Low voltage

Acti 9

the efficiency you deserve

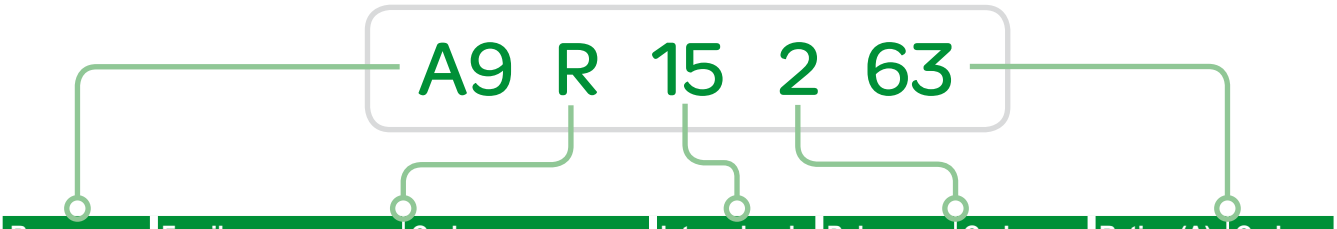
Catalogue
09/2013

Schneider Electric

Contents

Principle of catalogue numbers

iID, iC60, Vigi iC60, Reflex iC60, switches



Range	Family	Code
Acti 9 (A9)	**iID**	R
	Vigi iC60	V
	iC60	F
	iK60	K
	Auxiliaries and accessories	A
	Switches	S
	Reflex iC60	C

Internal code

Poles	Code
0	0
1P	1
2P	2
3P	3
4P	4
1N	5
1P+N	6
3P+N	7

Rating (A)	Code
0	00
0.5	70
0.75	71
1	01
1.6	72
2	02
2.5	73
3	03
4	04
6	06
6.3	76
8	08
10	10
12.5	82
13	13
16	16
20	20
25	25
32	32
40	40
50	50
63	63
80	80
100	91
125	92

Comb busbar and comb busbar accessories

Range	Family	Code
Acti 9 (A9)	Comb busbar	X

Type		Type of installation	
Comb busbar			
Fork teeth	F	Horizontal	H
Pin teeth	P		
Auxiliarisable	A		
Accessories			
End-piece	E	Double terminals	D
Tooth cover	T	Single terminal	M
Connector	C		

Number of poles	
1P	1
2P	2
3P	3
4P	4
4P balanced, with neutral	5
3P balanced for single-poles	6

Dimensioning	
Comb busbar	Number of 18 mm modules (approximately)
Accessories	Number of pieces per cat. no.

Choice of circuit protective devices

■ Circuit breakers can:
□ break a faulty electrical circuit (short-circuit, overload, insulation fault), to prevent fires,
□ protect control devices,
□ increase the service life of the installation, thanks to its ability to limit the short-circuit current (see module CA908025),
□ in IT and TN systems, they ensure personal protection against electrocution in the event of indirect contacts.
■ The choice of circuit breakers must be optimised to provide absolute protection while ensuring continuity of service.
■ Although circuit breakers are sometimes used as control units, it is recommended to install separate control devices which are more suitable for frequent switching operations (switch, contactor, impulse relay).

DB123788

Protection of electrical connections against short circuits and overloads

DB123789

Protection of loads against overloads

DB123790

Protection of control devices

DB123792

Protection for people against indirect contacts in IT and TN earthing systems

Choice of protective circuit breakers

This depends on several criteria:
■ prospective short-circuit current
■ max. voltage rating
■ planned amperage for the circuit to be protected
■ nature and cross section of cables
■ ambient temperature (possible derating)
■ the network and neutral system, which determine the number of poles of the protective circuit breaker installed on their power supply circuit and the tripping curve
■ coordination with the other electrical devices (protection, discrimination, cascading).

Choice of breaking capacity

■ The breaking capacity must be greater than or equal to the prospective short-circuit current (Isc) upstream of the circuit-breaker (Isc depends on the length, type of conductor and cross section of the cable and the power of the source).
■ However, in the event of use in combination with an upstream circuit-breaker limiting the current, this breaking capacity can possibly be reduced (cascading, see module **557E4200**).

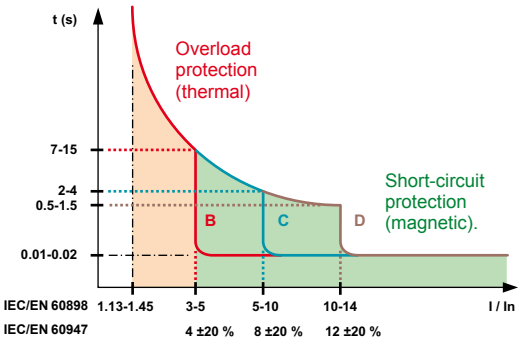
Choice of rating

■ The rating (In) is chosen above all to protect the electrical connections:
□ for cables: it is chosen according to the cross section and type of conductor,
□ for Canalis prefabricated busbar trunking: it must be simply less than or equal to the rating of the busbar trunking.
■ The rating should be greater than the nominal current of the loads.

Choice of tripping curve

The tripping curve makes the protection more or less sensitive to:
■ the inrush current at power up
■ the overload current.

E103695



Tripping thresholds (x In)		
Curves	**IEC /EN 60898**	**IEC/EN 60947-2**
B	Between 3 In and 5 In	4 ±20 %
C	Between 5 In and 10 In	8 ±20 %
D or K	Between 10 In and 14 In	12 ±20 %
MA	-	12 ±20 %
Z	-	3 ±20 %

■ To prevent nuisance tripping, it may be advisable to choose a less sensitive curve, e.g. change from B to C (tripping curves, see module **CA908024**).

Selection guide (cont.)

Circuit breakers						
Type			**C120N**		**C120H**	
						
Standard			IEC/EN 60898-1		IEC/EN 60898-1	
Quality label			Country approval pictogram		Country approval pictogram	
Number of poles			1P	2, 3, 4P	1P	2, 3, 4P
Add-on residual current devices (Vigi)			■		■	
Auxiliaries for remote tripping and indication			■		■	
Electrical characteristics						
Curves			B, C, D		B, C, D	
Ratings (A)	In		63 to 125		63 to 125	
Maximum operational voltage (V)	Ue max	AC (50/60 Hz)	240/415, 440		240/415, 440	
		DC	125 per pole		125 per pole	
Minimum operational voltage (V)	Ue min	AC (50/60 Hz)	12		12	
		DC	12		12	
Insulation voltage (V AC)	Ui		500		500	
Rated impulse withstand voltage (kV)	Uimp		6		6	
Breaking capacity						
IEC/EN 60898 (A)	Icn	230/400 V	10000	10000	15000	15000
AC-Breaking capacity		**Ue (50/60 Hz)**	**1P**	**2, 3, 4P**	**1P**	**2, 3, 4P**
Ratings (A)	In		63 to 125		63 to 125	
IEC 60947-2 (kA)	Icu	110...130 V	–	–	–	–
		12...130 V	**20**	–	**30**	–
		220...240 V	**10**	**20**	**15**	**30**
		380...415 V	**3** (1)	**10**	**4.5** (1)	**15**
		440 V	–	**6**	–	**10**
		500 V	–	–	–	–
	Ics		75 % of Icu		50 % of Icu	
DC-Breaking capacity		**Ue DC**				
IEC 60947-2 (kA)	Icu	12...125 V (1P)	**15**		**20**	
		≤ 144 V (1P)	**10**		**15**	
		≤ 250 V (2P)	**10**		**15**	
		≤ 375 V (3P)	**10**		**15**	
		≤ 500 V (4P)	**10**		**15**	
	Ics		100 % of Icu		100 % of Icu	
Other characteristics						
Suitable for industrial isolation according to IEC/EN 60947-2			■		■	
Reference temperature IEC/EN 60947-2			50°C		50°C	
Fault tripping indication			–		–	
Positive contact indication			■		■	
Fast closing			■		■	
Degree of protection	IP	Device only	IP20		IP20	
		Device in modular enclosure	IP40		IP40	
For more detail, see module			**CA901015**		**CA901016**	
Accessories			**CA907012 and CA907013**		**CA907012 and CA907013**	
Auxiliaries			**CA907008 and CA907013**		**CA907008 and CA907013**	
Earth leakage module (Vigi)			**CA902016**		**CA902016**	

(1) Breaking capacity under 1 pole with IT isolated neutral system (case of double fault).

C120N circuit breakers (curves C, D)

DB123398

Country approval pictograms

PB107914-30

PB107917-40

PB107920-30

PB107923-30

IEC/EN 60947-2

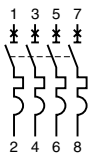
C120N circuit breakers are multistandard circuit breakers that combine the following functions:
- circuit protection against short-circuit currents,
- circuit protection against overload currents,
- suitability for isolation in the industrial sector to IEC/EN 60947-2,
- fault tripping and indication by adding auxiliaries.

Alternating current (AC) 50/60 Hz			
Breaking capacity (Icu) to IEC/EN 60947-2			Service breaking capacity (Ics)
Type		Voltage (V)	
1P, 2P, 3P, 4P		230 to 400 V	
Rating (In)	80 and 100 A	10 kA	75 % of Icu

Direct current (DC)						
Breaking capacity (Icu) according to IEC/EN 60947-2						Service breaking capacity (Ics)
		Voltage (Ue)				
Between +/-		12 to 125 V	≤ 144 V	≤ 250 V	≤ 375 V	≤ 500 V	
Number of poles		1P		2P	3P	4P	
Rating (In)	80 and 100 A	15 kA	10 kA	10 kA	10 kA	10 kA	100 % of Icu

Catalogue numbers

C120N circuit breaker

Type	1P		2P		3P		4P	
								
Auxiliaries	Remote indication and tripping, module CA907008 and CA907013		Remote indication and tripping, module CA907008 and CA907013		Remote indication and tripping, module CA907008 and CA907013		Remote indication and tripping, module CA907008 and CA907013	
Vigi C120	Vigi C120 add-on residual current device, module CA902016		Vigi C120 add-on residual current device, module CA902016		Vigi C120 add-on residual current device, module CA902016		Vigi C120 add-on residual current device, module CA902016	
Rating (In)	Curve		Curve		Curve		Curve	
	C	D	C	D	C	D	C	D
80 A	A9N60729	A9N60745	A9N60733	A9N60749	A9N60737	A9N60753	A9N60741	A9N60757
100 A	A9N60730	A9N60746	A9N60734	A9N60750	A9N60738	A9N60754	A9N60742	A9N60758
Width in 9-mm modules	3		6		9		12	
Accessories	Module CA907012 and CA907013		Module CA907012 and CA907013		Module CA907012 and CA907013		Module CA907012 and CA907013	

C120H circuit breakers (curve C)

DB123398

Country approval pictograms

PB107913-30

PB107916-30

PB107919-30

PB107922-30

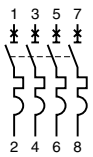
IEC/EN 60947-2

C120H circuit breakers are multistandard circuit breakers that combine the following functions:
- circuit protection against short-circuit currents,
- circuit protection against overload currents,
- suitability for isolation in the industrial sector to IEC/EN 60947-2,
- fault tripping and indication by adding auxiliaries.

Alternating current (AC) 50/60 Hz		
Breaking capacity (Icu) to IEC/EN 60947-2		Service breaking capacity (Ics)
Type	Voltage (V)	
1P	230 to 400 V	
Rating (In) 80 and 100 A	15 kA	50 % of Icu

Direct current (DC)						
Breaking capacity (Icu) according to IEC/EN 60947-2						Service breaking capacity (Ics)
	Voltage (Ue)					
Between +/-	12 to 125 V	≤ 144 V	≤ 250 V	≤ 375 V	≤ 500 V	
Number of poles	1P		2P	3P	4P	
Rating (In) 80 and 100 A	20 kA	15 kA	15 kA	15 kA	15 kA	100 % of Icu

Catalogue numbers

C120H circuit breaker				
Type	1P	2P	3P	4P
				
Auxiliaries	Remote indication and tripping, module CA907008 and CA907013	Remote indication and tripping, module CA907008 and CA907013	Remote indication and tripping, module CA907008 and CA907013	Remote indication and tripping, module CA907008 and CA907013
Vigi C120	Vigi C120 add-on residual current device, module CA902016	Vigi C120 add-on residual current device, module CA902016	Vigi C120 add-on residual current device, module CA902016	Vigi C120 add-on residual current device, module CA902016
Rating (In)	Curve C	Curve C	Curve C	Curve C
80 A	A9N60777	A9N60781	A9N60785	A9N60789
100 A	A9N60778	A9N60782	A9N60786	A9N60790
Width in 9-mm modules	3	6	9	12
Accessories	Module CA907012 and CA907013	Module CA907012 and CA907013	Module CA907012 and CA907013	Module CA907012 and CA907013

C120 circuit breakers

PB107917-40

■ Terminals insulated to IP20

■ Location for 4 clip-on terminal markers

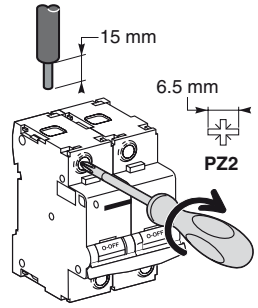
Positive contact indication
■ Suitability for isolation in the industrial sector to IEC/EN 60947-2.
■ The presence of the green strip guarantees that the contacts open physically and allows work to be carried out safely on the downstream circuit.

■ Longer product service life thanks to:
□ good overvoltage withstand capacity: products designed to offer a high industrial performance level (degree of pollution, rated impulse withstand voltage and insulation voltage).
□ high limitation performances (see limitation curves).
□ fast closure independent of toggle operating speed.
■ Remote indication of the open/closed/tripped state by auxiliary contacts (optional).
■ Power supply from above or below.

C120 circuit breakers (Cont.)

Connection

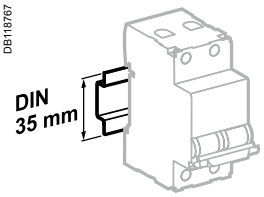
DB126143



Rating	Tightening torque	Without access. Copper cables: Rigid/ semi-rigid	Without access. Copper cables: Flexible or with ferrule	With accessories: 50 mm² Al Terminal	With accessories: Screw-on connection for ring terminal (1)	With accessories: Multi-cable terminal: Rigid cables	With accessories: Multi-cable terminal: Flexible cables
		DB122945	DB122946	DB122935	DB118789	DB118787	
				Al	Ø		
80 and 100 A	3.5 N.m	1 to 50 mm²	1.5 to 35 mm²	16 to 50 mm²	Ø 5 mm	3 x 16 mm²	3 x 10 mm²

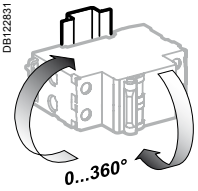
(1) For lugs up to 63 A, front or rear access.

DB118767



Clips onto 35 mm DIN rail.

DB122831

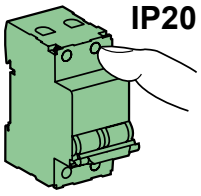


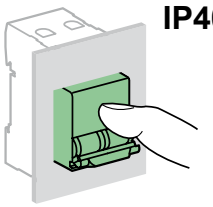
Any installation position.

Technical data

Main characteristics		
To IEC/EN 60947-2		
Insulation voltage (Ui)		500 V AC
Degree of pollution		3
Rated impulse withstand voltage (Uimp)		6 kV
Thermal tripping	Reference temperature	50°C
Magnetic tripping	Curve C	8 In ± 20 %
	Curve D	12 In ± 20 %
Limitation class		3
Additional characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in a modular enclosure	IP40
Endurance (O-C)	Electrical	5000 cycles (O-C)
	Mechanical	20000 cycles
Operating temperature		-30°C to +70°C
Storage temperature		-40°C to +80°C
Tropicalisation (IEC 60068-1)		Treatment 2 (relative humidity 95 % at 55°C)

DB122932



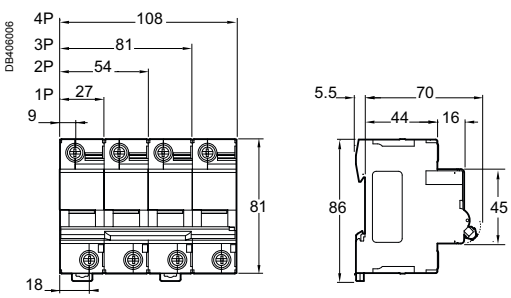


Weight (g)

Circuit breaker	
Type	**C120**
1P	205
2P	410
3P	615
4P	820

Dimensions (mm)

DB406006



C120N circuit breakers (curves B, C, D)

DB123430 DB123525

Country approval pictograms

PB107914-30

PB107917-40

PB107920-30

PB107923-30

IEC/EN 60898-1, IEC 60947-2

C120N circuit breakers are multistandard circuit breakers that combine the following functions:
- circuit protection against short-circuit currents,
- circuit protection against overload currents,
- suitability for isolation in the industrial sector to IEC/EN 60947-2,
- fault tripping and indication by adding auxiliaries.

Alternating current (AC) 50/60 Hz

Breaking capacity (Icu) to IEC/EN 60947-2						Service breaking capacity (Ics)
Type		**Voltage (V)**				
1P		**12 to 130 V**	**220 to 240 V**	**380 to 415 V**	**440 V**	
Rating (In)	63 to 125 A	20 kA	10 kA	3 kA (1)	-	75 % of Icu
2P/3P/4P		**12 to 130 V**	**220 to 240 V**	**380 to 415 V**	**440 V**	
	63 to 125 A	-	20 kA	10 kA	6 kA	75 % of Icu

Breaking capacity (Icn) to IEC/EN 60898-1			
Type		**Voltage (V)**	
1P, 2P, 3P, 4P		**230 to 400 V**	
Rating (In)	63 to 125 A	10000 A	75 % of Icn

(1) One-pole breaking capacity in IT isolated neutral system (double fault).

Direct current (DC)

Breaking capacity (Icu) according to IEC/EN 60947-2						Service breaking capacity (Ics)
		Voltage (Ue)				
Between +/-		**12 to 125 V**	**≤ 144 V**	**≤ 250 V**	**≤ 375 V**	**≤ 500 V**
Number of poles		**1P**		**2P**	**3P**	**4P**
Rating (In)	63 to 125 A	15 kA	10 kA	10 kA	10 kA	10 kA	100 % of Icu

Catalogue numbers

C120N circuit breaker

Type	1P			2P		
						
Auxiliaries	**Remote indication and tripping, module CA907008 and CA907013**			**Remote indication and tripping, module CA907008 and CA907013**		
Vigi C120	**Vigi C120 add-on residual current device, module CA902016**			**Vigi C120 add-on residual current device, module CA902016**		
Rating (In)	**Curve**			**Curve**		
	B	**C**	**D**	**B**	**C**	**D**
63 A	**A9N18340**	**A9N18356**	**A9N18378**	**A9N18344**	**A9N18360**	**A9N18382**
80 A	**A9N18341**	**A9N18357**	**A9N18379**	**A9N18345**	**A9N18361**	**A9N18383**
100 A	**A9N18342**	**A9N18358**	**A9N18380**	**A9N18346**	**A9N18362**	**A9N18384**
125 A	**A9N18343**	**A9N18359**	**A9N18381**	**A9N18347**	**A9N18363**	**A9N18385**
Width in 9-mm modules	3			6		
Accessories	**Module CA907012 and CA907013**			**Module CA907012 and CA907013**		

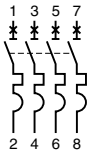
(1) Country France only

C120N circuit breakers (curves B, C, D) (cont.)

PB107917-40

Positive contact indication
- Suitability for isolation in the industrial sector to IEC/EN 60947-2.
- The presence of the green strip guarantees that the contacts open physically and allows work to be carried out safely on the downstream circuit.

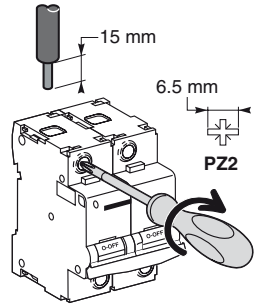
- Longer product service life thanks to:
  - good overvoltage withstand capacity: products designed to offer a high industrial performance level (degree of pollution, rated impulse withstand voltage and insulation voltage).
  - high limitation performances (see limitation curves).
  - fast closure independent of toggle operating speed.
- Remote indication of the open/closed/tripped state by auxiliary contacts (optional).
- Power supply from above or below.

	3P			4P		
						
	Remote indication and tripping, module CA907008 and CA907013			**Remote indication and tripping, module CA907008 and CA907013**		
	Vigi C120 add-on residual current device, module CA902016			**Vigi C120 add-on residual current device, module CA902016**		
	Curve			**Curve**		
	B	**C**	**D**	**B**	**C**	**D**
	A9N18348	**A9N18364**	**A9N18386**	**A9N18352**	**A9N18371**	**A9N18390**
	A9N18349	**A9N18365**	**A9N18387**	**A9N18353**	**A9N18372** **A9N18373(1)**	**A9N18391**
	A9N18350	**A9N18367**	**A9N18388**	**A9N18354**	**A9N18374** **A9N18375(1)**	**A9N18392**
	A9N18351	**A9N18369**	**A9N18389**	**A9N18355**	**A9N18376** **A9N18377(1)**	**A9N18393**
	9			12		
	Module CA907012 and CA907013			**Module CA907012 and CA907013**		

C120N circuit breakers (curves B, C, D) (cont.)

Connection

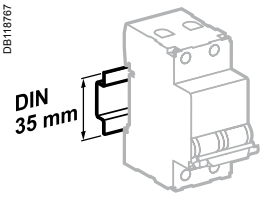
DB126143



Rating	Tightening torque	Without access. Copper cables: Rigid/ semi-rigid	Without access. Copper cables: Flexible or with ferrule	With accessories: 50 mm² Al Terminal	With accessories: Screw-on connection for ring terminal(1)	With accessories: Multi-cable terminal: Rigid cables	With accessories: Multi-cable terminal: Flexible cables
		DB122945	DB122946	DB122935	DB118789	DB118787	
63 to 125 A	3.5 N.m	1 to 50 mm²	1.5 to 35 mm²	16 to 50 mm²	Ø 5 mm	3 x 16 mm²	3 x 10 mm²

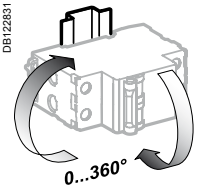
(1) For lugs up to 63 A, front or rear access.

DB118767



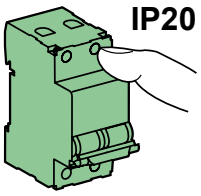
Clips onto 35 mm DIN rail.

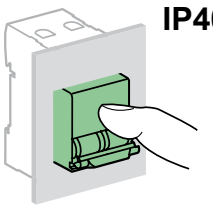
DB122831



Any installation position.

DB122932





Technical data

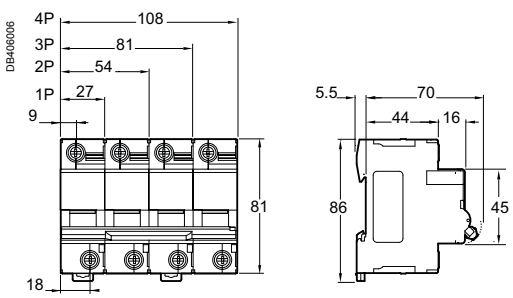
Main characteristics		
To IEC/EN 60947-2		
Insulation voltage (Ui)		500 V AC
Degree of pollution		3
Rated impulse withstand voltage (Uimp)		6 kV
Thermal tripping	Reference temperature	50°C
To IEC/EN 60898-1		
Magnetic tripping	Curve B	3 and 5 In
	Curve C	5 and 10 In
	Curve D	10 and 14 In
Limitation class		3
Additional characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in a modular enclosure	IP40
Endurance (O-C)	Electrical 63 A	10000 cycles (O-C)
	Electrical 80...125 A	5000 cycles (O-C)
	Mechanical	20000 cycles
Operating temperature		-30°C to +70°C
Storage temperature		-40°C to +80°C
Tropicalisation (IEC 60068-1)		Treatment 2 (relative humidity 95 % at 55°C)

Weight (g)

Circuit breaker	
Type	**C120N**
1P	205
2P	410
3P	615
4P	820

Dimensions (mm)

DB406006



C120H circuit breakers (curves B, C, D)

DB123430 DB123525

Country approval pictograms

PB107913-30

PB107916-30

PB107919-30

PB107922-30

IEC/EN 60898-1, IEC 60947-2

C120H circuit breakers are multistandard circuit breakers that combine the following functions:
- circuit protection against short-circuit currents
- circuit protection against overload currents
- suitability for isolation in the industrial sector to IEC/EN 60947-2
- fault tripping and indication by adding auxiliaries.

Alternating current (AC) 50/60 Hz

Breaking capacity (Icu) to IEC/EN 60947-2						Service breaking capacity (Ics)
Type		Voltage (V)				
1P		12 to 130 V	220 to 240 V	380 to 415 V	440 V	
Rating (In)	63 to 125 A	30 kA	15 kA	4,5 kA (1)	-	50 % of Icu
2P, 3P, 4P		12 to 130 V	220 to 240 V	380 to 415 V	440 V	
	63 to 125 A	-	30 kA	15 kA	10 kA	50 % of Icu

Breaking capacity (Icn) to IEC/EN 60898-1			
Type		Voltage (V)	
1P, 2P, 3P, 4P		230 to 400 V	
Rating (In)	63 to 125 A	15000 A	50 % of Icn

(1) One-pole breaking capacity in IT isolated neutral system (double fault).

Direct current (DC)

Breaking capacity (Icu) according to IEC/EN 60947-2						Service breaking capacity (Ics)
		Voltage (Ue)				
Between +/-		12 to 125 V	≤ 144 V	≤ 250 V	≤ 375 V	≤ 500 V
Number of poles		1P		2P	3P	4P
Rating (In)	63 to 125 A	20 kA	15 kA	15 kA	15 kA	15 kA	100 % of Icu

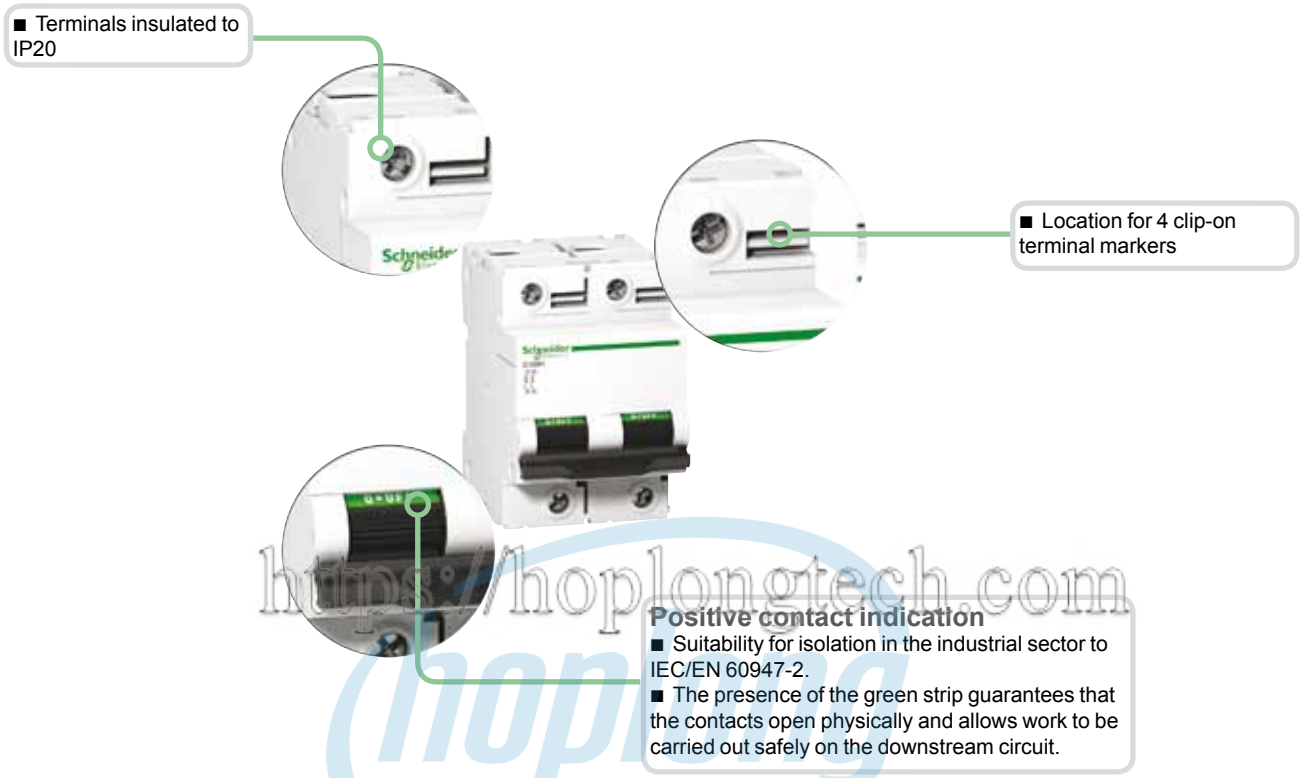
Catalogue numbers

C120H circuit breaker

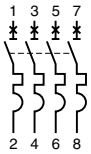
Type	1P			2P		
						
Auxiliaries	Remote indication and tripping, module CA907008 and CA907013			Remote indication and tripping, module CA907008 and CA907013		
Vigi C120	Vigi C120 add-on residual current device, module CA902016			Vigi C120 add-on residual current device, module CA902016		
Rating (In)	Curve			Curve		
	B	C	D	B	C	D
63 A	A9N18401	A9N18445	A9N18489	A9N18412	A9N18456	A9N18500
80 A	A9N18402	A9N18446	A9N18490	A9N18413	A9N18457	A9N18501
100 A	A9N18403	A9N18447	A9N18491	A9N18414	A9N18458	A9N18502
125 A	A9N18404	A9N18448	A9N18492	A9N18415	A9N18459	A9N18503
Width in 9 mm modules	3			6		
Accessories	Module CA907012 and CA907013			Module CA907012 and CA907013		

C120H circuit breakers (curves B, C, D) (cont.)

PB107916-40



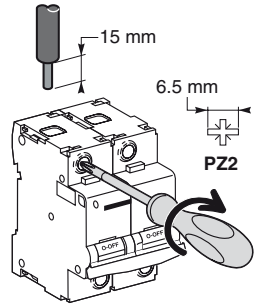
■ Longer product service life thanks to:
□ good overvoltage withstand capacity: products designed to provide a high industrial performance level (degree of pollution, rated impulse withstand voltage and insulation voltage).
□ high limitation performances (see limitation curves).
□ fast closure independent of toggle operating speed.
■ Remote indication of the open/closed/tripped state by auxiliary contacts (optional).
■ Power supply from above or below.

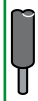
	3P			4P		
						
	Remote indication and tripping, module CA907008 and CA907013			**Remote indication and tripping, module CA907008 and CA907013**		
	Vigi C120 add-on residual current device, module CA902016			**Vigi C120 add-on residual current device, module CA902016**		
	Curve			**Curve**		
	B	**C**	**D**	**B**	**C**	**D**
	A9N18423	**A9N18467**	**A9N18511**	**A9N18434**	**A9N18478**	**A9N18522**
	A9N18424	**A9N18468**	**A9N18512**	**A9N18435**	**A9N18479**	**A9N18523**
	A9N18425	**A9N18469**	**A9N18513**	**A9N18436**	**A9N18480**	**A9N18524**
	A9N18426	**A9N18470**	**A9N18514**	**A9N18437**	**A9N18481**	**A9N18525**
	9			12		
	Module CA907012 and CA907013			**Module CA907012 and CA907013**		

C120H circuit breakers (curves B, C, D) (cont.)

Connection

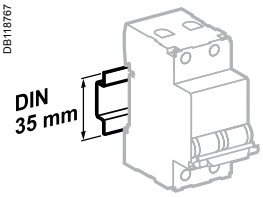
DB126143



Rating	Tightening torque	Without access. Copper cables Rigid	Without access. Copper cables Flexible or with ferrule	With accessories 50 mm² Al term.	With accessories Screw-on connection for ring terminal (1)	With accessories Multi-cable terminal Rigid cables	With accessories Multi-cable terminal Flexible cables
		DB122945 	DB122946 DB122935 	Al DB118789 	Ø DB118787 		
63 to 125 A	3.5 N.m	1 to 50 mm²	1.5 to 35 mm²	16 to 50 mm²	Ø 5 mm	3 x 16 mm²	3 x 10 mm²

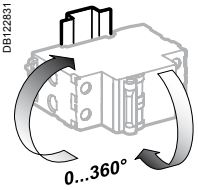
(1) For lugs up to 63 A, front or rear accessories.

DB118767



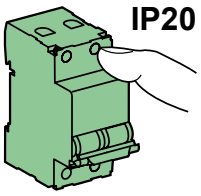
Clips onto 35 mm DIN rail.

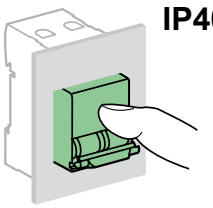
DB122831



Any installation position.

DB122932





Technical data

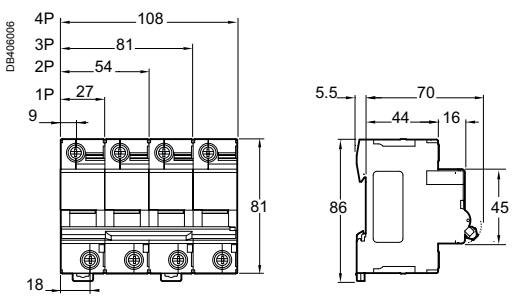
Main characteristics		
To IEC/EN 60947-2		
Insulation voltage (Ui)		500 V AC
Degree of pollution		3
Rated impulse withstand voltage (Uimp)		6 kV
Thermal tripping	Reference temperature	50°C
To IEC/EN 60898-1		
Magnetic tripping	Curve B	3 and 5 In
	Curve C	5 and 10 In
	Curve D	10 and 14 In
Limitation class		3
Additional characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in a modular enclosure	IP40 (IPXXD)
Endurance (O-C)	Electrical 63 A	10000 cycles (O-C)
	Electrical 80...125 A	5000 cycles (O-C)
	Mechanical	20000 cycles
Operating temperature		-30°C to +70°C
Storage temperature		-40°C to +80°C
Tropicalisation (IEC 60068-1)		Treatment 2 (relative humidity 95% at 55°C)

Weight (g)

Circuit breaker	
Type	**C120H**
1P	205
2P	410
3P	615
4P	820

Dimensions (mm)

DB406006



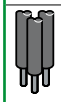
Accessories for C120, DPN, DPN Vigi, C60H-DC, SW60-DC, C60NA-DC , C60PV-DC, iSW devices (cont.)

Safety

Accessories	Screw shield		Terminal shield			Interpole barrier	Spacer
							
Function							
	Prevents all contact with the fixing screws ■ The degree of protection becomes IP40 ■ Sealable, max. diameter 1.2 mm ■ Dividable		**Prevents all contact with the terminals** ■ Degree of protection becomes IP40 ■ Sealable, max. diameter 1.2 mm			**Improves the insulation between the connections: cables, terminals, lugs, etc.**	■ Used to: □ complete the rows □ separate the devices ■ Width: 1 x 9 mm module ■ Allows that 2 cables are routed from one row to another (above and below), up to 6 mm²
Cat. numbers	**18527**	**26981**	**18526**	**26975** ■ 1P ■ 3P: 1 x 26975 + 1 x 26976 ■ 4P: 2 x 26976	**26976** ■ 2P	**27001**	**A9N27062**
Set of	**2 (4P dividable)**		**2 (for upstream/downstream terminal)**			**10**	**1**
Suitable for the following devices:							
C120, C120NA-DC	■	–	■	–	–	■	■
Vigi C120	–	–	–	–	–	–	■
DPN, DPN Vigi	–	–	–	–	–	–	■
C60H-DC	–	■	–	■	■	■	■
SW60-DC, C60NA-DC, C60PV-DC	–	■	–	–	–	■	■
iSW	–	■ iSW 40 to 125 A	–	■ iSW 40 to 125 A		■ iSW 40 to 125 A	■

Accessories for C120, DPN, DPN Vigi, C60H-DC, SW60-DC, C60NA-DC , C60PV-DC, iSW devices (cont.)

Connection

Accessories	Multi-cable terminal		50 mm² Al terminal	Screw-on connection for ring terminal	Connection kit for ring terminals	Terminal for rear connector
	DB118780 		DB118782 	DB123897 	058967N-23 	DB118784 
Function						
	For 3 copper cables: ■ Rigid up to 16 mm² ■ Flexible up to 10 mm²		**For 16 to 50 mm² aluminium cables**	**For lug tipped cables, front or rear mounting**	**For terminal up to 63 A, front or rear access (screw Ø 5 mm)** ■ It incorporates a "conductive" part and an "insulating" part which ensures the phase-to-phase clearance	**For cable up to 50 mm² or by terminal** ■ Supplied with a 1P terminal shield
	DB118787 		DB122935 	DB118789 		
Cat. numbers	**19091**	**19096**	**27060**	**27053**	**17400**	**18528**
Set of	**4**	**3**	**1**	**8**	**2**	**2**
C120, C120NA-DC	■	■	■	■	–	■
Vigi C120	■	■	■	–	–	–
DPN, DPN Vigi	–	–	–	■	–	–
C60H-DC, iSW 40 to 125 A	■	■	■	■	■	–
SW60-DC, C60NA-DC	■	■	■	■	–	–
C60PV-DC	–	–	–	■	–	–
Tightening torque	2 N.m		10 N.m	2 N.m	–	–
Stripping length	11 mm		13 mm	–	–	–
Tools to be used	Diameter 5 mm or PZ2		Hc 1/5" or 5 mm	Diameter 5 mm	Diameter 5 mm	–

Identification

Accessories	Clip-on terminal marker strip			
	03120HD_SE-23 			
Function	**For connection identification**			
Cat. numbers	0: **AB1-R0**	A: **AB1-GA**	K: **AB1-GK**	U: **AB1-GU**
	1: **AB1-R1**	B: **AB1-GB**	L: **AB1-GL**	V: **AB1-GV**
	2: **AB1-R2**	C: **AB1-GC**	M: **AB1-GM**	W: **AB1-GW**
	3: **AB1-R3**	D: **AB1-GD**	N: **AB1-GN**	X: **AB1-GX**
	4: **AB1-R4**	E: **AB1-GE**	O: **AB1-GO**	Y: **AB1-GY**
	5: **AB1-R5**	F: **AB1-GF**	P: **AB1-GP**	Z: **AB1-GZ**
	6: **AB1-R6**	G: **AB1-GG**	Q: **AB1-GQ**	+: **AB1-R12**
	7: **AB1-R7**	H: **AB1-GH**	R: **AB1-GR**	-: **AB1-R13**
	8: **AB1-R8**	I: **AB1-GI**	S: **AB1-GS**	Blank : **AB1-RV**
	9: **AB1-R9**	J: **AB1-GJ**	T: **AB1-GT**	
Set of	**250**			
C120, C120NA-DC	■ 4 markers max. per pole			
Vigi C120	■ 4 markers max. per device			
DPN, DPN Vigi	■ 4 markers max. per pole			
C60H-DC, SW60-DC, C60NA-DC, C60PV-DC	■ 4 markers max. per pole			

The equipment standards specify that the altitude of the place in which the products are to be installed should not exceed 2000 m.
The altitude does not affect the products' characteristics up to 2000 m.
Above that, it is necessary to allow for the reduction in dielectric strength and the cooling power of the air.
The table below shows the corrections to be made depending on the altitude.

Type		Altitude (m)			
Acti9 main products		**≤ 2000**	**3000**	**4000**	**5000**
Phase and Neutral circuit breakers: iC40					
Dielectric voltage withstand (V AC)		2500	2200	2000	-
Impulse withstand voltage Uimp (kV)		4	3	3	-
Rated insulation voltage Ui (V AC)	1P+N	400	320	320	-
	3P, 3P+N	440	400	320	-
Maximum rated operational voltage Ue (V AC)	1P+N	230	220	200	-
	3P, 3P+N	400	380	300	-
Rated current at reference ambient temperature		In	0.96 x In	0.93 x In	-
Breaking capacity (kA)		No change			
Add-on residual current devices for Phase and Neutral circuit breakers: Vigi iC40					
Maximum rated operational voltage Ue L/L (V AC)	2P	230	220	200	-
	3P, 4P	400	380	380	-
Sensibility IΔn (mA)		No change			
Circuit breakers up to 63 A: iC60					
Dielectric voltage withstand (V AC)		2500	2200	2000	1800
Impulse withstand voltage Uimp (kV)		6	5	5	4
Rated insulation voltage Ui L/L (V AC)		500	400	400	320
Maximum rated operational voltage Ue L/L (V AC)		440	400	400	300
Rated current at reference ambient temperature		In	0.96 x In	0.93 x In	0.9 x In
Breaking capacity (kA)		No change			
Add-on residual current devices for circuit breakers up to 63 A: Vigi iC60					
Maximum rated operational voltage Ue L/L (V AC)	2P	240	220	220	-
	3P, 4P	415	380	380	-
Sensibility IΔn (mA)		No change			
Direct current circuit breakers up to 63 A: C60H-DC, C60PV-DC, C60NA-DC					
Dielectric voltage withstand (V DC)		2500	2200	2000	1800
Impulse withstand voltage Uimp (kV)		6	5	5	4
Rated insulation voltage Ui (V DC)		500	400	400	320
Maximum rated operational voltage Ue (V DC)	1P	250	220	220	200
	2P	500	400	400	300
Rated current at reference ambient temperature		In	0.96 x In	0.93 x In	0.9 x In
Breaking capacity (kA)		No change			
Residual current circuit breakers: iID, iID40					
Dielectric voltage withstand (V AC)		2500	2200	2000	-
Impulse withstand voltage Uimp (kV)		6	5	5	-
Rated insulation voltage Ui (V AC)		500	400	400	-
Maximum rated operational voltage Ue (V AC)	2P	240	220	220	-
	4P	415	400	400	-
Rated current at reference ambient temperature		In	0.96 x In	0.93 x In	-
Breaking capacity (kA)		No change			
Residual current operated circuit-breakers: iC60 RCBO					
Dielectric voltage withstand (V AC)		2500	2200	2000	-
Impulse withstand voltage Uimp (kV)		6	5	5	-
Rated insulation voltage Ui L/L (V AC)		500	400	400	-
Maximum rated operational voltage Ue L/L (V AC)		415	380	380	-
Rated current at reference ambient temperature		In	0.96 x In	0.93 x In	-
Breaking capacity (kA)		No change			
Circuit breakers up to 125 A: C120					
Dielectric voltage withstand (V AC)		2500	2200	2000	1800
Impulse withstand voltage Uimp (kV)		6	5	5	4
Rated insulation voltage Ui L/L (V AC)		500	400	400	320
Maximum rated operational voltage Ue L/L (V AC)		415	380	380	300
Rated current at reference ambient temperature		In	0.96 x In	0.93 x In	0.9 x In
Breaking capacity (kA)		No change			
Add-on residual current devices for circuit breakers up to 125 A: Vigi C120					
Maximum rated operational voltage Ue L/L (V AC)	2P	240	220	220	-
	3P, 4P	415	380	380	-
Sensibility IΔn (mA)		No change			

Type		Altitude (m)			
Acti9 main products		**≤ 2000**	**3000**	**4000**	**5000**
High performance circuit breakers: NG125					
Dielectric voltage withstand (V AC)		2500	2200	2000	1800
Impulse withstand voltage Uimp (kV)		8	6	6	4
Rated insulation voltage Ui L/L (V AC)		690	500	500	400
Maximum rated operational voltage Ue L/L (V AC)		500	440	415	380
Rated current at reference ambient temperature		In	0.96 x In	0.93 x In	0.9 x In
Breaking capacity (kA)		No change			
Add-on residual current devices for high performances circuit breakers: Vigi NG125					
Maximum rated operational voltage Ue L/L (V AC)	2P	240	220	220	-
	3P, 4P	415	380	380	-
Sensibility IΔn (mA)		No change			
Fuses: STI					
Rated insulation voltage Ui L/L (V AC)		500	400	400	-
Maximum rated operational voltage Ue (V AC)	8.5 x 31,5 mm	400	380	380	-
	10.3 x 38 mm	500	400	400	-
High voltage fuses: SBI					
Rated insulation voltage Ui L/L (V AC)		690	500	500	-
Maximum rated operational voltage Ue (V AC)	14 x 51 (≤ 25 A), 22 x 58 (≤ 80 A)	690	500	500	-
	14 x 51 (32-40 A)	500	400	400	-
	14 x 51 (50 A), 22 x 58 (100-125 A)	400	380	380	-
Switch-disconnectors: iSW					
Dielectric voltage withstand (V AC)		2500	2200	2000	-
Impulse withstand voltage Uimp (kV)		6	5	5	-
Rated insulation voltage Ui (V AC)		500	400	400	-
Maximum rated operational voltage Ue (V AC)	1P	240	220	220	-
	2P, 3P, 4P	415	400	400	-
Rated current at reference ambient temperature		In	0.96 x In	0.93 x In	-
Conditional rated short-circuit current (Inc - kA)		No change			
Switch-disconnectors: iSW-NA					
Dielectric voltage withstand (V AC)		2500	2200	2000	-
Impulse withstand voltage Uimp (kV)		6	5	5	-
Rated insulation voltage Ui (V AC)		500	400	400	-
Maximum rated operational voltage Ue (V AC)	1P+N	240	220	220	-
	3P+N	415	400	400	-
Rated current at reference ambient temperature		In	0.96 x In	0.93 x In	-
Conditional rated short-circuit current (Inc - kA)		No change			
Impulse Relay: iTL 16 A					
Rated current (A)		16	14.4	13.6	12
Electrical Endurance (AC22 - cycles)		40,000	36,000	34,000	30,000
Impulse withstand voltage Uimp (kV)		No change			
Rated insulation voltage Ui L/L (V AC)		No change			
Maximum rated operational voltage Ue L/L (V AC)		No change			
Impulse Relay: iTL 32 A					
Rated current (A)		32	28.8	27.2	24
Electrical Endurance (AC22 - cycles)		20,000	18,000	17,000	15,000
Impulse withstand voltage Uimp (kV)		No change			
Rated insulation voltage Ui L/L (V AC)		No change			
Maximum rated operational voltage Ue L/L (V AC)		No change			
Contactors: iCT					
Rated current (A)		16	14.4	13.6	12
		25	22.5	21.2	18.7
		40	36	34	30
		63	56.7	53.5	47.2
		100	90	85	75
Electrical endurance (cycles)		30,000	27,000	25,500	22,500
Impulse withstand voltage Uimp (kV)		No change			
Rated insulation voltage Ui L/L (V AC)		No change			
Maximum rated operational voltage Ue L/L (V AC)		No change			

Type		Altitude (m)			
Multi9 main products		**≤ 2000**	**3000**	**4000**	**5000**
Circuit breakers up to 63 A: C60					
Dielectric voltage withstand (V AC)		2500	2200	2000	1800
Impulse withstand voltage Uimp (kV)		6	5	5	4
Rated insulation voltage Ui L/L (V AC)		500	400	400	320
Maximum rated operational voltage Ue L/L (V AC)		440	400	400	300
Rated current at reference ambient temperature		In	0.96 x In	0.93 x In	0.9 x In
Breaking capacity (kA)		No change			
Circuit breakers up to 63 A: C60 UL					
Dielectric voltage withstand (V AC)		2500	2200	2000	1800
Impulse withstand voltage Uimp (kV)		6	5	5	4
Rated insulation voltage Ui L/L (V AC)		500	400	400	320
Maximum rated operational voltage Ue L/L (V AC)		480	400	400	300
Rated current at reference ambient temperature		In	0.96 x In	0.93 x In	0.9 x In
Breaking capacity (kA)		No change			
Add-on residual current devices for circuit breakers up to 63 A: Vigi C60					
Maximum rated operational voltage Ue L/L (V AC)	2P	240	220	220	-
	3P, 4P	415	380	380	-
Sensibility IΔn (mA)		No change			
Residual current circuit breakers: ID-GFP					
Dielectric voltage withstand (V AC)		2500	2200	2000	-
Impulse withstand voltage Uimp (kV)		6	5	5	-
Rated insulation voltage Ui (V AC)		500	400	400	-
Maximum rated operational voltage Ue (V AC)	2P	240	220	220	-
	4P	415	400	400	-
Rated current at reference ambient temperature		In	0.96 x In	0.93 x In	-
Breaking capacity (kA)		No change			

Type	Altitude (m)			
Enclosures, plugs and sockets	**≤ 2000**	**3000**	**4000**	**5000**
Plastic enclosures: Kaedra, Pragma				
Rated current at reference ambient temperature	In	0.96 x In	0.93 x In	0.9 x In
Industrial plugs and sockets: PratiKa				
Rated current at reference ambient temperature	In	0.96 x In	0.93 x In	0.9 x In

Note:
No derating for: auxiliaries and accessories (linked to main product), SPD (linked with rated voltage).
No voltage derating for enclosures, plugs and sockets.

IEC 60068-2-78, IEC 60068-2-30 standards
Acti**9**

IEC 60068-2-78

Description
Environmental testing.
Part 2-78:
Tests - Test Cab: damp heat, steady state.

Scope
This part of IEC 60068 establishes a test method for determining the ability of electrical products, components or equipment to withstand transportation, storage and use under conditions of high humidity. The object of this standard is to investigate the effect of high humidity at constant temperature without condensation on a specimen over a prescribed period.

Severity
The test severity is defined by a combination of the temperature, relative humidity and total duration of testing.

Unless otherwise specified in the particular specifications, the temperature and relative humidity severities can be chosen from the following values:

Severity 1 (S1)	30°C ± 2	85% ± 3 relative humidity
Severity 2 (S2)	30°C ± 2	93% ± 3 relative humidity
Severity 3 (S3)	40°C ± 2	85% ± 3 relative humidity
Severity 4 (S4)	40°C ± 2	93% ± 3 relative humidity

Test duration
4 days.

IEC 60068-2-30

Description
Environmental testing.
Part 2-30:
Db tests and guide: Cyclic damp heat test (12 h + 12 h cycle).

Scope
This part of IEC 60068 determines the suitability of components, equipment or other articles for use, transportation and storage under conditions of high humidity – combined with cyclic temperature changes and, in general, producing condensation on the surface of the specimen. If the test is being used to verify the performance of a specimen whilst it is being transported or stored in packaging then the packaging will normally be fitted when the test conditions are being applied.

Severity
The chosen test severity is: 55°C 2 cycles 95% relative humidity.

IEC 60068-2-78, IEC 60068-2-30 standards

Acti**9** (continued)

Type	Humidity	
Products (main products)	**IEC 60068-2-78**	**IEC 60068-2-30**
	Operating conditions	Transport conditions
Acti9		
Circuit breakers		
iC60, iC40, C120, NG125, C60H-DC, C60PV-DC, C60NA-DC, iC60L MA, NG125L MA	S4	■
iK60N, K60	S3	■
Fuses		
STI, SBI, DO	S4	■
Residual current circuit breakers		
iID, iID K, ITG40, ID C40, iID40, RCCB-ID 125 A, REDs, REDtest	S4	■
Add-on residual current devices for circuit breakers		
Vigi iC60, Vigi C120, Vigi NG125, Vigi TG40, Vigi TG60, Vigi C40, Vigi iC40, Vigi iCG40	S4	■
Auxiliaries of monitoring and control of protections		
iMN, iMN, iMNx, iMSU, iMX, iMX+OF, iOF, iSD, iOF/SD+OF, iOF+SD24	S4	■
Surge arresters		
iPRF1 12,5, PRD1 35r, PRD1 25r, PRD1 Master, iPF, iPF K, iPRD, iQuick PRD, iQuick PF, iPRD-DC, iPRD PV-DC	S4	■
Switch		
iSW, SW Biconnect, iSW-NA, NG125NA, SW60-DC, C120NA-DC	S4	■
Contactor, impulse relay		
iCT, iTL	S1	■
Connnection		
Horizontal comb busbar 9, 18, 27 mm, vertical comb busbar	S4	■

IEC 60068-2-78, IEC 60068-2-30 standards

Multi**9**

Type	Humidity	
Products (main products)	**IEC 60068-2-78**	**IEC 60068-2-30**
	Operating conditions	Transport conditions
Multi9		
Circuit breakers		
C60, C60UL	S4	■
Residual current circuit breakers		
ID-GFP	S4	■
Add-on residual current devices for circuit breakers		
Vigi C60	S4	■
Auxiliaries of monitoring and control of protections		
MN, MNS, MNx, MSU, MX, MX+OF, OF, SD, OF/SD+OF	S4	■
Contactor, impulse relay		
CT, TL	S1	■

IEC 60068-2-78, IEC 60068-2-30 standards

Enclosures, plugs and sockets

Type	Humidity	
Products (main products)	**IEC 60068-2-78**	**IEC 60068-2-30**
	Operating conditions	Transport conditions
Enclosures, plugs and sockets		
Plastic enclosures		
Kaedra, Pragma	S4	■
Industrial plugs and sockets		
PratiKa	S4	■

IEC 60068-2-52 standard
Acti9

Description

Environmental testing.
Part 2:
Tests - Test Kb: Cyclic salt spray test (sodium chloride solution).

Severity

Severity 2 (S2): 3 x 2 h salt mist / 20-22 h humidity storage.

Type	Salt mist
Level of stress applied	
	Severity 2 (S2)
Additional verifications post-stress	
Without recovery (at the end of the test)	Conductivity, temperature-rise. Absence of corrosion.

Type	Salt mist
Products (main products)	**IEC 60068-2-52**
	Operating conditions
Acti9	
Circuit breakers	
iC60, iK60N, iC40, C120, NG125, C60H-DC, C60PV-DC, C60NA-DC, iC60L MA, NG125L MA	S2
Fuses	
STI, SBI, DO	S2
Residual current circuit breakers	
iID, iID K, ITG40, ID C40, iID40, RCCB-ID 125 A, REDs, REDtest	S2
Add-on residual current devices for circuit breakers	
Vigi iC60, Vigi C120, Vigi NG125, Vigi TG40, Vigi TG60, Vigi C40, Vigi iC40, Vigi iCG40	S2
Auxiliaries of monitoring and control of protections	
iMN, iMN⚿, iMNx, iMSU, iMX, iMX+OF, iOF, iSD, iOF/SD+OF, iOF+SD24	S2
Surge arresters	
iPRF1 12,5, PRD1 35r, PRD1 25r, PRD1 Master, iPF, iPF K, iPRD, iQuick PRD, iQuick PF, iPRD-DC, iPRD PV-DC	S2
Switch	
iSW, SW Biconnect, iSW-NA, NG125NA, SW60-DC, C120NA-DC	S2
Contactor, impulse relay	
iCT, iTL	S2
Connnection	
Horizontal comb busbar 9, 18, 27 mm, vertical comb busbar	S2

IEC 60068-2-52 standard

Multi**9**

Type	Salt mist
Products (main products)	**IEC 60068-2-52**
	Operating conditions
Multi9	
Circuit breakers	
C60	S2
Residual current circuit breakers	
ID-GFP	S2
Add-on residual current devices for circuit breakers	
Vigi C60	S2
Auxiliaries of monitoring and control of protections	
MN, MNS, MNx, MSU, MX, MX+OF, OF, SD, OF/SD+OF	S2
Contactor, impulse relay	
CT, TL	S2

IEC 60068-2-52 standard
Enclosures, plugs and sockets

Type	Salt mist
Products (main products)	**IEC 60068-2-52**
	Operating conditions
Enclosures, plugs and sockets	
Plastic enclosures	
Kaedra, Pragma	S2
Industrial plugs and sockets	
PratiKa	S2

Vibrations
IEC 60068-2-6 standard
Acti**9**

Transportation conditions:
No breakage or damage to the product post-test.

Conditions of use:
No tripping during testing and no damage to the product afterwards.

Description
Environmental testing.
Part 2-6:
Tests - Test Fc: (sinusoidal) vibrations.

Scope
This part of IEC 60068 gives a method of test which provides a standard procedure to determine the ability of components, equipment and other articles, hereinafter referred to as specimens, to withstand specified severities of sinusoidal vibration. If an item is to be tested in an unpackaged form, that is without its packaging, it is referred to as a test specimen. However, if the item is packaged then the item itself is referred to as a product and the item and its packaging together are referred to as a test specimen.

Classification
Category 7g, 5 to 150 Hz
- Amplitude: ± 0.7 mm
- Acceleration: 7g
- 10 frequency sweep cycles per axis
- 1 octave per min., on the 3 perpendicular axes.

Category 5g, 5 to 150 Hz
- Amplitude: ± 0.35 mm
- Acceleration: 5g
- 10 frequency sweep cycles per axis
- 1 octave per min., on the 3 perpendicular axes.

Category 2g, 5 to 150 Hz
- Amplitude: ± 7.5 mm
- Acceleration: 2g
- 10 frequency sweep cycles per axis
- 1 octave per min., on the 3 perpendicular axes.

Category 1g, 5 to 150 Hz
- Amplitude: ± 3.5 mm
- Acceleration: 1g
- 10 frequency sweep cycles per axis
- 1 octave per min., on the 3 perpendicular axes.

IEC 60068-2-6 standard

Acti**9** (continued)

Type	Vibrations	
Products (main products)	**IEC 60068-2-6**	
	Operating conditions	Transport conditions
Acti9		
Circuit breakers		
iC60, iK60N, iC40, C120, C60H-DC, C60PV-DC, C60NA-DC, iC60L MA	2g ± 7.5 mm	7g ± 0.7 mm
iK60N, K60	2g ± 7.5 mm	7g ± 0.7 mm
NG125, NG125L MA	2g ± 7.5 mm	5g ± 0.35 mm
Fuses		
STI, SBI, DO	2g ± 7.5 mm	7g ± 0.7 mm
Residual current circuit breakers		
iID, iID K, ITG40, ID C40, iID40, RCCB-ID 125A, REDs, REDtest	2g ± 7.5 mm	7g ± 0.7 mm
Add-on residual current devices for circuit breakers		
Vigi iC60, Vigi C120, Vigi NG125, Vigi TG40, Vigi TG60, Vigi C40, Vigi iC40, Vigi iCG40	2g ± 7.5 mm	7g ± 0.7 mm
Auxiliaries of monitoring and control of protections		
iMN, iMNS, iMNx, iMSU, iMX, iMX+OF, iOF, iSD, iOF/SD+OF, iOF+SD24	1g ± 3.5 mm	2g ± 7.5 mm
Surge arresters		
iPRF1 12,5, PRD1 35r, PRD1 25r, PRD1 Master, iPF, iPF K, iPRD, iQuick PRD, iQuick PF, iPRD-DC, iPRD PV-DC	1g ± 3.5 mm	2g ± 7.5 mm
Switch		
iSW, SW Biconnect, iSW-NA, NG125NA, SW60-DC, C120NA-DC	2g ± 7.5 mm	7g ± 0.7 mm
Contactor, impulse relay		
iCT, iTL	1g ± 3.5 mm	2g ± 7.5 mm
Connnection		
Horizontal comb busbar 9, 18, 27 mm, vertical comb busbar	2g ± 7.5 mm	5g ± 0.35 mm

IEC 60068-2-6 standard

Multi**9**

Type	Vibrations	
Products (main products)	**IEC 60068-2-6**	
	Operating conditions	Transport conditions
Multi9		
Circuit breakers		
C60, C60UL	2g ± 7.5 mm	7g ± 0.7 mm
Residual current circuit breakers		
ID-GFP	2g ± 7.5 mm	7g ± 0.7 mm
Add-on residual current devices for circuit breakers		
Vigi C60	2g ± 7.5 mm	7g ± 0.7 mm
Auxiliaries of monitoring and control of protections		
MN, MNS, MNx, MSU, MX, MX+OF, OF, SD, OF/SD+OF	1g ± 3.5 mm	2g ± 7.5 mm
Contactor, impulse relay		
CT, TL	1g ± 3.5 mm	2g ± 7.5 mm

Note:
No vibration conditions for enclosures, plugs and sockets.

IEC 60068-2-27 standard
Acti9

Transportation conditions:
No breakage or damage to the product post-test.

Conditions of use:
No tripping during testing and no damage to the product afterwards.

Description

Basic Environmental Testing Procedures.
Part 2:
Tests - Test Ea and guide: shocks.

Scope

The purpose of this test is to reveal mechanical weakness and/or degradation in specified performances, or accumulated damage or degradation caused by shocks. In conjunction with the relevant specification, this may be used in some cases to determine the structural integrity of specimens or as a means of quality.

This test is primarily intended for unpackaged specimens and for items in their transport case when the latter may be considered to be part of the specimen. If an item is to be tested unpackaged, it is referred to as a test specimen. However, if the item is packaged, then the item itself is referred to as a product and the item and its packaging together are referred to as a test specimen.

Testing

Test Ea

- ■ Acceleration, severity:
  - □ 10g 16 ms
  - □ 15g 11 ms
  - □ 30g 6 ms
- ■ 3 separate successive shocks for each direction on the 3 perpendicular axes.

Type	Shock	
Products (main products)	**IEC 60068-2-27**	
	Operating conditions	Transport conditions
Acti9		
Circuit breakers		
iC60, iK60N, iC40, C120, NG125, C60H-DC, C60PV-DC, C60NA-DC, iC60L MA, NG125L MA	15g 11 ms	30g 6 ms
iK60N, K60	15g 11 ms	30g 6 ms
Fuses		
STI, SBI, DO	15g 11 ms	30g 6 ms
Residual current circuit breakers		
iID, iID K, ITG40, ID C40, iID40, RCCB-ID 125 A, REDs, REDtest	15g 11 ms	30g 6 ms
Add-on residual current devices for circuit breakers		
Vigi iC60, Vigi C120, Vigi NG125, Vigi TG40, Vigi TG60, Vigi C40, Vigi iC40, Vigi iCG40	15g 11 ms	30g 6 ms
Auxiliaries of monitoring and control of protections		
iMN, iMNS, iMNx, iMSU, iMX, iMX+OF, iOF, iSD, iOF/SD+OF, iOF+SD24	10g 16 ms	15g 11 ms
Surge arresters		
iPRF1 12,5, PRD1 35r, PRD1 25r, PRD1 Master, iPF, iPF K, iPRD, iQuick PRD, iQuick PF, iPRD-DC, iPRD PV-DC	10g 16 ms	15g 11 ms
Switch		
iSW, SW Biconnect, iSW-NA, NG125NA, SW60-DC, C120NA-DC	10g 16 ms	15g 11 ms
Contactor, impulse relay		
iCT, iTL	10g 16 ms	15g 11 ms
Connnection		
Horizontal comb busbar 9, 18, 27 mm, vertical comb busbar	15g 11 ms	30g 6 ms

IEC 60068-2-27 standard

Multi9

Type	Shock	
Products (main products)	**IEC 60068-2-27**	
	Operating conditions	Transport conditions
Multi9		
Circuit breakers		
C60, C60UL	15g 11 ms	30g 6 ms
Residual current circuit breakers		
ID-GFP	15g 11 ms	30g 6 ms
Add-on residual current devices for circuit breakers		
Vigi C60	15g 11 ms	30g 6 ms
Auxiliaries of monitoring and control of protections		
MN, MNS, MNx, MSU, MX, MX+OF, OF, SD, OF/SD+OF	10g 16 ms	15g 11 ms
Contactor, impulse relay		
iCT, iTL	10g 16 ms	15g 11 ms

Note:
No shock conditions for enclosures, plugs and sockets.

Bump (successive shocks)
IEC 60068-2-27 standard
Acti9

Description

Basic Environmental Testing Procedures.
Part 2:
Tests - Test Ea and guide: bumps.

Transportation conditions:
No breakage or damage to the product post-test.

Conditions of use:
No tripping during testing and no damage to the product afterwards.

Testing

Test Ea

- ■ Acceleration, severity:
- □ 5g 30 ms
- □ 15g 6 ms
- □ 25g 6 ms
- ■ 100 separate successive shocks for each direction on the 3 perpendicular axes.

Type	Bump (successive shocks)	
Products (main products)	**IEC 60068-2-27**	
	Operating conditions	Transport conditions
Acti9		
Circuit breakers		
iC60, iK60N, iC40, C120, NG125, C60H-DC, C60PV-DC, C60NA-DC, iC60L MA, NG125L MA	15g 6 ms	25g 6 ms
iK60N, K60	15g 6 ms	25g 6 ms
Fuses		
STI, SBI, DO	15g 6 ms	25g 6 ms
Residual current circuit breakers		
iID, iID K, ITG40, ID C40, iID40, RCCB-ID 125 A, REDs, REDtest	15g 6 ms	25g 6 ms
Add-on residual current devices for circuit breakers		
Vigi iC60, Vigi C120, Vigi NG125, Vigi TG40, Vigi TG60, Vigi C40, Vigi iC40, Vigi iCG40	15g 6 ms	25g 6 ms
Auxiliaries of monitoring and control of protections		
iMN, iMN🅂, iMNx, iMSU, iMX, iMX+OF, iOF, iSD, iOF/SD+OF, iOF+SD24	5g 30 ms	15g 6 ms
Surge arresters		
iPRF1 12,5, PRD1 35r, PRD1 25r, PRD1 Master, iPF, iPF K, iPRD, iQuick PRD, iQuick PF, iPRD-DC, iPRD PV-DC	5g 30 ms	15g 6 ms
Switch		
iSW, SW Biconnect, iSW-NA, NG125NA, SW60-DC, C120NA-DC	5g 30 ms	15g 6 ms
Contactor, impulse relay		
iCT, iTL	5g 30 ms	15g 6 ms
Connnection		
Horizontal comb busbar 9, 18, 27 mm, vertical comb busbar	15g 6 ms	25g 6 ms

IEC 60068-2-27 standard

Multi**9**

Type	Bump (chocs répétés)	
Products (main products)	**IEC 60068-2-27**	
	Operating conditions	Transport conditions
Multi9		
Circuit breakers		
C60, C60UL	15g 6 ms	25g 6 ms
Residual current circuit breakers		
ID-GFP	15g 6 ms	25g 6 ms
Add-on residual current devices for circuit breakers		
Vigi C60	15g 6 ms	25g 6 ms
Auxiliaries of monitoring and control of protections		
MN, MNS, MNx, MSU, MX, MX+OF, OF, SD, OF/SD+OF	5g 30 ms	15g 6 ms
Contactor, impulse relay		
iCT, iTL	5g 30 ms	15g 6 ms

Note:
No bump conditions for enclosures, plugs and sockets.

IEC 62262 and IEC 60068-2-75 standards

Acti9

Description

Degrees of protection provided by the enclosures of electrical equipment against external mechanical impacts (IK code).

Testing

Test Eha: pendulum hammer (as per IEC 60068-2-75)

- Protection against mechanical impacts is verified by applying blows to the enclosure to be tested.
- There should be five impacts on each exposed surface.
- In no case should more than three impacts be applied in the vicinity of a given point on the enclosure.No breakage or damage to the product post-test.

Correspondence between the IK code and the impact energy

	IK code									
	IK01	**IK02**	**IK03**	**IK04**	**IK05**	**IK06**	**IK07**	**IK08**	**IK09**	**IK10**
Impact energy (J)	0.14	0.2	0.35	0.5	0.7	1	2	5	10	20

The test is performed on the total surface of the products. No transportation test, because the products are packed.

Type	IK impact
Products (main products)	**IEC 62262 and IEC 60068-2-75**
	Operating conditions
Acti9	
Circuit breakers	
iC60, iK60N, iC40, C120, NG125, C60H-DC, C60PV-DC, C60NA-DC, iC60L MA, NG125L MA	IK05
iK60N, K60	IK05
Fuses	
STI, SBI, DO	IK05
Residual current circuit breakers	
iID, iID K, ITG40, ID C40, iID40, RCCB-ID 125 A, REDs, REDtest	IK05
Add-on residual current devices for circuit breakers	
Vigi iC60, Vigi C120, Vigi NG125, Vigi TG40, Vigi TG60, Vigi C40, Vigi iC40, Vigi iCG40	IK05
Auxiliaries of monitoring and control of protections	
iMN, iMN🅂, iMNx, iMSU, iMX, iMX+OF, iOF, iSD, iOF/SD+OF, iOF+SD24	IK03
Surge arresters	
iPRF1 12,5, PRD1 35r, PRD1 25r, PRD1 Master, iPF, iPF K, iPRD, iQuick PRD, iQuick PF, iPRD-DC, iPRD PV-DC	IK03
Switch	
iSW, SW Biconnect, iSW-NA, NG125NA, SW60-DC, C120NA-DC	IK05
Contactor, impulse relay	
iCT, iTL	IK01
Connnection	
Horizontal comb busbar 9, 18, 27 mm, vertical comb busbar	IK05

IEC 62262 and IEC 60068-2-75 standards

Multi**9**

Type	IK impact
Products (main products)	**IEC 62262 and IEC 60068-2-75**
	Operating conditions
Multi9	
Circuit breakers	
C60, C60UL	IK05
Residual current circuit breakers	
ID-GFP	IK05
Add-on residual current devices for circuit breakers	
Vigi C60	IK05
Auxiliaries of monitoring and control of protections	
MN, MN[S], MNx, MSU, MX, MX+OF, OF, SD, OF/SD+OF	IK03
Contactor, impulse relay	
CT, TL	IK01

IEC 62262 and IEC 60068-2-75 standards

Enclosures, plugs and sockets

Type	IK impact
Products (main products)	**IEC 62262 and IEC 60068-2-75**
	Operating conditions
Enclosures, plugs and sockets	
Plastic enclosures	
Kaedra	IK09
Pragma	IK08
Industrial plugs and sockets	
PratiKa	IK08

ISO 2248 standard

Acti9

Description

Environmental testing.
Vertical impact test by free fall of complete filled packages.

Scope

This vertical impact test method by free fall of complete filled packages is designed to measure the strength of the packaging in a distribution system which involves a risk of vertical impact.

Testing

Test at 0.8 m or 1.2 m, one fall per surface, for the 6 surfaces on a concrete surface after storage in humidity 48 h at 30°C and 85% RH.

No breakage or damage to the product post-test.

Type	Vertical free fall
Products (main products)	**ISO 2248**
	Transport conditions
Acti9	
Circuit breakers	
iC60, iK60N, iC40, C120, NG125, C60H-DC, C60PV-DC, C60NA-DC, iC60L MA, NG125L MA	0.8 m
iK60N, K60	0.8 m
Fuses	
STI, SBI, DO	0.8 m
Residual current circuit breakers	
iID, iID K, ITG40, ID C40, iID40, RCCB-ID 125 A, REDs, REDtest	0.8 m
Add-on residual current devices for circuit breakers	
Vigi iC60, Vigi C120, Vigi NG125, Vigi TG40, Vigi TG60, Vigi C40, Vigi iC40, Vigi iCG40	0.8 m
Auxiliaries of monitoring and control of protections	
iMN, iMN, iMNx, iMSU, iMX, iMX+OF, iOF, iSD, iOF/SD+OF, iOF+SD24	0.8 m
Surge arresters	
iPRF1 12,5, PRD1 35r, PRD1 25r, PRD1 Master, iPF, iPF K, iPRD, iQuick PRD, iQuick PF, iPRD-DC, iPRD PV-DC	0.8 m
Switch	
iSW, SW Biconnect, iSW-NA, NG125NA, SW60-DC, C120NA-DC	0.8 m
Contactor, impulse relay	
iCT, iTL	0.8 m
Connnection	
Horizontal comb busbar 9, 18, 27 mm, vertical comb busbar	1.2 m

ISO 2248 standard
Multi**9**

Type	Vertical free fall
Products (main products)	**ISO 2248**
	Transport conditions
Multi9	
Circuit breakers	
C60, C60UL	0.8 m
Residual current circuit breakers	
ID-GFP	0.8 m
Add-on residual current devices for circuit breakers	
Vigi C60	0.8 m
Auxiliaries of monitoring and control of protections	
MN, MNS, MNx, MSU, MX, MX+OF, OF, SD, OF/SD+OF	0.8 m
Contactor, impulse relay	
CT, TL	0.8 m

ISO 2248 standard

Enclosures, plugs and sockets

Type	Vertical free fall
Products (main products)	**ISO 2248**
	Transport conditions
Enclosures, plugs and sockets	
Plastic enclosures	
Kaedra	1.2 m
Pragma	1.2 m
Industrial plugs and sockets	
PratiKa	1.2 m

Selectivity table

Upstream: NG125N/H/L, C120N/H curve B

Downstream: iDPN/ iDPN N curves B, C, D, iDPN N Vigi / iDPN H Vigi curves B, C

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve B										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**1P+N 3P, 3P+N**											
Selectivity limit (A)												
iDPN **iDPN N** **iDPN N Vigi** **iDPN H Vigi** Curve B	**1**	300	500	700	1000	1500	2000	2500	T	T	T	T
	2	150	300	500	700	1000	1500	2000	T	T	T	T
	3	40	64	300	500	700	1000	1500	T	T	T	T
	4	40	64	80	400	500	700	800	3000	T	T	T
	6	40	64	80	400	500	700	800	3000	T	T	T
	10		64	80	100	130	500	600	1800	3000	T	T
	16				100	130	160	200	1000	2000	3300	3750
	20					52	160	200	1000	1600	2500	3700
	25						59	200	800	1300	2100	3700
	32							200	600	1000	1800	2700
	40								112	320	1600	2400
Selectivity limit (A)												
iDPN **iDPN N** **iDPN N Vigi** **iDPN H Vigi** Curve C	**1**	300	500	700	1000	1500	2000	2500	T	T	T	T
	2	150	300	500	700	1000	1500	2000	T	T	T	T
	3	40	64	300	500	700	1000	1500	T	T	T	T
	4	40	64	80	400	500	700	800	3000	T	T	T
	6		51	80	100	500	700	800	3000	T	T	T
	10				80	130	500	600	1800	3000	4000	T
	16					98	128	200	1000	2000	3300	3700
	20						128	160	1000	1600	2500	3700
	25							160	201	1300	2100	3700
	32								201	256	1800	2700
	40									255	320	2400
Selectivity limit (A)												
iDPN **iDPN N** Curve D	**1**	300	500	700	1000	1500	2000	2500	T	T	T	T
	2	150	300	500	700	1000	1500	2000	T	T	T	T
	3		64	300	500	700	1000	1500	T	T	T	T
	4			80	400	500	700	800	3000	T	T	T
	6					500	700	800	3000	T	T	T
	10							600	1800	3000	4000	T
	16								201	2000	3300	3700
	20								201	256	2500	3700
	25								201	256	320	3700
	32									256	320	400
	40										320	400

4000 Selectivity limit = 4 kA.

T Total selectivity, up to the breaking capacity of the downstream circuit breaker.

No selectivity.

Note: if you cannot find your combination, refer to the selection table on page A-14

Selectivity table

Upstream: NG125N/H/L, C120N/H curve C

Downstream: iDPN curves B, C, D, iDPN N Vigi / iDPN H Vigi curves B, C

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve C										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**1P+N 3P, 3P+N**											
Selectivity limit (A)												
iDPN **iDPN N** **iDPN N Vigi** **iDPN H Vigi** Curve B	**1**	300	500	700	1000	T	T	T	T	T	T	T
	2	150	300	500	700	1000	1500	T	T	T	T	T
	3	120	200	300	500	700	1000	1500	T	T	T	T
	4	80	130	170	400	500	700	800	3000	T	T	T
	6	80	130	170	400	500	700	800	3000	T	T	T
	10		130	160	200	350	500	600	1800	3000	T	T
	16				200	270	340	450	1250	2000	3300	3700
	20					52	320	400	1000	1600	2500	3700
	25						59	400	800	1300	2100	3700
	32							95	600	1000	1800	2700
	40								112	700	1600	2400
Selectivity limit (A)												
iDPN **iDPN N** **iDPN N Vigi** **iDPN H Vigi** Curve C	**1**	300	500	700	1000	T	T	T	T	T	T	T
	2	150	300	500	700	1000	1500	T	T	T	T	T
	3	120	200	300	500	700	1000	1500	T	T	T	T
	4	21	200	170	400	500	700	800	3000	4500	4500	T
	6	18	200	170	400	500	700	800	3000	4500	4500	T
	10		25	160	200	350	500	600	1800	3000	4500	4500
	16				200	270	340	450	1250	2000	3300	3700
	20					52	320	400	1000	1600	2500	3700
	25						59	400	800	1300	2100	3700
	32							95	800	1000	1800	2700
	40								112	257	1600	2400
Selectivity limit (A)												
iDPN **iDPN N** Curve D	**1**	300	500	700	1000	T	T	T	T	T	T	T
	2	150	300	500	700	1000	1500	T	T	T	T	T
	3	120	200	300	500	700	1000	1500	T	T	T	T
	4	21	200	170	400	500	700	800	3000	4500	4500	T
	6				400	500	700	800	3000	4500	4500	T
	10				200	450	500	600	1800	3000	4500	4500
	16							450	1000	2000	3300	3700
	20								1000	1600	2500	3700
	25								800	1300	2100	3700
	32										1800	2700
	40											2400

4000 Selectivity limit = 4 kA.

T Total selectivity, up to the breaking capacity of the downstream circuit breaker.

No selectivity.

Note: if you cannot find your combination, refer to the selection table on page A-14

Selectivity table

Upstream: NG125N/H/L, C120N/H curve D

Downstream: iDPN/ iDPN N curves B, C, D, iDPN N Vigi / iDPN H Vigi curves B, C

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve D										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**1P+N 3P, 3P+N**											
Selectivity limit (A)												
iDPN **iDPN N** **iDPN N Vigi** **iDPN H Vigi** Curve B	**1**	350	T	T	T	T	T	T	T	T	T	T
	2	240	770	830	2000	2200	4800	T	T	T	T	T
	3	180	610	640	1600	1700	3800	T	T	T	T	T
	4	120	450	500	1000	1100	1900	4600	T	T	T	T
	6	120	340	360	730	740	1200	2600	4700	T	T	T
	10		192	240	550	580	860	1600	2800	3500	5600	T
	16				300	380	480	1200	1900	2400	3600	4200
	20					380	480	1000	1500	2000	2900	3300
	25						59	950	1400	1700	2600	2900
	32							600	1100	1600	2200	2600
	40								756	1400	2100	2400
Selectivity limit (A)												
iDPN **iDPN N** **iDPN N Vigi** **iDPN H Vigi** Curve C	**1**	350	T	T	T	T	T	T	T	T	T	T
	2	240	770	830	2000	2200	4800	T	T	T	T	T
	3	180	610	640	1600	1700	3800	T	T	T	T	T
	4	120	450	500	1000	1100	1900	4600	T	T	T	T
	6	18	192	360	730	740	1200	2600	4700	T	T	T
	10		29	240	550	580	860	1600	2800	3500	5600	T
	16				49	380	480	1200	1900	2400	3600	4200
	20					52	480	1000	1500	2000	2900	3300
	25						59	600	1400	1700	2600	2900
	32							95	1100	1600	2200	2600
	40								756	960	2100	2400
Selectivity limit (A)												
iDPN **iDPN N** Curve D	**1**	350	T	T	T	T	T	T	T	T	T	T
	2	240	770	830	2000	2200	4800	T	T	T	T	T
	3	120	610	640	1600	1700	3800	T	T	T	T	T
	4	21	450	500	1000	1100	1900	4600	T	T	T	T
	6	18	192	360	730	740	1200	2600	4700	T	T	T
	10		25	240	300	580	860	1600	2800	3500	5600	T
	16				49	380	480	1200	1900	2400	3600	4200
	20					52	480	1000	1500	2000	2900	3300
	25						59	600	756	1700	2600	2900
	32							95	756	1600	2200	2600
	40								756	960	2100	2400

4000 Selectivity limit = 4 kA.

T Total selectivity, up to the breaking capacity of the downstream circuit breaker.

No selectivity.

Note: if you cannot find your combination, refer to the selection table on page A-14

Selectivity table

Upstream: NG125N/H/L, C120N/H curve B
Downstream: iC40, iC40 N curves B, C, D & iCV40N curves B, C

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve B										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**1P+N 3P, 3P+N**											
Selectivity limit (A)												
iC40 iC40 N iCV40 N iCV40 H Curve B	**2**	150	300	500	700	1000	1500	2000	T	T	T	T
	4	40	64	80	400	500	700	800	3000	T	T	T
	6	40	64	80	400	500	700	800	3000	T	T	T
	10		64	80	100	130	500	600	1800	3000	T	T
	13				100	130	160	200	1000	2000	3300	3750
	16				100	130	160	200	1000	2000	3300	3750
	20					52	160	200	1000	1600	2500	3700
	25						59	200	800	1300	2100	3700
	32							200	600	1000	1800	2700
	40								112	320	1600	2400
Selectivity limit (A)												
iC40 iC40 N iCV40 N iCV40 H Curve C	**2**	150	300	500	700	1000	1500	2000	T	T	T	T
	4	40	64	80	400	500	700	800	3000	T	T	T
	6		51	80	100	500	700	800	3000	T	T	T
	10				80	130	500	600	1800	3000	4000	T
	13					98	128	200	1000	2000	3300	3700
	16					98	128	200	1000	2000	3300	3700
	20						128	160	1000	1600	2500	3700
	25							160	201	1300	2100	3700
	32								201	256	1800	2700
	40									255	320	2400
Selectivity limit (A)												
iC40 iC40 N iCV40 H Curve D	**2**	150	300	500	700	1000	1500	2000	T	T	T	T
	4			80	400	500	700	800	3000	T	T	T
	6					500	700	800	3000	T	T	T
	10							600	1800	3000	4000	T
	13								201	2000	3300	3700
	16								201	2000	3300	3700
	20								201	256	2500	3700
	25								201	256	320	3700
	32									256	320	400
	40										320	400

4000 Selectivity limit = 4 kA.

T Total selectivity, up to the breaking capacity of the downstream circuit breaker.

No selectivity.

Note: if you cannot find your combination, refer to the selection table on page A-14

Selectivity table

Upstream: NG125N/H/L, C120N/H curve C
Downstream: iC40, iC40 N curves B, C, D & iCV40N curves B, C

A

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve C										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**1P+N 3P, 3P+N**											
Selectivity limit (A)												
iC40	**2**	150	300	500	700	1000	1500	T	T	T	T	T
iC40 N	**4**	80	130	170	400	500	700	800	3000	T	T	T
iCV40 N	**6**	80	130	170	400	500	700	800	3000	T	T	T
iCV40 H	**10**		130	160	200	350	500	600	1800	3000	T	T
Curve B	**13**				200	270	340	450	1250	2000	3300	3700
	16				200	270	340	450	1250	2000	3300	3700
	20					52	320	400	1000	1600	2500	3700
	25						59	400	800	1300	2100	3700
	32							95	600	1000	1800	2700
	40								112	700	1600	2400
Selectivity limit (A)												
iC40	**2**	150	300	500	700	1000	1500	T	T	T	T	T
iC40 N	**4**	21	200	170	400	500	700	800	3000	4500	4500	T
iCV40 N	**6**	18	200	170	400	500	700	800	3000	4500	4500	T
iCV40 H	**10**		25	160	200	350	500	600	1800	3000	4500	4500
Curve C	**13**				200	270	340	450	1250	2000	3300	3700
	16				200	270	340	450	1250	2000	3300	3700
	20					52	320	400	1000	1600	2500	3700
	25						59	400	800	1300	2100	3700
	32							95	800	1000	1800	2700
	40								112	257	1600	2400
Selectivity limit (A)												
iC40	**2**	150	300	500	700	1000	1500	T	T	T	T	T
iC40 N	**4**	21	200	170	400	500	700	800	3000	4500	4500	T
Curve D	**6**				400	500	700	800	3000	4500	4500	T
	10				200	450	500	600	1800	3000	4500	4500
	13							450	1000	2000	3300	3700
	16							450	1000	2000	3300	3700
	20								1000	1600	2500	3700
	25								800	1300	2100	3700
	32										1800	2700
	40											2400

4000 Selectivity limit = 4 kA.

T Total selectivity, up to the breaking capacity of the downstream circuit breaker.

No selectivity.

Note: if you cannot find your combination, refer to the selection table on page A-14

Selectivity table

Upstream: NG125N/H/L, C120N/H curve D
Downstream: iC40, iC40 N curves B, C, D & iCV40N curves B, C

A

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve D										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**1P+N 3P, 3P+N**											
Selectivity limit (A)												
iC40	**2**	240	770	830	2000	2200	4800	T	T	T	T	T
iC40 N	**4**	120	450	500	1000	1100	1900	4600	T	T	T	T
iCV40 N	**6**	120	340	360	730	740	1200	2600	4700	T	T	T
iCV40 H	**10**		192	240	550	580	860	1600	2800	3500	5600	T
Curve B	**13**				300	380	480	1200	1900	2400	3600	4200
	16				300	380	480	1200	1900	2400	3600	4200
	20					380	480	1000	1500	2000	2900	3300
	25						59	950	1400	1700	2600	2900
	32							600	1100	1600	2200	2600
	40								756	1400	2100	2400
Selectivity limit (A)												
iC40	**2**	240	770	830	2000	2200	4800	T	T	T	T	T
iC40 N	**4**	120	450	500	1000	1100	1900	4600	T	T	T	T
iCV40 N	**6**	18	192	360	730	740	1200	2600	4700	T	T	T
iCV40 H	**10**		29	240	550	580	860	1600	2800	3500	5600	T
Curve C	**13**				49	380	480	1200	1900	2400	3600	4200
	16				49	380	480	1200	1900	2400	3600	4200
	20					52	480	1000	1500	2000	2900	3300
	25						59	600	1400	1700	2600	2900
	32							95	1100	1600	2200	2600
	40								756	960	2100	2400
Selectivity limit (A)												
iC40	**2**	240	770	830	2000	2200	4800	T	T	T	T	T
iC40 N	**4**	21	450	500	1000	1100	1900	4600	T	T	T	T
Curve D	**6**	18	192	360	730	740	1200	2600	4700	T	T	T
	10		25	240	300	580	860	1600	2800	3500	5600	T
	13				49	380	480	1200	1900	2400	3600	4200
	16				49	380	480	1200	1900	2400	3600	4200
	20					52	480	1000	1500	2000	2900	3300
	25						59	600	756	1700	2600	2900
	32							95	756	1600	2200	2600
	40								756	960	2100	2400

4000 Selectivity limit = 4 kA.

T Total selectivity, up to the breaking capacity of the downstream circuit breaker.

No selectivity.

Note: if you cannot find your combination, refer to the selection table on page A-14

Selectivity table

Upstream: NG125N/H/L, C120N/H curve B
Downstream: iC60N/H/L curves B, C, D

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve B										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**1P, 1P+N, 2P (380-415 V) two-phase network 3P, 3P+N, 4P**											
Selectivity limit (A)												
iC60 N/H/L Curve B	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	70	150	210	350	550	2000	2500	T	T	T	T
	2	60	110	140	230	310	590	630	1200	2100	3900	9700
	3	40	90	120	180	220	380	460	770	1400	2000	5300
	4	40	64	80	150	190	310	380	570	940	1400	2400
	6	15	64	80	100	130	290	300	440	620	930	1700
	10		22	80	100	130	200	200	380	550	770	1300
	13			28	100	130	160	200	380	480	680	1100
	16				35	130	160	200	250	320	600	940
	20					46	160	200	250	320	400	850
	25						56	200	250	320	400	750
	32							80	250	320	400	500
	40								250	320	400	500
	50									320	400	500
	63											500
Selectivity limit (A)												
iC60 N/H/L Curve C	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	70	150	210	350	550	2000	2500	T	T	T	T
	2	40	110	140	230	250	590	630	1200	2100	3900	9700
	3	30	64	120	180	220	380	460	770	1400	2000	5300
	4		64	80	150	190	310	340	570	940	1400	2400
	6			80	100	130	290	300	440	620	930	1700
	10					130	160	200	380	550	770	1100
	13						160	200	250	480	680	940
	16							200	250	320	600	940
	20									320	400	850
	25									320	400	750
	32											500
	40											500
Selectivity limit (A)												
iC60 N/H/L Curve D	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	60	150	210	350	550	2000	2500	T	T	T	T
	2	40	90	140	200	250	520	630	1200	2100	3900	9700
	3		64	80	180	220	380	380	770	1200	2000	5300
	4			80	150	190	310	340	570	820	1100	2400
	6					130	240	200	440	620	930	1700
	10							200	380	480	770	1100
	13								250	480	680	940
	16									320	600	940
	20										400	750
	25											500

4000 Selectivity limit = 4 kA.

T Total selectivity, up to the breaking capacity of the downstream circuit breaker.

No selectivity.

Note: if you cannot find your combination, refer to the selection table on page A-14

Selectivity table

Upstream: NG125N/H/L, C120N/H curve B
Downstream: iC60N/H/L curves B, C, D

A

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve B										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**2P (220-240 V) single-phase network**											
Selectivity limit (A)												
iC60 N/H/L Curve B	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	120	490	T	T	T	T	T	T	T	T	T
	2	60	160	350	500	1200	4200	8100	T	T	T	T
	3	40	110	170	250	520	1300	1900	6700	T	T	T
	4	40	64	80	190	280	630	750	1400	2700	6200	T
	6	15	64	80	150	150	350	430	810	1400	2100	6100
	10		22	80	100	130	160	200	500	840	1300	2500
	13			28	100	130	240	200	440	770	1100	1900
	16				35	130	160	200	380	520	770	1400
	20					46	160	200	250	320	600	1000
	25						56	200	250	320	400	890
	32							80	250	320	400	840
	40								250	320	400	790
	50									320	400	750
	63											500
Selectivity limit (A)												
iC60 N/H/L Curve C	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	120	490	T	T	T	T	T	T	T	T	T
	2	60	160	350	500	1200	4200	8100	T	T	T	T
	3	30	110	170	250	520	1300	1900	6700	T	T	T
	4		64	80	190	280	630	750	1400	2700	6200	T
	6			80	150	150	350	430	810	1400	2100	6100
	10					130	160	200	500	840	1300	2500
	13						160	200	440	620	1100	1900
	16							200	380	520	770	1400
	20									320	600	1000
	25									320	400	890
	32											840
	40											500
Selectivity limit (A)												
iC60 N/H/L Curve D	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	120	490	T	T	T	T	T	T	T	T	T
	2	60	160	350	500	1200	4200	8100	T	T	T	T
	3		110	170	250	520	1300	1900	6700	T	T	T
	4			80	190	280	630	750	1400	2700	6200	T
	6					150	350	430	810	1400	2100	6100
	10							200	500	840	1300	2500
	13								380	620	930	1900
	16									520	770	1400
	20										600	1000
	25											890

4000 Selectivity limit = 4 kA.

T Total selectivity, up to the breaking capacity of the downstream circuit breaker.

No selectivity.

Note: the selectivity limits given in the table must be compared to the phase/neutral fault current (Ik1).
If the max. phase/earth fault current (If) is high, the selectivity of this fault current should also be verified by referring to the limits given in the dark green part of the table.

Selectivity table

Upstream: NG125N/H/L, C120N/H curve C
Downstream: iC60N/H/L curves B, C, D

220-240/380-415 V AC

Upstream		NG125N/H/L Curve C										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**1P, 1P+N, 2P (380-415 V) two-phase network 3P, 3P+N, 4P**											
Selectivity limit (A)												
iC60 N/H/L Curve B	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	140	490	920	2300	T	T	T	T	T	T	T
	2	80	250	380	550	1800	2400	8800	10000	13000	T	T
	3	80	190	280	380	1200	1400	4600	8000	8500	14000	T
	4	80	130	240	300	800	820	2000	2300	3400	7000	13000
	6	15	130	160	200	610	650	1400	2300	2300	3600	6400
	10		22	160	200	500	510	1100	1300	1600	2200	3600
	13			28	200	460	470	930	1100	1400	2000	2600
	16				35	380	430	770	950	1200	1700	2300
	20					46	320	680	850	960	1500	2100
	25						56	600	760	960	1200	1800
	32							80	500	640	1200	1500
	40								130	640	800	1500
	50									640	800	1500
	63										800	1000
Selectivity limit (A)												
iC60 N/H/L Curve C	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	140	490	920	2300	T	T	T	T	T	T	T
	2	80	250	380	550	2100	2400	8800	10000	13000	T	T
	3	80	190	280	380	1200	1400	4600	8000	8500	14000	T
	4	18	130	160	300	800	820	2000	2300	3400	6000	13000
	6	15	130	160	200	610	650	1400	2300	2300	3600	5500
	10		22	160	200	500	510	930	1300	1400	2200	3100
	13			28	51	420	430	770	1100	1200	2000	2600
	16				35	256	400	770	950	1200	1700	2300
	20					46	320	680	850	960	1500	1800
	25						56	400	760	960	1200	1800
	32							80	500	640	1200	1500
	40								500	640	800	1500
	50									640	800	1000
	63											1000
Selectivity limit (A)												
iC60 N/H/L Curve D	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	140	490	920	2300	T	T	T	T	T	T	T
	2	80	250	380	550	1800	2400	8800	10000	13000	T	T
	3	21	190	280	380	1200	1200	4600	8000	8500	14000	T
	4	18	130	160	300	740	740	2000	2300	3400	6000	13000
	6		130	160	200	570	600	1400	1900	2300	3600	5500
	10				200	450	480	930	1300	1400	2200	3100
	13					256	430	770	950	1200	1700	2600
	16						320	770	950	960	1500	2300
	20							400	760	960	1200	1800
	25									640	1200	1500
	32									640	800	1500
	40											1000

4000 Selectivity limit = 4 kA.

T Total selectivity, up to the breaking capacity of the downstream circuit breaker.

No selectivity.

Note: if you cannot find your combination, refer to the selection table on page A-14

Selectivity table

Upstream: NG125N/H/L, C120N/H curve C
Downstream: iC60N/H/L curves B, C, D

A

220-240/380-415 V AC

Upstream		NG125N/H/L Curve C										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**2P (220-240 V) single-phase network**											
Selectivity limit (A)												
iC60 N/H/L Curve B	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	950	T	T	T	T	T	T	T	T	T	T
	2	210	1900	4200	10000	T	T	T	T	T	T	T
	3	120	780	1300	4700	T	T	T	T	T	T	T
	4	80	310	590	1100	4000	13000	T	T	T	T	T
	6	15	190	330	510	1500	2700	7200	9000	9000	T	T
	10		22	160	300	1000	1400	2700	3500	3500	7400	T
	13			28	200	760	910	2000	2700	2700	4900	8100
	16				35	620	620	1600	2700	2700	3600	5500
	20					46	480	1100	1600	1600	2200	3600
	25						56	930	1200	1200	2000	2600
	32							80	930	960	1700	2300
	40								130	960	1400	2000
	50									640	1200	1900
	63										1200	1700
Selectivity limit (A)												
iC60 N/H/L Curve C	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	950	T	T	T	T	T	T	T	T	T	T
	2	210	1900	3500	10000	T	T	T	T	T	T	T
	3	80	670	1300	4700	T	T	T	T	T	T	T
	4	18	310	590	1100	3600	13000	T	T	T	T	T
	6	15	190	290	510	1500	2700	7200	9000	9000	T	T
	10		22	160	200	890	1200	2700	3700	3700	6600	T
	13			28	51	760	770	2000	2700	2700	4000	7200
	16				35	256	620	1600	2700	2700	3600	4600
	20					46	320	1100	1400	1400	2200	3600
	25						56	400	1100	1200	2000	2600
	32							80	500	960	1400	2300
	40								500	640	1200	2000
	50									640	800	1700
	63											1000
Selectivity limit (A)												
iC60 N/H/L Curve D	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	950	T	T	T	T	T	T	T	T	T	T
	2	210	1700	3500	10000	T	T	T	T	T	T	T
	3	21	550	1300	4700	T	T	T	T	T	T	T
	4	18	310	520	960	3600	13000	T	T	T	T	T
	6		190	240	460	1500	2700	6400	9000	9000	T	T
	10				200	890	1100	2700	3700	3700	6600	T
	13					256	620	2000	2300	2300	4000	7200
	16						320	1400	2300	2300	3100	4600
	20							400	1400	1400	2200	3100
	25									960	1700	2600
	32									640	1400	2000
	40											1800

4000 Selectivity limit = 4 kA.

T Total selectivity, up to the breaking capacity of the downstream circuit breaker.

No selectivity.

Note: the selectivity limits given in the table must be compared to the phase/neutral fault current (Ik1).
If the max. phase/earth fault current (If) is high, the selectivity of this fault current should also be verified by referring to the limits given in the dark green part of the table.

Selectivity table

Upstream: NG125N/H/L, C120N/H curve D
Downstream: iC60N/H/L curves B, C, D

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve D										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**1P, 1P+N, 2P (380-415 V) two-phase network 3P, 3P+N, 4P**											
Selectivity limit (A)												
iC60 N/H/L Curve B	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	410	3800	5200	T	T	T	T	T	T	T	T
	2	240	770	920	2600	2700	7400	14000	T	T	T	T
	3	180	610	640	1300	1600	3600	11000	T	T	T	T
	4	120	450	450	890	1100	1900	4100	11000	13000	T	T
	6	15	340	360	730	740	1300	2600	4700	6200	T	T
	10		22	240	590	660	910	1700	2600	3500	T	T
	13			28	300	580	810	1500	2100	2500	4600	T
	16				35	380	720	1300	1900	2400	3600	T
	20					46	480	1100	1600	2000	3000	3600
	25						56	900	1400	1700	2400	2900
	32							83	1100	1700	2400	2600
	40								1100	1400	2100	2300
	50									1400	2000	2300
	63										2000	2300
Selectivity limit (A)												
iC60 N/H/L Curve C	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	410	3800	5200	T	T	T	T	T	T	T	T
	2	240	770	920	2600	2700	7400	T	T	T	T	T
	3	21	530	640	1300	1600	3600	11000	T	T	T	T
	4	18	450	450	890	1100	1900	4100	11000	13000	T	T
	6	15	340	360	730	740	1300	2200	4700	6200	T	T
	10		22	240	590	580	910	1700	2600	3500	T	T
	13			28	51	580	720	1300	2100	2500	4100	T
	16				35	380	480	1100	1900	2400	3600	T
	20					46	88	1100	1600	2000	2700	2900
	25						56	600	1400	1700	2400	2900
	32							80	1100	1400	2400	2600
	40								756	1400	2100	2300
	50									960	2000	2300
	63										1800	2300
Selectivity limit (A)												
iC60 N/H/L Curve D	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	410	3800	5200	T	T	T	T	T	T	T	T
	2	240	770	920	2600	2700	6300	T	T	T	T	T
	3	21	530	550	1300	1600	3600	11000	T	T	T	T
	4	18	370	450	890	970	1600	3700	11000	13000	T	T
	6	15	340	360	730	740	1100	2200	4700	5400	T	T
	10		22	240	520	580	810	1500	2600	3000	T	T
	13			28	51	380	720	1300	2100	2500	4100	T
	16				35	380	480	1100	1900	2400	3600	T
	20					46	480	900	1400	1700	2700	2900
	25						56	600	1400	1700	2400	2600
	32							80	1100	1400	2100	2600
	40								756	1400	2100	2300
	50									960	1800	1800
	63										1800	1800

4000 Selectivity limit = 4 kA.

T Total selectivity, up to the breaking capacity of the downstream circuit breaker.

No selectivity.

Note: if you cannot find your combination, refer to the selection table on page A-14

Selectivity table

Upstream: NG125N/H/L, C120N/H curve D
Downstream: iC60N/H/L curves B, C, D

A

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve D										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**2P (220-240 V) single-phase network**											
Selectivity limit (A)												
iC60 N/H/L Curve B	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	T	T	T	T	T	T	T	T	T	T	T
	2	1200	T	T	T	T	T	T	T	T	T	T
	3	520	3400	3400	T	T	T	T	T	T	T	T
	4	120	1200	1300	5800	5600	T	T	T	T	T	T
	6	15	700	720	1900	1900	6000	11000	T	T	T	T
	10		22	540	1200	1200	2600	4200	10000	T	T	T
	13			28	300	900	1800	3400	7300	8000	T	T
	16				35	740	1500	2200	4700	5400	T	T
	20					46	910	1700	3500	3500	6900	T
	25						56	1500	2500	2500	5200	6800
	32							83	2000	2400	3400	4400
	40								1800	1900	2900	4000
	50									1900	2800	3300
	63										2300	2800
Selectivity limit (A)												
iC60 N/H/L Curve C	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	T	T	T	T	T	T	T	T	T	T	T
	2	1200	T	T	T	T	T	T	T	T	T	T
	3	21	3400	3400	T	T	T	T	T	T	T	T
	4	18	1200	1300	5800	5600	T	T	T	T	T	T
	6	15	700	720	1900	1900	6000	11000	T	T	T	T
	10		22	480	1200	1200	2200	4200	10000	T	T	T
	13			28	51	900	1800	3000	7300	8000	T	T
	16				35	740	1300	2200	4700	5400	T	T
	20					46	88	1700	3500	3500	6900	T
	25						56	600	2500	2500	4600	6800
	32							80	2000	2200	3400	4400
	40								756	1900	2900	3500
	50									960	2300	2800
	63										2300	2800
Selectivity limit (A)												
iC60 N/H/L Curve D	**0.5**	T	T	T	T	T	T	T	T	T	T	T
	1	T	T	T	T	T	T	T	T	T	T	T
	2	1200	T	T	T	T	T	T	T	T	T	T
	3	21	3000	3400	T	T	T	T	T	T	T	T
	4	18	1100	1300	5800	4500	T	T	T	T	T	T
	6	15	600	600	1600	1600	5300	11000	T	T	T	T
	10		22	420	1000	1100	2200	3400	10000	T	T	T
	13			28	51	900	1700	2600	6400	7100	T	T
	16				35	380	1300	2200	3900	4500	T	T
	20					46	480	1500	3000	3500	6000	T
	25						56	600	2100	2500	4100	5900
	32							80	1800	2200	3400	4400
	40								756	1700	2400	2900
	50									960	2300	2800
	63										2000	2300

4000 Selectivity limit = 4 kA.

T Total selectivity, up to the breaking capacity of the downstream circuit breaker.

No selectivity.

Note: the selectivity limits given in the table must be compared to the phase/neutral fault current (Ik1).
If the max. phase/earth fault current (If) is high, the selectivity of this fault current should also be verified by referring to the limits given in the dark green part of the table.

Selectivity table

Upstream: NG125N/H/L, C120N/H curve B
Downstream: iC60 RCBO curves B, C

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve B										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**3P/4P 380-415 V AC**											
Selectivity limit (A)												
iC60 RCBO Curve B	**6**	15	64	80	100	130	290	300	440	620	930	1700
	10		22	80	100	130	200	200	380	550	770	1300
	13			28	100	130	160	200	380	480	680	1100
	16				35	130	160	200	250	320	600	940
	20					46	160	200	250	320	400	850
	25						56	200	250	320	400	750
	32							80	250	320	400	500
Selectivity limit (A)												
iC60 RCBO Curve C	**6**			80	100	130	290	300	440	620	930	1700
	10					130	160	200	380	550	770	1100
	13						160	200	250	480	680	940
	16							200	250	320	600	940
	20									320	400	850
	25									320	400	750
	32											500

4000 Selectivity limit = 4 kA.

No selectivity.

Note: if you cannot find your combination, refer to the selection table on page A-14

Selectivity table

Upstream: NG125N/H/L, C120N/H curve B
Downstream: iC60 RCBO curves B, C

A

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve B										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**2P (220-240 V AC Phase to Neutral) 3P (220-240 V AC Phase to Phase)**											
Selectivity limit (A)												
iC60 RCBO Curve B	**6**	15	64	80	150	150	350	430	810	1400	2100	6100
	10		22	80	100	130	160	200	500	840	1300	2500
	13			28	100	130	240	200	440	770	1100	1900
	16				35	130	160	200	380	520	770	1400
	20					46	160	200	250	320	600	1000
	25						56	200	250	320	400	890
	32							80	250	320	400	840
Selectivity limit (A)												
iC60 RCBO Curve C	**6**			80	150	150	350	430	810	1400	2100	6100
	10					130	160	200	500	840	1300	2500
	13						160	200	440	620	1100	1900
	16							200	380	520	770	1400
	20									320	600	1000
	25									320	400	890
	32											840

4000 Selectivity limit = 4 kA.

No selectivity.

Note: the selectivity limits given in the table must be compared to the phase/neutral fault current (Ik1).
If the max. phase/earth fault current (If) is high, the selectivity of this fault current should also be verified by referring to the limits given in the dark green part of the table.

Selectivity table

Upstream: NG125N/H/L, C120N/H curve C
Downstream: iC60 RCBO curves B, C

220-240/380-415 V AC

Upstream		NG125N/H/L Curve C										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**3P/4P 380-415 V AC**											
Selectivity limit (A)												
iC60 RCBO Curve B	**6**	15	130	160	200	610	650	1400	2300	2300	3600	6400
	10		22	160	200	500	510	1100	1300	1600	2200	3600
	13			28	200	460	470	930	1100	1400	2000	2600
	16				35	380	430	770	950	1200	1700	2300
	20					46	320	680	850	960	1500	2100
	25						56	600	760	960	1200	1800
	32							80	500	640	1200	1500
Selectivity limit (A)												
iC60 RCBO Curve C	**6**	15	130	160	200	610	650	1400	2300	2300	3600	5500
	10		22	160	200	500	510	930	1300	1400	2200	3100
	13			28	51	420	430	770	1100	1200	2000	2600
	16				35	256	400	770	950	1200	1700	2300
	20					46	320	680	850	960	1500	1800
	25						56	400	760	960	1200	1800
	32							80	500	640	1200	1500

4000 Selectivity limit = 4 kA.

No selectivity.

Note: if you cannot find your combination, refer to the selection table on page A-14

Selectivity table

Upstream: NG125N/H/L, C120N/H curve C
Downstream: iC60 RCBO curves B, C

220-240/380-415 V AC

Upstream		NG125N/H/L Curve C										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**2P (220-240 V AC Phase to Neutral) 3P (220-240 V AC Phase to Phase)**											
Selectivity limit (A)												
iC60 RCBO Curve B	**6**	15	190	330	510	1500	2700	7200	9000	9000	T	T
	10		22	160	300	1000	1400	2700	3500	3500	7400	T
	13			28	200	760	910	2000	2700	2700	4900	8100
	16				35	620	620	1600	2700	2700	3600	5500
	20					46	480	1100	1600	1600	2200	3600
	25						56	930	1200	1200	2000	2600
	32							80	930	960	1700	2300
Selectivity limit (A)												
iC60 RCBO Curve C	**6**	15	190	290	510	1500	2700	7200	9000	9000	T	T
	10		22	160	200	890	1200	2700	3700	3700	6600	T
	13			28	51	760	770	2000	2700	2700	4000	7200
	16				35	256	620	1600	2700	2700	3600	4600
	20					46	320	1100	1400	1400	2200	3600
	25						56	400	1100	1200	2000	2600
	32							80	500	960	1400	2300

4000 Selectivity limit = 4 kA.

T Total selectivity, up to the breaking capacity of the downstream circuit breaker.

No selectivity.

Note: the selectivity limits given in the table must be compared to the phase/neutral fault current (Ik1).
If the max. phase/earth fault current (If) is high, the selectivity of this fault current should also be verified by referring to the limits given in the dark green part of the table.

Selectivity table

Upstream: NG125N/H/L, C120N/H curve D
Downstream: iC60 RCBO curves B, C

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve D										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**3P/4P 380-415 V AC**											
Selectivity limit (A)												
iC60 RCBO Curve B	**6**	15	340	360	730	740	1300	2600	4700	6200	T	T
	10		22	240	590	660	910	1700	2600	3500	T	T
	13			28	300	580	810	1500	2100	2500	4600	T
	16				35	380	720	1300	1900	2400	3600	T
	20					46	480	1100	1600	2000	3000	3600
	25						56	900	1400	1700	2400	2900
	32							83	1100	1700	2400	2600
Selectivity limit (A)												
iC60 RCBO Curve C	**6**	15	340	360	730	740	1300	2200	4700	6200	T	T
	10		22	240	590	580	910	1700	2600	3500	T	T
	13			28	51	580	720	1300	2100	2500	4100	T
	16				35	380	480	1100	1900	2400	3600	T
	20					46	88	1100	1600	2000	2700	2900
	25						56	600	1400	1700	2400	2900
	32							80	1100	1400	2400	2600

4000 Selectivity limit = 4 kA.

T Total selectivity, up to the breaking capacity of the downstream circuit breaker.

No selectivity.

Note: if you cannot find your combination, refer to the selection table on page A-14

Selectivity table

Upstream: NG125N/H/L, C120N/H curve D
Downstream: iC60 RCBO curves B, C

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve D										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**2P (220-240 V AC Phase to Neutral) 3P (220-240 V AC Phase to Phase)**											
Selectivity limit (A)												
iC60 RCBO Curve B	**6**	15	700	720	1900	1900	6000	11000	T	T	T	T
	10		22	540	1200	1200	2600	4200	10000	T	T	T
	13			28	300	900	1800	3400	7300	8000	T	T
	16				35	740	1500	2200	4700	5400	T	T
	20					46	910	1700	3500	3500	6900	T
	25						56	1500	2500	2500	5200	6800
	32							83	2000	2400	3400	4400
Selectivity limit (A)												
iC60 RCBO Curve C	**6**	15	700	720	1900	1900	6000	11000	T	T	T	T
	10		22	480	1200	1200	2200	4200	10000	T	T	T
	13			28	51	900	1800	3000	7300	8000	T	T
	16				35	740	1300	2200	4700	5400	T	T
	20					46	88	1700	3500	3500	6900	T
	25						56	600	2500	2500	4600	6800
	32							80	2000	2200	3400	4400

4000 Selectivity limit = 4 kA.

T Total selectivity, up to the breaking capacity of the downstream circuit breaker.

No selectivity.

Note: the selectivity limits given in the table must be compared to the phase/neutral fault current (Ik1).
If the max. phase/earth fault current (If) is high, the selectivity of this fault current should also be verified by referring to the limits given in the dark green part of the table.

Selectivity table

Upstream: NG125N/H/L, C120N/H curve B
Downstream: C120, NG125 curves B, C, D

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve B										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**1P, 1P+N, 2P (380-415 V) two-phase network 3P, 3P+N, 4P**											
Selectivity limit (A)												
C120 N/H NG125 N/H/L Curve B	**10**			80	100	130	160	200	250	320	400	800
	16				100	130	160	200	250	320	400	750
	20					65	160	200	250	320	400	750
	25						160	200	250	320	400	500
	32							200	250	320	400	500
	40								250	320	400	500
	50									320	400	500
	63										400	500
	80											400
Selectivity limit (A)												
C120 N/H NG125 N/H/L Curve C	**10**					130	160	200	250	320	400	750
	16							200	250	320	400	500
	20								250	320	400	500
	25									320	400	500
	32										400	500
	40											500
Selectivity limit (A)												
C120 N/H NG125 N/H/L Curve D	**10**							200	250	320	400	750
	16									320	400	500
	20										400	500
	25											500

4000 Selectivity limit = 4 kA.

No selectivity.

Note: if you cannot find your combination, refer to the selection table on page A-14

Selectivity table

Upstream : NG125N/H/L, C120N/H curve B
Downstream: C120, NG125 curves B, C, D

A

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve B										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**2P (220-240 V) single-phase network**											
Selectivity limit (A)												
C120 N/H	**10**			80	100	130	260	200	400	540	670	1100
NG125 N/H/L	**16**				100	130	240	200	250	480	630	910
Curve B	**20**					65	160	200	250	320	600	830
	25						160	200	250	320	400	830
	32							200	250	320	400	750
	40								250	320	400	750
	50									320	400	500
	63										400	500
	80											400
Selectivity limit (A)												
C120 N/H	**10**					130	240	200	250	480	670	980
NG125 N/H/L	**16**							200	250	320	400	830
Curve C	**20**								250	320	400	830
	25									320	400	750
	32										400	500
	40											500
Selectivity limit (A)												
C120 N/H	**10**							200	250	320	630	980
NG125 N/H/L	**16**									320	400	750
Curve D	**20**										400	750
	25											500

4000 Selectivity limit = 4 kA.

No selectivity.

Note: the selectivity limits given in the table must be compared to the phase/neutral fault current (Ik1).
If the max. phase/earth fault current (If) is high, the selectivity of this fault current should also be verified by referring to the limits given in the dark green part of the table.

Selectivity table

Upstream: NG125N/H/L, C120N/H curve C
Downstream: C120, NG125 curves B, C, D

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve C										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**1P, 1P+N, 2P (380-415 V) two-phase network 3P, 3P+N, 4P**											
Selectivity limit (A)												
C120 N/H NG125 N/H/L Curve B	**10**		130	160	200	260	320	650	820	960	1300	1700
	16				200	260	320	600	760	800	900	1500
	20					65	320	400	500	640	800	1500
	25						320	400	500	640	800	1000
	32							400	500	640	800	1000
	40								500	640	800	1000
	50									640	800	1000
	63										800	1000
	80											1000
Selectivity limit (A)												
C120 N/H NG125 N/H/L Curve C	**10**		39	160	200	260	320	650	760	900	1200	1700
	16				70	110	320	400	500	640	800	1500
	20					65	124	400	500	640	800	1000
	25						89	149	500	640	800	1000
	32							123	240	640	800	1000
	40								181	269	800	1000
	50									227	800	1000
	63										800	1000
	80											1000
Selectivity limit (A)												
C120 N/H NG125 N/H/L Curve D	**10**					260	320	600	760	900	1200	1600
	16						320	400	500	640	800	1000
	20							400	500	640	800	1000
	25								500	640	800	1000
	32										800	1000
	40											1000

4000 Selectivity limit = 4 kA.

No selectivity.

Note: if you cannot find your combination, refer to the selection table on page A-14

Selectivity table

Upstream: NG125N/H/L, C120N/H curve C
Downstream: C120, NG125 curves B, C, D

A

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve C										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**2P (220-240 V) single-phase network**											
Selectivity limit (A)												
C120 N/H **NG125 N/H/L** Curve B	**10**		130	160	200	480	510	930	1100	1200	1700	2500
	16				200	260	320	800	990	1100	1400	2000
	20					65	320	730	910	1100	1400	1900
	25						320	730	830	960	1200	1600
	32							400	830	960	1200	1600
	40								500	640	800	1500
	50									640	800	1500
	63										800	1000
	80											1000
Selectivity limit (A)												
C120 N/H **NG125 N/H/L** Curve C	**10**		39	160	200	260	480	870	1100	1200	1700	2500
	16				70	110	320	730	910	1100	1400	2000
	20					65	124	670	830	960	1300	1700
	25						89	149	500	640	1200	1600
	32							123	240	640	800	1500
	40								181	269	800	1000
	50									227	800	1000
	63										800	1000
	80											1000
Selectivity limit (A)												
C120 N/H **NG125 N/H/L** Curve D	**10**					260	320	800	1100	1100	1600	2200
	16						320	630	830	960	1300	1900
	20							400	760	960	1300	1700
	25								500	640	800	1500
	32										800	1500
	40											1000

4000 Selectivity limit = 4 kA.

No selectivity.

Note: the selectivity limits given in the table must be compared to the phase/neutral fault current (Ik1).
If the max. phase/earth fault current (If) is high, the selectivity of this fault current should also be verified by referring to the limits given in the dark green part of the table.

Selectivity table

Upstream: NG125N/H/L, C120N/H curve D
Downstream: C120, NG125 curves B, C, D

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve D										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**1P, 1P+N, 2P (380-415 V) two-phase network 3P, 3P+N, 4P**											
Selectivity limit (A)												
C120 N/H NG125 N/H/L Curve B	**10**		190	240	300	380	480	970	1300	1600	2200	2500
	16				300	380	480	600	1100	1400	2000	2300
	20					65	480	600	1100	1400	2000	2300
	25						480	600	760	960	1200	1500
	32							600	760	960	1200	1500
	40								760	960	1200	1500
	50									960	1200	1500
	63										1200	1500
	80											1500
Selectivity limit (A)												
C120 N/H NG125 N/H/L Curve C	**10**		190	240	300	380	480	970	1300	1600	2200	2500
	16				70	110	480	600	1100	1400	2000	2300
	20					65	124	600	1100	1400	2000	2300
	25						89	149	760	960	1200	1500
	32							123	240	960	1200	1500
	40								181	269	1200	1500
	50									227	1200	1500
	63										1200	1500
	80											1500
Selectivity limit (A)												
C120 N/H NG125 N/H/L Curve D	**10**		39	240	300	380	480	970	1300	1600	2200	2500
	16				70	110	480	600	1100	1400	2000	2300
	20					65	124	193	1100	1400	2000	2300
	25						89	149	236	960	1200	1500
	32							123	240	960	1200	1500
	40							181	269	1200	1500	
	50								227	1200	1500	
	63									1200	1500	
	80										1500	

4000 Selectivity limit = 4 kA.

No selectivity.

Note: if you cannot find your combination, refer to the selection table on page A-14

Selectivity table

Upstream: NG125N/H/L, C120N/H curve D
Downstream: C120, NG125 curves B, C, D

A

220-240/380-415 V AC

Upstream		NG125N/H/L, C120N/H Curve D										
In (A)		10	16	20	25	32	40	50	63	80	100	125
Downstream	**2P (220-240 V) single-phase network**											
Selectivity limit (A)												
C120 N/H **NG125 N/H/L** Curve B	**10**		190	240	250	380	720	1300	2000	2400	3700	4800
	16				300	380	480	1100	1600	1900	2600	3200
	20					65	480	1100	1500	1800	2600	2900
	25						480	600	1200	1400	2100	2400
	32							600	1200	1400	2100	2400
	40								760	960	1200	1500
	50									960	1200	1500
	63										1200	1500
	80											1500
Selectivity limit (A)												
C120 N/H **NG125 N/H/L** Curve C	**10**		190	240	250	380	720	1300	2000	2400	3700	4800
	16				70	110	480	1100	1600	1900	2600	3200
	20					65	124	1100	1500	1800	2600	2900
	25						89	149	1200	1400	2100	2400
	32							123	240	1400	2100	2400
	40								181	269	1200	1500
	50									227	1200	1500
	63										1200	1500
	80											1500
Selectivity limit (A)												
C120 N/H **NG125 N/H/L** Curve D	**10**		39	240	250	380	720	1300	2000	2400	3700	4800
	16				70	110	480	1100	1600	1900	2600	3200
	20					65	124	193	1500	1800	2600	2900
	25						89	149	236	1400	2100	2400
	32							123	240	1400	2100	2400
	40								181	269	1200	1500
	50									227	1200	1500
	63										1200	1500
	80											1500

4000 Selectivity limit = 4 kA.

No selectivity.

Note: the selectivity limits given in the table must be compared to the phase/neutral fault current (Ik1).
If the max. phase/earth fault current (If) is high, the selectivity of this fault current should also be verified by referring to the limits given in the dark green part of the table.