Low voltage

NG160
16 to 160 A

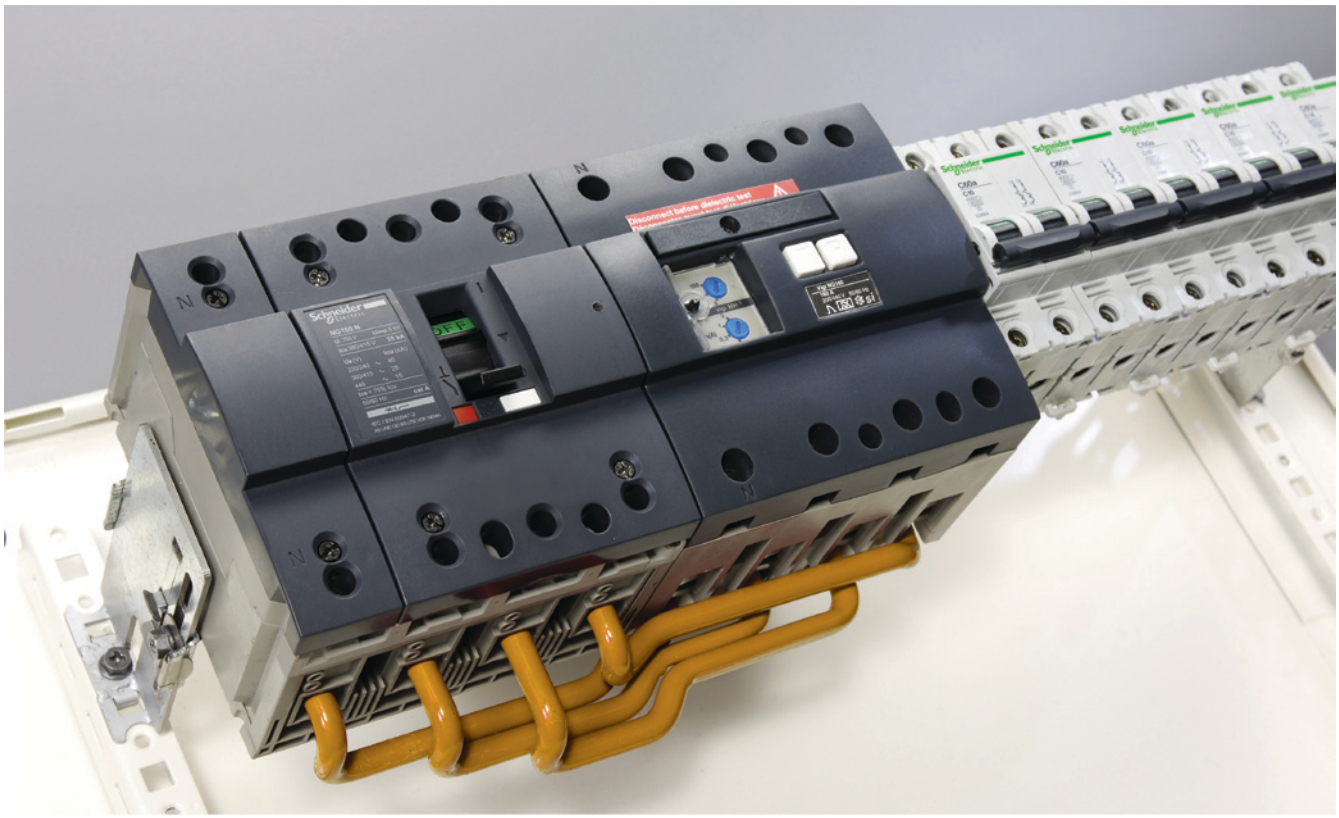
Modular incoming circuit breakers
and switch-disconnectors
for DIN-panel installation

Catalogue
2010

Schneider Electric

NG160 circuit breaker

Ready to install



General contents

NG160 circuit breaker

Incomer for modular panels

Mounting
on a DIN rail

The NG160 circuit breaker and its installation system were specially designed for the incomer function in modular switchboards.
The result meets the need for a *"ready to install"* device offering high-quality mounting and wiring characteristics.

Vigi earth-leakage protection module
for side-by-side mounting

Earth-leakage protection is widely used on the switchboard incomer function.

Mounting of a Vigi module alongside the incomer optimises enclosure space and leaves more room for other modular devices and instruments in the same row.

The new rigid cables for the Vigi module reduce connection errors and avoid tightening problems during mounting.

45 mm cut-outs

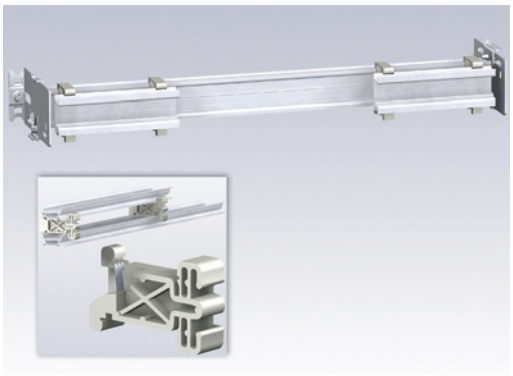
for modular mounting plates

The NG160 front escutcheon complies with the 45 mm standard.
This means the NG160 and Multi 9 switchgear can be mounted on the same DIN rail with all the fronts aligned.

New raisers for depth adjusters

for Multi 9

The raiser is used to fit an elevator DIN rail to compensate for the difference in depth between the NG160 and Multi 9 devices.
The new design ensures greater rigidity for the devices on the DIN rail.
Electrical continuity between the two rails for earthing purposes is provided by a metal insert on the depth adjuster.



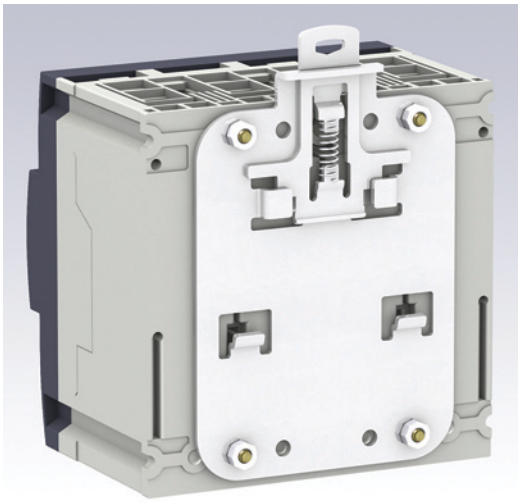
NG160 circuit breaker

Quick installation!

DIN mounting plate

already on the device

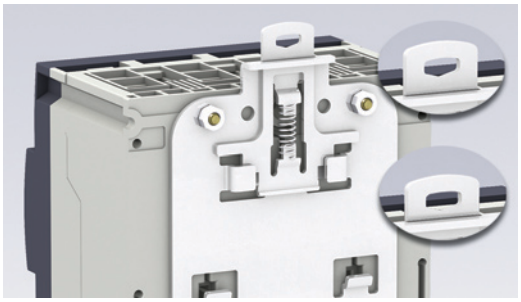
The Compact NG160 circuit breaker comes with its mounting plate already secured to the device.
The NG160 is "ready to install" right from its package.



Two-position clip

for fast mounting on a DIN rail

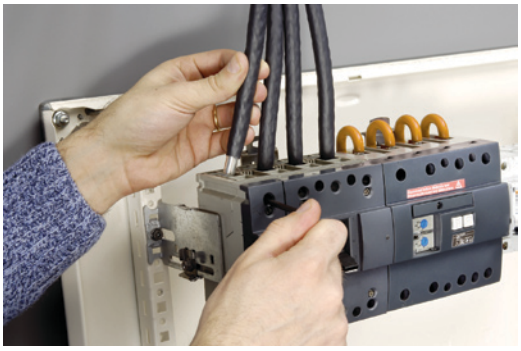
The circuit breaker and Vigi module mounting plates are equipped with two-position clips that can be opened and closed for easy mounting. Just open the clip with a screwdriver, place the NG160 in the desired position and close the clip to secure the device to the DIN rail.



Built-in connectors

for cables up to 70 mm^2

The Compact NG160 circuit breaker is supplied with its aluminium tunnel terminals.
They are designed for both Cu and Al cables with stripped ends or ferrules.
In this way, wiring is "ready to install".



New DIN rail

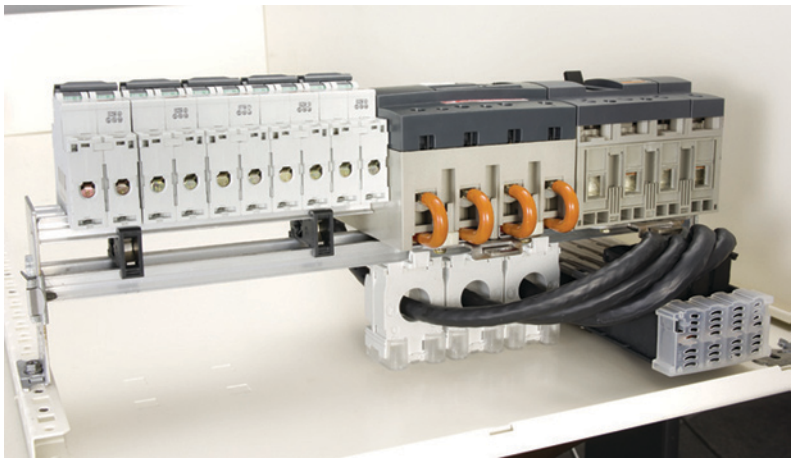
with adjustable support

The new DIN rail support specially designed for incoming devices instantly adapts the DIN rail to the desired depth.
The engraved depth indications ensure correct positioning of NG160, NS160 and NG125 devices.
The reinforced rigidity of the rail and its securing system ensure reliable mounting.

Distribution systems

for connection to Powerclip busbars

The new distribution systems for Prisma Plus switchboards and enclosures were designed for fast and totally safe connection of NG160 and NG125 incoming devices and Interpact switch-disconnectors.
One-piece prefabricated cable assemblies can be used for connection to the busbars and to Distribloc or Polybloc Multiclip distribution blocks to supply rows of Multi 9 breakers.
The space under the rail is sufficient for the measurement CTs.



NG160 circuit breaker

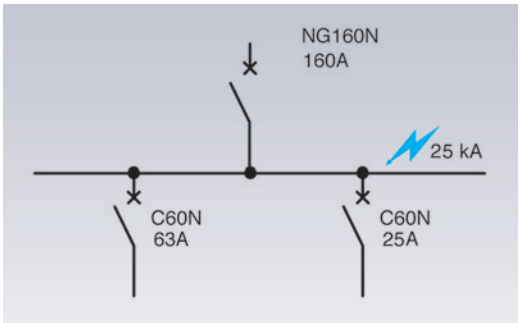
Operating safety

Breaking
via a double contact

To increase limiting of the fault current, each pole of the NG160 circuit breaker has a double fork-shaped contact.
This design splits the arc and significantly reduces the forces exerted during a short-circuit.
This ensures the integrity of installations in enclosures.

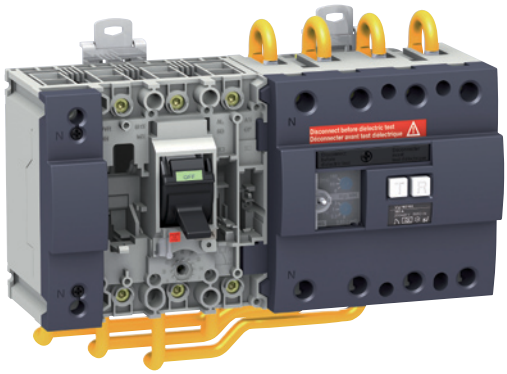
Cascading
with Multi 9 circuit breakers

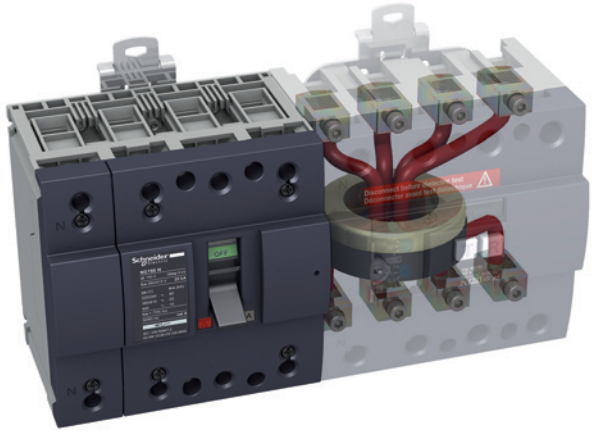
Thanks to its very high current-limiting capacity, the NG160 offers excellent cascading and discrimination with downstream Multi 9 breakers.
This means Multi 9 devices can have breaking performancies lower than the prospective short-circuit current, thus reducing their cost.



Vigi earth-leakage protection module
with direct tripping

If a residual-current fault occurs, the Vigi module of the NG160 acts directly on the tripping mechanism of the breaker via a mechanical link (no need to add a release coil).
This solution avoids any risk of non-tripping due to poor connections.





Vigi earth-leakage protection module with rigid cables

for optimum positioning in the toroid

The power cables are perfectly centred in the Vigi toroid to ensure precise measurement of the residual current and avoid risks of nuisance tripping. This solution ensures optimum continuity of service for the installation.

NG160 circuit breaker

Super-immunised protection

Earth-leakage protection

based on "**si**" technology

The earth-leakage protection function is mandatory to protect life and property, but can be affected by disturbed environments, such as:
> high-frequency currents with low rms values
> voltage surges caused by atmospheric phenomena such as lightning
> opening and closing of capacitive circuits.
These disturbances often cause nuisance tripping of residual-current devices leading to installation down-time costs.
Thanks to the "**si**" (super immunised) technology, the Vigi NG160 guarantees operation of the earth-leakage protection only if there is a real risk.

Operating safety

in severe environments (to -25 °C)

Operation of the Vigi NG160 is not affected by low temperatures down to -25 °C.

Consistent design

of the Schneider Electric low-voltage system

Pragma

New range of modular enclosures

The new range of Pragma enclosures combines functionality, robustness and attractive design, offering installers a complete solution for protection, control and distribution installations up to 960 A.
They are available in flush-mount and surface-mount versions, with a capacity of 24 modules.
Their are especially well-suited for installations in the commercial sector.

Prisma Plus G

Wall-mount and floor-standing enclosures up to 630 A

The Prisma Plus G range was designed for all types of wall-mount and floor-standing enclosures up to 630 A for commercial and small industrial applications.
All the enclosure components, modular DIN-rail devices and installation and connection systems contribute to fast and easy construction of Prisma Plus G enclosures.

Prisma Plus P

Functional system up to 3200 A

Prisma Plus P high-power switchboards are the best solution for demanding installation and safety requirements.
The perfect fit between the Prisma Plus P system, the low-voltage devices and the specially tested prefabricated connection solutions guarantees a safe and high-performance electrical installation.

Functions and characteristics

Characteristics of NG160 circuit breakers and switch-disconnectors

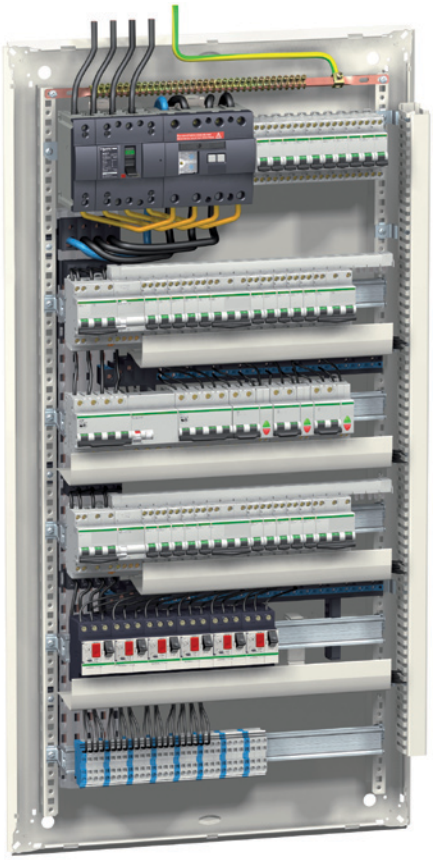
Incomer for modular switchboards

3 and 4 pole circuit breakers and switch-disconnectors specially designed for use upstream of Multi 9 modular devices:
- ■ reinforcement of breaking capacities of downstream devices by cascading up to 25 kA
- ■ easy installation in Pragma or Prisma Plus type G enclosures:
- □ standard 45 mm front cut-out
- □ clip-on installation on a DIN rail
- □ reduced depth (82.5 mm).

PB103512-SE-40

NG160 circuit breaker.

PB103530-SE-58



NG160 in modular enclosure.

NG160 circuit breaker

Electrical characteristics as per IEC 60947-2

Rated current (A)	**In**		40 °C	160		
Rated insulation voltage (V)	**Ui**			800		
Rated impulse withstand voltage (kV)	**Uimp**			8		
Rated operational voltage (V)	**Ue**		AC 50/60 Hz	500		
Type of circuit breaker				**E**	**N**	**H**
Ultimate breaking capacity (kA rms)	**Icu**	AC 50/60 Hz	220/240 V	25	40	50
			380/415 V	16	25	36
			440 V	10	16	22
			500 V	8	10	15
Service breaking capacity	**Ics**		% Icu	75 %		
Suitability for isolation				■		
Durability (C-O cycles)	mechanical			10000		
	electrical (In -440 V)			5000		

Protection

Built-in thermal-magnetic trip unit

Ratings	**In**	16	25	32	40	50	63	80	100	125	160
Thermal protection	**Ir**	fixed threshold									
Magnetic protection	**Im**	600	600	600	600	600	800	800	1000	1250	1250

NG160NA switch-disconnector

Electrical characteristics as per IEC 60947-3

Conventional thermal current (A)	**Ith**	40 °C		160	
Rated insulation voltage (V)	**Ui**			800	
Rated impulse withstand voltage (kV)	**Uimp**			8	
Rated operational voltage (V)	**Ue**	AC 50/60 Hz		500	
Rated operational current	**Ie**	AC 50/60 Hz		**AC22A**	**AC23A**
		220/240 V		160	160
		380/415 V		160	160
		440/480 V		160	160
		500 V		160	125
Short-circuit making capacity	**Icm**	(kA peak) min. for switch-disconnector alone		2.1	
		max. with protection by upstream circuit breaker		330	
Short-time withstand current	**Icw**	(A rms)	1 s	1500	
			3 s	1500	
Suitability for isolation				■	

Coordination between circuit breakers and switch-disconnectors

The switch-disconnector must be protected against downstream short-circuits. The choice of the right switch-disconnector therefore depends on coordination with the protective device installed upstream. The table below indicates the maximum short-circuit current in kArms for which the switch-disconnector is protected by coordination with the circuit breaker located upstream.
Important: the switch-disconnector must be protected against overloads. The rating of the switch-disconnector must be greater than or equal to that of the upstream circuit breaker.

Upstream protection			**NR100F NR160F**	**NS100 - NS160 N**	**SX**	**H**
NG160NA downstream						
380 - 415 V	Isc max	**kA rms**	25	36	50	70
	Making capacity	**kA peak**	52	75	105	154
440 V	Isc max	**kA rms**	20	35	50	65
	Making capacity	**kA peak**	42	73	105	143

Installation and connections

Connections

Connectors — Bare cables from 1.5 to 70 mm² cables

Dimensions (mm)		**W x H x D**	**Width in 9 mm modules**
NG160	3P	90 x 120 x 82.5	10
	4P	120 x 120 x 82.5	14
NG160 with Vigi	3P	210 x 120 x 82.5	24
	4P	240 x 120 x 82.5	27
Weight (kg)			
Device	3P	1.1	
	4P	1.4	
Device + Vigi module	3P	2.6	
	4P	2.9	

Accessories for NG160 circuit breakers and switch-disconnectors

Incomer for modular switchboards

PB103521-SE-58

NG160 *+ add-on Vigi module.*

PB101693_SE_50

PB101691_SE_50

Earth-leakage protection : add-on Vigi module

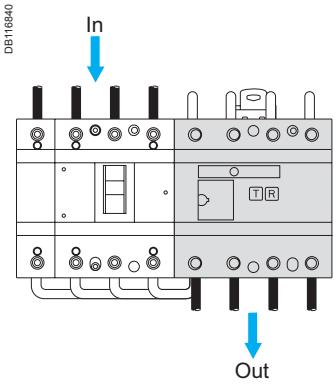
Can be installed on the right side of the circuit breaker or switch-disconnector. Two versions allow connection of outgoing circuits to the top or bottom of the Vigi module to meet installation requirements.

Characteristics as per IEC/EN 60947-2 annex B				
Number of poles		3, 4		
Sensitivity (A)		0.03 / 0.3 / 1 / 3		
Time delay	intentional [1] (ms)	0	60	150
	max. break time	< 40	< 140	< 150
Rated voltage (V)	50/60 Hz	200 to 440 V		
Reset		pushbutton		
Test		pushbutton		
Protection against nuisance tripping		■		
DC-component withstand		class A		

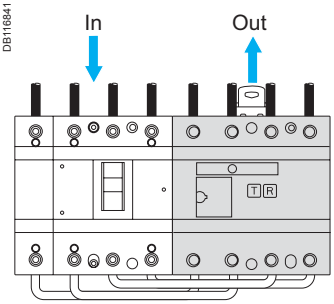
(1) If the sensitivity is set to 30 mA, there is no time delay, whatever the time-delay setting.

Prefabricated incoming connections to Vigi module for top or bottom outgoing connections

DB116840

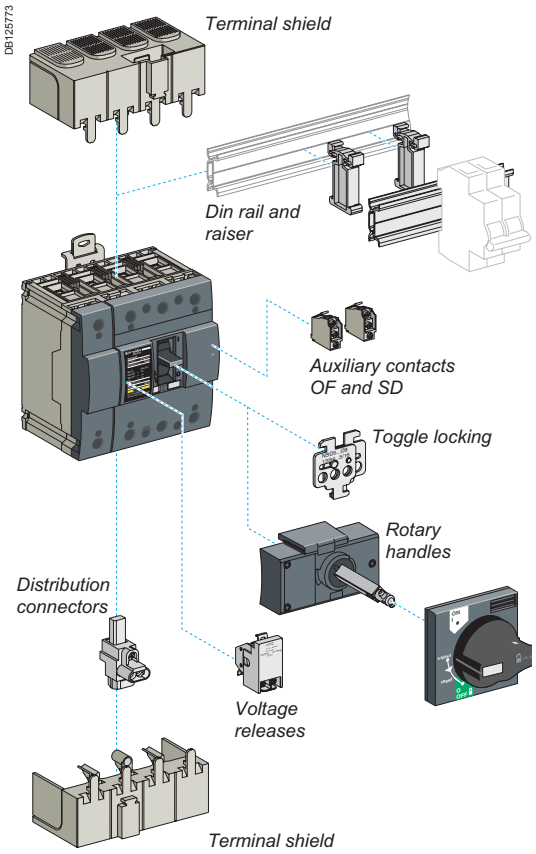


DB116841



Accessories for NG160 circuit breakers and switch-disconnectors

Incomer for modular switchboards



NG160.

Auxiliaries and accessories

Available auxiliaries include:

- 1 ON/OFF indication contact (OF)
- 1 trip-indication contact (SD)
- 1 voltage release (MN undervoltage release or MX shunt trip)
- 1 extended rotary handle with door locking, allowing operation of the device from outside the enclosure.

Depth adjuster

This accessory is required to align the front of Multi 9 devices when they are. installed next to a NG160. Maximum length 342 mm (36 modules).

Extended rotary handle

Degree of protection: IP55, IK08.

This handle makes it possible to operate circuit breakers installed inside switchboards, from the switchboard front.

It maintains:

- suitability for isolation
- indication of the three positions O (OFF), I (ON) and tripped
- access to trip unit settings, when the switchboard door is open
- circuit breaker locking capability in the OFF position by one to three padlocks, shackle diameter 5 to 8 mm (not supplied).

The door cannot be opened if the circuit breaker is ON or locked.

The extended rotary handle is made up of:

- a unit that replaces the front cover of the circuit breaker (secured by screws)
- an assembly (handle and front plate) on the door that is always secured in the same position, whether the circuit breaker is installed vertically or horizontally
- an extension shaft that must be adjusted to the distance between the back of the circuit breaker and the door, between a minimum of 185 mm and a maximum of 600 mm.

Locking accessory.

Toggle locking using a removable device

The circuit breaker can be locked in OFF position by fitting a removable accessory on the toggle.

This locking system complies with the isolation requirements of IEC 60947-2.

One to three padlocks can be used, with shackle diameters from 5 to 8 mm.

PB101696_13

Indication contacts.

PB101697_23

MX or MN voltage release.

Electrical auxiliaries

■ OF contact (open/closed): indicates the position of the circuit breaker contacts
■ SD contact (trip indication) indicates that the circuit breaker has tripped due to:
□ an overload
□ a short-circuit
□ an earth fault
□ operation of an MX or MN voltage release.
The SD contact returns to de-energised state when the circuit breaker is reset.

Standard contacts			
Rated thermal current (A)		6	
Utilisation category (IEC 60947-5-1)		AC12	AC15
Operational current (A)	220/240 V	6	4
	380/440 V	6	2

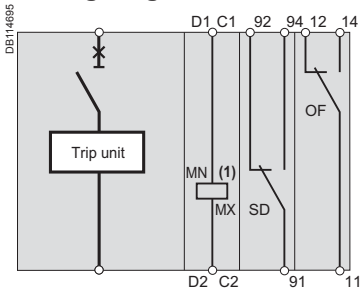
■ MX shunt release.
Trips the circuit breaker when the control voltage rises above 0.7 times the rated voltage.
Control signals can be of the impulse type (≥ 20 ms) or maintained.
■ MN undervoltage release
This release trips the circuit breaker when the control voltage drops below a tripping threshold:
□ tripping threshold between 0.35 and 0.7 times the rated voltage
□ circuit breaker closing is possible only if the voltage exceeds 0.85 times the rated voltage.
A time delay unit for the MN release eliminates the risk of nuisance tripping due to a transient voltage dip lasting ≤ 200 ms.

Operation
When the circuit breaker has been tripped by an MN or MX release, it must be reset locally.
MN or MX tripping takes priority over manual closing.
In the presence of a standing trip order, closing of the contacts, even momentarily, is not possible.

Remote tripping			
Characteristics		**MN**	**MX**
Power supply			
	V AC 50/60 Hz	24 V, 48 V, 110/130 V, 220/240 V, 380/415 V, 440/480 V	
	V DC	24 V, 48 V, 110-125 V, 250 V	
Operating threshold		0.85 to 1.1 Un	0.7 to 1.1 Un
Consumption (pick-up/hold)		< 5 VA	< 5 VA
Response time		< 50 ms	< 50 ms
Connection cable diameter		1.5 mm² max	1.5 mm² max

Wiring diagram

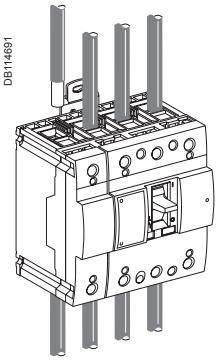
DB114695



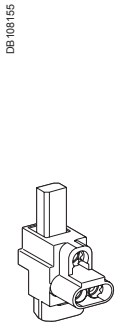
(1) MN or MX (MN: D1, D2 ; MX: C1, C2).

Installation recommendations

NG160 connection and installation in switchboards



Connection by cables.



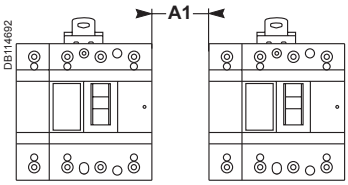
Distribution lug for 3 cables.

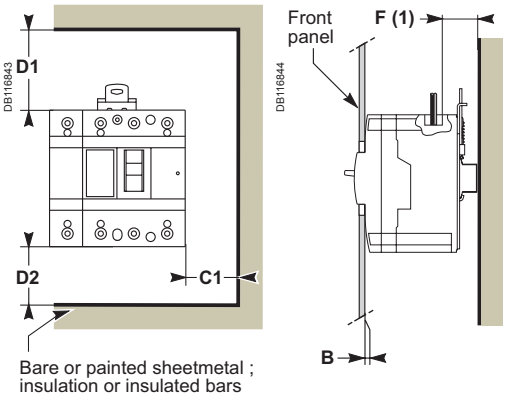
Connections

NG160 devices come with built-in bare-cable connectors as standard.
They can be tightened with a 4 mm male spanner.
The distribution lug can be used to connect 3 small-size cables.

	Standard device		With distribution lug
Rating (A)	16 to 125	160	16 to 160
L (mm)	18		≤ 10
S (mm²) rigid	1.5 to 70	10 to 70	1.5 to 16
Cu / Al flexible	1.5 to 50	10 to 50	1 to 10 (1)
Tightening torque (Nm)	5.6	8.5	2

(1) Flexible cables from 1.5 to 4 mm²: connection with crimped or self-crimping ferrules.





(1) If F < 8 mm: insulating screen is mandatory.

Minimum distance between the circuit breaker and top bottom or side panels and front or rear panels.

Safety clearance

When installing a circuit breaker, minimum distances (safety clearances) must be maintained between the device and panels, bars and other protection devices installed nearby. These distances, which depend on the ultimate breaking capacity, are defined by tests carried out in accordance with standard IEC 60947-2.

NG160	Dimensions (mm)							
Voltage	Insulation, insulated bars or painted sheetmetal			Bare sheetmetal				
	C1	D1	D2	C1	D1	D2	A1	B
U ≤ 440 V	0	30	30	5	35	35	10 0 (2)	0

(2) For NG160 with terminal shield mounted.
The mandatory distances when installing NG160 circuit breakers are calculated from the device case, not taking into account the terminal shields.

Temperature derating

When the ambient temperature is greater than 40 °C, overload-protection characteristics are slightly modified.
To determine tripping times using time/current curves, use Ir values corresponding to the thermal setting on the device, corrected for the ambient temperature (see tables below).

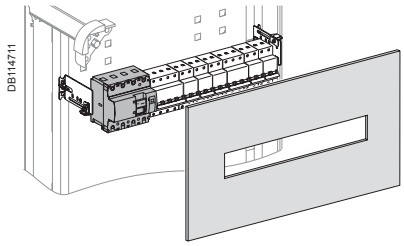
NG160

Rating (A)	40 °C	45 °C	50 °C	55 °C	60 °C	65 °C	70 °C
16	16	15.6	15.2	14.8	14.5	14	13.8
25	25	24.5	24	23.5	23	22	21
32	32	31.3	30.5	30	29.5	29	28.5
40	40	39	38	37	36	35	34
50	50	49	48	47	46	45	44
63	63	61	60	58	56	54	52
80	80	78	77	75	73	72	70
100	100	98	96	93	91	89	86
125	125	123	120	118	116	113	111
160	160	157	153	150	146	142	139
NG160NA	160	160	156	153	146	143	140

Power dissipation (in Watts)				
		Fixed circuit breaker	Additional power	
3/4 poles	Rating (A)	P/pole	Vigi (N, L3)	Vigi (L1, L2)
NG160	16	4	0.06	0.06
	25	5	0.16	0.16
	32	5.5	0.26	0.26
	40	6	0.4	0.4
	50	7	0.63	0.63
	63	8	1	1
	80	9	1.6	1.6
	100	10	2.5	2.5
	125	12.5	3.9	3.9
	160	15.4	6.4	6.4
NG160NA	160	15.4		

Modular devices
Installation in Prisma Plus wall-mount and floor-standing enclosures

NG160 circuit breaker



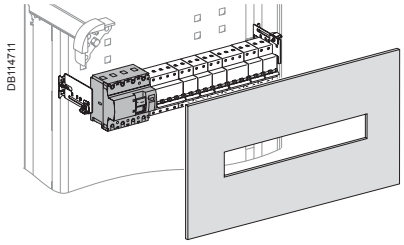
Device	*No. of vertical modules*	*Adjustable modular rail* (1)	*Modular front plate*
NG125 circuit breaker			
NG160, Vigi NG160	5	**03002 + 04227**	**03205**

(1) To add modular devices to the row, order a raised DIN rail (04227).

Capacity of modular rail: 48 Multi 9 modules.

Width of NG160 circuit breakers:
NG160 3P : 10 Multi 9 modules
NG160 4P : 14 Multi 9 modules
Vigi NG160 3P : 24 Multi 9 modules
Vigi NG160 4P : 27 Multi 9 modules

NG125, C120 circuit breaker

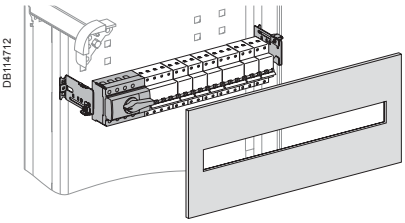


Device	*No. of vertical modules*	*Adjustable modular rail*	*Modular front plate*
Disjoncteur NG125			
NG125, Vigi NG125 C120, Vigi C120	5	**03002**	**03205**

Capacity of modular rail: 48 Multi 9 modules.

Width of NG125 circuit breakers:
NG125 3P : 9 Multi 9 modules
NG125 4P : 12 Multi 9 modules
Vigi NG125 3P ⩽ 63 A: fixed sensitivity 18 Multi 9 modules
adjustable sensitivity 20 Multi 9 modules
> 63 A: fixed sensitivity 20 Multi 9 modules
adjustable sensitivity 20 Multi 9 modules
Vigi NG125 4P ⩽ 63 A: fixed sensitivity 21 Multi 9 modules
adjustable sensitivity 23 Multi 9 modules
> 63 A: fixed sensitivity 23 Multi 9 modules
adjustable sensitivity 23 Multi 9 modules

INS40/160 switch-disconnector

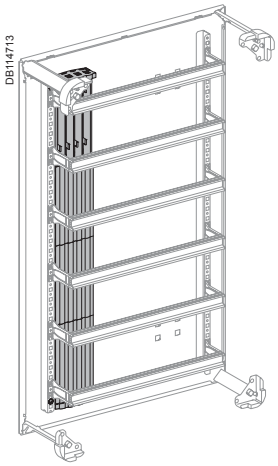


Device	*No. of vertical modules*	*Adjustable modular rail*	*Modular front plate*	*Hinged modular front plate*
INS40/160				
INS40/160	4	**03002**	**03204**	**03211**
INS100/160 with long terminal shields	5	**03002**	**03205**	

Capacity of modular rail: 48 Multi 9 modules.

Width of devices:
INS40/80: width 10 Multi 9 modules
INS100/160: width 15 Multi 9 modules

125 A Powerclip busbars



Available in two lengths (450 and 750 mm) in three and four-pole versions.
The busbars can be cut to length every 150 mm.
They are supplied with clip-on covers that block off the connected cable lugs and can be cut as needed.

Cat. no. selection

125 A Powerclip busbars		**Cat. no.**
Three-pole	L = 450 mm	**04103**
	L = 750 mm	**04107**
Four-pole	L = 450 mm	**04104**
	L = 750 mm	**04108**

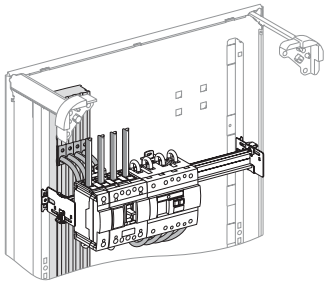
160/630 A Powerclip busbars

Available in two lengths (1000 and 1400 mm) in three and four-pole versions. The busbars can be cut to length every 200 mm.
Prefabricated connections are available for the devices.

Powerclip busbars		**160 A**	**250 A**	**400 A**	**630 A**
Three-pole	L = 1000 mm	**04111**	**04112**	**04113**	**04114**
	L = 1400 mm	**04116**	**04117**	**04118**	**04119**
Four-pole	L = 1000 mm	**04121**	**04122**	**04123**	**04124**
	L = 1400 mm	**04126**	**04127**	**04128**	**04129**

Busbar connection to powerclip

DB114714

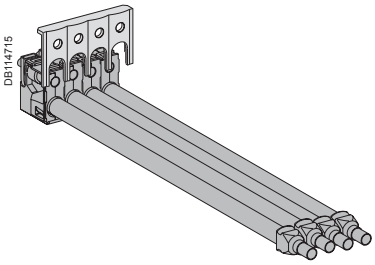


NG160 Vigi incoming device (located on left-hand side)
NG160 (without Vigi) incoming device (located in the middle)
NG125, INS160, C120

One-piece 3/4 P fast connection to busbars, equipped with male fittings on one end for tunnel terminals.
3 black cables and 1 blue cable (reversible neutral position).

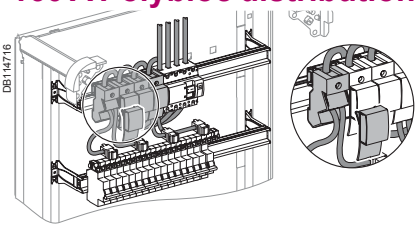
Designation	Cat. no.
One-piece connection, 160 A, L = 440 mm	04148

DB114715



160 A Polybloc distribution block

DB114716



160 A distribution block

Designation	Cat. no.
160 A Polybloc distribution block, 1P	04031

Note: *installation on a raised DIN rail.*

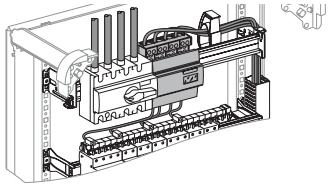
Connection for NG125, NG160, INS40/160 with or without Vigi

Two 45 mm² end fittings for tunnel terminals.

Designation	Cat. no.
Four 160 A connections for modular devices, L = 380 mm	04149

125/160 A Distribloc distribution block

DB114717



125 A distribution block

Designation	Cat. no.
125 A Distribloc distribution block	04045

Note: *installation on a raised DIN rail.*

Connection for NG125, INS40/160, C120 with or without Vigi

A male ferrule for a tunnel terminal is crimped on one end.
A 45° angle lug with a hole is crimped on the other end.
3 black cables and 1 blue cable

Designation	Cat. no.
4 NG-INS125 connections for Distribloc, L = 210 mm	04047

160 A distribution block

Designation	Cat. no.
160 A Distribloc distribution block	04046

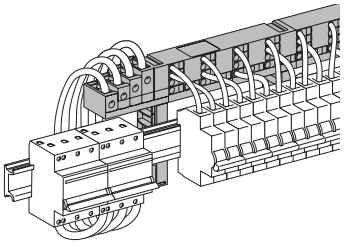
Note: *installation on a raised DIN rail.*

Connection for NG160, INS100/160 with or without Vigi

The Distribloc 160 A distribution block comes with device connections.

Multiclip distribution blocks

DB114718



Distribution block

Designation	Cat. no.
Multiclip, 80 A, 4P	04004
Multiclip, 63 A, 4P, 1/2 row	04008
Multiclip, 200 A, 2P	04012
Multiclip, 200 A, 3P	04013
Multiclip, 200 A, 4P	04014
Multiclip, 160 A, 4P, 1/2 row	04018

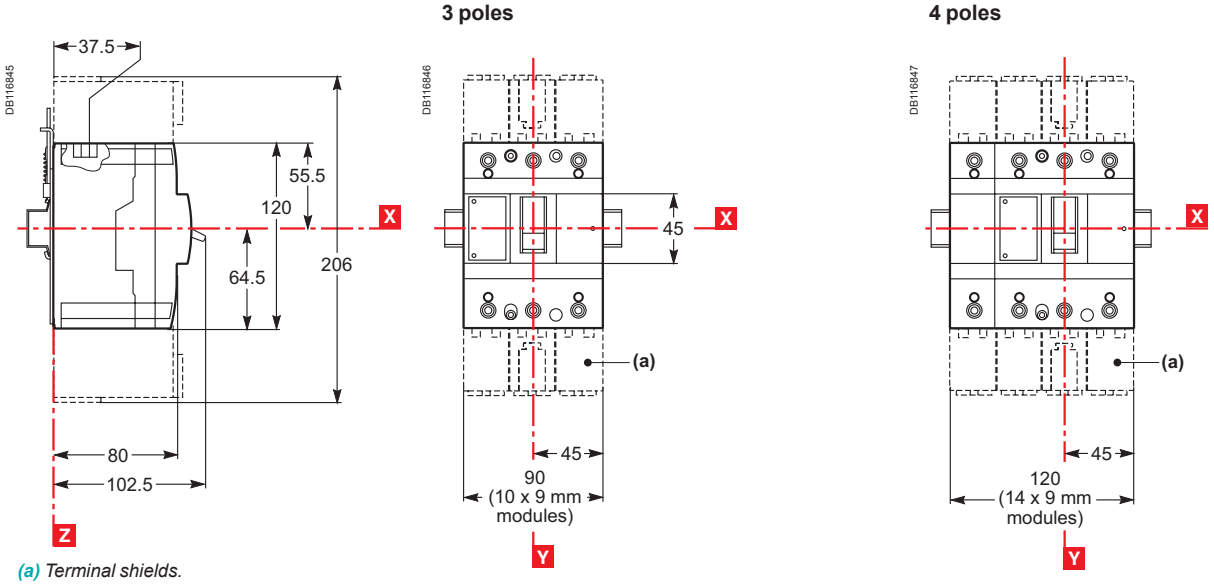
Connections

Designation	Cat. no.
Connection between 200 A Multiclip and Powerclip insulated busbars	04021
Connection between 160 A Multiclip (1/2 row) and devices	04030

Dimensions and connection

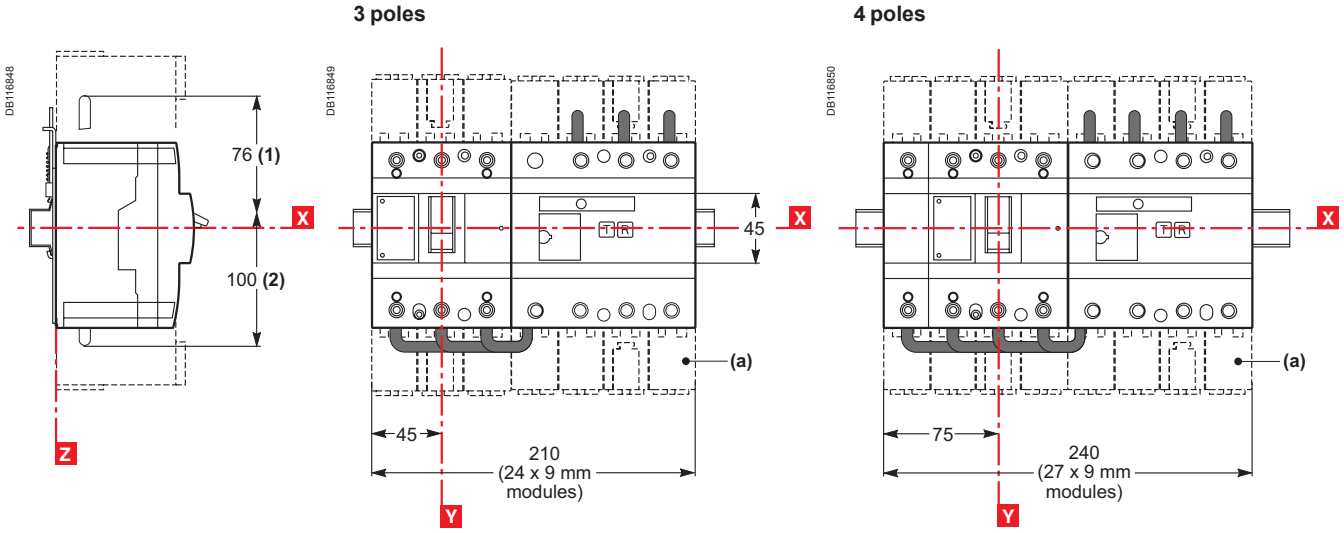
Mounting NG160, NG160 with Vigi module, Rotary handle

NG160



(a) Terminal shields.

NG160 with Vigi module

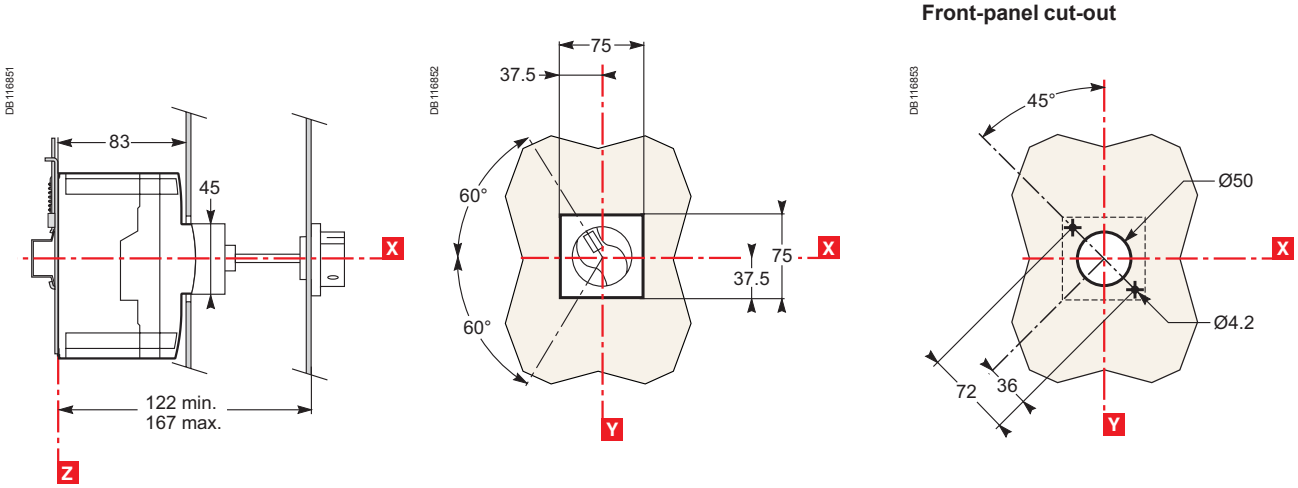


Vigi module dimensions

(1) Incoming Vigi module connection via bottom (top out version).
(2) Incoming Vigi module connection via the top (bottom out version).

(a) Terminal shields

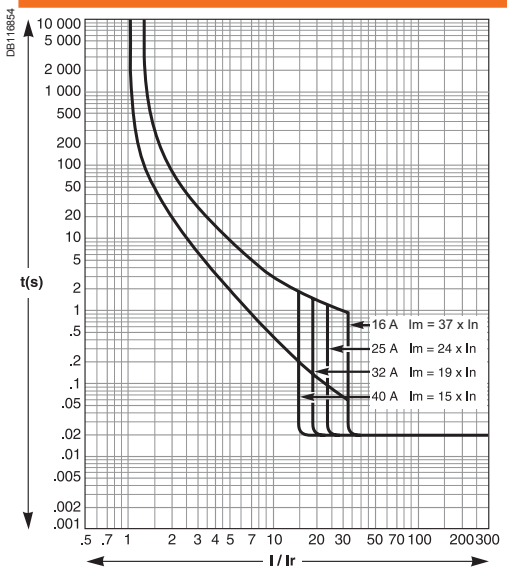
Rotary handle



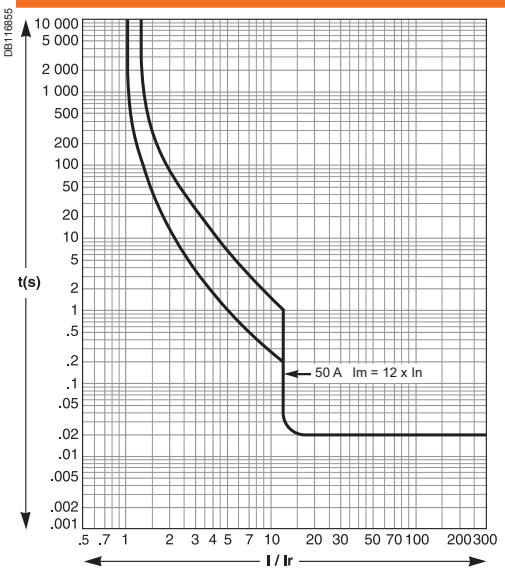
Additional characteristics

Tripping curves NG160

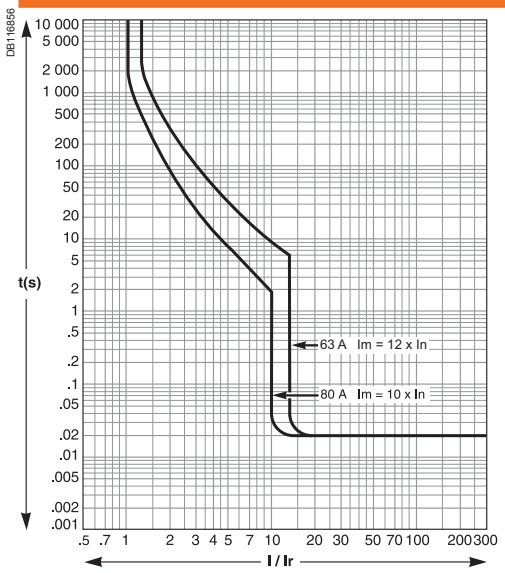
16...40 A



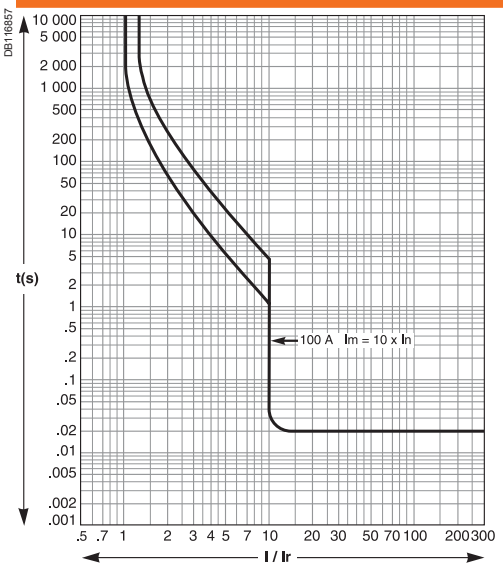
50 A



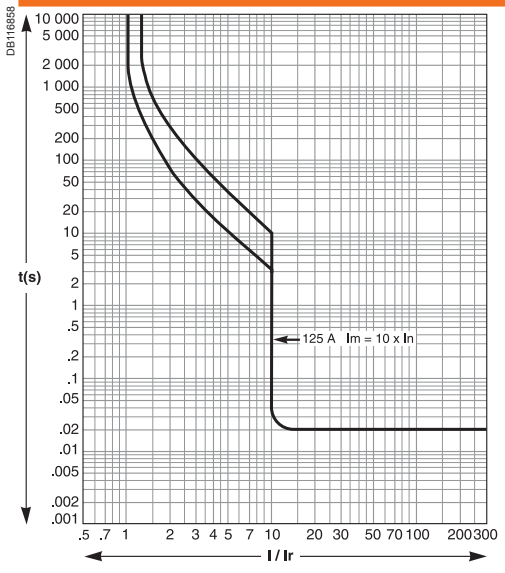
63...80 A



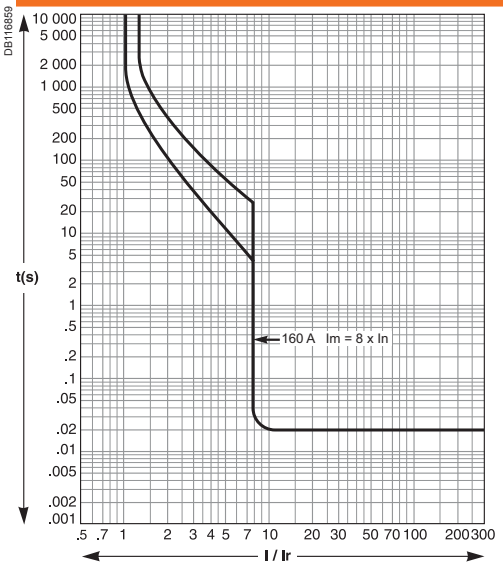
100 A



125 A



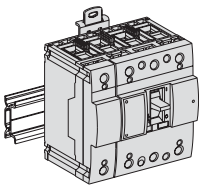
160 A



Catalogue numbers

NG160E/N/H circuit breakers
NG160NA switch-disconnectors

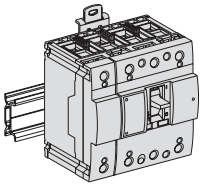
NG160E



NG160E (16 kA at 380/415 V)

	Rating	**3P** (10 x 9 mm modules)	**4P** (14 x 9 mm modules)
Fixed	16	**28609**	**28619**
	25	**28608**	**28618**
	32	**28607**	**28617**
	40	**28606**	**28616**
	50	**28605**	**28615**
	63	**28604**	**28614**
	80	**28603**	**28613**
	100	**28602**	**28612**
	125	**28601**	**28611**
	160	**28600**	**28610**

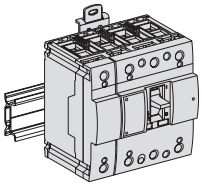
NG160N



NG160N (25 kA at 380/415 V)

	Rating	**3P** (10 x 9 mm modules)	**4P** (14 x 9 mm modules)
Fixed	16	**28629**	**28639**
	25	**28628**	**28638**
	32	**28627**	**28637**
	40	**28626**	**28636**
	50	**28625**	**28635**
	63	**28624**	**28634**
	80	**28623**	**28633**
	100	**28622**	**28632**
	125	**28621**	**28631**
	160	**28620**	**28630**

NG160H



NG160H (36 kA at 380/415 V)

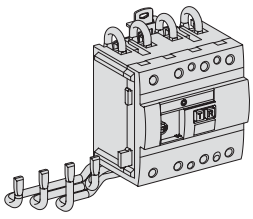
	Rating	**3P** (10 x 9 mm modules)	**4P** (14 x 9 mm modules)
Fixed	16	**28649**	**28659**
	25	**28648**	**28658**
	32	**28647**	**28657**
	40	**28646**	**28656**
	50	**28645**	**28655**
	63	**28644**	**28654**
	80	**28643**	**28653**
	100	**28642**	**28652**
	125	**28641**	**28651**
	160	**28640**	**28650**

NG160NA switch-disconnectors

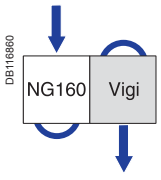
Rating	**3P** (10 x 9 mm modules)	**4P** (14 x 9 mm modules)
160	**28265**	**28267**

Add-on Vigi module

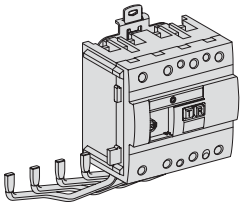
Bottom out



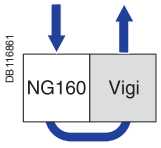
Rating	Sensitivity	Delay	**3P** (14 x 9 mm modules)	**4P** (14 x 9 mm modules)
160	Adjustable 30 mA at 3 A	Adjustable 0 - 60 - 150 ms	**28310**	**28311**



Top out



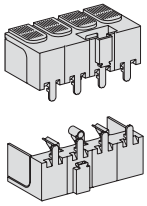
Rating	Sensitivity	Delay	**3P** (14 x 9 mm modules)	**4P** (14 x 9 mm modules)
160	Adjustable 30 mA at 3 A	Adjustable 0 - 60 - 150 ms	**28312**	**28313**



NG160E/N/H and NG160NA accessories

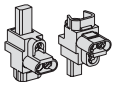
Connection accessories

Terminal shields (1 pair) for Vigi circuit breaker



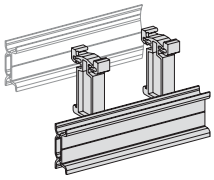
3P	**28034**
4P	**28035**

Distribution connectors



3 x 16 mm²	Set of 4	**19091**

Mounting accessories



Din rail and 4 raisers for Multi 9 devices, length 342 mm		
	For 24 module enclosure	**04227** (1)
	For 36 module enclosure	2 x **04227** (1)

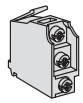
Locking

Toggle locking device for 1 or 3 padlocks

29370

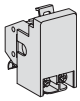
Electrical auxiliaries

Auxiliary contacts (changeover)



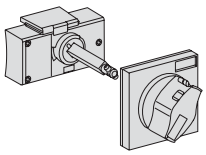
OF or SD	**29450**
OF or SD low level	**29452**

Voltage releases



AC 50/60 Hz	Tension (V)	MX	MN
	48	**28070**	**28080**
	110/130	**28071**	**28081**
	220/240	**28072**	**28082**
	380/415	**28073**	**28083**
	440/480	**28074**	**28084**
MN 220-240 V 50/60 Hz with time delay composed of:			**29421**
	MN 250 V DC		**28088**
	Delay unit 220-240 V 50/60 Hz		**29427**
DC	Voltage (V)	MX	MN
	24	**28075**	**28085**
	48	**28076**	**28086**
	125	**28077**	**28087**
	250	**28078**	**28088**

Rotary handles



Black extended handle	**28061**
Red extended handle on yellow front	**28060**

(1) MGA parts.

Schneider Electric Industries SAS
35, rue Joseph Monier
CS 30323
F- 92506 Rueil Malmaison Cedex

RCS Nanterre 954 503 439
Capital social 896 313 776 €
www.schneider-electric.com

As standards, specifications and designs change from time to time, please ask for confirmation of the information given in this publication.

This document has been printed on ecological paper

Design: Schneider Electric
Photos: Schneider Electric
Printed: