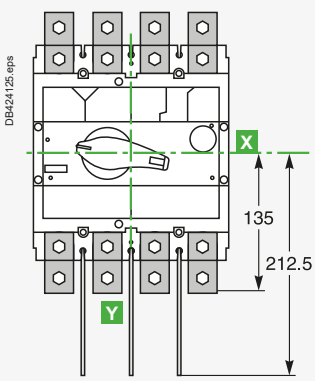
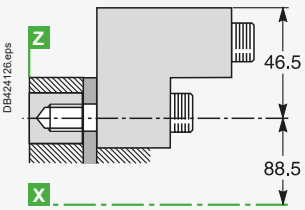


2-cable connector

DB424125.eps



DB424126.eps



Compact INS320 to 630 Compact INV320 to 630

Front connection of insulated bars and cables with crimped lugs

Compact INS320 to 630 and INV320 to 630 switch-disconnectors are equipped as standard with terminals receiving snap-in nuts and M10 screws for direct connection of bars or cables with lugs.

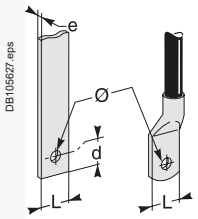
Lugs

- The small lugs for copper cables may be used for cables with the following cross-sectional areas 240 or 300 mm² (secure the lugs by hexagonal crimping or punching).
- The small lugs for aluminium cables may be used for cables with the following cross-sectional areas 240 or 300 mm² (secure the lugs by hexagonal crimping).

Pole pitch

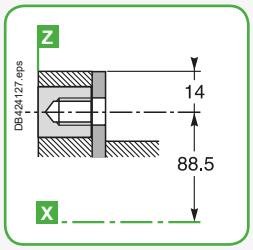
45 mm

Dimensions



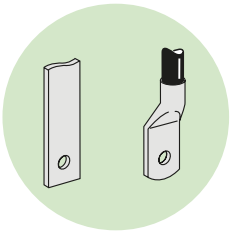
Bars	d (mm)	≤ 15
	e (mm)	3 ≤ e ≤ 10
	L (mm)	≤ 32
	Ø (mm)	≥ 10
Lugs	L (mm)	≤ 32
	Ø (mm)	≥ 10
Torque	(Nm)	50

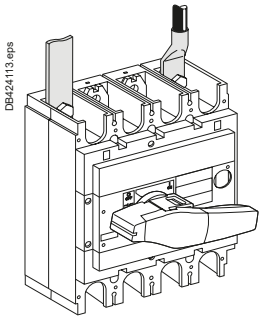
Dimensions



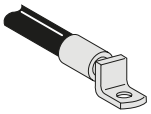
Insulation of live parts

- With short or long terminal shields.
- Interphase-barrier:
  - distribution blocks, lugs, right-angle/straight/edgewise terminal extensions and spreaders are supplied with interphase-barrier
  - interphase-barrier may be positioned horizontally or vertically
  - they may be replaced by long terminal shields.

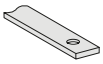




Small lugs for copper cables.

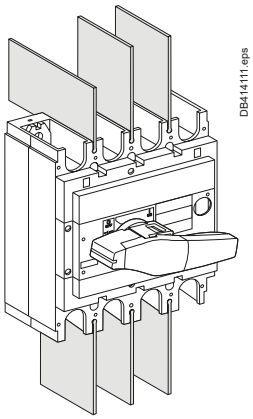


Small lugs for aluminium cables.

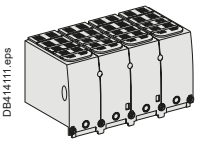


Bar.

If 500 V ≤ U ≤ 690 V, interphase-barrier or short or long terminal shields are mandatory.

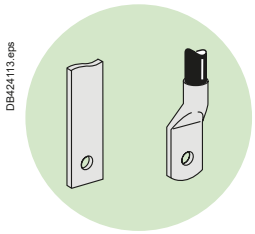


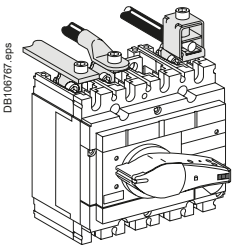
Interphase-barrier.

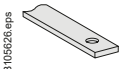


Terminal shields.

Compact INS320 to 630 Compact INV320 to 630





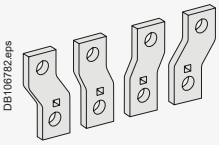


Bar.

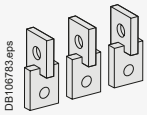
B

Front connection with accessories

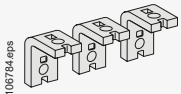
Spreader
Material: tinned copper.



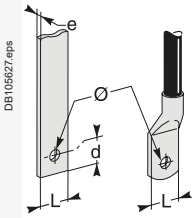
Edgewise terminal extensions
Material: tinned copper.



Right-angle extensions
Material: tinned copper.
Installation on upstream terminals.



Pole pitch	
Without spreader	45 mm
With spreader	52.5 or 70 mm

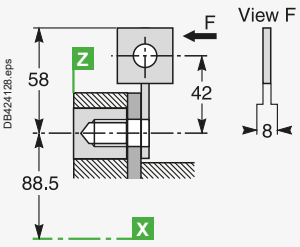
Dimensions			With spreader	With edgewise terminal ext.
	Bars	d (mm)	≤ 15	≤ 15
		e (mm)	3 ≤ e ≤ 10	3 ≤ e ≤ 10
		L (mm)	≤ 32	≤ 32
		Ø (mm)	> 10.5	> 10.5
	Lugs	L (mm)	≤ 32	≤ 32
		Ø (mm)	10.5	10.5
	Torque	(Nm)	50 [1]	50 [1]

[1] Tightening torque for spreader.

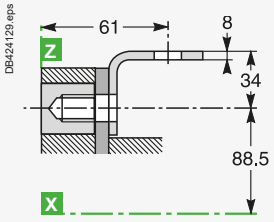
Spreaders, straight terminal extensions and right-angle terminal extensions are supplied with interphase-barrier.

Dimensions

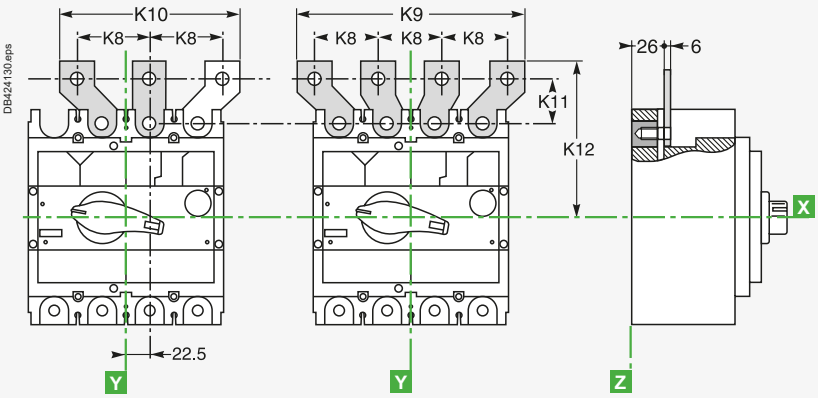
Edgewise terminal extensions



Right-angle terminal extensions



Spreader



Type		K8	K9	K10	K11	K12
Spreader	Width in mod. of 52.5 mm	52.5	187.5	135	39	142.5
	Width in mod. of 70 mm	70	240	170	52.5	156

Rear connection

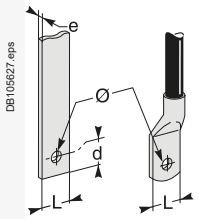
The rear connections are simply fitted to the device connection terminals. All combinations of rear connection lengths and positions are possible on a given switch-disconnector. The switch-disconnector is mounted on a backplate.

Bars or cables with crimped lugs

Compact INS320 to 630 and INV320 to 630 switch-disconnectors may be equipped with long or short rear connections, or a mix of the two. The connections may be positioned flat, on edge or at 45° angles, or any combination thereof.

Material of rear connections: tinned copper.

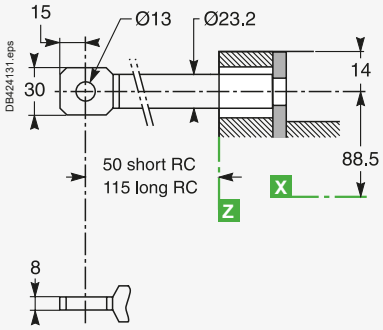
Dimensions



Bars	d (mm)	≤ 15
	e (mm)	3 ≤ e ≤ 10
	L (mm)	≤ 32
	Ø (mm)	> 10.5
Lugs	L (mm)	≤ 32
	Ø (mm)	≥ 10.5
Torque	(Nm)	20 [1]

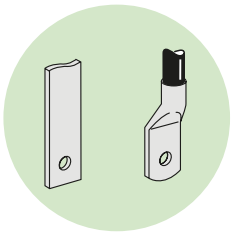
[1] Tightening torque for rear connections.

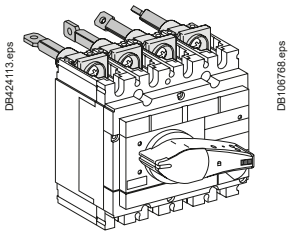
Dimensions

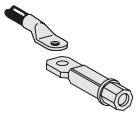


Bare cables (copper or aluminium)

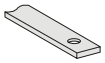
The rear connections may be equipped with 1-cable connectors secured by clips. Insulation stripping lengths and tightening torques for cables, bare bars and cables with lugs are identical to those for direct connection to devices.



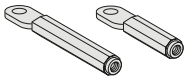




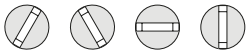
Connection of bars or cables with lugs.



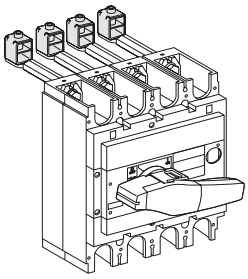
Bar.

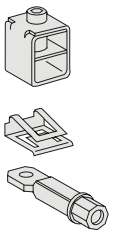


Two lenghts.



Four positions.

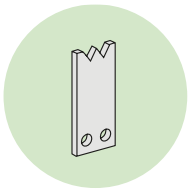




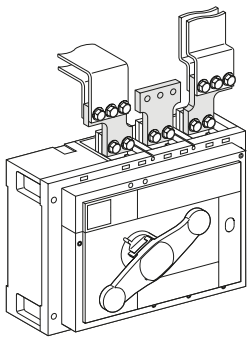
Rear connection with bar.

Compact INS630b to 1600
Compact INV630b to 1600

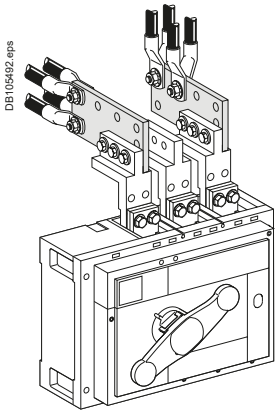
DB424131.eps



DB105487.eps



DB105492.eps



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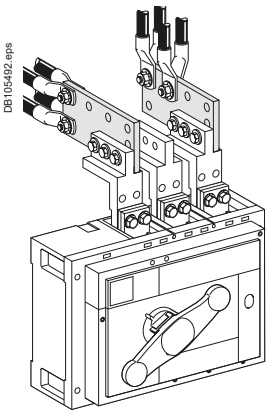


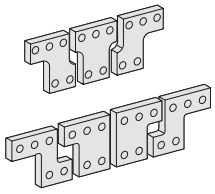
2-cable connector.

Connections

There are many solutions to connect bars:
- vertical connection adapters to connect edgewise bars
- spreaders with a 95 mm pole pitch to increase the clearance between bars.

Spreaders
Spreaders increase the pole pitch of a switch-disconnector for greater clearance between the bars. They are not compatible with terminal shields.

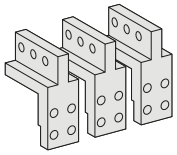
DB105488.eps



Spreaders.

Vertical connection adapters
For connection of edgewise bars.

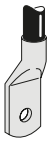
DB105489.eps



Vertical connection adapters.

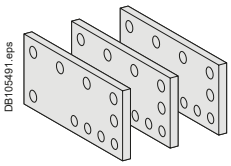
Adapters for cables with crimped lugs
Cable-lug adapters are used in conjunction with vertical connection adapters. They may be used to connect one to four cables (S ⩽ 300 mm²) with crimped lugs. To ensure adequate mechanical strength, the cable-lug adapters must be secured together by spacers.

DB106793.eps



Lugs for copper cables.

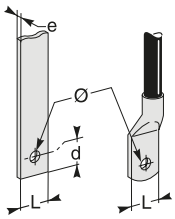
DB105491.eps



Adapters for cables with crimped lugs.

Pole pitch				
Without spreader		70 mm		
With spreader		95 mm		
Dimensions		**With spreader**	**With vertical connection adapters**	**With cable lug adapters**
Bars	d (mm)	12.5	⩽ 12.5	-
	e (mm)	3 ⩽ e ⩽ 10	3 ⩽ e ⩽ 10	-
	L (mm)	⩽ 80	⩽ 80	-
	Ø (mm)	12	> 12	-
Lugs	L (mm)	-	-	⩽ 40
	Ø (mm)	-	-	⩽ 12
Torque	(Nm)	50 [1]	50	50 (1)

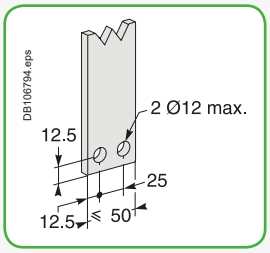
DB105627.eps



[1] Tightening torque for spreader.

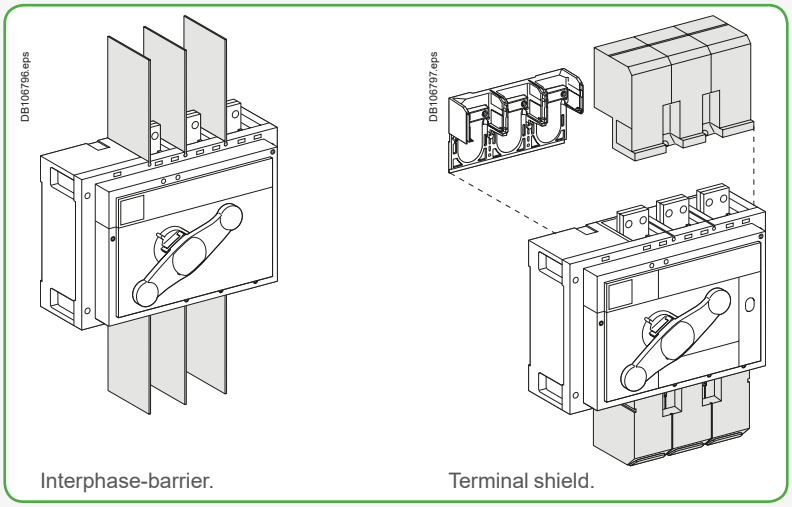
Front connection of insulated bars

Connection of bars
Compact INS/INVswitch-disconnectors are equipped with terminals for direct connection of bars.



Insulation of live parts

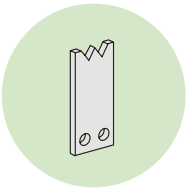
- ■ With terminal shields.
- ■ Interphase-barrier:
- □ interphase-barrier may be positioned horizontally or vertically
- □ they may be replaced by long terminal shields.

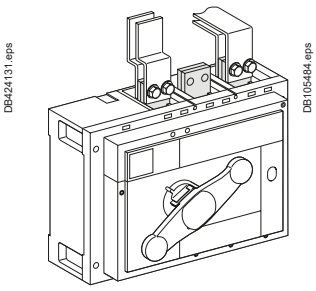


Interphase-barrier. Terminal shield.

Compatibility of terminal shields + base for connections

	Base	Terminal shields	Spreader	Interphase-barrier
Base	-	YES	YES	NO
Terminal shields	YES	-	NO	NO
Spreader	NO	NO	-	YES
Interphase-barrier	NO	NO	YES	-





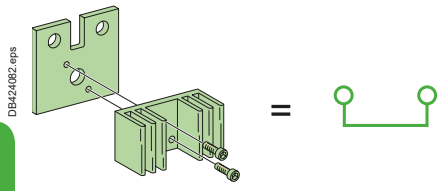
If 500 V ⩽ U ⩽ 690 V, interphase-barrier or short or long terminal shields are mandatory.

B

Connection accessories

Series connection of poles for direct current applications.

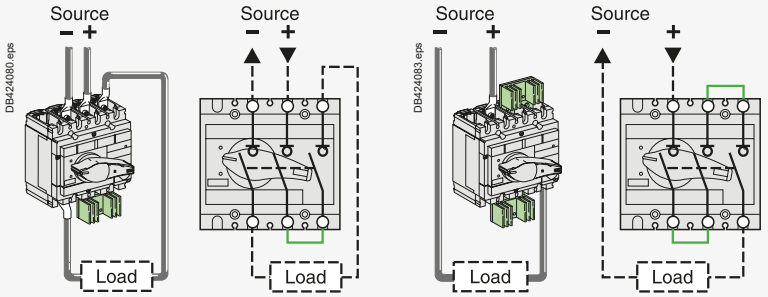
With Compact INS/INV switch-disconnectors, it is easy to create a large number of series pole arrangements using prefabricated connections mounted on site during equipment installation.



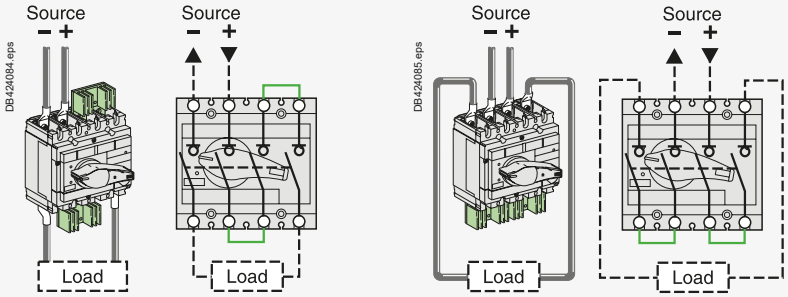
One type of connection per frame size, two catalogue numbers for all series connections.

Examples of series connection

Three-pole devices

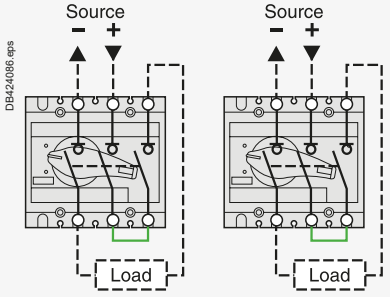


Four-pole devices

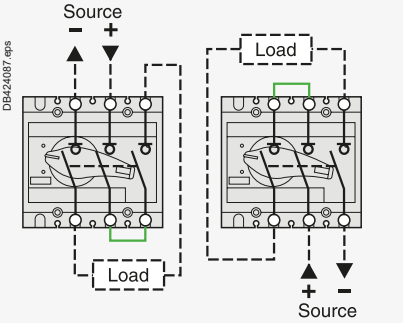


Great flexibility for connections

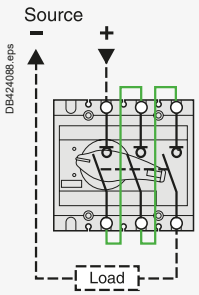
- Indifferent connection of polarities, from left to right or right to left.
- Indifferent connection of upstream and downstream cables to top or bottom terminals.
- Series connection of poles is possible by upstream/downstream connections. Creation of the connections is the responsibility of the panel builder or the installer.



Indifferent connection of polarities.



Upstream/downstream connections to top or bottom connectors.

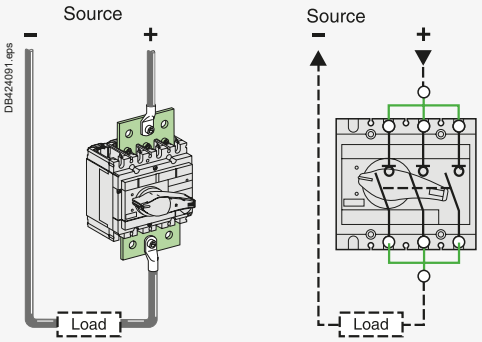


Series connection of poles is possible by upstream/downstream connections (user made).

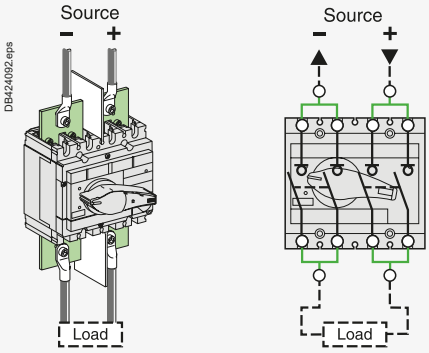
Parallel connection of poles for direct current applications.

Examples of parallel connection

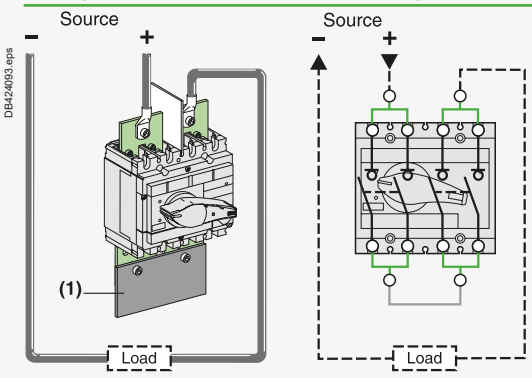
Three-pole devices



Four-pole devices (2 x 2 poles in parallel)



It is possible to mix series and parallel connections

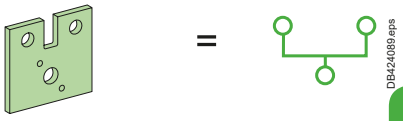


Note: creation of the additional connection (1) is the responsibility of the panel builder or the installer.

Great flexibility for connections

- Indifferent connection of polarities, from left to right or right to left.
- Indifferent connection of upstream and downstream cables to top or bottom terminals.

The exceptional performance levels of Compact INS/INV switch-disconnectors mean the poles can be parallel connected. This technique virtually doubles, triples or quadruples the current rating depending on the type of circuit breaker and thus reduces the cost of solutions.



Parallel pole connection accessories are identical to those for series connections. The are equipped with heat sinks.
Customer connections are made directly to the connection plates after removing the heat sinks.

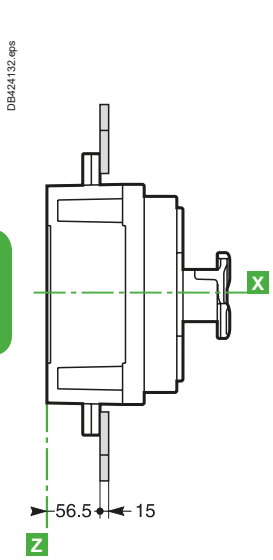
Specific connections are required for parallel connection of three poles.

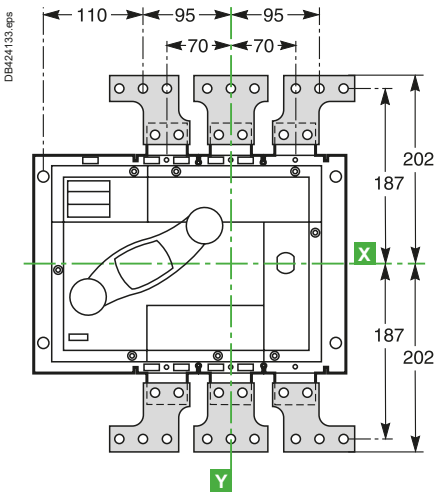
B

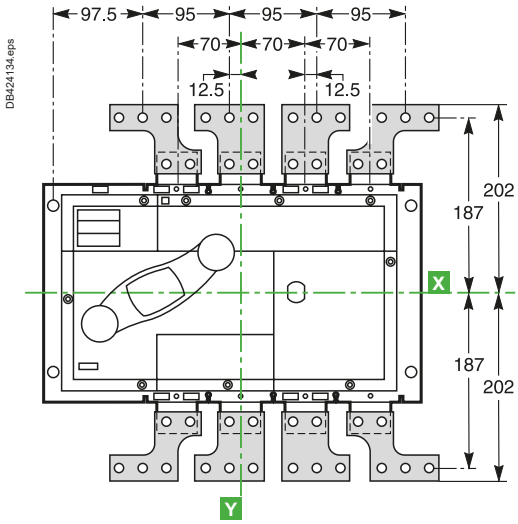
Compact INS630b to 1600
Compact INV630b to 1600

Dimensions

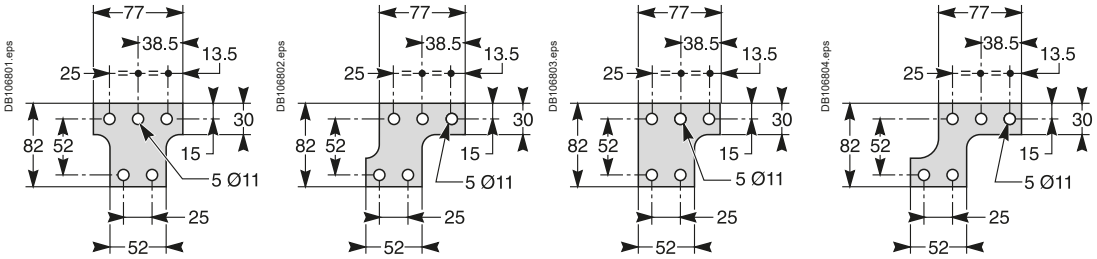
Connection with spreaders







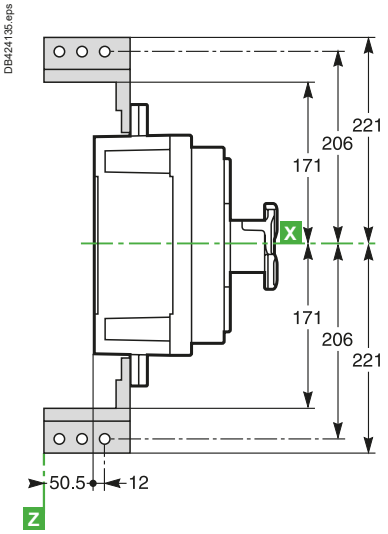
Spreader details

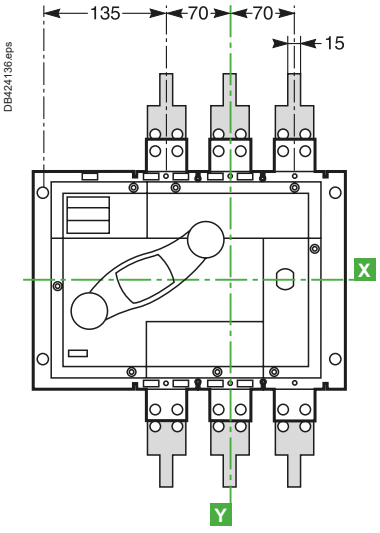


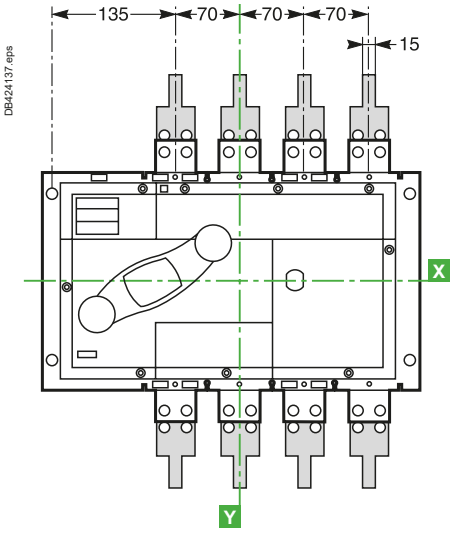
For 3P switch-disconnectors.

For 4P switch-disconnectors.

Connection with vertical connection adapters

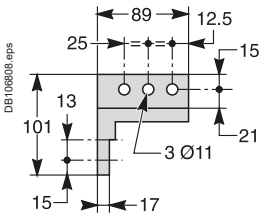




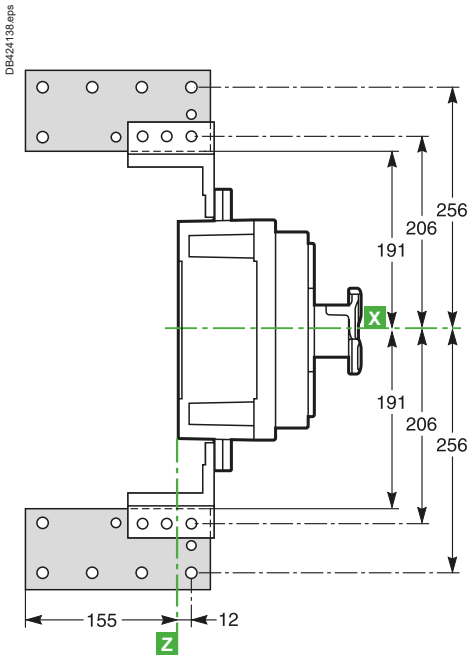


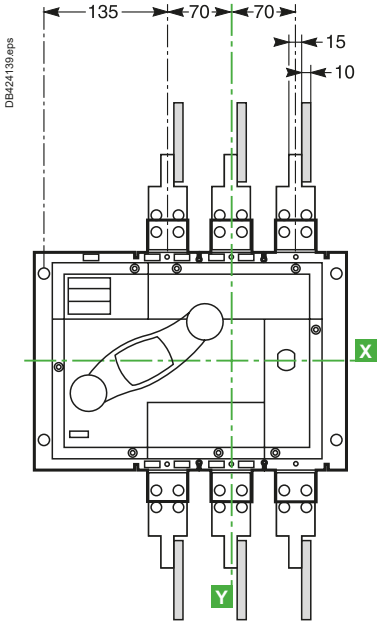
Note: lines X and Y indicate the axes of symmetry of the switch-disconnector.
Reference plane Z corresponds to the back of the switch-disconnector.
2 connection possibilities on vertical connection adapters (21 mm between centres).
Recommended connection screws: M10 class 8.8.
Tightening torque: 50 Nm with contact washer.

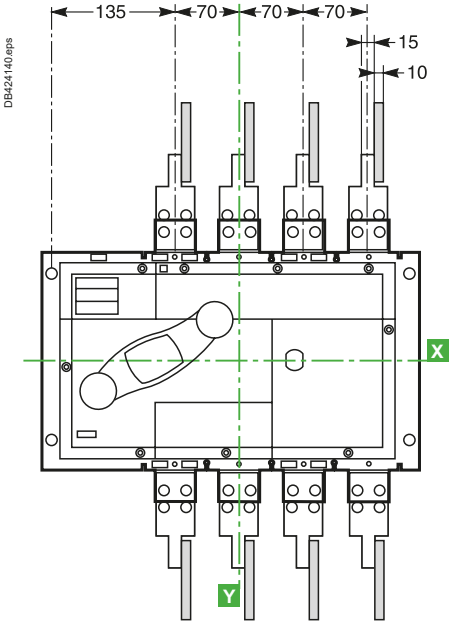
Connector details



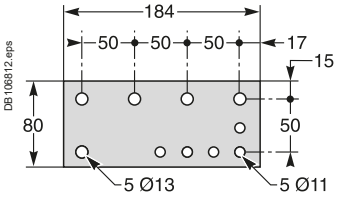
Connection with vertical connection adapters





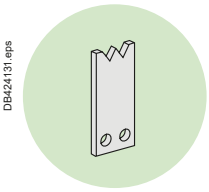


Cable lug adapter detail



B

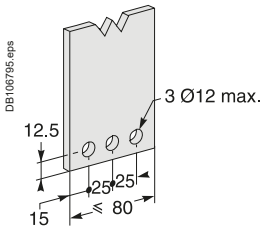
Compact INS2000 to 2500
Compact INV2000 to 2500

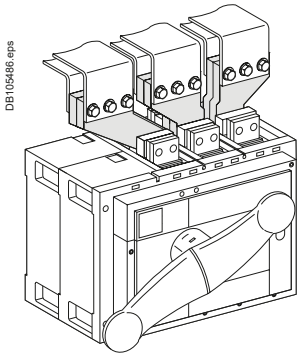


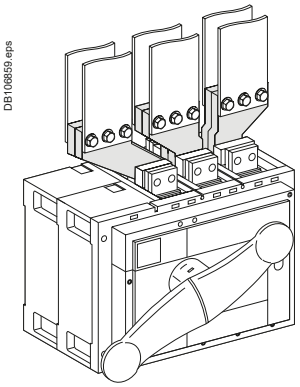
Front connection of insulated bars

Connection of bars

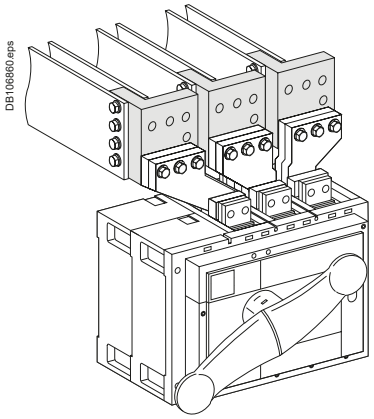
Compact INS/INVswitch switch-disconnectors are equipped with terminals for direct connection of bars.







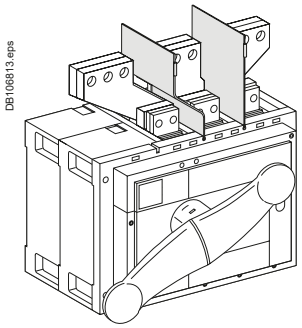
Connector for connection of edgewise bars



If 500 V ≤ U ≤ 690 V, interphase-barrier are mandatory.

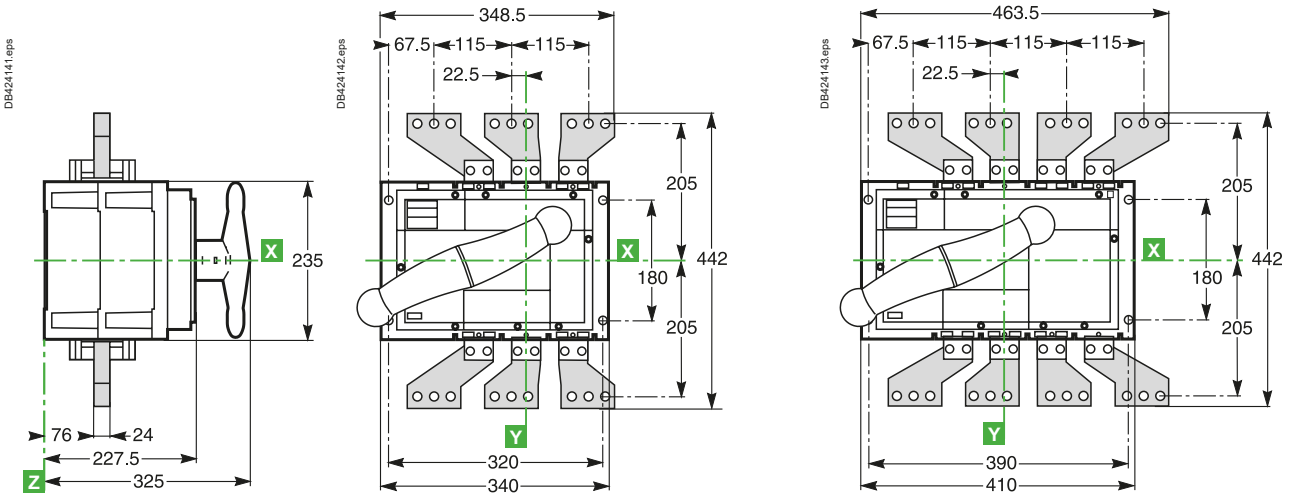
Insulation of live parts

Interphase-barrier

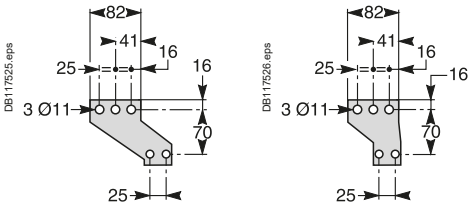


Dimensions

Connection with spreaders

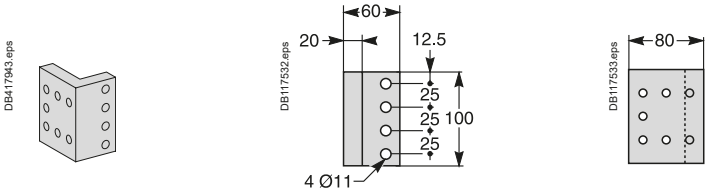


Spreader details



For 3P and 4P switch-disconnectors.

Connection with spreaders



Note: lines X and Y indicate the axes of symmetry of the switch-disconnector.
Reference plane Z corresponds to the back of the switch-disconnector.

Use at high temperatures

Power dissipated and resistance per pole

Compact INS	40	63	80	100	125	160		
Rating (A)	40	63	80	100	125	160		
Resistance per pole (mΩ)	0.3	0.3	0.3	0.2	0.2	0.2		
Power dissipated per pole (W)	0.5	1.2	1.9	2	3.1	5.1		
Compact INS/INV	**100**	**160**	**200**	**250**	**320**	**400**	**500**	**630**
Rating (A)	100	160	200	250	320	400	500	630
Resistance per pole (mΩ)	0.15	0.15	0.15	0.15	0.06	0.06	0.06	0.06
Power dissipated per pole (W)	1.5	4	6	9.5	6.1	9.6	15	24
Compact INS/INV	**800**	**1000**	**1250**	**1600**	**2000**	**2500**		
Rating (A)	800	1000	1250	1600	2000	2500		
Resistance per pole (mΩ)	0.024	0.024	0.024	0.024	0.012	0.012		
Power dissipated per pole (W)	16	24	38	62	48	75		

B

Temperature derating

Compact INS		40	63	80	100	125	160		
Front connection with bare-cable connectors or lugs									
Thermal current Ith at	60 °C	40	63	80	100	125	160		
	65 °C	40	63	80	100	125	160		
	70 °C	40	63	80	100	125	150		
Compact INS/INV		**100**	**160**	**200**	**250**	**320**	**400**	**500**	**630**
Front connection / rear connection									
Thermal current Ith at	60 °C	100	160	200	250	320	400	500	630
	65 °C	100	160	200	250	320	400	500	590
	70 °C	100	160	200	250	320	400	500	550
Front connection with right-angle terminal extension + bare-cable connectors									
Thermal current Ith at	55 °C	100	160	200	250	320	400	500	630
	60 °C	100	160	200	250	320	400	500	590
	65 °C	100	160	200	250	320	400	500	550
	70 °C	100	160	200	240	320	400	500	510
Front connection / rear connection with ammeter or CT module									
Thermal current Ith at	40 °C	100	160	200	250	320	400	500	600
	50 °C	100	160	200	250	320	400	500	575
	55 °C	100	160	200	250	320	400	500	540
	60 °C	100	160	200	240	320	400	500	505
	65 °C	100	160	200	230	320	400	480	480
	70 °C	100	160	200	210	320	400	450	450

Compact INS/INV		630b	800 with or without term. shield	1000 with or without term. shield	1250 with term. shield	1250 without term. shield	1600 with term. shield	1600 without term. shield	2000 with term. shield	2500 without term. shield
Direct connection by flat-facing bars							[1]			
Thermal current Ith at	40 °C	630	800	1000	1250	1250	1600	1600	2000	2500
	45 °C	630	800	1000	1250	1250	1570	1600	2000	2500
	50 °C	630	800	1000	1250	1250	1500	1550	2000	2500
	55 °C	630	800	1000	1250	1250	1420	1470	2000	2500
	60 °C	630	800	1000	1250	1250	1340	1390	2000	2500
	65 °C	630	800	1000	1250	1250	1250	1300	2000	2500
	70 °C	630	800	1000	1060	1210	1060	1210	2000	2400
Connection by flat-facing bars via spreaders, without terminal shields							[2]			
Thermal current Ith at	40 °C	630	800	1000	1250		1600		-	-
	45 °C	630	800	1000	1250		1600		-	-
	50 °C	630	800	1000	1250		1580		-	-
	55 °C	630	800	1000	1250		1500		-	-
	60 °C	630	800	1000	1250		1420		-	-
	65 °C	630	800	1000	1250		1330		-	-
	70 °C	630	800	1000	1240		1240		-	-
Connection of edgewise bars via vertical connection adapters or cables via vertical connection adapters with cable-lug adapters										
Thermal current Ith at	40 °C	630	800	1000	1250		1600	1600	-	-
	45 °C	630	800	1000	1250		1600	1600	-	-
	50 °C	630	800	1000	1250		1600	1600	-	-
	55 °C	630	800	1000	1250		1600	1600	-	-
	60 °C	630	800	1000	1250		1600	1600	-	-
	65 °C	630	800	1000	1250		1520	1560	-	-
	70 °C	630	800	1000	1250		1410	1450	-	-

[1] INS/INV1600: 4 bars 50 x 5. **[2]** INS/INV1600: 3 bars 80 x 5.

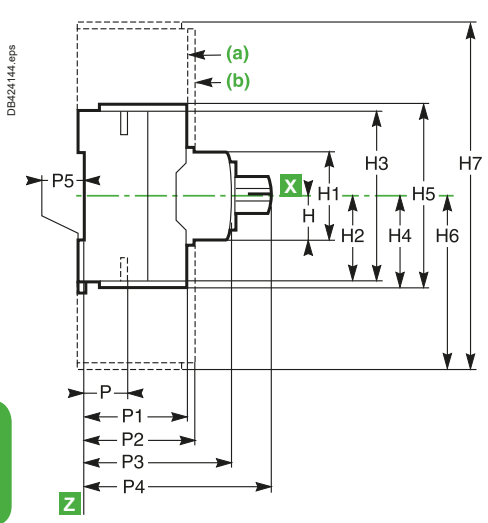
Note: thermal current Ith in Amps (QA).

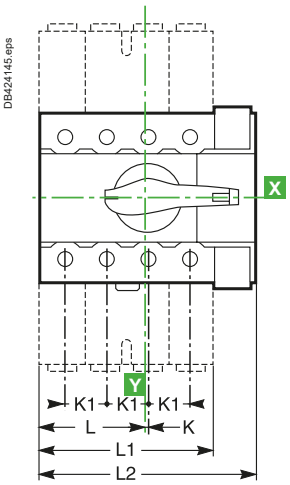
Dimensions and connection

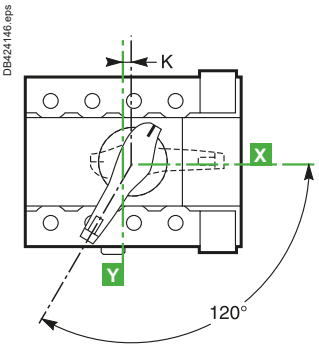
C

Dimensions

Front handle





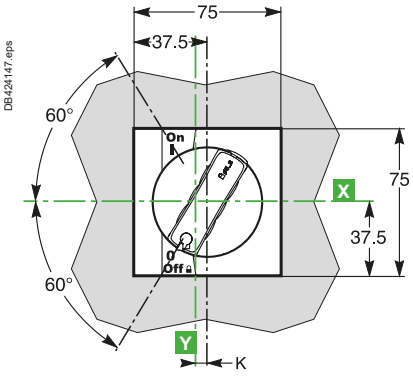


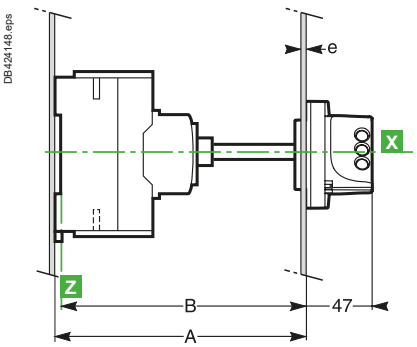
[a] Terminal shields INS40/63/80.
[b] Terminal shields INS100/125/160.

Dimensions (mm)

Type	H	H1	H2	H3	H4	H5	H6	H7	K	K1	L	L1	L2	P	P1	P2	P3	P4	P5
INS40/63/80	22.5	45	40.5	81	42.5	85	73.5	147	1	18	46	73	90	23.3	43	47	62.5	79	5
INS100/125/160	22.5	45	50	100	50	100	110	220	7.5	30	75	119	135	21.5	45	47	62.5	79	5

Extended front handle





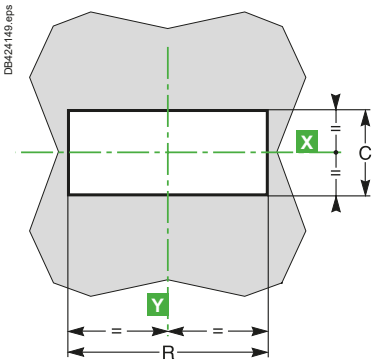
Dimensions (mm)

Type	A (on back plate)		B (on rail)	
	Min.	Max.	Min.	Max.
INS40/63/80	128	519	123	514
INS100/125/160	128	519	123	514

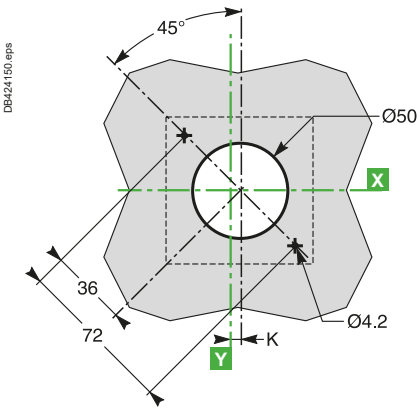
Type	e	K	Length of shaft
INS40/63/80	1…3	1	A - 69
INS100/125/160	1…3	7.5	A - 69

Door or front panel cutout for front handle

Direct



Extended



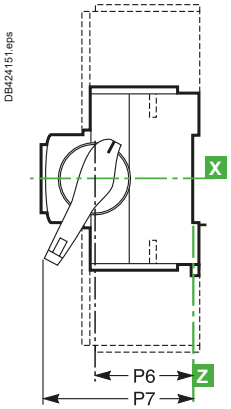
Dimensions (mm)

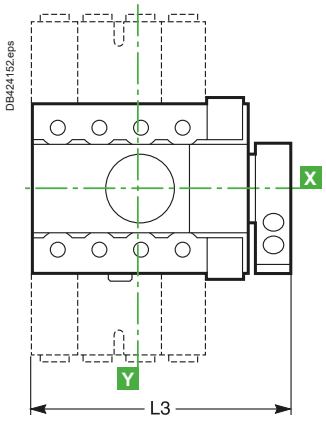
Type	C	R	K
INS40/63/80	47	92	1
INS100/125/160	47	137	7.5

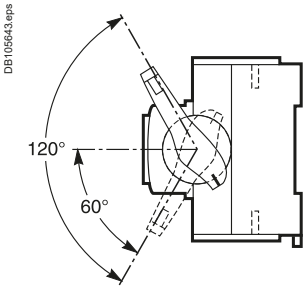
Note: lines X and Y indicate the axes of symmetry of the switch-disconnector.
Reference plane Z corresponds to the back of the switch-disconnector.

Dimensions

Lateral handle





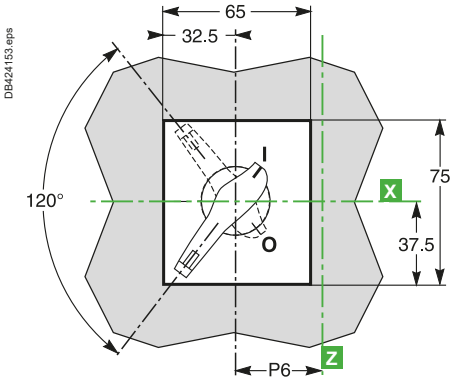


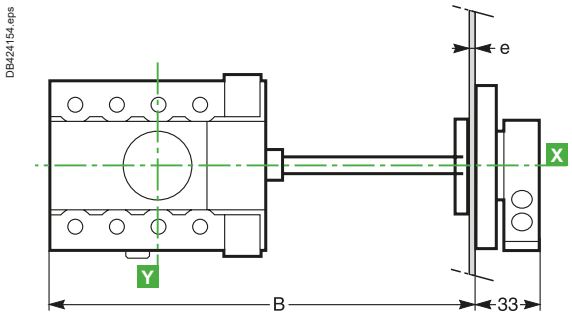
Dimensions (mm)

Type	L3	P6	P7
INS40/63/80	109	40	66.1
INS100/125/160	154	42.5	69.3

DB105643

Extended lateral handle

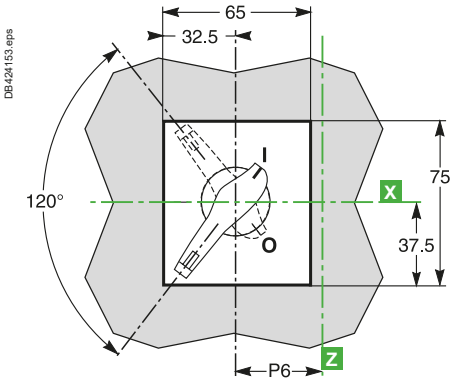


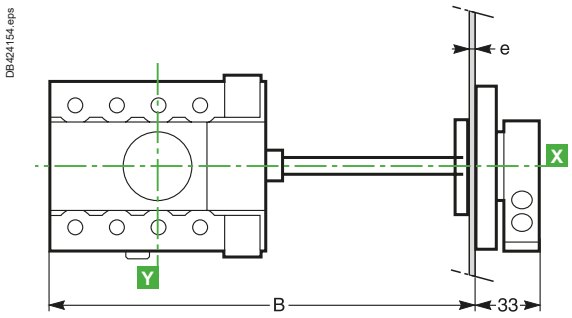


Dimensions (mm)

Type With shaft	B Min.	 Max.	e	P6	Length of shaft
INS40/63/80	155	396	1…3	40	B - 95
INS100/125/160	200	441	1…3	42.5	B - 140
Without shaft	**B**		**e**	**P6**	
INS40/63/80	102		1…3	40	
INS100/125/160	147		1…3	42.5	

Lateral handle for functional enclosure



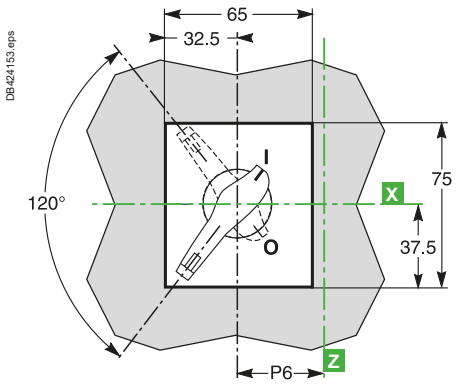


Dimensions (mm)

Type	Enclosure length	Type of shaft	B	e	P6
INS40/63/80	550 mm	Short	149	1…3	41.5
	600 mm	Long	174	1…3	41.5
INS100/125/160	550 mm	Short	194	1…3	41.5
	600 mm	Long	219	1…3	41.5

Dimensions

Front panel cutout for extended handle



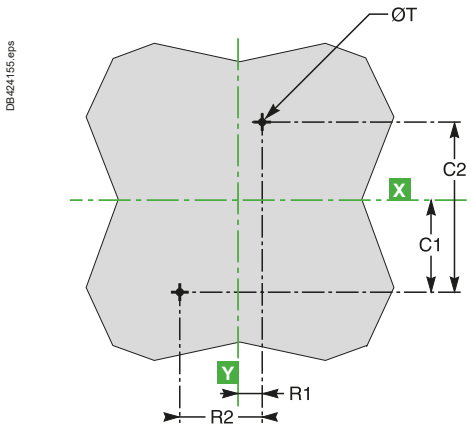
Dimensions (mm)

Type	P6
INS40/63/80	40
INS100/125/160	42.5

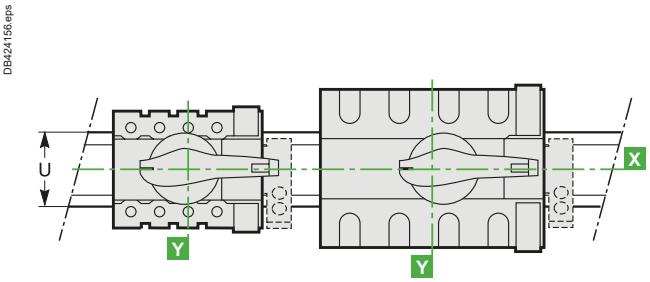
C

Installation

On a backplate



On rail

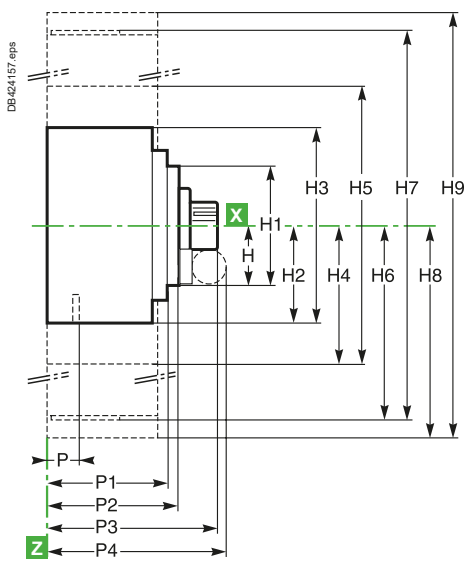


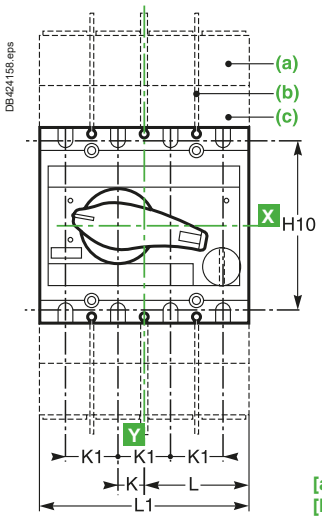
Dimensions (mm)

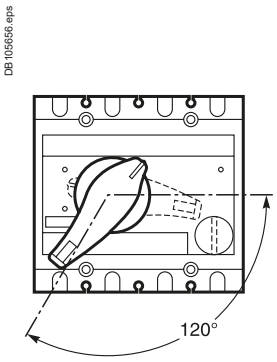
Type	C1	C2	R1	R2	ØT	U
INS40/63/80	40	80	10	36	4.5	35
INS100/125/160	37.5	75	22.5	60	4.5	35

Dimensions

Front handle







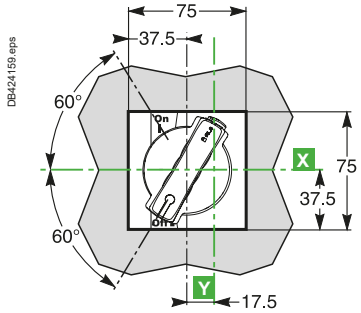
[a] Long terminal shield.
[b] Interphase-barrier.
[c] Short terminal shield.

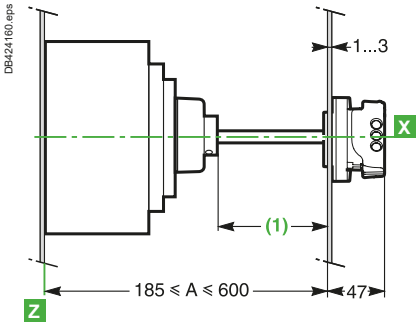
Dimensions (mm)

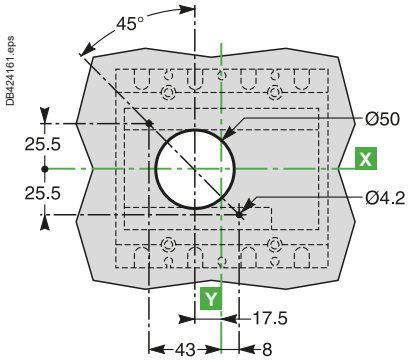
Type	H	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	K	K1	L	L1	P	P1	P2	P3	P4
INS250 INV100/250	40	80	68	136	82	164	133	266	166	332	115	17.5	35	70	140	21.5	86	96	131	138
INS320/630 INV320/630	61.5	123	102.5	205	118	236	175	350	212.5	425	177	22.5	45	92.5	185	26	110	120	160.4	162

Extended front handle

INS250-100 to 250 and INV100 to 250

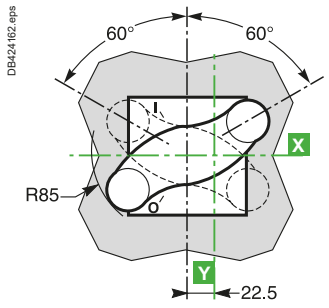


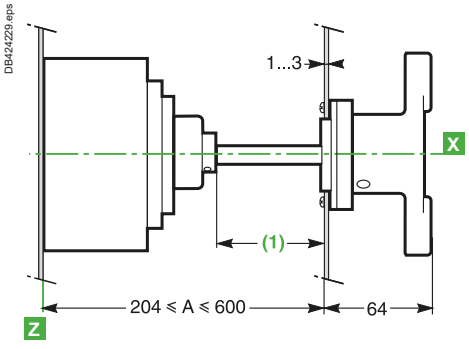


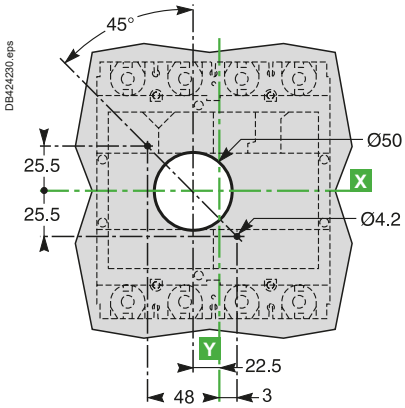


[1] Length of shaft = A - 101.

INS320 to 630 and INV320 to 630





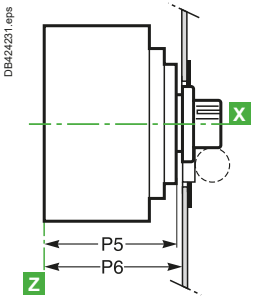


[1] Length of shaft = A - 124.

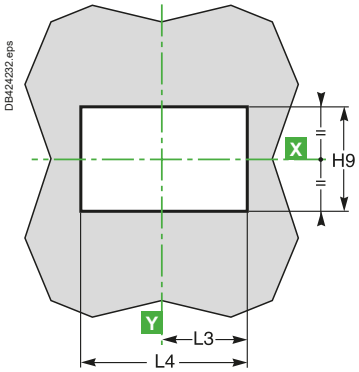
Note: Lines X and Y indicate the axes of symmetry of the switch-disconnector.
Reference plane Z corresponds to the back of the switch-disconnector.

Compact INS250-100 to 630
Compact INV100 to 630

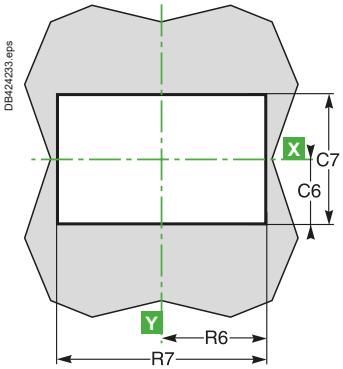
Door or front panel cutout for front handle



Without escutcheon



With escutcheon



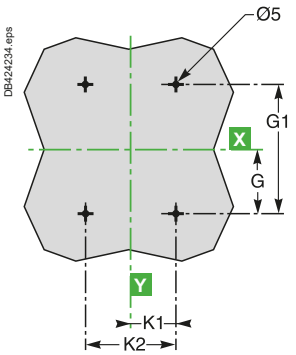
Dimensions (mm)

Type	C6	C7	H9	L3	L4	P5	P6	R6	R7
INS/INV100 to 250	51.5	103	82	66	132	96	98	81	162
INS/INV320 to 630	76.5	153	125	86	172	120	122	101	202

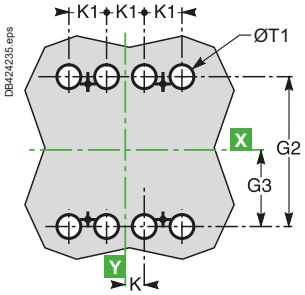
C

Installation

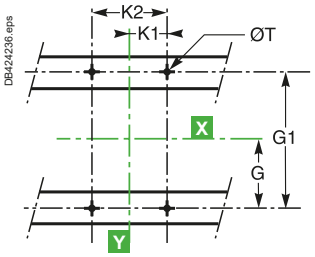
On panel fixed/FC



On panel fixed/RC



On rail

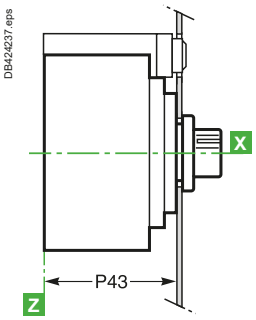


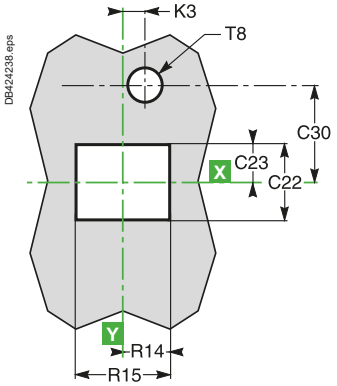
Dimensions (mm)

Type	G	G1	G2	G3	K	K1	K2	ØT	ØT1
INS/INV100 to 250	50	100	115	57.5	17.5	35	70	6	24
INS/INV320 to 630	75	150	177	88.5	22.5	45	90	6	32

Front panel cutout

Switch-disconnector equipped with a voltage-presence indicator



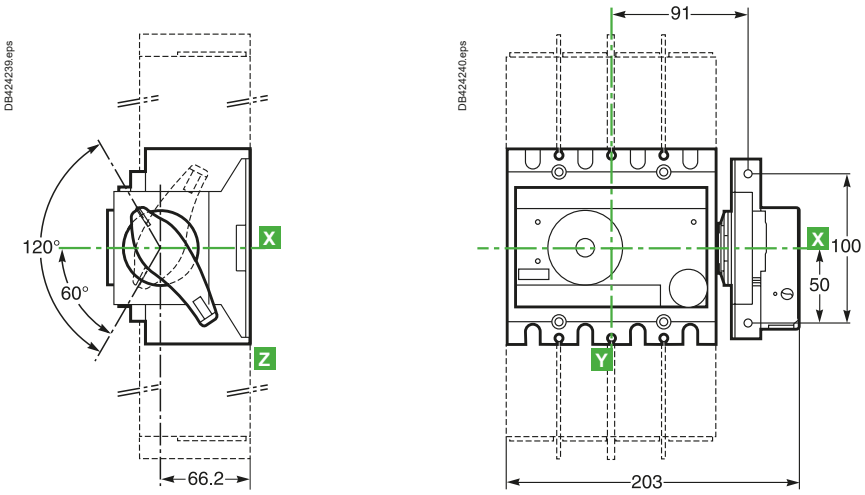


Dimensions (mm)

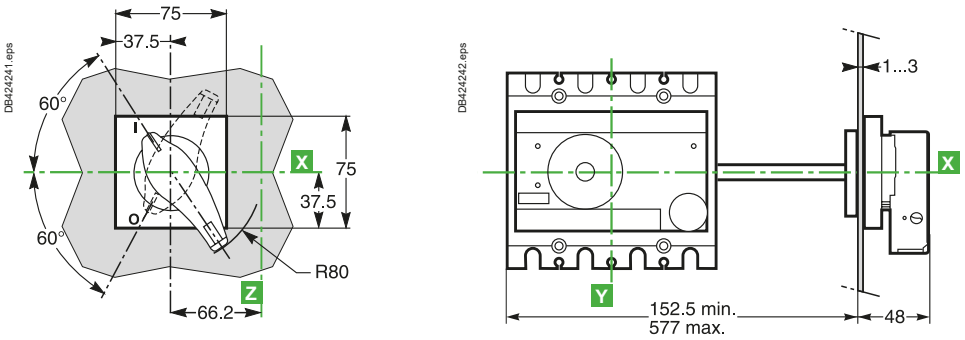
Type	P43	R14	R15	C22	C23	C30	T8	K3
INS/INV100 to 250	98	65	132	82	40	58.5	31	18
INS/INV320 to 630	122	86	172	125	62.85	97	31	22.7

Dimensions

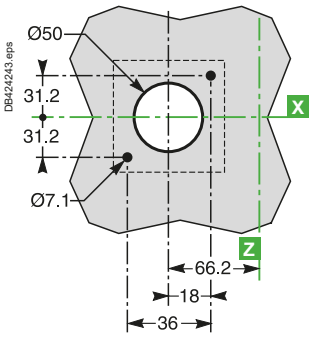
Lateral handle (only for INS250-100 to 250 and INV100 to 250)



Extended lateral handle (only for INS250-100 to 250 and INV100 to 250)



Door or front panel cutout for lateral handle (only for INS250-100 to 250 and INV100 to 250)



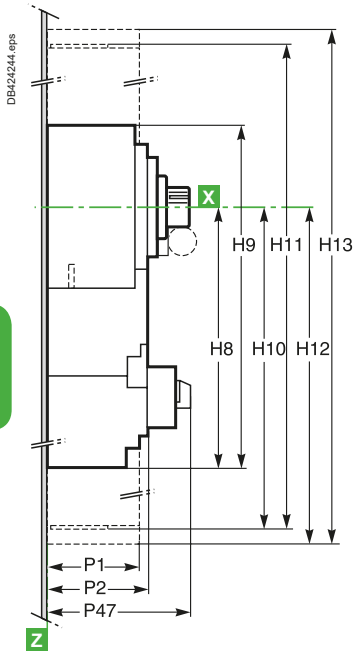
C

Compact INS250-100 to 630
Compact INV100 to 630

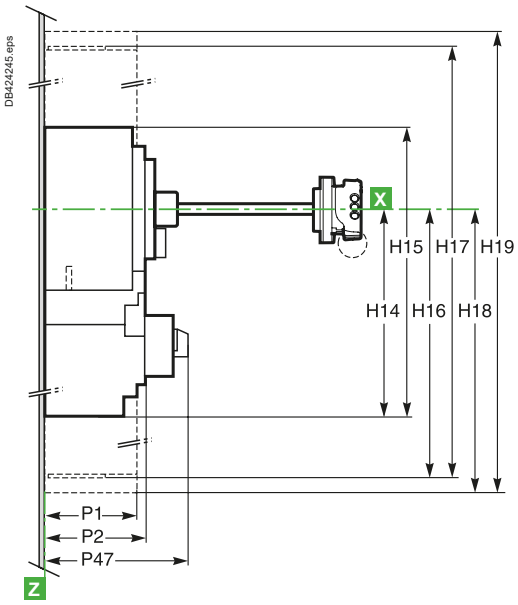
Dimensions

Switch-disconnector with ammeter module

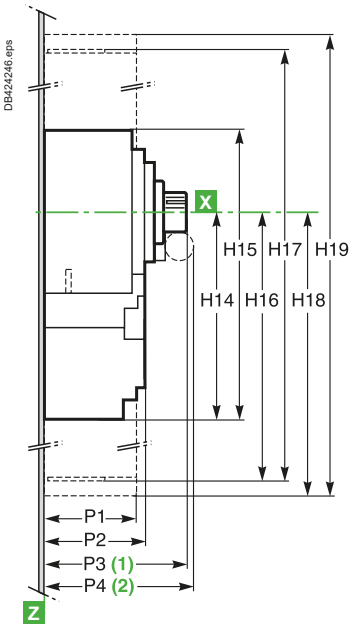
Direct handle
(INS250/INV100 to 250)



Extended handle



Switch-disconnector equipped with current transformer

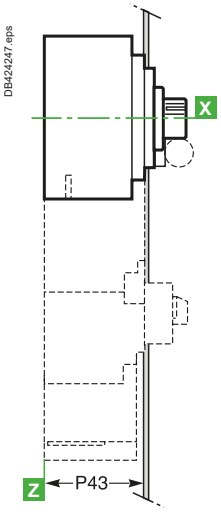


[1] To front of direct handle.
[2] To front of key.

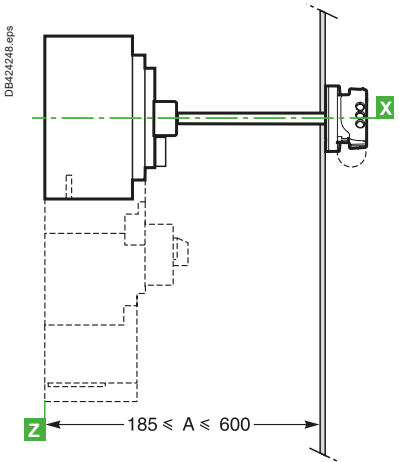
Front panel cutout

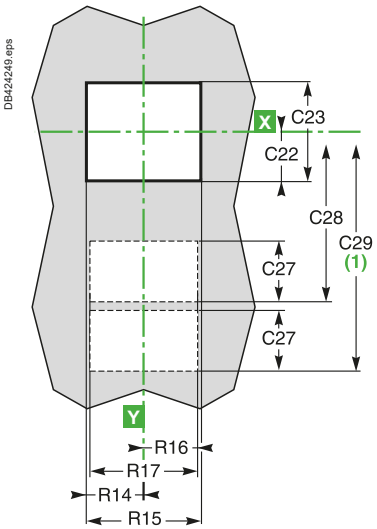
Switch-disconnector with ammeter module

Direct handle
(INS250/INV100 to 250)



Extended handle



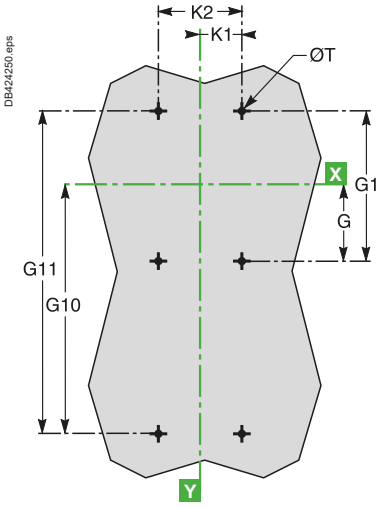


[1] Only for INS250/INV100 to 250 with direct handle and ammeter module.

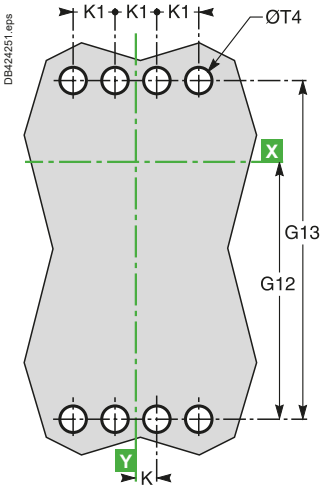
Installation
(for INS250 direct rotary handle equipped with ammeter module or current transformer)

On a backplate

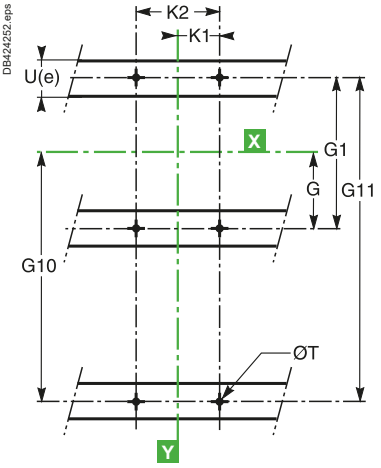
Fixed front connection



Fixed rear connection



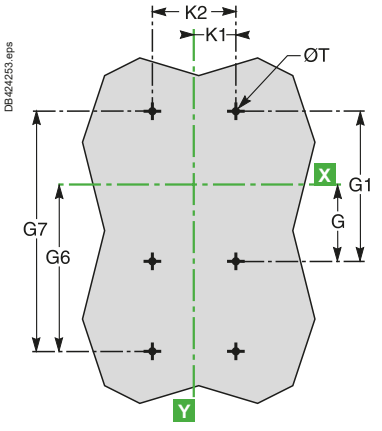
On rails



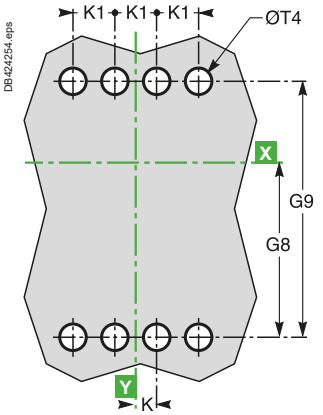
Installation (for extended rotary handle equipped with ammeter module)

On a backplate

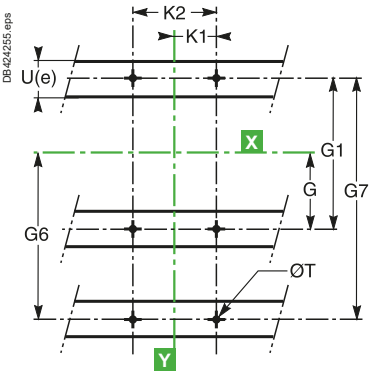
Fixed front connection



Fixed rear connection



On rails



Dimensions (mm)

Type	C22	C23	C27	C28	C29	G	G1	G6	G7	G8	G9	G10	G11	G12	G13
INS/INV100 to 250	41	82	56.5	187	195	50	100	125	175	132.5	190	200	250	207.5	265
INS/INV320 to 630	63.5	127	56.5	162	-	75	150	175	250	188.5	277	175	250	188.5	277

Type	H8	H9	H10	H11	H12	H13	H14	H15	H16	H17	H18	H19
INS/INV100 to 250	216	282	279.5	410	297.5	446	141	207	205	334	223	370
INS/INV320 to 630	-	-	-	-	-	-	202.5	305	310.5	521.5	217.5	530

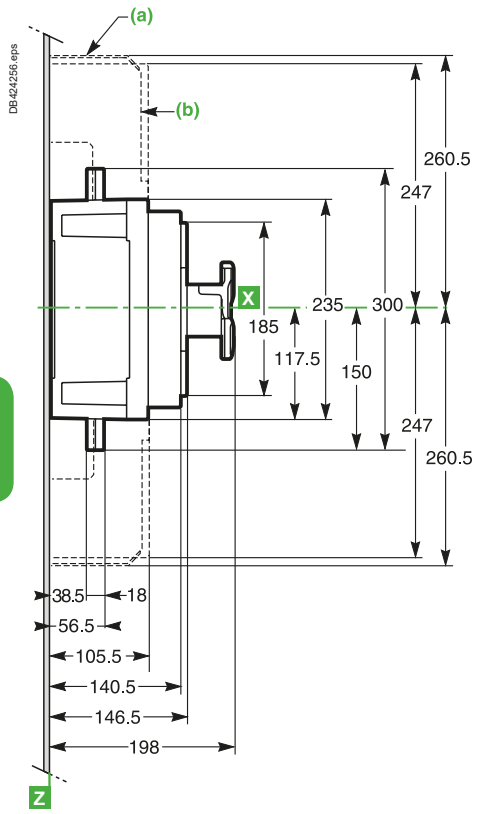
Type	K	K1	K2	P1	P2	P3	P4	P43	P47	R14	R15	R16	R17	ØT	ØT4	U(e)
INS/INV100 to 250	17.5	35	70	81	86	131	138	89	137	48.5	97	46.5	93	6	24	⩽ 32
INS/INV320 to 630	22.5	45	90	95.5	110	160.4	162	112	162	64.5	129	64.5	93	6	32	⩽ 32

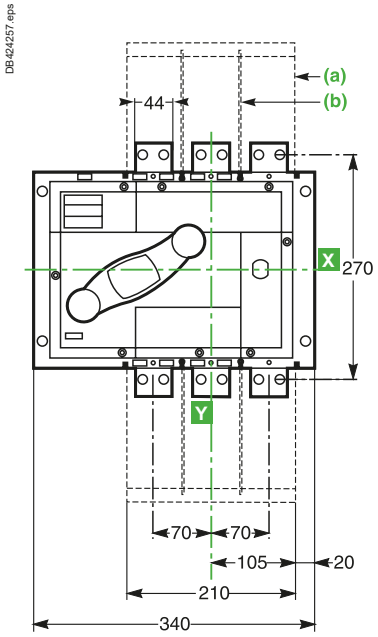
Compact INS630b to 1600
Compact INV630b to 1600

Dimensions

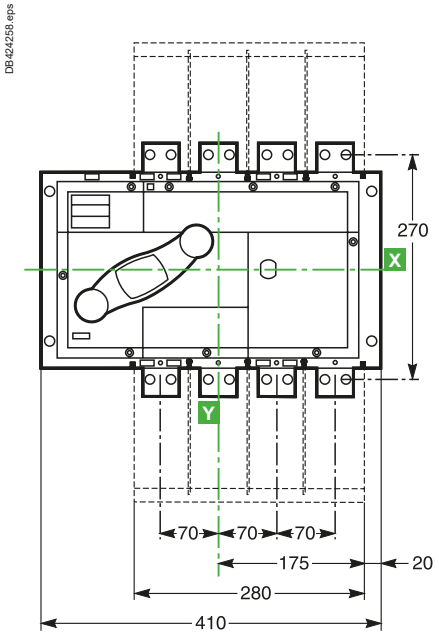
Direct front handle

3 poles



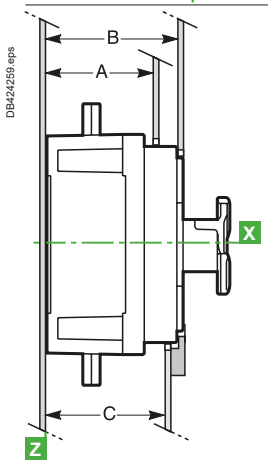


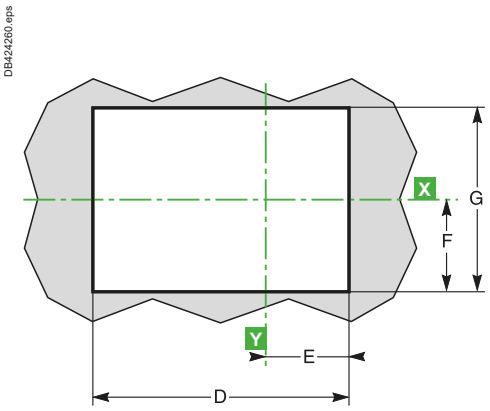
4 poles



[a] Terminal shields.
[b] Interphase-barrier.

Door or front panel cutout for extended handle





Cutout for switch-disconnector cover (mm)

Type	A	D	E	F	G
3P	107	299	103	108	216
4P	107	369	173	108	216

Cutout for switch-disconnector front (mm)

Type	B	D	E	F	G
3P	142	274	90.5	95.5	191
4P	142	344	160.5	95.5	191

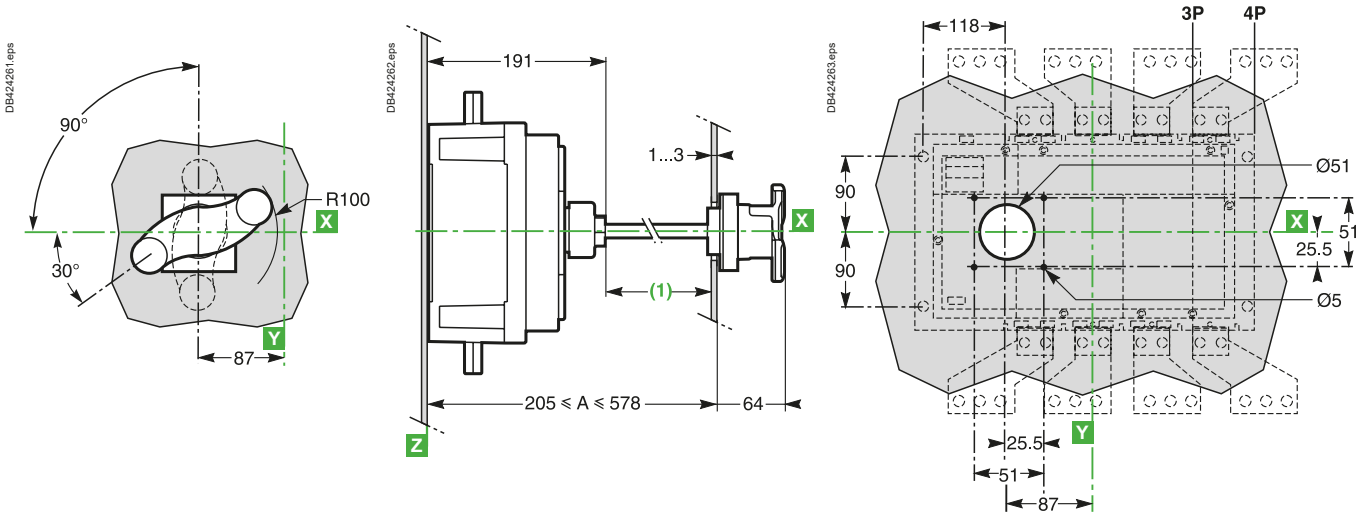
Cutout for escutcheon (mm)

Type	C	D	E	F	G
3P	132	330	120	123	246
4P	132	400	190	123	246

Note: Lines X and Y indicate the axes of symmetry of the switch-disconnector.
Reference plane Z corresponds to the back of the switch-disconnector.

Compact INS630b to 1600 Compact INV630b to 1600

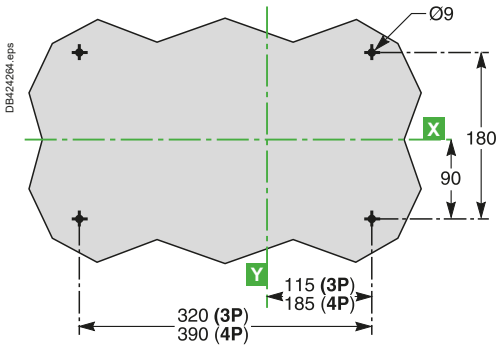
Extended front handle



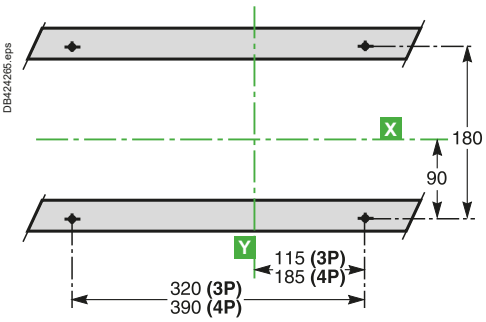
[1] Length of shaft = A - 151.

Installation

On backplate



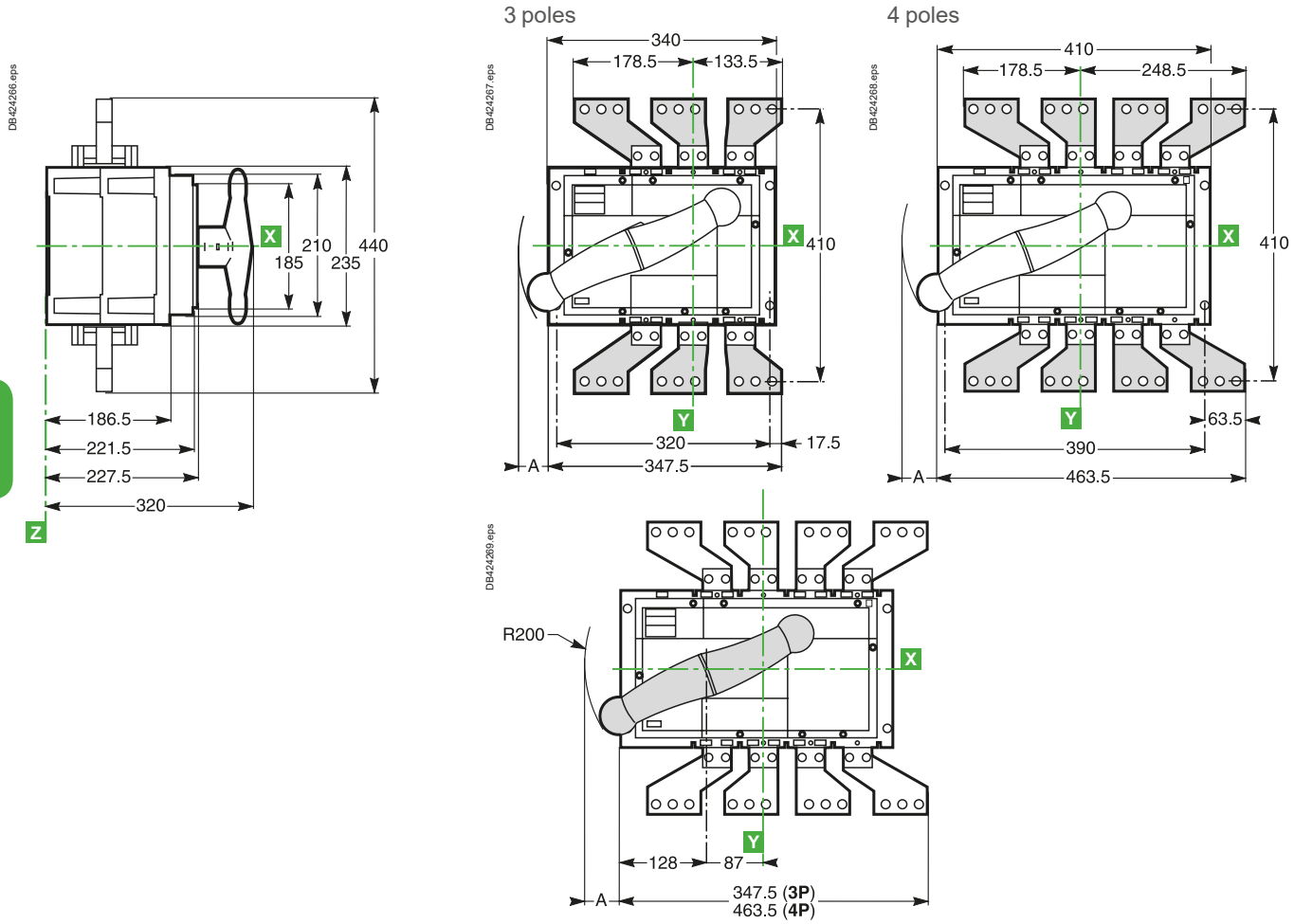
On rail



Compact INS2000 to 2500
Compact INV2000 to 2500

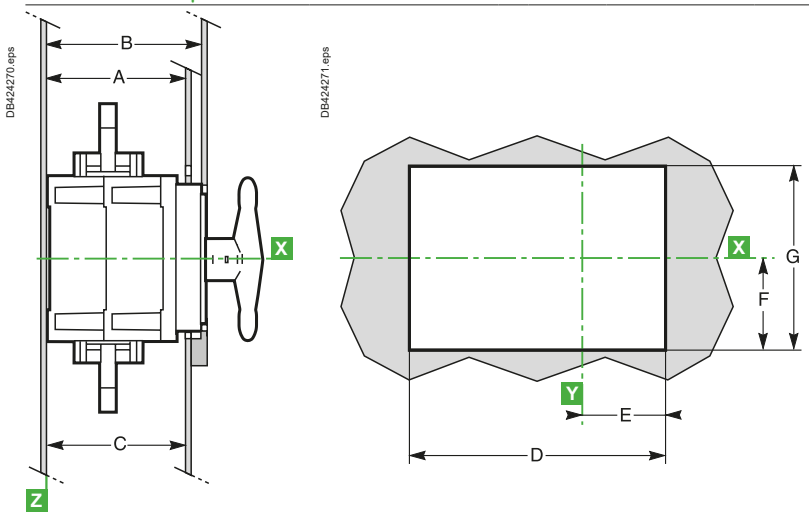
Dimensions

Direct front handle



A : 50 min.
72 max.
A : 50 min. / 72 max.

Door or front panel cutout for front handle



Cutout for switch-disconnector cover (mm)

Type	A	D	E	F	G
3P	188	299	103	108	216
4P	188	369	173	108	216

Cutout without escutcheon (mm)

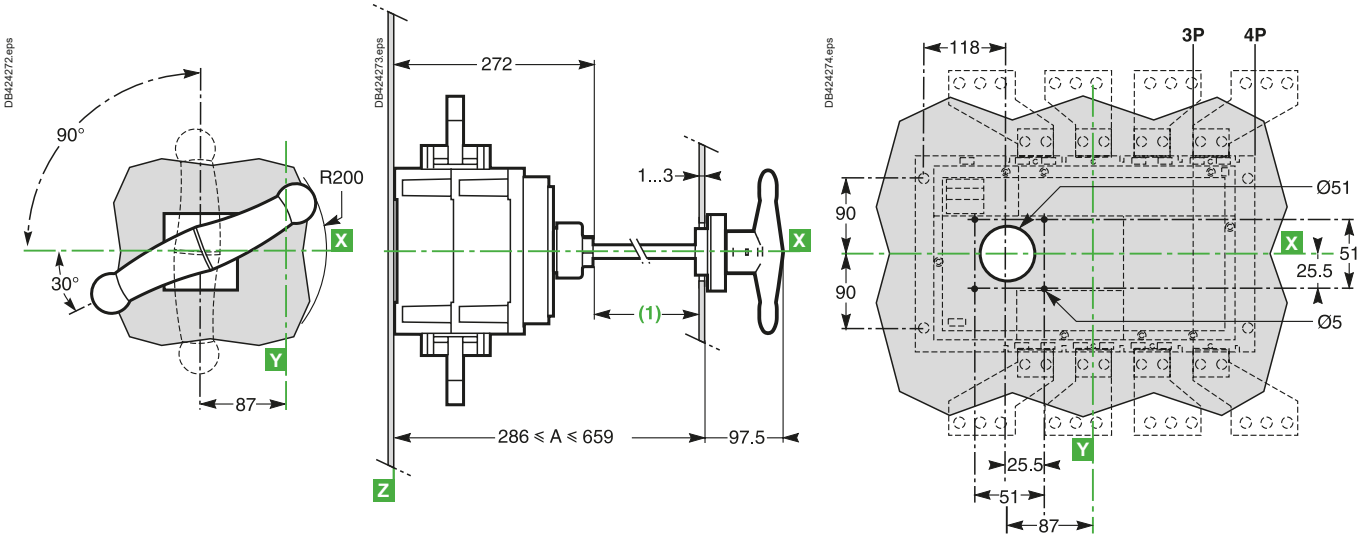
Type	B	D	E	F	G
3P	223	274	90.5	95.5	191
4P	223	344	160.5	95.5	191

Cutout with escutcheon (mm)

Type	C	D	E	F	G
3P	213	327	110	121.5	243
4P	213	397	180	121.5	243

Note: Lines X and Y indicate the axes of symmetry of the switch-disconnector.
Reference plane Z corresponds to the back of the switch-disconnector.

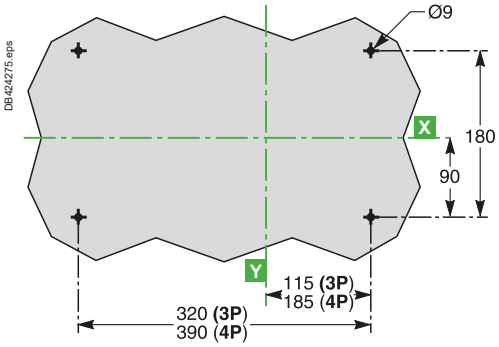
Extended front handle



[1] Length of shaft = A - 232.

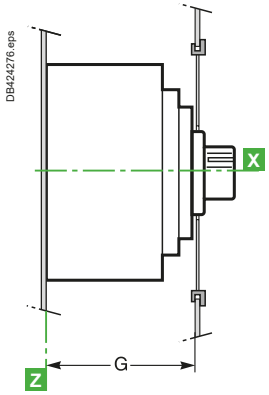
Installation

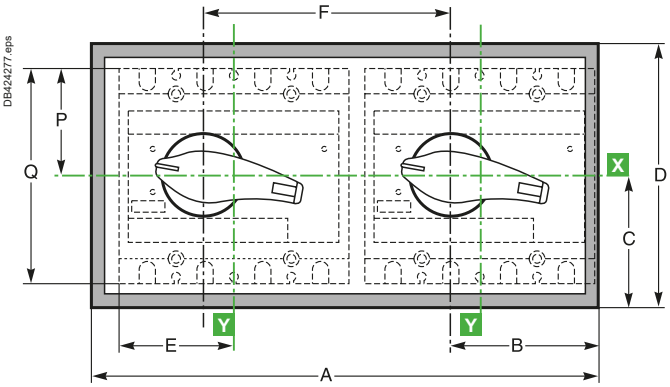
On backplate



Mechanical interlocks for direct and extended handles
INS40 to 630, INV100 to 630

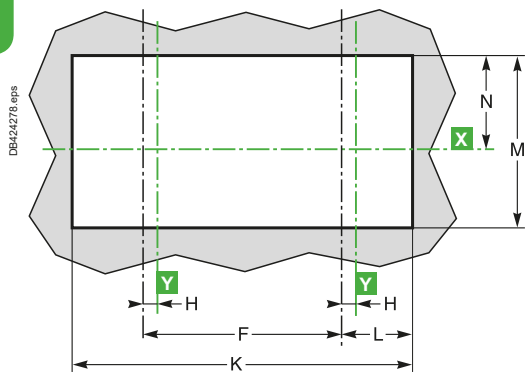
Dimensions for direct handle (INS250-100 to 630 and INV100 to 630)





C

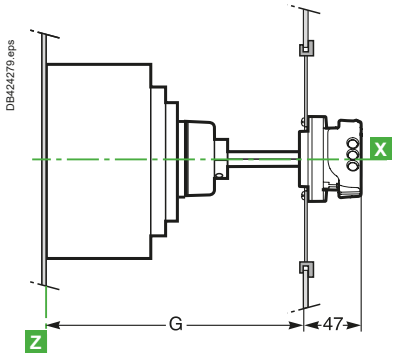
Door cutout

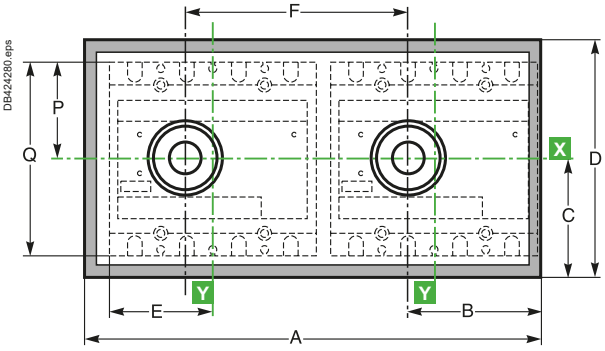


Dimensions (mm)

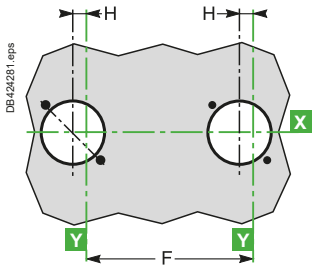
Type	A	B	C	D	E	F	G	H	K	L	M	N	P	Q
INS250 INV100/250	325	90	87.5	175	70	156	106	17.5	295	75.5	150	75	68	136
INS320/630 INV320/630	416	115	100	200	92.5	210	130	22.5	386	100	175	74.5	102.5	205

Dimensions for extended handle (INS250-100 to 630 and INV100 to 630)





Door cutout



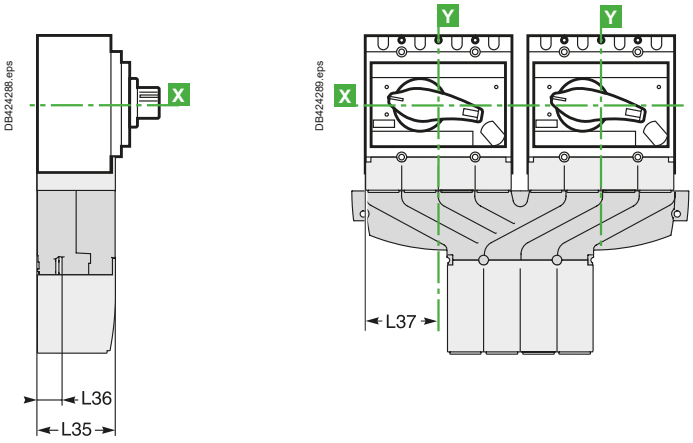
Dimensions (mm)

Type	A	B	C	D	E	F	G min.	 max.	H	P	Q
INS40/80	-	-	-	-	46	156	155	396	-	45	90
INS100/160	-	-	-	-	70	156	128	519	-	50	100
INS250 INV100/250	325	90	87.5	175	70	156	185	600	17.5	68	136
INS320/630 INV320/630	416	115	100	200	92.5	210	204	600	22.5	102.5	205

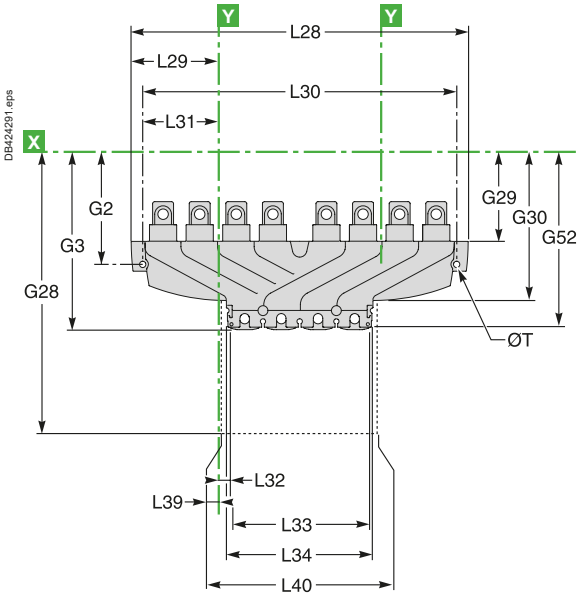
Note: Lines X and Y indicate the axes of symmetry of the switch-disconnector.
Reference plane Z corresponds to the back of the switch-disconnector.

Installation of downstream coupling
INS250-100 to 630, INV100 to 630

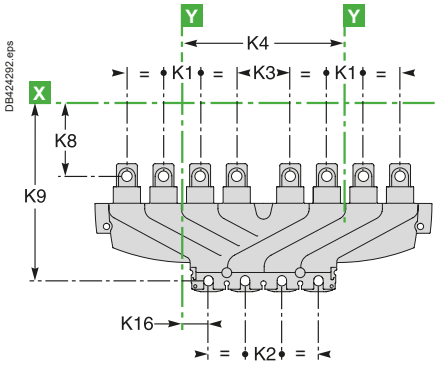
Dimensions



Dimensions



Connection



Dimensions (mm)

Type	G2	G3	G28	G29	G30	G52	K1	K2	K3	K4	K8	K9	K16
INS250-100/160/200/250	105.5	169	232	83.5	140	165.5	35	35	51	156	57.5	157.5	25.5
INS320/400/500/630	141	240.7	313	119	195.6	240	45	45	75	210	88.5	225.7	37.5

Dimensions (mm)

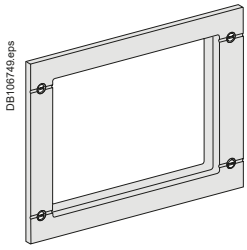
Type	L28	L29	L30	L31	L32	L33	L34	L35	L36	L37	L39	L40	ØT
INS250-100/160/200/250	320	83	300	72	12.8	130.5	139.5	74.5	21.5	70	8.5	140	6
INS320/400/500/630	425	107.5	400	95	17.35	175.3	184.7	98.5	26	92.5	12.65	184.7	6

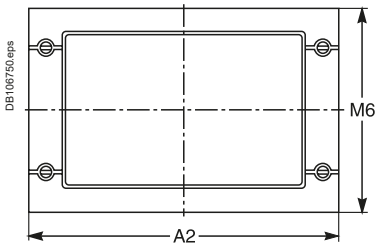
Note: Lines X and Y indicate the axes of symme try of the switch-disconnector.
Reference plane Z corresponds to the back of the switch-disconnector.

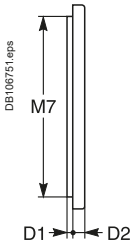
Front-panel accessories
INS250-100 to 2500, INV100 to 2500

Front-panel escutcheon

For switch-disconnectors





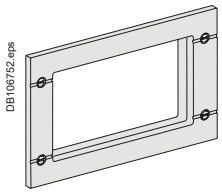


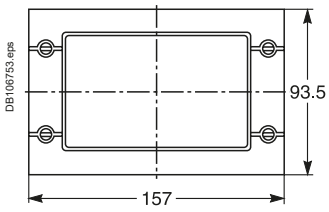
Dimensions (mm)

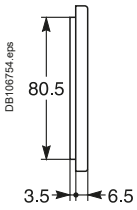
Type		A2	D1	D2	M6	M7
INS250 INV100/250		174	3.5	6.5	114	101
INS320/630 INV320/630		215.5	3.5	6.5	164	151
INS630b/2500	3P	346	3.5	11.5	257.5	242 x 326.5
INV630b/2500	4P	416	3.5	11.5	257.5	242 x 396.5

C

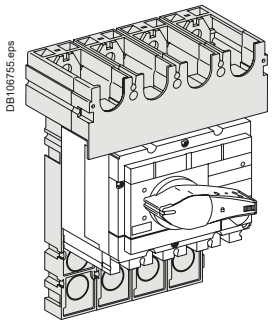
For ammeter module

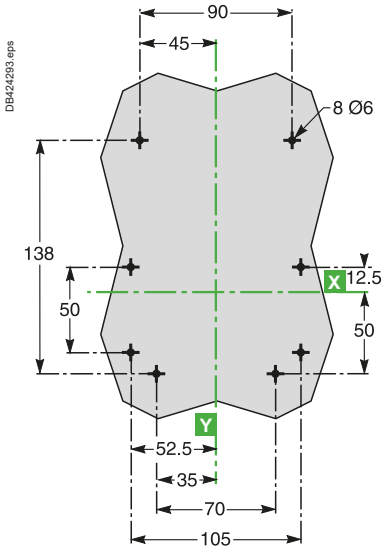






Front alignment (only for INS/INV250-100)





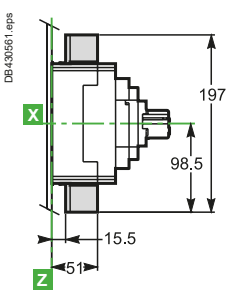
Note: Lines X and Y indicate the axes of symme try of the switch-disconnector.
Reference plane Z corresponds to the back of the switch-disconnector.

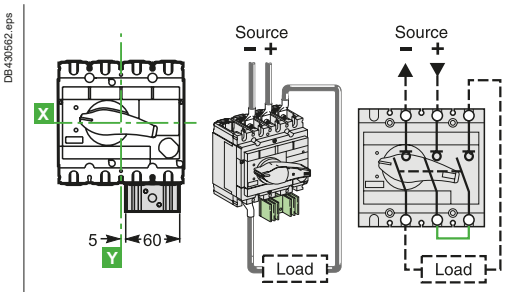
Parallel or series connection accessories for direct current

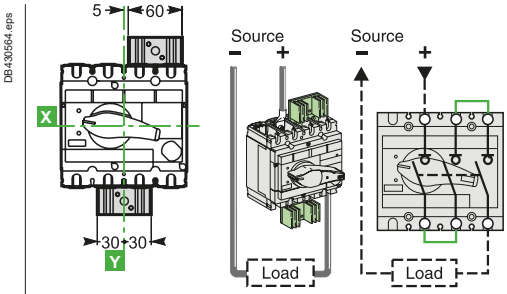
Compact INS250-100 to 250
Compact INV100 to 250

With series connections

3P

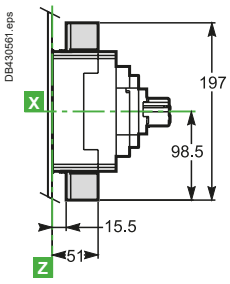


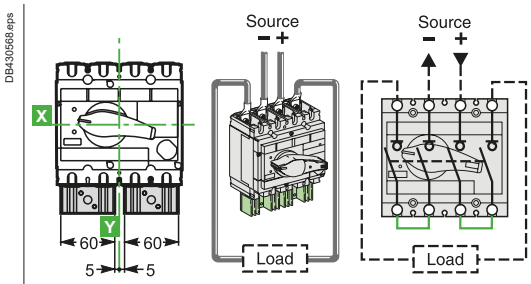


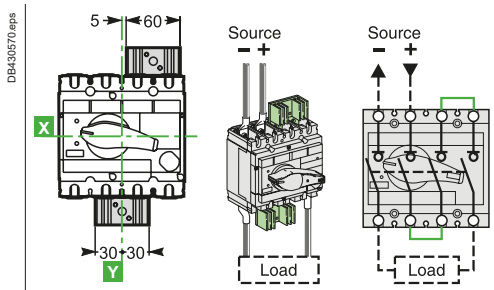


Terminal shield	1 x LV438326	1 x LV438326
Terminal extension	1 x LV438328	2 x LV438328

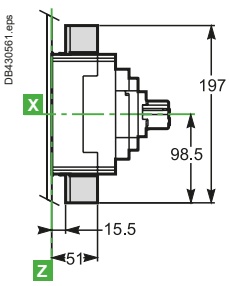
4P

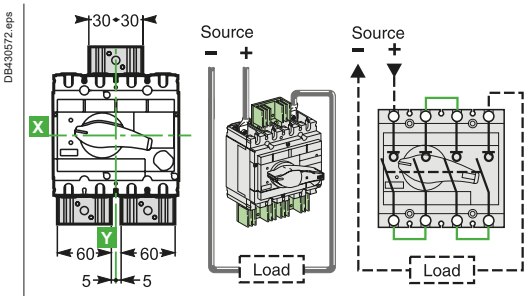






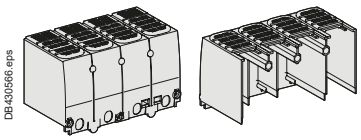
Terminal shield	1 x LV438327	1 x LV438326
Terminal extension	2 x LV438328	2 x LV438328



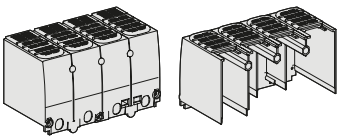


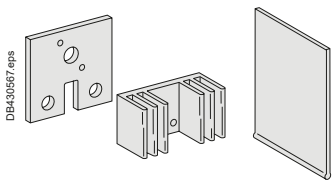
Terminal shield	1 x LV438327 + 1 x LV438326
Terminal extension	3 x LV438328

Accessories

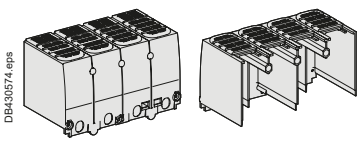


LV438326





LV438328



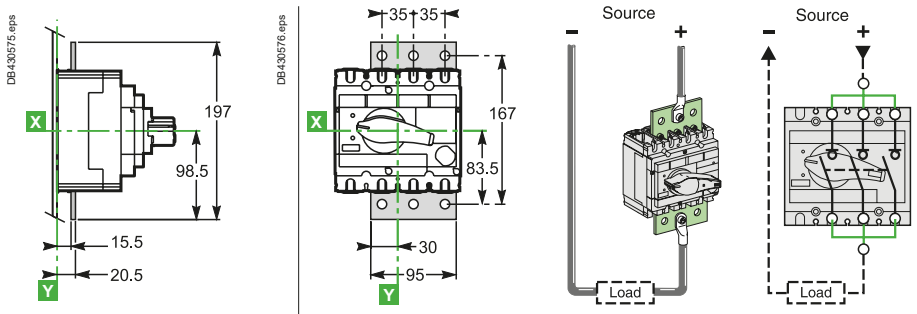
LV438327

C

Parallel or series connection accessories for direct current
Compact INS250-100 to 250
Compact INV100 to 250

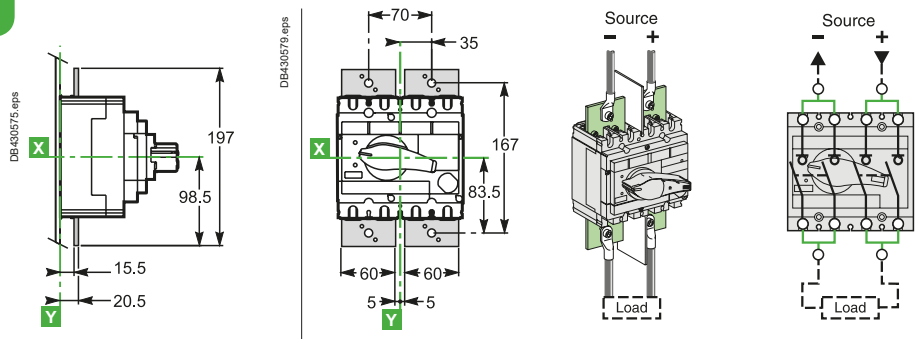
With parallel connections

3P



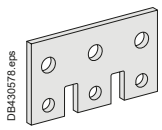
Terminal shield	-
Terminal extension	2 x LV438329

4P



Terminal shield	N/A
Terminal extension	4 x LV438328

Accessories



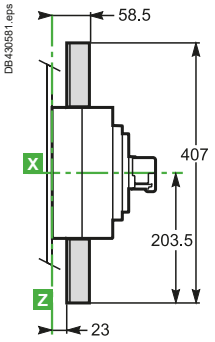
LV438329

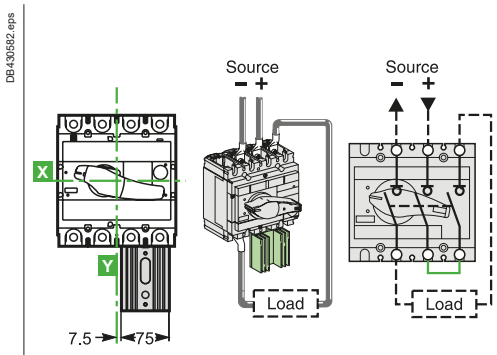
Parallel or series connection accessories for direct current

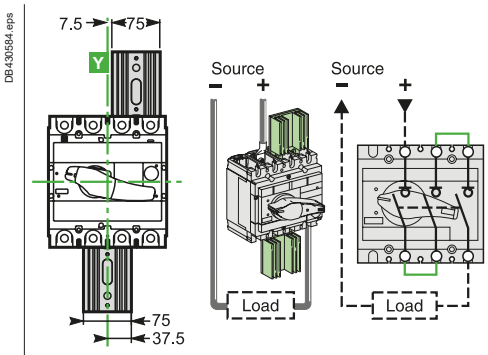
Compact INS320 to 630
Compact INV320 to 630

With series connections

3P

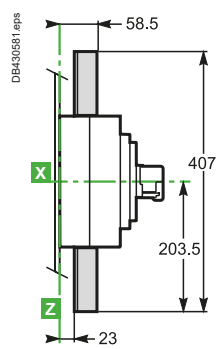


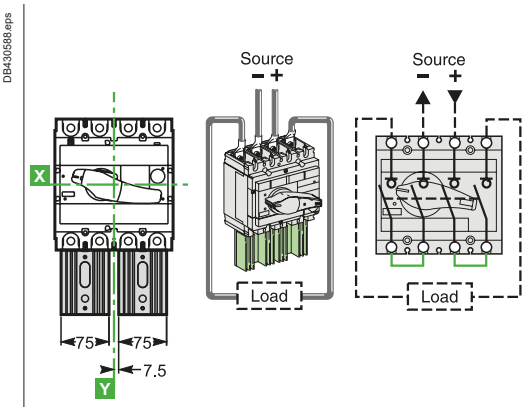


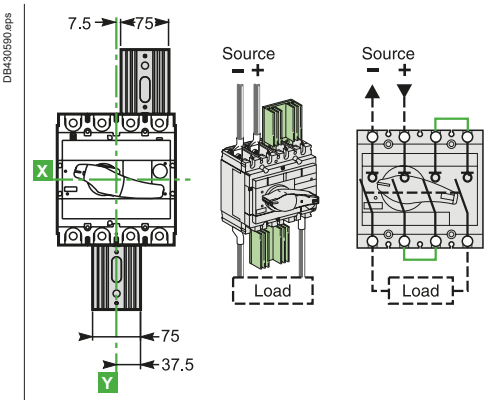


Terminal shield	1 x LV438295 + 1 x LV432594	1 x LV438295 + 1 x LV438294
Terminal extension	1 x LV438338	2 x LV438338

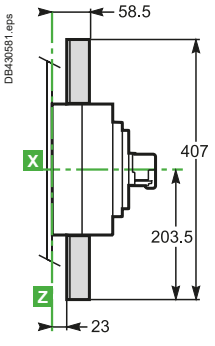
4P

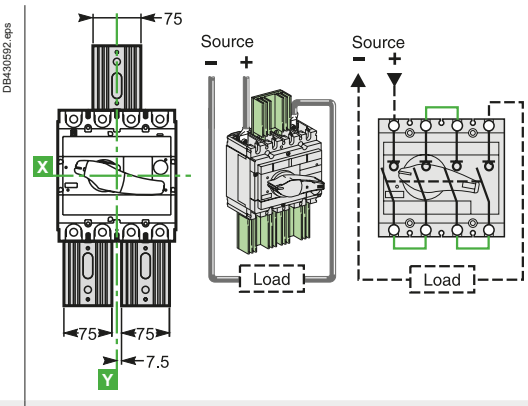






Terminal shield	1 x LV438294 + 1 x LV432594	1 x LV438294 + 1 x LV438295
Terminal extension	2 x LV438338	2 x LV438338



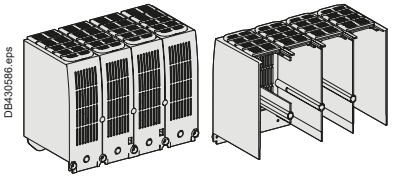


Terminal shield	1 x LV438293 + 1 x LV438294
Terminal extension	3 x LV438338

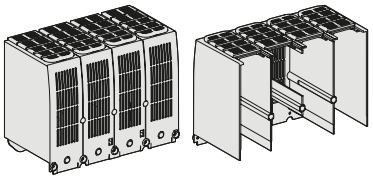
C

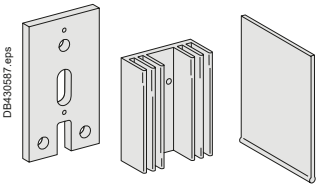
Parallel or series connection accessories for direct current
Compact INS320 to 630
Compact INV320 to 630

Accessories

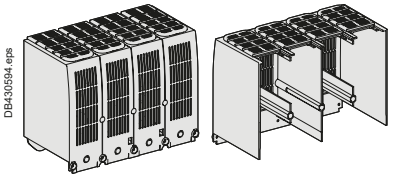


LV438294 and LV438295





LV438338

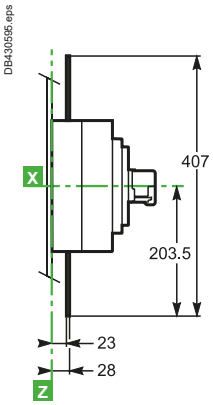


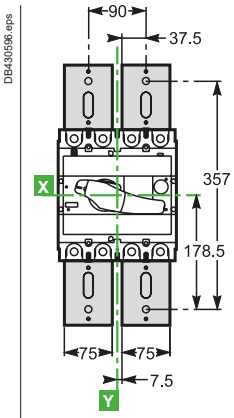
LV438293

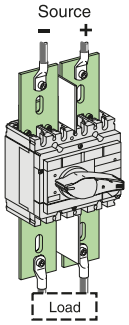
C

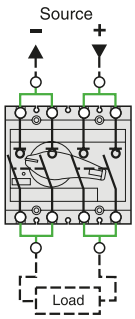
With parallel connections

4P



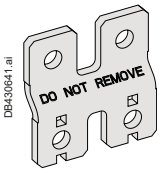






Terminal shield	N/A or 1 x LV438327 (if you use LV438307)
Terminal extension	4 x LV438338 (proposal replace by 1 x LV438307)

Accessories



LV438307

Complementary technical information

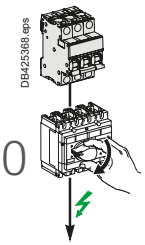
Coordination

All switches must be protected by an overcurrent protection device placed upstream.
The tables below give the coordination performance of circuit breakers and switch-disconnector of main Schneider Electric ranges: in the event of an overload or a short-circuit the circuit breaker proposed in the table will ensure protection of the Switch-disconnector according to its electrodynamic withstand and short-time and permanent withstand.

Switch-disconnector - Circuit breaker coordination

Upstream: iC60, C120, NG125

Downstream: Compact INS40 to INS250, INV100 to INV250



Ue ⩽ 415 V AC

Downstream	Switch-disconnector	INS40	INS63	INS80	INS100	INS 250-100 INV100	INS125	INS160	INS 250-160 INV160	INS 250-200 INV200	INS250 INV250
	Ith (A) 60°	40	63	80	100	100	125	160	160	250	250
	Icw (kA)	3	3	3	5.5	8.5	5.5	5.5	8.5	8.5	8.5
	Icm (kÂ)	15	15	15	20	30	20	20	30	30	30

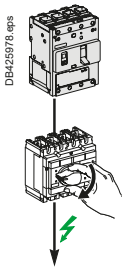
Upstream Circuit breaker	Rating	Icu (kA) 415 V	Switch-disconnector conditionnal short-circuit current and related making capacity									
iC60N B-C-D Curves	⩽ 32	10	T	T	T	T	T	T	T	T	T	T
	40	10	T	T	T	T	T	T	T	T	T	T
	50	10		T	T	T	T	T	T	T	T	T
	63	10		T	T	T	T	T	T	T	T	T
iC60H B-C-D Curves	⩽ 32	15	T	T	T	T	T	T	T	T	T	T
	40	15	T	T	T	T	T	T	T	T	T	T
	50	15		T	T	T	T	T	T	T	T	T
	63	15		T	T	T	T	T	T	T	T	T
iC60L B-C-D-K-Z Curves	⩽ 25	25	T	T	T	T	T	T	T	T	T	T
	32	20	T	T	T	T	T	T	T	T	T	T
	40	20		T	T	T	T	T	T	T	T	T
	50	15		T	T	T	T	T	T	T	T	T
	63	15		T	T	T	T	T	T	T	T	T
C120N	63	10		T	T	T	T	T	T	T	T	T
B-C-D Curves	80	10			T	T	T	T	T	T	T	T
1P 240V	100	10				T	T	T	T	T	T	T
2, 3, 4P 415 V	125	10						T	T	T	T	T
C120H	63	20		T	T	T	T	T	T	T	T	T
B-C-D Curves	80	20			T	T	T	T	T	T	T	T
1P 240V	100	20				T	T	T	T	T	T	T
2, 3, 4P 415 V	125	20						T	T	T	T	T
NG125N	⩽ 40	25	T	T	T	T	T	T	T	T	T	T
B-C-D Curves	63	25		T	T	T	T	T	T	T	T	T
	80	25			T	T	T	T	T	T	T	T
	100	25				T	T	T	T	T	T	T
	125	25						T	T	T	T	T
NG125H C Curves	⩽ 40	36	T	T	T	T	T	T	T	T	T	T
	63	36		T	T	T	T	T	T	T	T	T
	80	36			T	T	T	T	T	T	T	T
	100	36				T	T	T	T	T	T	T
	125	36						T	T	T	T	T
NG125L B-C-D Curves	⩽ 40	50	T	T	T	T	T	T	T	T	T	T
	63	50		T	T	T	T	T	T	T	T	T
	80	50			T	T	T	T	T	T	T	T

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured



Switch-disconnector - Circuit breaker coordination

Upstream: Compact NSXm

Downstream: Compact INS40 to 250, Compact INV100 to 250

Ue ⩽ 440 V AC

Downstream	Switch-disconnector	INS40	INS63	INS80	INS100	INS250-100 INV100	INS125	INS160	INS250-160 INV160	INS250-200 INV200	INS250 INV250
	Ith A 60°	40	63	80	100	100	125	160	160	200	200
	Icw (kA)	3	3	3	5.5	8.5	5.5	5.5	8.5	8.5	8.5
	Icm (kÂ)	15	15	15	20	30	20	20	30	30	30

Upstream Circuit breaker:	Icu (kA) 415 V	440 V	Ir	Switch-disconnector conditionnal short-circuit current and related making capacity									
NSXm E	16	10	Ir ⩽ 40	T	T	T	T	T	T	T	T	T	T
TMD, Micrologic			Ir ⩽ 50		T	T	T	T	T	T	T	T	T
			Ir ⩽ 63		T	T	T	T	T	T	T	T	T
			Ir ⩽ 80			T	T	T	T	T	T	T	T
			Ir ⩽ 100				T	T	T	T	T	T	T
			Ir ⩽ 125						T	T	T	T	T
			Ir ⩽ 160							T	T	T	T
NSXm B	25	20	Ir ⩽ 40	T	T	T	T	T	T	T	T	T	T
TMD, Micrologic			Ir ⩽ 50		T	T	T	T	T	T	T	T	T
			Ir ⩽ 63		T	T	T	T	T	T	T	T	T
			Ir ⩽ 80			T	T	T	T	T	T	T	T
			Ir ⩽ 100				T	T	T	T	T	T	T
			Ir ⩽ 125						T	T	T	T	T
			Ir ⩽ 160							T	T	T	T
NSXm F	36	35	Ir ⩽ 40	T	T	T	T	T	T	T	T	T	T
TMD, Micrologic			Ir ⩽ 50		T	T	T	T	T	T	T	T	T
			Ir ⩽ 63		T	T	T	T	T	T	T	T	T
			Ir ⩽ 80			T	T	T	T	T	T	T	T
			Ir ⩽ 100				T	T	T	T	T	T	T
			Ir ⩽ 125						T	T	T	T	T
			Ir ⩽ 160							T	T	T	T
NSXm N	50	50	Ir ⩽ 40	36/75	36/75	36/75	T	T	T	T	T	T	T
TMD, Micrologic			Ir ⩽ 50		36/75	36/75	T	T	T	T	T	T	T
			Ir ⩽ 63		36/75	36/75	T	T	T	T	T	T	T
			Ir ⩽ 80			36/75	T	T	T	T	T	T	T
			Ir ⩽ 100				T	T	T	T	T	T	T
			Ir ⩽ 125						T	T	T	T	T
			Ir ⩽ 160							T	T	T	T
NSXm H	70	65	Ir ⩽ 40	36/75	36/75	36/75	T	T	T	T	T	T	T
TMD, Micrologic			Ir ⩽ 50		36/75	36/75	T	T	T	T	T	T	T
			Ir ⩽ 63		36/75	36/75	T	T	T	T	T	T	T
			Ir ⩽ 80			36/75	T	T	T	T	T	T	T
			Ir ⩽ 100				T	T	T	T	T	T	T
			Ir ⩽ 125						T	T	T	T	T
			Ir ⩽ 160							T	T	T	T

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

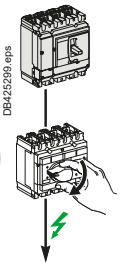
: Protection of the switch-disconnector is not ensured

D

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NSX100 to 250

Downstream: Compact INS40 to INS250, INV100 to INV250



Ue ⩽ 440 V AC

Downstream	Switch-disconector	INS40	INS63	INS80	INS100	INS250-100 INV100	INS125	INS160	INS250-160 INV160	INS250-200 INV200	INS250 INV250
	Ith A 60°	40	63	80	100	100	125	160	160	200	250
	Icw (kA)	3	3	3	5,5	8,5	5,5	5,5	8,5	8,5	8,5
	Icm (kÂ)	15	15	15	20	30	20	20	30	30	30

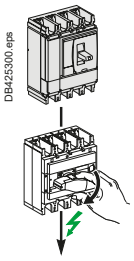
Upstream circuit breaker	Icu (kA) 415V	440V	Ir	Switch-disconnector conditionnal short-circuit current and related making capacity									
NSX100B	25	20	Ir ⩽ 40	T	T	T	T	T	T	T	T	T	T
NSX160B			Ir ⩽ 63		T	T	T	T	T	T	T	T	T
TMD / TMG /			Ir ⩽ 80			T	T	T	T	T	T	T	T
Micrologic			Ir ⩽ 100				T	T	T	T	T	T	T
			Ir ⩽ 125						T	T	T	T	T
			Ir ⩽ 160							T	T	T	T
NSX250B	25	20	Ir ⩽ 40	T	T	T	T	T	T	T	T	T	T
TMD / TMG /			Ir ⩽ 63		T	T	T	T	T	T	T	T	T
Micrologic			Ir ⩽ 80			T	T	T	T	T	T	T	T
			Ir ⩽ 100				T	T	T	T	T	T	T
			Ir ⩽ 125						T	T	T	T	T
			Ir ⩽ 160							T	T	T	T
			Ir ⩽ 200									T	T
			Ir ⩽ 250										T
NSX100F	36	35	Ir ⩽ 40	36/75	36/75	36/75	T	T	T	T	T	T	T
NSX160F			Ir ⩽ 63		36/75	36/75	T	T	T	T	T	T	T
TMD / TMG /			Ir ⩽ 80			36/75	T	T	T	T	T	T	T
Micrologic			Ir ⩽ 100				T	T	T	T	T	T	T
			Ir ⩽ 125						T	T	T	T	T
			Ir ⩽ 160							T	T	T	T
NSX250F	36	35	Ir ⩽ 40	25/52	25/52	25/52	T	T	T	T	T	T	T
TMD / TMG /			Ir ⩽ 63		25/52	25/52	T	T	T	T	T	T	T
Micrologic			Ir ⩽ 80			25/52	T	T	T	T	T	T	T
			Ir ⩽ 100				T	T	T	T	T	T	T
			Ir ⩽ 125						T	T	T	T	T
			Ir ⩽ 160							T	T	T	T
			Ir ⩽ 200									T	T
			Ir ⩽ 250										T
NSX100N/H	50/70	50/65	Ir ⩽ 40	25/52	25/52	25/52	T	T	T	T	T	T	T
NSX160N/H			Ir ⩽ 63		25/52	25/52	T	T	T	T	T	T	T
TMD / TMG /			Ir ⩽ 80			25/52	T	T	T	T	T	T	T
Micrologic			Ir ⩽ 100				T	T	T	T	T	T	T
			Ir ⩽ 125						T	T	T	T	T
			Ir ⩽ 160							T	T	T	T
NSX250N/H	50/70	50/65	Ir ⩽ 40	25/52	25/52	25/52	T	T	T	T	T	T	T
TMD / TMG /			Ir ⩽ 63		25/52	25/52	T	T	T	T	T	T	T
Micrologic			Ir ⩽ 80			25/52	T	T	T	T	T	T	T
			Ir ⩽ 100				T	T	T	T	T	T	T
			Ir ⩽ 125						T	T	T	T	T
			Ir ⩽ 160							T	T	T	T
			Ir ⩽ 200									T	T
			Ir ⩽ 250										T
NSX100S/L/R	100/	90/	Ir ⩽ 40	36/75	36/75	36/75	65/143	T	65/143	65/143	T	T	T
TMD / TMG /	150/	130/	Ir ⩽ 63		36/75	36/75	65/143	T	65/143	65/143	T	T	T
Micrologic	200	200	Ir ⩽ 80			36/75	65/143	T	65/143	65/143	T	T	T
			Ir ⩽ 100				65/143	T	65/143	65/143	T	T	T
NSX160S/L	100/	90/	Ir ⩽ 40	36/75	36/75	36/75	65/143	T	65/143	65/143	T	T	T
TMD / TMG /	150	130	Ir ⩽ 63		36/75	36/75	65/143	T	65/143	65/143	T	T	T
Micrologic			Ir ⩽ 80			36/75	65/143	T	65/143	65/143	T	T	T
			Ir ⩽ 100				65/143	T	65/143	65/143	T	T	T
			Ir ⩽ 125						65/143	65/143	T	T	T
			Ir ⩽ 160							65/143	T	T	T
NSX250S/L/R	100/	90/	Ir ⩽ 40	25/52	25/52	25/52	65/143	T	65/143	65/143	T	T	T
TMD / TMG /	150/	130/	Ir ⩽ 63		25/52	25/52	65/143	T	65/143	65/143	T	T	T
Micrologic	200	200	Ir ⩽ 80			25/52	65/143	T	65/143	65/143	T	T	T
			Ir ⩽ 100				65/143	T	65/143	65/143	T	T	T
			Ir ⩽ 125						65/143	65/143	T	T	T
			Ir ⩽ 160							65/143	T	T	T
			Ir ⩽ 200									T	T
			Ir ⩽ 250										T

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured



Switch-disconnector - Circuit breaker coordination

Upstream: Compact NSX400 to 630

Downstream: Compact INS/INV100 to 630

Ue ⩽ 440 V AC

Downstream	Switch-disconnector	INS100	INS250-100 INV100	INS125	INS160	INS250-160 INV160	INS250-200 INV200	INS250 INV250	INS320 INV320	INS400 INV400	INS500 INV500	INS630 INV630	INS630b INV630b
	Ith A 60°	100	100	125	160	160	200	250	320	400	500	630	630
	Icw (kA)	5.5	8.5	5.5	5.5	8.5	8.5	8.5	20	20	20	20	35
	Icm (kÂ)	20	30	20	20	30	30	30	50	50	50	50	75

Upstream Circuit breaker	Icu (kA) 415 V	440 V	Setting Ir	Switch-disconnector conditionnal short-circuit current and related making capacity												
NSX400F	36	30	Ir = 100 [1]	16/32	T	16/32	16/32	T	T	T	T	T	T	T	T	T
NSX630F			Ir ⩽ 160				16/32	T	T	T	T	T	T	T	T	T
Micrologic			Ir ⩽ 200						T	T	T	T	T	T	T	T
			Ir ⩽ 250							T	T	T	T	T	T	T
			Ir ⩽ 320								T	T	T	T	T	T
			Ir ⩽ 400									T	T	T	T	T
			Ir ⩽ 500										T	T	T	T
			Ir ⩽ 630											T	T	T
NSX400N	50	42	Ir = 100 [1]	16/32	36/75	16/32	16/32	36/75	36/75	36/75	T	T	T	T	T	T
NSX630N			Ir ⩽ 160				16/32	36/75	36/75	36/75	T	T	T	T	T	T
Micrologic			Ir ⩽ 200						36/75	36/75	T	T	T	T	T	T
			Ir ⩽ 250							36/75	T	T	T	T	T	T
			Ir ⩽ 320								T	T	T	T	T	T
			Ir ⩽ 400									T	T	T	T	T
			Ir ⩽ 500										T	T	T	T
			Ir ⩽ 630											T	T	T
NSX400H	70	65	Ir = 100 [1]	16/32	36/75	16/32	16/32	36/75	36/75	36/75	T	T	T	T	T	T
NSX630H			Ir ⩽ 160				16/32	36/75	36/75	36/75	T	T	T	T	T	T
Micrologic			Ir ⩽ 200						36/75	36/75	T	T	T	T	T	T
			Ir ⩽ 250							36/75	T	T	T	T	T	T
			Ir ⩽ 320								T	T	T	T	T	T
			Ir ⩽ 400									T	T	T	T	T
			Ir ⩽ 500										T	T	T	T
			Ir ⩽ 630											T	T	T
NSX400S	100	90	Ir = 100 [1]	16/32	36/75	16/32	16/32	36/75	36/75	36/75	T	T	T	T	T	T
NSX630S			Ir ⩽ 160				16/32	36/75	36/75	36/75	T	T	T	T	T	T
Micrologic			Ir ⩽ 200						36/75	36/75	T	T	T	T	T	T
			Ir ⩽ 250							36/75	T	T	T	T	T	T
			Ir ⩽ 320								T	T	T	T	T	T
			Ir ⩽ 400									T	T	T	T	T
			Ir ⩽ 500										T	T	T	T
			Ir ⩽ 630											T	T	T
NSX400L	150	130	Ir = 100 [1]	16/32	36/75	16/32	16/32	36/75	36/75	36/75	T	T	T	T	T	T
NSX630L			Ir ⩽ 160				16/32	36/75	36/75	36/75	T	T	T	T	T	T
Micrologic			Ir ⩽ 200						36/75	36/75	T	T	T	T	T	T
			Ir ⩽ 250							36/75	T	T	T	T	T	T
			Ir ⩽ 320								T	T	T	T	T	T
			Ir ⩽ 400									T	T	T	T	T
			Ir ⩽ 500										T	T	T	T
			Ir ⩽ 630											T	T	T
NSX400R	200	200	Ir = 100 [1]	16/32	36/75	16/32	16/32	36/75	36/75	36/75	150/330	150/330	150/330	150/330	T	
NSX630R			Ir ⩽ 160				16/32	36/75	36/75	36/75	150/330	150/330	150/330	150/330	T	
Micrologic			Ir ⩽ 200						36/75	36/75	150/330	150/330	150/330	150/330	T	
			Ir ⩽ 250							36/75	150/330	150/330	150/330	150/330	T	
			Ir ⩽ 320								150/330	150/330	150/330	150/330	T	
			Ir ⩽ 400									150/330	150/330	150/330	T	
			Ir ⩽ 500										150/330	150/330	T	
			Ir ⩽ 630											150/330	T	

[1] NSX400 with Micrologic 250 A can be set down to 100 A.

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

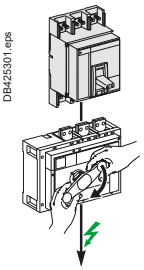
36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

D

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NS630b to 3200, Masterpact MTZ1
Downstream: Compact INS/INV500 to 2500



Ue ⩽ 440 V AC

Downstream	Switch-disconnector	INS500 INV500	INS630 INV630	INS630b INV630b	INS800 INV800	INS1000 INV1000	INS1250 INV1250	INS1600 INV1600	INS2000 INV2000	INS2500 INV2500
	Ith A 60°	500	630	630	800	1000	1250	1600	2000	2500
	Icw (kA)	20	20	35	35	35	35	35	50	50
	Icm (kÂ)	50	50	75	75	75	75	75	105	105

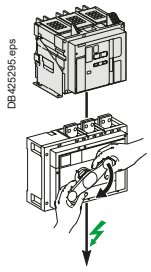
Upstream Circuit breaker	Icu (kA)		Setting	Switch-disconnector conditionnal short-circuit current and related making capacity								
	415 V	440 V	Ir									
NS630bN	50	50	Ir ⩽ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
NS800N			Ir ⩽ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
NS1000N			Ir ⩽ 800				35/75	35/75	35/75	35/75	T	T
NS1250N			Ir ⩽ 1000					35/75	35/75	35/75	T	T
NS1600N			Ir ⩽ 1250						35/75	35/75	T	T
			Ir ⩽ 1600							35/75	T	T
NS630bH	70	65	Ir ⩽ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
NS800H			Ir ⩽ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
NS1000H			Ir ⩽ 800				35/75	35/75	35/75	35/75	50/105	50/105
NS1250H			Ir ⩽ 1000					35/75	35/75	35/75	50/105	50/105
NS1600H			Ir ⩽ 1250						35/75	35/75	50/105	50/105
			Ir ⩽ 1600							35/75	50/105	50/105
NS630bL	150	130	Ir ⩽ 500	50/105	50/105	T	T	T	T	T	T	T
NS800L			Ir ⩽ 630		50/105	T	T	T	T	T	T	T
NS1000L			Ir ⩽ 800				T	T	T	T	T	T
			Ir ⩽ 1000					T	T	T	T	T
NS630bLB	200	200	Ir ⩽ 500	90/200	90/200	T	T	T	T	T	T	T
NS800LB			Ir ⩽ 630		90/200	T	T	T	T	T	T	T
			Ir ⩽ 800				T	T	T	T	T	T
NS1600bN	70	65	Ir ⩽ 1250						35/75	35/75	50/105	50/105
NS2000N			Ir ⩽ 1600							35/75	50/105	50/105
NS2500N			Ir ⩽ 2000								50/105	50/105
NS3200N			Ir ⩽ 2500									50/105
NS1600bH	85	85	Ir ⩽ 1250						35/75	35/75	50/105	50/105
NS2000H			Ir ⩽ 1600							35/75	50/105	50/105
NS2500H			Ir ⩽ 2000								50/105	50/105
NS3200H			Ir ⩽ 2500									50/105
MTZ1 06H1	42	42	Ir ⩽ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
MTZ1 08H1			Ir ⩽ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
MTZ1 10H1			Ir ⩽ 800				35/75	35/75	35/75	35/75	T	T
MTZ1 12H1			Ir ⩽ 1000					35/75	35/75	35/75	T	T
MTZ1 16H1			Ir ⩽ 1250						35/75	35/75	T	T
			Ir ⩽ 1600							35/75	T	T
MTZ1 06H2	50	50	Ir ⩽ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
MTZ1 08H2			Ir ⩽ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
MTZ1 10H2			Ir ⩽ 800				35/75	35/75	35/75	35/75	T	T
MTZ1 12H2			Ir ⩽ 1000					35/75	35/75	35/75	T	T
MTZ1 16H2			Ir ⩽ 1250						35/75	35/75	T	T
			Ir ⩽ 1600							35/75	T	T
MTZ1 06H3	66	66	Ir ⩽ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
MTZ1 08H3			Ir ⩽ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
MTZ1 10H3			Ir ⩽ 800				35/75	35/75	35/75	35/75	50/105	50/105
MTZ1 12H3			Ir ⩽ 1000					35/75	35/75	35/75	50/105	50/105
MTZ1 16H3			Ir ⩽ 1250						35/75	35/75	50/105	50/105
			Ir ⩽ 1600							35/75	50/105	50/105
MTZ1 06L1	150	130	Ir ⩽ 500	50/105	50/105	100/220	100/220	100/220	100/220	100/220	100/220	100/220
MTZ1 08L1			Ir ⩽ 630		50/105	100/220	100/220	100/220	100/220	100/220	100/220	100/220
MTZ1 10L1			Ir ⩽ 800				100/220	100/220	100/220	100/220	100/220	100/220
			Ir ⩽ 1000					100/220	100/220	100/220	100/220	100/220

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured



Switch-disconnector - Circuit breaker coordination

Upstream: Masterpact MTZ2

Downstream: Compact INS/INV500 to 2500

Ue ⩽ 440 V AC

Downstream	Switch-disconnector	INS500 INV500	INS630 INV630	INS630b INV630b	INS800 INV800	INS1000 INV1000	INS1250 INV1250	INS1600 INV1600	INS2000 INV2000	INS2500 INV2500
	Ith A 60°	500	630	630	800	1000	1250	1600	2000	2500
	Icw (kA)	20	20	35	35	35	35	35	50	50
	Icm (kÂ)	50	50	75	75	75	75	75	105	105

Upstream Circuit breaker	Icu (kA) 415 V	440 V	Setting Ir	Switch-disconnector conditionnal short-circuit current and related making capacity								
MTZ2 08N1	42	42	Ir ⩽ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
MTZ2 10N1			Ir ⩽ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
MTZ2 12N1			Ir ⩽ 800				35/75	35/75	35/75	35/75	T	T
MTZ2 16N1			Ir ⩽ 1000					35/75	35/75	35/75	T	T
MTZ2 20N1			Ir ⩽ 1250						35/75	35/75	T	T
			Ir ⩽ 1600							35/75	T	T
			Ir ⩽ 2000								T	T
MTZ2 08H1	66	66	Ir ⩽ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
MTZ2 10H1			Ir ⩽ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
MTZ2 12H1			Ir ⩽ 800				35/75	35/75	35/75	35/75	50/105	50/105
MTZ2 16H1			Ir ⩽ 1000					35/75	35/75	35/75	50/105	50/105
MTZ2 20H1			Ir ⩽ 1250						35/75	35/75	50/105	50/105
MTZ2 25H1			Ir ⩽ 1600						35/75	35/75	50/105	50/105
			Ir ⩽ 2000								50/105	50/105
			Ir ⩽ 2500									50/105
MTZ2 08H2	100	100	Ir ⩽ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
MTZ2 10H2			Ir ⩽ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
MTZ2 12H2			Ir ⩽ 800				35/75	35/75	35/75	35/75	50/105	50/105
MTZ2 16H2			Ir ⩽ 1000					35/75	35/75	35/75	50/105	50/105
MTZ2 20H2			Ir ⩽ 1250						35/75	35/75	50/105	50/105
MTZ2 25H2			Ir ⩽ 1600						35/75	35/75	50/105	50/105
MTZ2 20H3	150	150	Ir ⩽ 2000								50/105	50/105
MTZ2 25H3			Ir ⩽ 2500									50/105

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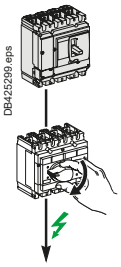
36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NSXm, Compact NSX100 to 250
Downstream: Compact INS40 to 250, Compact INV100 to 250



Ue = 500/525 V AC

Downstream	Switch-disconnector	INS100	INS250-100 INV100	INS125	INS160	INS250-160 INV160	INS250-200 INV200	INS250 INV250
	Ith A 60°	100	100	125	160	160	200	250
	Icw (kA)	5.5	8.5	5.5	5.5	8.5	8.5	8.5
	Icm (kÂ)	20	30	20	20	30	30	30

Upstream Circuit breaker	Icu (kA) 500 V	525 V	Ir	Switch-disconnector conditionnal short-circuit current and related making capacity						
NSXm E/B TMD	8/10	-	Ir ≤ 40	T	T	T	T	T	T	T
			Ir ≤ 50	T	T	T	T	T	T	T
			Ir ≤ 63	T	T	T	T	T	T	T
NSXm F TMD	15	10	Ir ≤ 40	T	T	T	T	T	T	T
			Ir ≤ 50	T	T	T	T	T	T	T
			Ir ≤ 63	T	T	T	T	T	T	T
NSXm N TMD	25	15	Ir ≤ 40	T	T	T	T	T	T	T
			Ir ≤ 50	T	T	T	T	T	T	T
			Ir ≤ 63	T	T	T	T	T	T	T
NSXm H TMD	30	22	Ir ≤ 40	T	T	T	T	T	T	T
			Ir ≤ 50	T	T	T	T	T	T	T
			Ir ≤ 63	T	T	T	T	T	T	T
NSX100B NSX160B NSX250B TMD / TMG / Micrologic	15	-	Ir ≤ 100	T	T	T	T	T	T	T
			Ir ≤ 125			T	T	T	T	T
			Ir ≤ 160				T	T	T	T
			Ir ≤ 200						T	T
			Ir ≤ 250							T
NSX100F NSX160F NSX250F TMD / TMG / Micrologic	25	22	Ir ≤ 100	T	T	T	T	T	T	T
			Ir ≤ 125			T	T	T	T	T
			Ir ≤ 160				T	T	T	T
			Ir ≤ 200						T	T
			Ir ≤ 250							T
NSX100N NSX160N NSX250N TMD / TMG / Micrologic	36	35	Ir ≤ 100	22/46	T	22/46	T	T	T	T
			Ir ≤ 125			22/46	T	T	T	T
			Ir ≤ 160				T	T	T	T
			Ir ≤ 200						T	T
			Ir ≤ 250							T
NSX100H NSX160H NSX250H TMD / TMG / Micrologic	50	35	Ir ≤ 100	22/46	T	22/46	T	T	T	T
			Ir ≤ 125			22/46	T	T	T	T
			Ir ≤ 160				T	T	T	T
			Ir ≤ 200						T	T
			Ir ≤ 250							T
NSX100S NSX160S NSX250S TMD / TMG / Micrologic	65	40	Ir ≤ 100	22/46	T	22/46	T	T	T	T
			Ir ≤ 125			22/46	T	T	T	T
			Ir ≤ 160				T	T	T	T
			Ir ≤ 200						T	T
			Ir ≤ 250							T
NSX100L NSX160L NSX250L TMD / TMG / Micrologic	70	50	Ir ≤ 100	22/46	T	22/46	T	T	T	T
			Ir ≤ 125			22/46	T	T	T	T
			Ir ≤ 160				T	T	T	T
			Ir ≤ 200						T	T
			Ir ≤ 250							T
NSX100R NSX250R TMD / TMG / Micrologic	80	65	Ir ≤ 100	22/46	T	22/46	T	T	T	T
			Ir ≤ 125			22/46	T	T	T	T
			Ir ≤ 160				T	T	T	T
			Ir ≤ 200						T	T
			Ir ≤ 250							T

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

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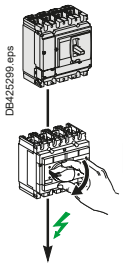

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NSXm, Compact NSX100 to 250
Downstream: Compact INS40 to 250, Compact INV100 to 250

Ue = 690 V AC

Downstream	Switch-disconnector	INS100	INS250-100 INV100	INS125	INS160	INS250-160 INV160	INS250-200 INV200	INS250 INV250
	Ith A 60°	100	100	125	160	160	200	200
	Icw (kA)	5.5	8.5	5.5	5.5	8.5	8.5	8.5
	Icm (kÂ)	20	30	20	20	30	30	30

Upstream Circuit breaker	Icu (kA) 690 V	Ir	Switch-disconnector conditionnal short-circuit current and related making capacity						
NSXm N TMD	10	Ir ≤ 40	T	T	T	T	T	T	T
		Ir ≤ 50	T	T	T	T	T	T	T
		Ir ≤ 63	T	T	T	T	T	T	T
NSXm H TMD	10	Ir ≤ 40	T	T	T	T	T	T	T
		Ir ≤ 50	T	T	T	T	T	T	T
		Ir ≤ 63	T	T	T	T	T	T	T
NSX100F NSX160F NSX250F TMD / TMG / Micrologic	8	Ir ≤ 100	T	T	T	T	T	T	T
		Ir ≤ 125			T	T	T	T	T
		Ir ≤ 160				T	T	T	T
		Ir ≤ 200						T	T
		Ir ≤ 250							T
NSX100N NSX160N NSX250N TMD / TMG / Micrologic	10	Ir ≤ 100	T	T	T	T	T	T	T
		Ir ≤ 125			T	T	T	T	T
		Ir ≤ 160				T	T	T	T
		Ir ≤ 200						T	T
		Ir ≤ 250							T
NSX100H NSX160H NSX250H TMD / TMG / Micrologic	10	Ir ≤ 100	T	T	T	T	T	T	T
		Ir ≤ 125			T	T	T	T	T
		Ir ≤ 160				T	T	T	T
		Ir ≤ 200						T	T
		Ir ≤ 250							T
NSX100S NSX160S NSX250S TMD / TMG / Micrologic	15	Ir ≤ 100	T	T	T	T	T	T	T
		Ir ≤ 125			T	T	T	T	T
		Ir ≤ 160				T	T	T	T
		Ir ≤ 200						T	T
		Ir ≤ 250							T
NSX100L NSX160L NSX250L TMD / TMG / Micrologic	20	Ir ≤ 100	T	T	T	T	T	T	T
		Ir ≤ 125			T	T	T	T	T
		Ir ≤ 160				T	T	T	T
		Ir ≤ 200						T	T
		Ir ≤ 250							T
NSX100R NSX250R TMD / TMG / Micrologic	45	Ir ≤ 100	20/40	T	20/40	20/40	T	T	T
		Ir ≤ 125			20/40	20/40	T	T	T
		Ir ≤ 160				20/40	T	T	T
		Ir ≤ 200						T	T
		Ir ≤ 250							T

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T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

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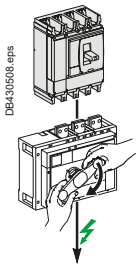
D

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NSX400 to 630

Downstream: Compact INS/INV100 to 630



Ue = 690 V AC

Downstream	Switch-disconnector	INS500 INV500	INS630 INV630	INS630b INV630b	INS800 INV800	INS1000 INV1000	INS1250 INV1250	INS1600 INV1600	INS2000 INV2000	INS2500 INV2500
	Ith A 60°	630	630	630	800	1000	1250	1600	2000	2500
	Icw (kA)	20	20	35	35	35	35	35	50	50
	Icm (kÂ)	50	50	75	75	75	75	75	105	105

Upstream Circuit breaker	Icu (kA) 690 V	Ir	Switch-disconnector conditionnal short-circuit current and related making capacity								
NSX400F NSX630F Micrologic	10	Ir = 100 [1]	T	T	T	T	T	T	T	T	T
		Ir ≤ 160		T	T	T	T	T	T	T	T
		Ir ≤ 200			T	T	T	T	T	T	T
		Ir ≤ 250				T	T	T	T	T	T
		Ir ≤ 320					T	T	T	T	T
		Ir ≤ 400						T	T	T	T
		Ir ≤ 500							T	T	T
		Ir ≤ 630								T	T
NSX400N NSX630N Micrologic	10	Ir = 100 [1]	T	T	T	T	T	T	T	T	T
		Ir ≤ 160		T	T	T	T	T	T	T	T
		Ir ≤ 200			T	T	T	T	T	T	T
		Ir ≤ 250				T	T	T	T	T	T
		Ir ≤ 320					T	T	T	T	T
		Ir ≤ 400						T	T	T	T
		Ir ≤ 500							T	T	T
		Ir ≤ 630								T	T
NSX400H NSX630H Micrologic	20	Ir = 100 [1]	T	T	T	T	T	T	T	T	T
		Ir ≤ 160		T	T	T	T	T	T	T	T
		Ir ≤ 200			T	T	T	T	T	T	T
		Ir ≤ 250				T	T	T	T	T	T
		Ir ≤ 320					T	T	T	T	T
		Ir ≤ 400						T	T	T	T
		Ir ≤ 500							T	T	T
		Ir ≤ 630								T	T
NSX400S NSX630S Micrologic	25	Ir = 100 [1]	T	T	T	T	T	T	T	T	T
		Ir ≤ 160		T	T	T	T	T	T	T	T
		Ir ≤ 200			T	T	T	T	T	T	T
		Ir ≤ 250				T	T	T	T	T	T
		Ir ≤ 320					T	T	T	T	T
		Ir ≤ 400						T	T	T	T
		Ir ≤ 500							T	T	T
		Ir ≤ 630								T	T
NSX400L NSX630L Micrologic	35	Ir = 100 [1]	25/52	25/52	25/52	25/52	T	T	T	T	T
		Ir ≤ 160		25/52	25/52	25/52	T	T	T	T	T
		Ir ≤ 200			25/52	25/52	T	T	T	T	T
		Ir ≤ 250				25/52	T	T	T	T	T
		Ir ≤ 320					T	T	T	T	T
		Ir ≤ 400						T	T	T	T
		Ir ≤ 500							T	T	T
		Ir ≤ 630								T	T
NSX400R NSX630R Micrologic	45	Ir = 100 [1]	25/52	25/52	25/52	25/52	T	T	T	T	T
		Ir ≤ 160		25/52	25/52	25/52	T	T	T	T	T
		Ir ≤ 200			25/52	25/52	T	T	T	T	T
		Ir ≤ 250				25/52	T	T	T	T	T
		Ir ≤ 320					T	T	T	T	T
		Ir ≤ 400						T	T	T	T
		Ir ≤ 500							T	T	T
		Ir ≤ 630								T	T

[1] NSX400 with Micrologic 250 A can be set down to 100 A.

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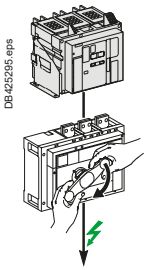
36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured



Switch-disconnector - Circuit breaker coordination

Upstream: Compact NS630b to 3200, Masterpact MTZ1/2

Downstream: Compact INS/INV 500 to 2500

Ue = 690 V AC

Downstream	Switch-disconnector	INS500 INV500	INS630 INV630	INS630b INV630b	INS800 INV800	INS1000 INV1000	INS1250 INV1250	INS1600 INV1600	INS2000 INV2000	INS2500 INV2500
	Ith A 60°	630	630	630	800	1000	1250	1600	2000	2500
	Icw (kA)	20	20	35	35	35	35	35	50	50
	Icm (kÂ)	50	50	75	75	75	75	75	105	105

Upstream Circuit breaker	Icu (kA) 690 V	Ir	Switch-disconnector conditionnal short-circuit current and related making capacity								
NS630bN NS800N NS1000N NS1250N NS1600N	30	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 800				35/75	35/75	35/75	35/75	T	T
		Ir ≤ 1000					35/75	35/75	35/75	T	T
		Ir ≤ 1250						35/75	35/75	T	T
		Ir ≤ 1600							35/75	T	T
NS630bH NS800H NS1000H NS1250H NS1600H	42	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
		Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
		Ir ≤ 800				35/75	35/75	35/75	35/75	50/105	50/105
		Ir ≤ 1000					35/75	35/75	35/75	50/105	50/105
		Ir ≤ 1250						35/75	35/75	50/105	50/105
		Ir ≤ 1600							35/75	50/105	50/105
NS630bLB NS800LB	75	Ir ≤ 500	70/154	70/154	T	T	T	T	T	T	T
		Ir ≤ 630		70/154	T	T	T	T	T	T	T
		Ir ≤ 800				T	T	T	T	T	T
NS1600bN NS2000N NS2500N NS3200N	65	Ir ≤ 1250						35/75	35/75	50/105	50/105
		Ir ≤ 1600							35/75	50/105	50/105
		Ir ≤ 2000								50/105	50/105
		Ir ≤ 2500									50/105
MTZ1 06H1/H2 MTZ1 08H1/2 MTZ1 10H1/2 MTZ1 12H1/2 MTZ1 16H1/2	42	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 800				35/75	35/75	35/75	35/75	T	T
		Ir ≤ 1000					35/75	35/75	35/75	T	T
		Ir ≤ 1250						35/75	35/75	T	T
		Ir ≤ 1600							35/75	T	T
MTZ1 06L1 MTZ1 08L1 MTZ1 10L1	25	Ir ≤ 500	T	T	T	T	T	T	T	T	T
		Ir ≤ 630		T	T	T	T	T	T	T	T
		Ir ≤ 800				T	T	T	T	T	T
		Ir ≤ 1000					T	T	T	T	T
MTZ2 08N1 MTZ2 10N1 MTZ2 12N1 MTZ2 16N1 MTZ2 20N1	42	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 800				35/75	35/75	35/75	35/75	T	T
		Ir ≤ 1000					35/75	35/75	35/75	T	T
		Ir ≤ 1250						35/75	35/75	T	T
		Ir ≤ 1600							35/75	T	T
		Ir ≤ 2000								T	T
MTZ2 08 MTZ2 10 MTZ2 12 MTZ2 16 MTZ2 20 MTZ2 25 MTZ2 32 MTZ2 40	H1/H2/H3/L1 66/85/100/100	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
		Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
		Ir ≤ 800				35/75	35/75	35/75	35/75	50/105	50/105
		Ir ≤ 1000					35/75	35/75	35/75	50/105	50/105
		Ir ≤ 1250						35/75	35/75	50/105	50/105
		Ir ≤ 1600						35/75	35/75	50/105	50/105
		Ir ≤ 2000								50/105	50/105
		Ir ≤ 2500									50/105

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

D

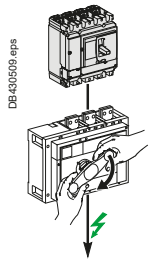
Switch-disconnector - Circuit breaker coordination

Upstream: Compact NSX100 to 630

Downstream: Compact INS/INV500 to 1000

Ue = 500/525 V AC

Ue = 690 V AC



Downstream	Switch-disconnector	INS500 INV500	INS630 INV630	INS630b INV630b	INS800 INV800	INS1000 INV1000
	Ith A 60°	500	630	630	800	1000
	Icw (kA)	20	20	35	35	35
	Icm (kÂ)	50	50	75	75	75

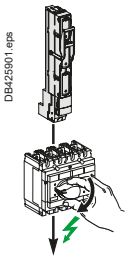
Upstream Circuit breaker	Icu (kA) 500 V	525 V	690 V	Ir	Switch-disconnector conditionnal short-circuit current and related making capacity				
NSX100B **NSX160B** **NSX250B** TMD / TMG / Micrologic	15	-	-	Ir ≤ 50	T	T	T	T	T
				Ir ≤ 100	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
NSX100F **NSX160F** **NSX250F** TMD / TMG / Micrologic	25	22	8	Ir ≤ 50	T	T	T	T	T
				Ir ≤ 100	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
NSX400F **NSX630F** Micrologic	25	20	10	Ir = 100 [1]	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
				Ir ≤ 400				T	T
				Ir ≤ 630					T
NSX100N **NSX160N** **NSX250N** TMD / TMG / Micrologic	36	35	10	Ir ≤ 50	T	T	T	T	T
				Ir ≤ 100	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
NSX400N **NSX630N** Micrologic	30	22	10	Ir = 100 [1]	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
				Ir ≤ 400				T	T
				Ir ≤ 630					T
NSX100H **NSX160H** **NSX250H** TMD / TMG / Micrologic	50	35	10	Ir ≤ 50	T	T	T	T	T
				Ir ≤ 100	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
NSX400H **NSX630H** Micrologic	50	35	20	Ir = 100 [1]	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
				Ir ≤ 400				T	T
				Ir ≤ 630					T
NSX100S **NSX160S** **NSX250S** TMD / TMG / Micrologic	65	40	15	Ir ≤ 50	T	T	T	T	T
				Ir ≤ 100	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
NSX400S **NSX630S** Micrologic	65	40	25	Ir = 100 [1]	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
				Ir ≤ 400				T	T
				Ir ≤ 630					T
NSX100L **NSX160L** **NSX250L** TMD / TMG / Micrologic	70	50	20	Ir ≤ 50	T	T	T	T	T
				Ir ≤ 100	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
NSX400L **NSX630L** Micrologic	70	50	35	Ir = 100 [1]	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
				Ir ≤ 400				T	T
				Ir ≤ 630					T

[1] NSX400 with Micrologic 250 A can be set down to 100 A.

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

: Protection of the switch-disconnector is not ensured



Switch-disconnector - Fuse coordination

Upstream: gG, aM, BS fuses

Downstream: Compact INS40 to 630, INV100 to 360

Ue ⩽ 500 V AC

Downstream	Switch-Disconnector	Compact INS 40 - 160						Compact INS250 Compact INV				Compact INS Compact INV			
	Ith (A) 60°	40	63	80	100	125	160	100	160	200	250	320	400	500	630
	Icw (kA)	3	3	3	5.5	5.5	5.5	8.5	8.5	8.5	8.5	20	20	20	20
	Icm (kÂ)	15	15	15	20	20	20	30	30	30	30	50	50	50	50

Upstream Fuse type	Rating	Switch-disconnector conditionnal short-circuit current and related making capacity													
gG fuse link without overload relay	25	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	32	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	40		T	T	T	T	T	T	T	T	T	T	T	T	T
	50		T	T	T	T	T	T	T	T	T	T	T	T	T
	63				T	T	T	T	T	T	T	T	T	T	T
	80				T	T	T	T	T	T	T	T	T	T	T
	100					T	T		T	T	T	T	T	T	T
	125						T		T	T	T	T	T	T	T
	160									T	T	T	T	T	T
	200										T	T	T	T	T
	225-250											T	T	T	T
	300-315												T	T	T
	355													T	T
	400													T	T
	450														T
	500														T
gG fuse link with overload relay	40	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	50-63	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	80	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	100	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	125	80/176	80/176	80/176	T	T	T	T	T	T	T	T	T	T	T
	160	36/75	36/75	36/75	50/105	50/105	50/105	T	T	T	T	T	T	T	T
	200				36/75	36/75	36/75	T	T	T	T	T	T	T	T
	225-250							T	T	T	T	T	T	T	T
	300							T	T	T	T	T	T	T	T
	315							T	T	T	T	T	T	T	T
	355							50/105	50/105	50/105	50/105	T	T	T	T
	400-450											T	T	T	T
	500											T	T	T	T
	630											50/105	50/105	50/105	50/105
	800														
aM Fuse link with overload relay	40	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	50 - 63	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	80	80/176	80/176	80/176	T	T	T	T	T	T	T	T	T	T	T
	100	50/105	50/105	50/105	T	T	T	T	T	T	T	T	T	T	T
	125				T	T	T	T	T	T	T	T	T	T	T
	160				50/105	50/105	50/105	T	T	T	T	T	T	T	T
	200				36/75	36/75	36/75	T	T	T	T	T	T	T	T
	225							80/176	80/176	80/176	80/176	T	T	T	T
	250							50/105	50/105	50/105	50/105	T	T	T	T
	300-315											T	T	T	T
	355-400											T	T	T	T
	450											50/105	50/105	50/105	50/105
	500											50/105	50/105	50/105	50/105
	630											30/63	30/63	30/63	30/63
BS Fuse link with overload relay	32M63	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	63M80	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	63M100	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	100M125	50/105	50/105	50/105	T	T	T	T	T	T	T	T	T	T	T
	100M160				50/105	50/105	50/105	T	T	T	T	T	T	T	T
	100M200							T	T	T	T	T	T	T	T
	200M250							T	T	T	T	T	T	T	T
	200M315											T	T	T	T
	315M400											50/105	50/105	50/105	50/105
	400M500												40/84	40/84	40/84

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to the breaking capacity of the fuse installed on supply side.

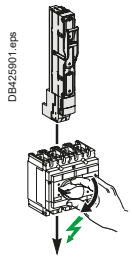
36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Note: Current limitation caracteristics can be signifiantly different from one manufacturer to another.
This table can not dispense to check selected fuse charactersistics

Switch-disconnector - Fuse coordination

Upstream: gG, aM, BS fuses
Downstream: Compact INS40 to 630, INV100 to 630



Ue ⩽ 690 V AC

Downstream	Switch-Disconnector	Compact INS 40 - 160			Compact INS250 Compact INV				Compact INS Compact INV			
	Ith (A) 60°	100	125	160	100	160	200	250	320	400	500	630
	Icw (kA)	5.5	5.5	5.5	8.5	8.5	8.5	8.5	20	20	20	20
	Icm (kÂ)	20	20	20	30	30	30	30	50	50	50	50
Upstream												
Fuse type	**Rating**											
gG fuse link without overload relay	25	T	T	T	T	T	T	T	T	T	T	T
	32	T	T	T	T	T	T	T	T	T	T	T
	40	T	T	T	T	T	T	T	T	T	T	T
	50	T	T	T	T	T	T	T	T	T	T	T
	63	T	T	T	T	T	T	T	T	T	T	T
	80	T	T	T	T	T	T	T	T	T	T	T
	100	T	T		T	T	T	T	T	T	T	T
	125		T		T	T	T	T	T	T	T	T
	160					T	T	T	T	T	T	T
	200						T	T	T	T	T	T
	225-250							T	T	T	T	T
	300-315								T	T	T	T
	355									T	T	T
	400									T	T	T
	450										T	T
	500										T	T
gG fuse link with overload relay	40	T	T	T	T	T	T	T	T	T	T	T
	50-63	T	T	T	T	T	T	T	T	T	T	T
	80	T	T	T	T	T	T	T	T	T	T	T
	100	T	T	T	T	T	T	T	T	T	T	T
	125	T	T	T	T	T	T	T	T	T	T	T
	160			T	T	T	T	T	T	T	T	T
	200			T	T	T	T	T	T	T	T	T
	225-250							T	T	T	T	T
	300							T	T	T	T	T
	315							T	T	T	T	T
	355							T	T	T	T	T
	400-450							T	T	T	T	T
	500							T	T	T	T	T
	630							50/105	50/105	50/105	50/105	50/105
	800											
aM Fuse link with overload relay	40	T	T	T	T	T	T	T	T	T	T	T
	50 - 63	T	T	T	T	T	T	T	T	T	T	T
	80	T	T	T	T	T	T	T	T	T	T	T
	100	T	T	T	T	T	T	T	T	T	T	T
	125			T	T	T	T	T	T	T	T	T
	160			T	T	T	T	T	T	T	T	T
	200			T	T	T	T	T	T	T	T	T
	225			50/105	50/105	50/105	50/105	T	T	T	T	T
	250							T	T	T	T	T
	300-315							T	T	T	T	T
	355-400							T	T	T	T	T
	450							50/105	50/105	50/105	50/105	50/105
	500							50/105	50/105	50/105	50/105	50/105
	630											30/63

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

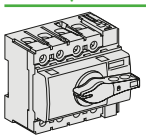
Note: Current limitation caracteristics can be signifiantly different from one manufacturer to another.
This table can not dispense to check selected fuse charactersistics

Catalogue numbers

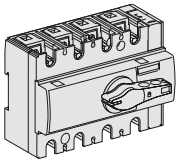
E

INS40 to 160
Complete fixed/FC device and accessories

Compact INS40 to 160 standard version with black handle

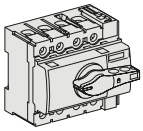


	3P	4P
Compact INS40	**28900**	**28901**
Compact INS63	**28902**	**28903**
Compact INS80	**28904**	**28905**
Compact INS80PV - Photovoltaic	-	**28907**

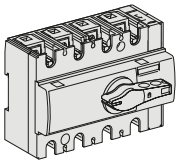


	3P	4P
Compact INS100	**28908**	**28909**
Compact INS125	**28910**	**28911**
Compact INS160	**28912**	**28913**

Compact INS40 to 160 with red handle and yellow front



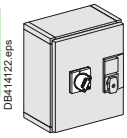
	3P	4P
Compact INS40	**28916**	**28917**
Compact INS63	**28918**	**28919**
Compact INS80	**28920**	**28921**



	3P	4P
Compact INS100	**28924**	**28925**
Compact INS125	**28926**	**28927**
Compact INS160	**28928**	**28929**

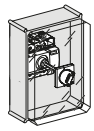
Individual enclosures

IP55 heavy-duty sheetmetal enclosure



For INS40 to INS160 with extended standard rotary handle	**31208**
For INS40 to INS160 with extended red handle on yellow front	**31209**

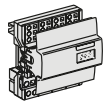
IP55 heavy-duty insulating enclosure



For INS40 to INS160 with extended standard rotary handle	**28967**
For INS40 to INS160 with extended red handle on yellow front	**28968**

Linergy distribution blocks

Linergy DX distribution block 4P



INS40 to 63	63 A, 4 incoming terminals (4 x 25 mm²) + 24 outgoing spring terminals (24 x 6 mm²)	
	Upstream incoming connection	**04040**
	Downstream incoming connection	**04041**
INS40 to 125	125 A, 4 incoming terminals (4 x 35 mm²) + 12 outgoing spring terminals (7 x 4 mm² + 3 x 6 mm² + 2 x 10 mm²) + 1 outgoing tunnel terminal (16 mm²)	**04045**
	4 prefabricated connections 125 A, 35 mm², l = 210 mm	**04047**
INS100 to 160	160 A, 4 incoming terminals (4 x 35 mm²) + 12 outgoing spring terminals (7 x 4 mm² + 3 x 6 mm² + 2 x 10 mm²) + 1 outgoing tunnel terminal (16 mm²) with 4 prefabricated connections	**04046**

Multi-stage Linergy DS distribution block 4P

INS100 to 160	100 A, 4 x 7 holes (3 x 10 mm² + 3 x 16 mm² + 1 x 25 mm²)	**LGY410028**
	125 A, 4 x 12 holes (4 x 16 mm² + 7 x 25 mm² + 1 x 35 mm²)	**LGY412548**
	125 A, 4 x 15 holes (11 x 16 mm² + 3 x 25 mm² + 1 x 35 mm²)	**LGY412560**
	160 A, 4 x 12 holes (1 x 70 mm² + 3 x 35 mm² + 8 x 25 mm²)	**LGY416048**
Neutral terminal strip	100 A, 4 x 7 holes (2 x 25 mm² + 5 x 16 mm²)	**LGYN1007**
	125 A, 4 x 12 holes (1 x 35 mm² + 7 x 25 mm² + 4 x 16 mm²)	**LGYN12512**
	125 A, 4 x 15 holes (4 x 35 mm² + 11 x 25 mm²)	**LGYN12515**

Connection accessories (cont.)

Connectors for bare Cu or Al cables


DB117559.eps

Snap-in	INS100 to 160 S ≤ 95 mm²	Set of 3	**28947**
		Set of 4	**28948**


DB117560.eps

Distribution connector for 3 rigid cables up to 16 mm² or 3 flexible cables up to 10 mm²	INS40 to 80	Set of 3	**19096** [1]
		Set of 4	**19091** [1]


DB117561.eps

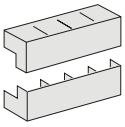
Distribution connector for 4 rigid cables up to 25 mm² or 4 flexible cables up to 16 mm²	INS100 to 160	Set of 3	**28949**
		Set of 4	**28950**

Crimp lugs for copper cables


DB117562.eps

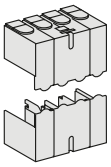
For 95 mm² cables with interphase barriers	INS100 to 160	Set of 3	**28951**
		Set of 4	**28952**

Terminal shrouds


DB117592.eps

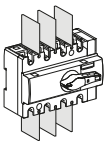
INS40 to 80	3P/4P	Set of 2	**28955**
INS100 to 160	3P/4P	Set of 2	**28956**

Terminal shields


DB117593.eps

INS40 to 80	3P/4P	Set of 2	**28957**
INS100 to 160	3P/4P	Set of 2	**28958**

Interphase barriers


DB404166.eps

INS100 to 160	3P/4P	Set of 6	**28959**

Electrical auxiliaries

Auxiliary contacts


DB117563.eps

1 CAF / CAO standard (early make or break)	INS40 to 160	**29450**
1 CAF / CAO low level (early make or break)	INS40 to 160	**29452**

Rotary handles

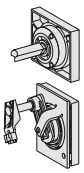
Direct front control or lateral control

Built-in

Accessories for conversion to extended rotary handles


DB414127.eps

Front control (handle included)	For black handle	INS40 to 160	**LV428941**
	For red handle on yellow front	INS40 to 160	**LV428942**


DB125623.eps

Lateral control (handle not included)	For black handle	INS40 to 160	**28943**
	For red handle on yellow front	INS40 to 160 [2]	**28944**
Lateral control on PRAGMA F functional enclosure [3] (handle not included)	For black handle	INS40 to 160	**28945**
	For red handle on yellow front	INS40 to 160 [2]	**28946**

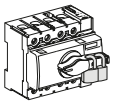
[1] The terminal shield 28957 can't be used with this connector.
[2] For red/yellow switch versions only.
[3] Not available with Prisma.

E

INS40 to 160
Accessories

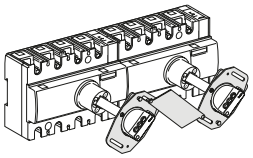
Locking and interlocking

Handle locking


DB117564.eps

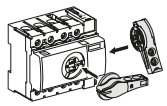
By 1 to 3 padlocks (OFF position), hasp dia. 5 to 8 mm, or by lead seals	**Built-in**

Interlocking for extended rotary handles


DB414126.eps

Mechanical interlocking for INS40 to INS160	**28953**

Spare parts


DB117565.eps

Black handle		**28962**
Red handle	[1]	**28963**

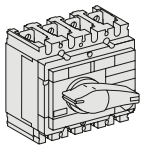
[1] For red/yellow switch versions only.

E

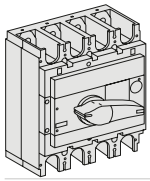
INS250-100 to 630

Complete fixed/FC device and accessories

Compact INS250 to 630 standard version with black handle

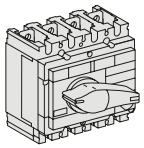


	3P	4P
Compact INS250-100A	**31100**	**31101**
Compact INS250-160A	**31104**	**31105**
Compact INS250-200A	**31102**	**31103**
Compact INS250	**31106**	**31107**

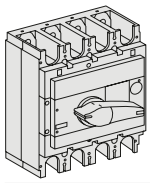


	3P	4P
Compact INS320	**31108**	**31109**
Compact INS400	**31110**	**31111**
Compact INS500	**31112**	**31113**
Compact INS630	**31114**	**31115**

Compact INS250 to 630 with red handle and yellow front

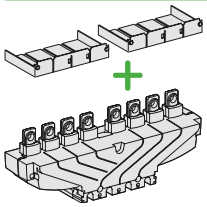


	3P	4P
Compact INS250-100A	**31120**	**31121**
Compact INS250-160A	**31124**	**31125**
Compact INS250-200A	**31122**	**31123**
Compact INS250	**31126**	**31127**



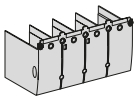
	3P	4P
Compact INS320	**31128**	**31129**
Compact INS400	**31130**	**31131**
Compact INS500	**31132**	**31133**
Compact INS630	**31134**	**31135**

Downstream coupling accessories



Short terminal shields (1 pair) + “normal” source/“replacement” source

	3/4P
INS250/INS250	**LV429359**
INS320 to INS630/INS320 to INS630	**LV432620**



Long terminal shields (1 piece)

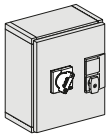
INS250 long terminal shield	**LV429518**
INS320 to INS630	
Long terminal shield, 45 mm (1 piece)	**LV432594**
Long terminal shield for spreaders, 52.5 mm (1 piece)	**LV432596**

E

INS250-100 to 630
Complete fixed/FC device and accessories

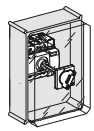
Individual enclosures

IP55 heavy-duty sheetmetal enclosure


DB414129.eps

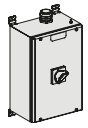
For INS250-100 to 250 with extended standard rotary handle	**31210**
For INS250-100 to 250 with extended red rotary handle on yellow front	**31211**
For INS320 to 630 with extended standard rotary handle	**31212**
For INS320 to 630 with extended red rotary handle on yellow front	**31213**

IP55 heavy-duty insulating enclosure


DB414130.eps

For INS250-100 to 250 with extended standard rotary handle	**31204**
For INS250-100 to 250 with extended red rotary handle on yellow front	**31205**
For INS320 to 630 with extended standard rotary handle	**31206**
For INS320 to 630 with extended red rotary handle on yellow front	**31207**

IP66


DB425654.eps

Enclosed disconnector switch 200 A 3P in Steel IP66 enclosure	**LV431228** [1] [2]
Enclosed disconnector switch 200 A 3P in Stainless steel IP66 enclosure	**LV431229** [1] [2]
Rotary handle	**LV431052** [2]

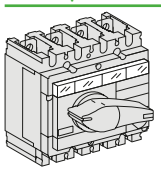
[1] Only available for Norway, Sweden, Denmark, Finland).
[2] Available in september 2017.

E

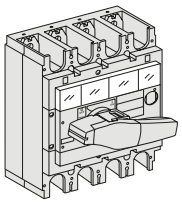
INV100 to 630

Complete fixed/FC device and specific accessories

Compact INV100 to 630 standard version with black handle

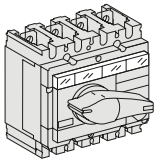


	3P	4P
Compact INV100	**31160**	**31161**
Compact INV160	**31164**	**31165**
Compact INV200	**31162**	**31163**
Compact INV250	**31166**	**31167**

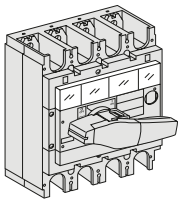


	3P	4P
Compact INV320	**31168**	**31169**
Compact INV400	**31170**	**31171**
Compact INV500	**31172**	**31173**
Compact INV630	**31174**	**31175**

Compact INV100 to 630 with red handle and yellow front



	3P	4P
Compact INV100	**31180**	**31181**
Compact INV160	**31184**	**31185**
Compact INV200	**31182**	**31183**
Compact INV250	**31186**	**31187**



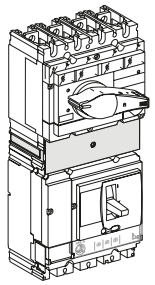
	3P	4P
Compact INV320	**31188**	**31189**
Compact INV400	**31190**	**31191**
Compact INV500	**31192**	**31193**
Compact INV630	**31194**	**31195**

Individual enclosures

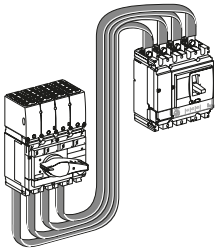
IP55 heavy-duty insulating enclosure

For INV100 to 250 with extended standard rotary handle	**31204**
For INV100 to 250 with extended red rotary handle on yellow front	**31205**
For INV320 to 630 with extended standard rotary handle	**31206**
For INV320 to 630 with extended red rotary handle on yellow front	**31207**

Combination with Compact NSX devices for "tarif jaune / tarif vert"



INV100 to 250 combination with NSX250	**31066**
INV320 to 630 combination with NSX250	**31067**
Front alignment base for INV320 to 630 combination with NSX250	**LV431064**
INV320 to 630 combination with NSX400/630	**31068**



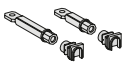
Flexible connection assembly for vertical INV100 to 250 with horizontal NSX250 [1]	**04443**
Flexible connection assembly for vertical INV100 to 250 with horizontal Vigi NSX250 [1]	**04444**
Flexible connection assembly for vertical INV320 to 630 with horizontal NSX250/400/630 [1]	**04445**
Flexible connection assembly for vertical INV320 to 630 with horizontal Vigi NSX250/400/630 [1]	**04446**
Flexible connection assembly for vertical INV100 to 250 with vertical NSX250 beside	**31071**
Flexible connection assembly for vertical INV320 to 630 with vertical NSX400/630 beside	**31072**
Flexible connection assembly for vertical INV320 to 630 with vertical NSX250 beside	**31093**

[1] Valid for new Prisma only.

INS250-100 to 250 and INV100 to 250
Accessories

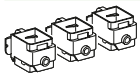
Connection accessories

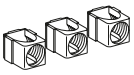
Rear connections

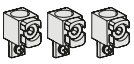

DB117567.eps

Short (1 pair)		**LV429235**
Long (1 pair)		**LV429236**

Cable connectors


DB112226.eps


DB112725.eps


DB425653.eps

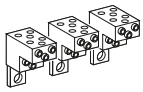
Snap-on, for cables:	Steel: 1.5 to 95 mm² ; ⩽ 160 A	Set of 3	**LV429242**
		Set of 4	**LV429243**
	Aluminium: 25 to 95 mm² ; ⩽ 250 A	Set of 3	**LV429227**
		Set of 4	**LV429228**
	Aluminium: 120 to 185 mm² ; ⩽ 250 A	Set of 3	**LV429259**
		Set of 4	**LV429260**
	Aluminium: 120 to 240 mm² ; ⩽ 250 A	Set of 3	**LV429244**
		Set of 4	**LV429245**


DB112724.eps

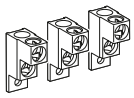
Tab connector for voltage tap on 185 mm² cable connector	Set of 10	**LV429348**


DB112726.eps

Clip for cable connector	Set of 10	**LV429241**

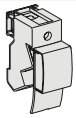

DB112228.eps

Distribution connector for six 1.5 to 35 mm² cables with interphase barriers	Set of 3	**LV429248**
	Set of 4	**LV429249**


DB112227.eps

Aluminium connectors for 2 cables: 2 x (50 to 120 mm²); ⩽ 250 A	Set of 3	**LV429218**
	Set of 4	**LV429219**

Linergy DX and DP distribution block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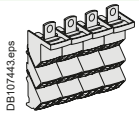

DB107443.eps

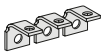
Linergy DX 160 A	For 6 cables (16 mm²) per pole [1]	1P	**04031**
Linergy DP 250 A	For 9 cables (6 x 10 mm² + 3 x 16 mm²)	3P	**04033**
	per pole [1]	4P	**04034**
	Additional blocks of 2 x 35 mm² per pole [1]	3P	**04155**
		4P	**04156**

Linergy DS distribution block


DB414899.eps

Linergy DS 250 A	For 14 holes (1 x 15.3 mm² + 1 x 10 mm² + 4 x 6 mm² + 8 x 7.5 mm²)	1P	**LGY125014**

Terminal extensions (supplied with 2 or 3 interphase barriers)

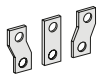

DB117570.eps

Right-angle terminal extensions [1]	Set of 3	**LV429261**
	Set of 4	**LV429262**

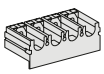

DB117571.eps

Straight terminal extensions [1]	Set of 3	**LV429263**
	Set of 4	**LV429264**

Spreaders (for upstream or downstream connection)


DB117572.eps

Separate for each pole	3P	**LV431563**
	4P	**LV431564**


DB404191.eps

One-piece	3/4P	**LV431061**
Front alignment base for one-piece spreader (when mounting with LV432594 and LV432596, refer installation page C-17)	3/4P	**LV431064**

Crimp lugs for copper cables (supplied with 2 or 3 interphase barriers)


DB417619_1.eps

For 120 mm² cables	Set of 3	**LV429252**
	Set of 4	**LV429256**
For 150 mm² cables	Set of 3	**LV429253**
	Set of 4	**LV429257**
For cable 185 mm² cables	Set of 3	**LV429254**
	Set of 4	**LV429258**

Crimp lugs for aluminium cables (supplied with 2 or 3 interphase barriers)

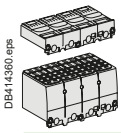

DB417620.eps

For 150 mm² cables	Set of 3	**LV429504**
	Set of 4	**LV429505**
For 185 mm² cables	Set of 3	**LV429506**
	Set of 4	**LV429507**

[1] Supplied with 2 or 3 interphase barriers.

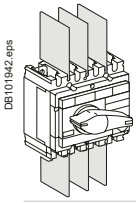
Connection accessories

Terminal shields


DB414360.eps

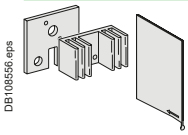
1 Short	3/4 P		**LV429516**
1 Long	3/4 P		**LV429518**

Interphase barriers

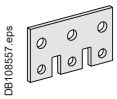

DB101942.eps

		Set of 6	**LV429329**

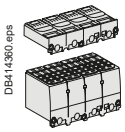
Special connection accessories for INS250-100 to 250DC and INV100 to 250DC


DB108556.eps

Terminal extensions for series or parallel connection of two poles [1]		1 connection plate equipped with heat sink + 1 interphase barrier	**LV438328**
[1] Series connection of:	2 poles = 1 terminal extension 3 poles = 2 terminal extensions 4 poles = 3 terminal extensions		
Parallel connection of:	2 poles = 2 terminal extensions 4 poles = 4 terminal extensions		


DB108557.eps

Terminal extensions for parallel connection of three poles:			
Parallel connection of:	3 poles = set of 2 terminal extensions		**LV438329**


DB414360.eps

4P terminal shields for series connection of poles		Set of 1	**LV438326**
4P terminal shields for parallel connection of poles (2P/4P)		Set of 1	**LV438327**

Electrical auxiliaries

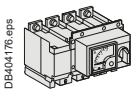
Auxiliary contacts (changeover type)


DB117563.eps

CAM (early make or break)			**29450**
Low level CAM (early make or break)			**29452**

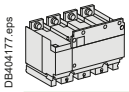
Indication and measurement modules

Ammeter module (4P)


DB404176.eps

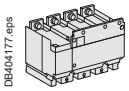
Adaptation kit (compulsory for devices with direct front handles)			**31081**
Rating (A)	100		**LV429456**
	150		**LV430556**
	250		**LV431566**

Current transformer module and voltage output (4P)


DB404177.eps

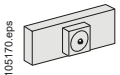
Rating (A)	100		**LV429462**
	150		**LV430562**
	250		**LV431570**

Current transformer module (4P)


DB404177.eps

Rating (A)	100		**LV429458**
	150		**LV430558**
	250		**LV431568**

Voltage presence indicator


DB105170.eps

Rating (A)	250		**LV429325**

E

INS250-100 to 250 and INV100 to 250
Accessories

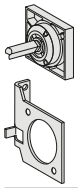
Rotary handles

Front control


DB414127.eps

Direct for INS/INV250		**Built-in**
Extended		
For INS/INV250 with standard rotary handle		**LV431050**
For INS/INV250 with red handle on yellow front	[1]	**LV431051**
For INS/INV250 with standard rotary handle equipped with gaskett (to use with IP66 enclosure)		**LV431052**
For complete source changeover assembly		**31055**

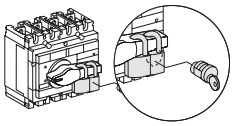
Lateral control


DB125624.eps

Direct lateral control for INS/INV250		
Lateral support		**31054**
+ standard lateral control assembly		**31057**
or + red and yellow lateral control assembly	[1]	**31058**
Extended lateral control for INS/INV250		
Standard lateral control assembly		**31057**
Red and yellow lateral control assembly	[1]	**31058**

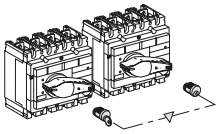
Locking and interlocking for INS/INV and source changeover systems

Locking for INS/INV


DB125625.eps

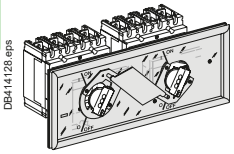
Handle locking by 1 to 3 padlocks (in OFF position)			**Built-in**
By keylock	Keylocking device	2 x	**31087**
	+ Ronis 1351B.500 keylock		**41940**
	or + Profalux KS5 B24 D4Z keylock		**42888**

Interlocking with key (2 keylocks / 1 key)


Db101549.eps

By 2 keylocks	INS250 keylocking device	2 x	**31087**
	INS320-630 keylocking device	2 x	**31088**
	+ Ronis 1351B.500 keylock	2 x	**41950**
	or + Profalux KS5 B24 D4Z keylock	2 x	**42878**

Interlocking for INS/INV with direct or extended rotary handle


DB414128.eps

Mechanical interlocking for INS250		**31073**

Installation accessories

Front panel escutcheons


DB117586.eps

For INS/INV		**31079**
For ammeter module, IP40		**LV429318**

Lead seal accessories

		LV429375

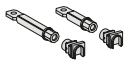
Spare parts

12 snap-in nuts for fixed/FC(M8)		**LV430554**
100 identification labels		**29314**
Bag of screws		**LV429312**
Black handle		**31082**
Red handle	[1]	**31083**
Viewport for INV100/160/250		**31089**

[1] For red/yellow switch versions only.

Connection accessories

Rear connections


DB117587.eps

Short (1 pair)		**LV432475**
Long (1 pair)		**LV432476**

Cable connectors


DB117587.eps

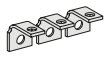

DB117588.eps


DB112724.eps

For 1 cable, 35 mm² to 300 mm²	Set of 3	**LV432479** [1]
	Set of 4	**LV432480** [2]
For 2 cables, 35 mm² to 240 mm²	Set of 3	**LV432481** [1]
	Set of 4	**LV432482** [2]
Tab connector for voltage tap on cable connector	Set of 10	**LV429348**

[1] Kit comprising 2 interphase barriers. **[2]** Kit comprising 3 interphase barriers.

Terminal extensions (supplied with 2 or 3 interphase barriers)


DB117570.eps


DB117589.eps

Right-angle terminal extensions	Set of 3	**LV432484**
	Set of 4	**LV432485**
Edgewise terminal extensions	Set of 3	**LV432486**
	Set of 4	**LV432487**

Spreaders (for upstream or downstream connection)


DB115652.eps

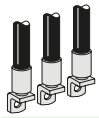
One-piece	52.5 mm	3P	**LV432490**
		4P	**LV432491**
	70 mm	3P	**LV432492**
		4P	**LV432493**

Crimp lugs for copper cables (supplied with 2 or 3 interphase barriers)


DB417619.eps

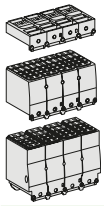
For 240 mm² cables	Set of 3	**LV432500**
	Set of 4	**LV432501**
For 300 mm² cables	Set of 3	**LV432502**
	Set of 4	**LV432503**

Crimp lugs for aluminium cables (supplied with 2 or 3 interphase barriers)


DB417620.eps

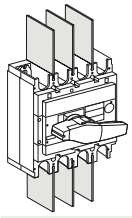
For 240 mm² cables	Set of 3	**LV432504**
	Set of 4	**LV432505**
For 300 mm² cables	Set of 3	**LV432506**
	Set of 4	**LV432507**

Terminal shields


DB414359.eps

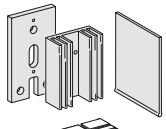
1 Short	3/4P	**LV432592**
1 Long	3/4P	**LV432594**
1 Long for 52.5 mm spreader (supplied with insulating plate)	3/4P	**LV432596**

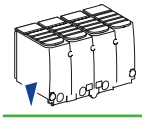
Interphase barriers


DB404182.eps

	Set of 6 **LV432570**

Special connection accessories for INS/INV320 to 630DC


DB108566.eps


DB416824.eps

Terminal extensions for series or parallel connection of two poles [3]	1 connection plate equipped with heat sink + 1 interphase barrier	**LV438338**

[3] Series connection of: 2 poles = 1 terminal extension; 3 poles = 2 terminal extensions; 4 poles = 3 terminal extensions
Parallel connection of: 2 poles = 2 terminal extensions; 4 poles = 4 terminal extensions

4P terminal shields for series connection of poles	Set of 2	**LV438346**
4P terminal shields for series connection of poles	Set of 2	**LV438337**

E

INS320 to 630 and INV320 to 630
Accessories

Electrical auxiliaries

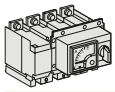
Auxiliary contacts (changeover type)


DB117563.eps

1 OF/CAF/CAO (early make or break)		**29450**
1 OF/CAF/CAO low level (early make or break)		**29452**

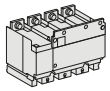
Indication and measurement modules

Ammeter module (4P)


DB404176.eps

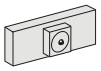
Rating (A)	400	**LV432656**
	630	**LV432856**

Current transformer module (4P)


DB404177.eps

Rating (A)	400	**LV432658**
	630	**LV432858**
	400 with voltage output	**LV432654**
	630 with voltage output	**LV432862**

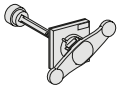
Voltage presence indicator


DB105170.eps

Rating (A)	630	**LV432566**

Rotary handles

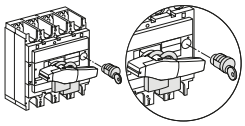
Extended front control


DB404185.eps

For INS320/400/630 with standard rotary handle		**31052**
For INS320/400/630 with red handle on yellow front	[1]	**31053**
For complete source changeover assembly		**31055**

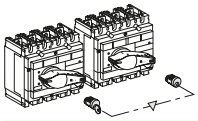
Locking and interlocking for INS/INV and source changeover systems

Locking for INS/INV


DB404186.eps

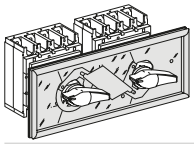
Handle locking by 1 to 3 padlocks (in OFF position)		**Built-in**
By keylock	Keylocking device	**31088**
	+ Ronis 1351B.500 keylock	**41940**
	or + Profalux KS5 B24 D4Z keylock	**42888**

Interlocking with key (2 keylocks / 1 key)


Db101549.eps

By 2 keylocks	INS250 keylocking device	2 x	**31087**
	INS320-630 keylocking device	2 x	**31088**
	+ Ronis 1351B.500 keylock	2 x	**41950**
	or + Profalux KS5 B24 D4Z keylock	2 x	**42878**

Interlocking for INS/INV with direct or extended rotary handle


DB404187.eps

Mechanical interlocking for INS320/400/630	**31074**

Installation accessories

Front panel escutcheons


DB117586.eps

For INS/INV	**31080**
For ammeter module, IP40	**LV429318**

Lead seal accessories

	LV429375

Spare parts

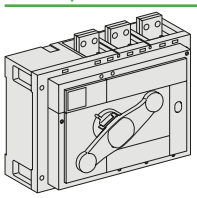
100 labels		**29314**
Bag of screws		**LV432552**
Black handle		**31084**
Red handle	[1]	**31085**
Viewport for INV320/400/630		**31090**

[1] For red/yellow switch versions only.

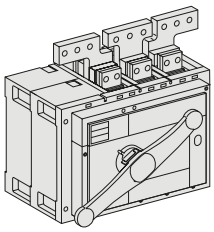
INS630b to 2500

Complete fixed/FC device and accessories

Compact INS630b to 2500 standard version with black handle

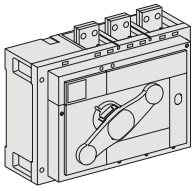


	3P	4P
Compact INS630b	**31342**	**31343**
Compact INS800	**31330**	**31331**
Compact INS1000	**31332**	**31333**
Compact INS1250	**31334**	**31335**
Compact INS1600	**31336**	**31337**



Compact INS2000	**31338**	**31339**
Compact INS2500	**31340**	**31341**

Compact INS800 to 1600 with red handle and yellow front



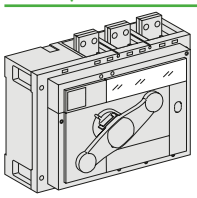
	3P	4P
Compact INS800	**31344**	**31345**
Compact INS1000	**31346**	**31347**
Compact INS1250	**31348**	**31349**
Compact INS1600	**31350**	**31351**

E

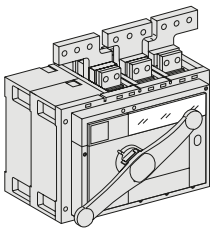
INV630b to 2500

Complete fixed/FC device and specific accessories

Compact INV630b to 2500 standard version with black handle

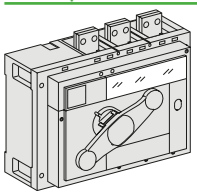


	3P	4P
Compact INV630b	**31370**	**31371**
Compact INV800	**31358**	**31359**
Compact INV1000	**31360**	**31361**
Compact INV1250	**31362**	**31363**
Compact INV1600	**31364**	**31365**



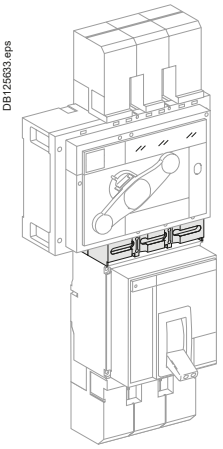
Compact INV2000	**31366**	**31367**
Compact INV2500	**31368**	**31369**

Compact INV800 to 1600 with red handle and yellow front



	3P	4P
Compact INV800	**31372**	**31373**
Compact INV1000	**31374**	**31375**
Compact INV1250	**31376**	**31377**
Compact INV1600	**31378**	**31379**

Combination with Compact NS devices (for "tarif vert")



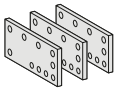
	3P	4P
INV630b/1000/1250 combination with NS800/1000/1250	**31385**	**31386**
Terminal shield	**31313**	**31314**

Connection accessories

Vertical connection adapters

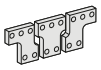
INS/INV630b-1600	3P	Set of 3	**31301**
	4P	Set of 4	**31302**

Cable lug adapters



INS/INV630b-1600	3P	Set of 3	**33644**
	4P	Set of 4	**33645**

Busbar connection (not compatible with terminal shield)

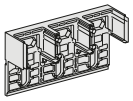


INS/INV630b-1600	3P	Set of 3	**31305**
	4P	Set of 4	**31306**

1 right angle connector for busbar (edgewise) to INS2000/2500	**31310**

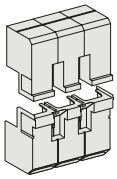
Insulation accessories

Base for terminal shield (not compatible with interphase barriers)



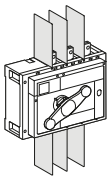
INS/INV630b-1600	3P	**31307**
	4P	**31308**

Terminal shield



INS/INV630b-1600	3P	**LV433638**
	4P	**LV433639**

Interphase barriers (not compatible with terminal shield and base)



INS/INV630b-1600	4P	Set of 6	**31315**
INS/INV2000/2500	4P	Set of 6	**31319**

Electrical auxiliaries

Auxiliary contacts (changeover type) INS/INV630b-2500

1 OF/CAF/CAO standard (early make or break)	**29450**
1 OF/CAF/CAO low level (early make or break)	**29452**

Extended front control

INS/INV630b-2500	For standard rotary handle (handle not included)		**31288**
INS/INV630b-1600	For red handle on yellow front (handle not included)	[1]	**31289**

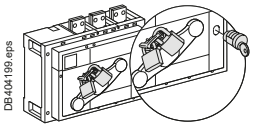
[1] For red/yellow switch versions only.

E

INS630b to 2500 and INV630b to 2500
Accessories

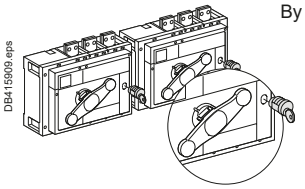
Locking and interlocking

Locking for INS/INV630b to 2500


DB404199.eps

Handle locking by 1 to 3 padlocks (in OFF position)		**Built-in**
By keylock	Keylocking device	**31291**
	+ Ronis 1351B.500 keylock	**41940**
	or + Profalux KS5 B24 D4Z keylock	**42888**

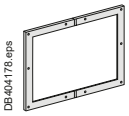
Interlocking for INS/INV630b to 2500


DB415909.eps

By keylock	Keylocking device	2 x	**31291**
	+ Ronis 1351B.500 keylock (1 key)	2 x	**41950**
	or + Profalux KS5 B24 D4Z keylock (1 key)	2 x	**42878**

Installation accessories

Escutcheon

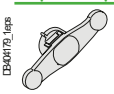

DB404178.eps

INS630b-2500	3P/4P	**31295**

Lead seal accessories

	31316

Spare parts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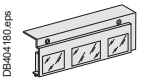
DB418371_tags


DB404180.eps

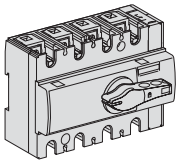
INS/INV630b-1600	Black handle		**31296**
	Red handle	[1]	**31297**
INS/INV2000-2500	Black handle		**31298**
Spare zamack piece for black handle INS/INV 2000-2500			**LV431285**
Viewport for INV630b/2500		3P	**31293**
		4P	**31294**

[1] For red/yellow switch versions only.

INSE80 (40 to 80 A) molded case switch UL489/CSA C22-2 N° 5.2

Complete fixed/FC device and accessories

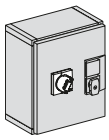
Compact INSE80 (40 to 80 A) standard version with black handle



		3P	4P
Compact INSE80	40 A	**28994**	**28995**
	60 A	**28996**	**28997**
	80 A	**28998**	**28999**

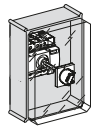
Individual enclosures

IP55 heavy-duty sheetmetal enclosure [1]



For INSE80-40 A to INSE80-80 A with extended standard rotary handle	**31208**
For INSE80-40 A to INSE80-80 A with extended red handle on yellow front	**31209**

IP55 heavy-duty insulating enclosure [1]



For INSE80-40 A to INSE80-80 A with extended standard rotary handle	**28967**
For INSE80-40 A to INSE80-80 A with extended red handle on yellow front	**28968**

Connection accessories

Multi-stage Linergy DS distribution block (for bare cables)

INSE80-40 A to INSE80-80 A [1]	125 A, 4 x 10 holes (5 x 10 mm² + 4 x 16 mm² + 1 x 35 mm²)	**LGY412548**
	125 A, 4 x 17 holes (8 x 10 mm² + 8 x 16 mm² + 1 x 35 mm²)	**LGY412560**

Connectors for bare Cu or Al cables

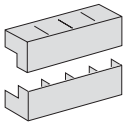
Snap-on	INSE80-40 A to INSE80-80 A 1.5 to 95 mm² 12 AWG to 3/0 AWG C4/AL	Set of 3 Set of 4	**28947** **28948**

Distribution connector for 4 rigid cables up to 25 mm² or 4 flexible cables up to 16 mm²	INSE80-40 A to INSE80-80 A [1]	Set of 3 Set of 4	**28949** **28950**

Crimp lugs for copper cables [1]

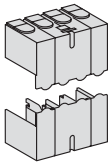
For 95 mm² cables with interphase barriers	INSE80-40 A to INSE80-80 A	Set of 3 Set of 4	**28951** **28952**

Terminal shrouds



INSE80-40 A to INSE80-80 A	3P/4P	Set of 2	**28956**

Terminal shieldsé



INSE80-40 A to INSE80-80 A	3P/4P	Set of 2	**28958**

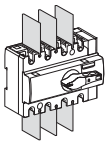
[1] Not UL Listed.

INSE80 (40 to 80 A) molded case switch UL489/CSA C22-2 N° 5.2

Complete fixed/FC device and accessories

Connection accessories (cont.)

Interphase barriers



INSE80-40 A to INSE80-80 A	3P/4P	Set of 6	**28959**

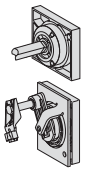
Electrical auxiliaries

Auxiliary contacts

1 CAF / CAO (standard)	INSE80-40 A to INSE80-80 A	**29450**
1 CAF / CAO (low level)	INSE80-40 A to INSE80-80 A	**29452**

Rotary handles

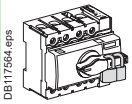
Accessories for conversion to extended rotary handles



Front control (handle included)	For black handle	INSE80-40 A to INSE80-80 A	**LV428941**
	For red handle on yellow front	INSE80-40 A to INSE80-80 A	**LV428942**
Lateral control (handle not included)	For black handle	INSE80-40 A to INSE80-80 A	**28943**
	For red handle on yellow front + red handle [2]	INSE80-40 A to INSE80-80 A	**28944** **28963**
Lateral control on PRAGMA F functional enclosure [3] (handle not included)	For black handle	INSE80-40 A to INSE80-80 A	**28945** [3]
	For red handle on yellow front [2]	INSE80-40 A to INSE80-80 A	**28946**

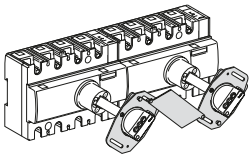
Locking and interlocking

Handle locking



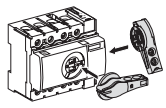
By 1 to 3 padlocks (OFF position), hasp dia. 5 to 8 mm, or by lead seals	**Built-in**

Interlocking for extended rotary handles



Mechanical [1]	**28953**

Spare parts



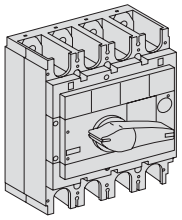
Black handle	**28962**
Red handle [2]	**28963**

[1] Not UL listed.
[2] For red/yellow switch versions only.
[3] Not available with Prisma.

INSJ400 (250 to 400 A) molded case switch UL489/ CSA C22-2 N° 5.2

Complete fixed/FC device and accessories

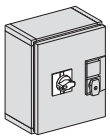
Compact INSJ400 (250 A to 400 A) standard version with black handle


DB114739.eps

	3P	4P
Compact INSJ400-250 A	**31118**	**31119**
Compact INSJ400-400 A	**31136**	**31137**

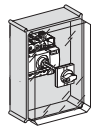
Individual enclosures

IP55 heavy-duty sheetmetal enclosure [1]


DB404164.eps

For INSJ400-250 to 400 A with extended standard rotary handle	**31212**
For INSJ400-250 to 400 A with extended red rotary handle on yellow front	**31213**

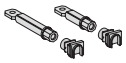
IP55 heavy-duty insulating enclosure [1]


DB117566.eps

For INSJ400-250 to 400 A with extended standard rotary handle	**31206**
For INSJ400-250 to 400 A with extended red rotary handle on yellow front	**31207**

Connection accessories

Rear connections


DB117567.eps

Short (1 pair)	**LV432475**
Long (1 pair)	**LV432476**

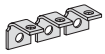
Cable connectors


DB117587.eps


DB117588.eps

For 1 cable, 35 mm² to 300 mm²	Set of 3	**LV432479**
	Set of 4	**LV432480**
For 2 cables, 35 mm² to 240 mm²	Set of 3	**LV432481**
	Set of 4	**LV432482**
Tab connector for voltage tap on cable connector	Set of 10	**LV429348**

Terminal extensions (supplied with 2 or 3 interphase barriers)


DB117570.eps


DB117589.eps

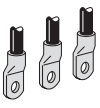
Right-angle terminal extensions	Set of 3	**LV432484**
	Set of 4	**LV432485**
Edgewise terminal extensions	Set of 3	**LV432486**
	Set of 4	**LV432487**

Spreaders (for upstream or downstream connection)


DB117572.eps

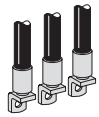
One-piece	52.5 mm	3P	**LV432490**
		4P	**LV432491**
	70 mm	3P	**LV432492**
		4P	**LV432493**

Crimp lugs for copper cables (supplied with 2 or 3 interphase barriers) [1]


DB117573.eps

For 240 mm² cables	Set of 3	**LV432500**
	Set of 4	**LV432501**
For 300 mm² cables	Set of 3	**LV432502**
	Set of 4	**LV432503**

Crimp lugs for aluminium cables (supplied with 2 or 3 interphase barriers) [1]


DB117574.eps

For 240 mm² cables	Set of 3	**LV432504**
	Set of 4	**LV432505**
For 300 mm² cables	Set of 3	**LV432506**
	Set of 4	**LV432507**

[1] Not UL Listed.

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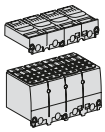
INSJ400 (250 to 400 A) molded case switch UL489/CSA C22-2 N° 5.2

Complete fixed/FC device and accessories

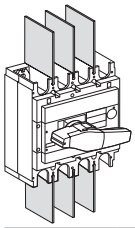
Connection accessories (cont.)

Terminal shields


DB414360.eps

1 Short	3/4P	**LV432592**
1 Long	3/4P	**LV432594**
1 Long for 52.5 mm spreader (supplied with insulating plate)	3/4P	**LV432596**

Interphase barriers


DB404182.eps

	Set of 6	**LV432570**

Electrical auxiliaries

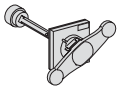
Auxiliary contacts (changeover type)


DB117563.eps

OF or CAM (early make or break)	**29450**
OF or CAM low level (early make or break)	**29452**

Rotary handles

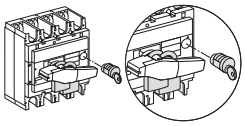
Extended front control


DB404185.eps

For INSJ400-250 to 400 A with standard rotary handle	**31052**
For INSJ400-250 to 400 A with red handle on yellow front + red handle [1]	**31053**
	31085

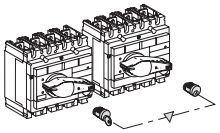
Locking and interlocking and source changeover systems

Locking


DB404186.eps

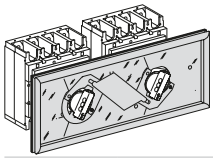
Handle locking by 1 to 3 padlocks (in OFF position)		**Built-in**
By keylock	Keylocking device	**31088**
	+ Ronis 1351B.500 keylock	**41940**
	or + Profalux KS5 B24 D4Z keylock	**42888**

Interlocking with key (2 keylocks / 1 key)


Db1015491.eps

By 2 keylocks	INSJ400-250 to 400 A keylocking device	2 x	**31088**
	+ Ronis 1351B.500 keylock	2 x	**41950**
	or + Profalux KS5 B24 D4Z keylock	2 x	**42878**

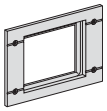
Interlocking with direct or extended rotary handle


DB414121.eps

Mechanical interlocking for INSJ400-250 to 400 A	**31074**

Installation accessories

Front panel escutcheons


DB114740.eps

	31080

Lead seal accessories

	LV429375

Spare parts

100 labels	**29314**
Bag of screws	**32552**
Black handle	**31084**
Red handle [1]	**31085**

[1] For red/yellow switch versions only.

Notes

Notes

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