

Remote trip isolating switch DX³-IS 40A and 63A

Cat. N°(s) : 4 065 27, 4 065 28, 4 065 35, 4 065 36,
4 065 43, 4 065 44



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1. DESCRIPTION - USE

Isolating switch ensuring the breaking and the isolation of electrical circuits. Fully visible breaking indication. Remote trip with associated control auxiliaries.

2. RANGE

Polarity and symbols :

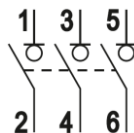
2-poles 400V~

40A
63A



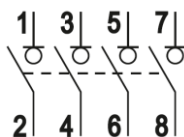
3-poles 400V~

40A
63A

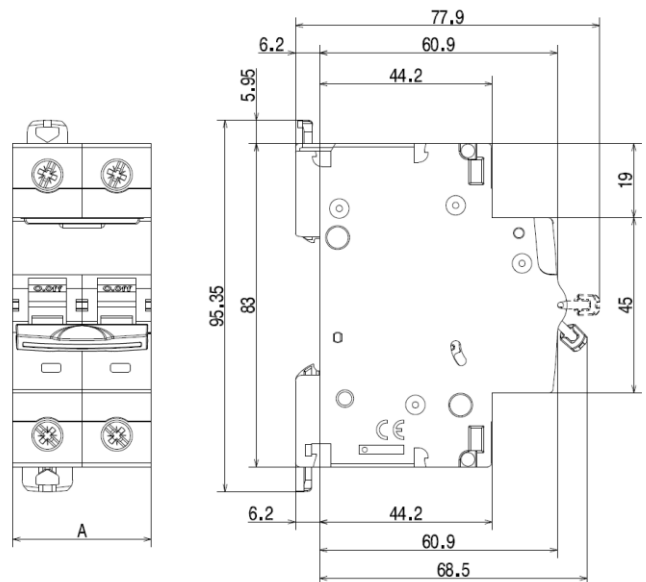


4-poles 400V~

40A
63A



3. OVERALL DIMENSIONS



	2-poles	3-poles	4-poles
A (mm)	35.4	53.1	70.8

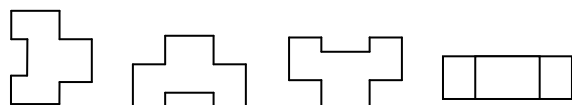
4. PREPARATION - CONNECTION

Mounting:

. On symmetrical EN 60.715 rail or DIN 35 rail

Operating position:

. Vertical Horizontal Upside down On the side



Power supply:

. Either from the top or the bottom

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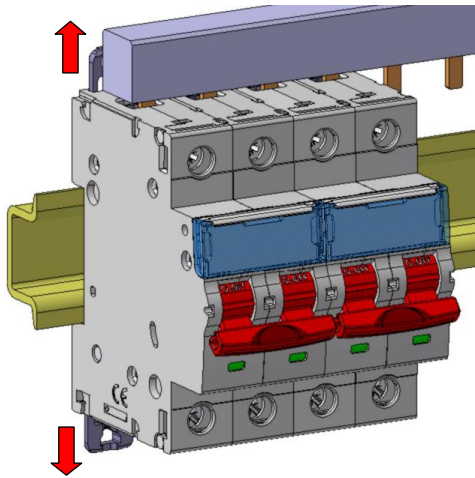
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4. PREPARATION - CONNECTION *(continued)*

Module maintenance:

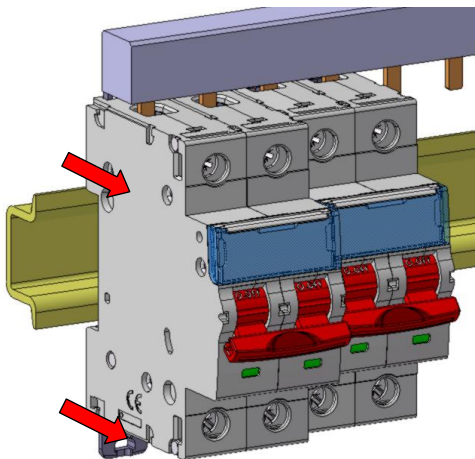
. A remote trip isolating switch may be replaced in the middle of a row supplied with busbars without disconnecting the other products.

Put the clamp
in the unlocking
position

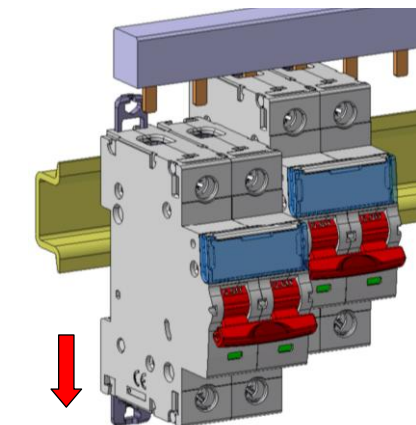


Unscrew both
upper terminals
completely

Put the clamp
in the unlocking
position



Pull the device
forward in order
to release it
from the rail



Pull the device
downward in
order to release
it completely
from the prongs
of the busbar

Connection:

- . Terminals protected against direct contact IP20, wired device
- . Cage terminals, with release and captive screws
- . Terminals fitted with shutters preventing a cable being placed under the terminal, with the terminal partly open or closed

4. PREPARATION - CONNECTION *(continued)*

Connection *(continued)*:

- . Alignment and spacing of the terminals permitting connection with the other products in the range by prong busbar and fork busbar
- . Terminal depth: 14 mm
- . Screw head: mixed, slotted and Pozidriv no. 2
- . Tightening torques:
 - Recommended: 3 Nm
 - Min.: 2 Nm
 - Max.: 3.5 Nm

Conductor type:

- . Copper cable or supply busbar
- . Cable cross-section

	Without ferrule	With ferrule
Rigid cable	1 x 1.5 à 35 mm ² 2 x 1.5 à 16 mm ²	-
Flexible cable	1 x 1.5 à 25 mm ² 2 x 1.5 à 10 mm ²	1 x 1.5 à 25 mm ²

- . HX³Prong busbar : screw terminal, alone or with a flexible wire (without ferrule) 16 mm² or a connection terminal in the same terminal.
- . HX³ 125 A Horizontal distribution block plug in system: at the top of the product
- . Fork busbar : at the bottom of the product

Recommended tools:

- . For the terminals:
 - screwdriver with 5.5 mm to 6.5 mm blade or Pozidriv no. 2 screwdriver
- . For attaching or removing the DIN rail:
 - screwdriver with 5.5 mm to 6 mm blade or Pozidriv no. 2 screwdriver

Manual actuation of the Remote trip isolating switch:

- . Ergonomic 2-position handle
- . "O-OFF": Device open
- . "I-ON": Device closed

Contact status display:

- . By visible contact indicator
- Green indicator = contacts opened
- Red indicator = contacts closed

Locking:

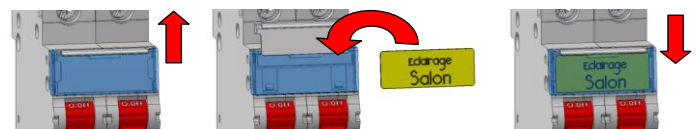
- . Padlocks possible in the open and closed positions with padlock support (Cat. N°. 4 063 03) and Ø5 mm padlock (Cat. N°. 4 063 13) or Ø6 mm padlock (Cat. N°. 0 227 97)

Sealing:

- . Possible in the open or closed positions

Labelling:

- . Circuit identification by way of a label inserted in the label holder situated on the front of the product.



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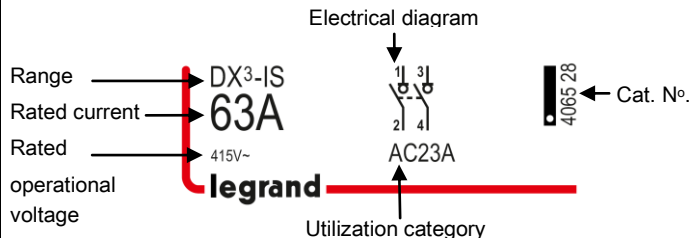
5. GENERAL CHARACTERISTICS

Neutral earthing system:

. IT, TT, TN

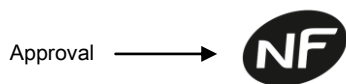
Marking on the front side:

. By permanent ink pad printing



Marking on the upper panel :

. By permanent ink pad printing



Standard → IEC 60947-3

Minimum operating voltage:

. U = 12 V AC

Maximum operating voltage:

. U = 455 V AC

Rated operating voltage:

. U_e = 415 V AC

Rated frequency :

. 50/60 Hz with standard tolerances

Rated short time withstand:

. I_{cw} = 1000 A for 1s according to standard IEC/EN 60947-3
. I_{cw} = 1700 A for 0.5s according to standard IEC/EN 60947-3

Rated making capacity in short circuit:

. I_{cm} = 3000 A according to standard IEC/EN 60947-3

Utilization category :

. A : Frequent operations
. AC22A : Mixed loads
. AC23A : Inductive loads
according to standard IEC/EN 60947-3

DC operation :

Minimum voltage U = 12 V DC
Maximum voltage U = 55 V DC par pôle :

. 110 V in 2-pole
. 165 V in 3-pole
. 220 V in 4-pole

Short-circuit behavior in coordination with DPCC

. I_{nc} = 3000 A according to standard EN 60669-2-4

Endurance DC22A

. 55 V for pole at 63 A DC

5. GENERAL CHARACTERISTICS (continued)

Insulation voltage:

. U_i = 500 V

Degree of pollution:

. 3

Rated impulse withstand voltage:

. U_{imp} = 6 kV

Degree or class of protection:

. Terminals protected against direct contact. Class of protection against solid objects and liquids (wired device): IP20 in accordance with standards IEC 529 – EN 60529 and NF 20-010
. Class II in relation to metallic conductive parts
. Class of protection against mechanical impacts IK02 in accordance with standard EN 62262.

Plastic materials:

. Polyamide and P.B.T.

Higher heating potential:

The heat potential is assessed at:

2-pole	3-pole	4- pole
2.47 MJ	3.73 MJ	4.94 MJ

Closing and opening force via the handle:

	2-pole	3-pole	4- pole
To switch Off	6 N	9 N	12 N
To switch On	20 N	30 N	40 N

Mechanical endurance:

. Compliant with standard EN/IEC 60947-3
. Superior to 35,000 operations

Electrical endurance:

. In accordance with standard EN/IEC 60947-3
. Tested with 15,000 operations in AC22 with load (I_n x Cos φ 0.65)
. Tested with 5,000 operations in AC23 with load (I_n x Cos φ 0.45)

Enclosure heat and fire resistance:

. Resistance to glow wire tests at 960°C, in accordance with standard EN/IEC 60898-1
. Classification V2, in accordance with standard UL94

Vibrations and tremors resistance:

. In accordance with standard IEC/EN60947-1 appendixQ category F

Resistance to wet heat and salt spray

. In accordance with standard IEC/EN60947-1 appendixQ category F

Ambient temperatures:

. Operation: from - 25°C to + 70°C
. Storage: from - 40°C to + 70°C

Frequency:

. Operation at 400 Hz: yes

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5. GENERAL CHARACTERISTICS (continued)

Packaged volume:

.Packaging by 1

2-pole	3-pole	4- pole
0.37 dm ³	0.52 dm ³	0.7 dm ³

Average unit weight per catalogue number:

2-pole	3-pole	4- pole
176 g	265 g	352 g

Power dissipated in W per pole in In:

. Remote trip isolating switch in In/Un

40A	63A
1.1 W	2.8 W

Short-circuit behavior in coordination with upstream protection:

. Tests performed according to the protocol of IEC/EN 60669-2-4 :

The device remains fully functional and meets the switch tests after suffering two short circuit established in coordination with the DPCC of the following table.

- The first short circuit being set at an angle of 45 °.
- The second being provided by the switching on of the isolator switch on the short-circuit.

Rated voltage 415V~ (3P,4P)		Inc (kA)	
Upstream protection		40A	63A
MCB	DX ³ 4500A/6kA	6	6
	DX ³ 6000A/10kA	10	10
	DX ³ 10000A/16kA	16	16
	DX ³ 25kA	16	16
	DX ³ 36kA	16	16
	DX ³ 50kA	16	16
	DPX ³ 160A 16kA	10	10
	DPX ³ 160A 25kA	10	10
	DPX ³ 160A 50kA	10	10
	DPX ³ 250A 25kA	10	10
	DPX ³ 250A 36kA	10	10
	DPX ³ 250A 70kA	10	10
Fuse gG / aM	40A	40	
	63A	30	30
	80A	20	20
	100A	16	16
	125A	5	5

Rated voltage 250V~ (2P)		Inc (kA)	
Upstream protection		40A	63A
MCB	DNX ³ 4500A/4,5kA	4,5	4,5
	DX ³ 4500A/6kA	6	6
	DX ³ 6000A/10kA	20	20
	DX ³ 10000A/16kA	25	25
	DX ³ 25kA	16	16
	DX ³ 36kA	16	16
	DX ³ 50kA	16	16
Fuse gG / aM	40A	40	
	63A	30	30
	80A	20	20
	100A	16	16
	125A	5	5

6. COMPLIANCE AND APPROVALS

In accordance with standard:

- . IEC/EN 60947-3

Usage in special conditions:

- . In accordance with appendix Q category F of standard IEC/EN 60947-1.

Respect for the environment – Compliance with European Union Directives:

- . Compliance with Directive 2002/95/EC of 27/01/03 known as "RoHS" which provides for a restriction on the use of dangerous substances such as lead, mercury, cadmium, hexavalent chromium and polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) brominated flame retardants from 1st July 2006.
- . Compliance with the Directive 91/338/EEC of 18/06/91 and decree 94-647 of 27/07/04.

Plastic materials:

- . Halogen free plastic materials.
- . Labelling of parts compliant with ISO 11469 and ISO 1043.

Packaging:

- . Design and manufacture of packaging compliant with decree 98-638 of 20/07/98 and Directive 94/62/EC.

Approvals obtained:

- . See list of approvals available.

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7. EQUIPEMENTS AND ACCESSORIES

Wiring accessories:

- . Supply busbar:
 - HX³ Prong busbar screw terminal (Cat. N° 4 049 38, 39, 40, 41, 42, 43, 44, 45)
 - Fork busbar (Cat. N° 4 049 14, 17, 18, 20)
- . Plug in system:
 - HX³ 125 A Horizontal distribution block plug in system (Cat. N° 4 052 20, 21)
 - HX³ 125 A Connection module plug in system (Cat. N° 4 052 22, 23)
- . Connection terminals (Cat. N° 4 049 06)
- . Sealable screw cover (Cat. N° 4 063 04).
- . Aluminum cable terminal section 50 mm² maxi (Cat. N° 4 063 10) for remote trip isolating switch DX³ ≤ 63A
- . Insulation partition (Cat. N° 4 063 05).

Possible combinations of auxiliaries and remote trip isolating switch:

- . The auxiliaries are installed on the left of the remote trip isolating switch
- . Maximum number of auxiliaries = 3

Signalling auxiliaries:

- . Auxiliary contact (0.5 module, Cat. N° 4 062 58)
- . Fault signalling contact (0.5 module, Cat. N° 4 062 60)
- . Auxiliary contact that can be changed into fault signalling contact (0.5 module, Cat. N° 4 062 62)
- . Auxiliary contact + fault signalling contact that can be changed into 2 auxiliary contacts (1 module, Cat. N° 4 062 66)
- . Maximum number of signalling auxiliaries = 2

Control auxiliaries:

- . Shunt trip (1 module, Cat. N° 4 062 76, 78)
- . Under voltage release (1 module, Cat. N° 4 062 80, 82)
- . Autonomous shunt trip release for N/C push-button (1.5 module, Cat. N° 4 062 87)
- . Power Overvoltage Protection (1 module, Cat. N° 4 062 86)
- . Maximum number of control auxiliaries (Cat. N° 4 062 76 to 4 062 87) = 1
- . The control auxiliary (trip Cat. N° from 4 062 76 to 4 062 87) must mandatorily be placed to the left of the signalling auxiliaries (Cat. N° from 4 062 58 to 4 062 66) where the auxiliaries from these 2 families are connected to the same remote trip isolating switch

Motor driven control modules:

- . Motor-driven control module (1 module, Cat. N° 4 062 91)
- . Motor-driven control module with integrated automatic reset (2 modules, Cat. N° 4 062 93, 4 062 95)
- . The motor-driven control module are installed immediately to the left of the remote trip isolating switch. 2 Signalling auxiliaries can be placed to the left of the motor-driven control module

Sealing:

- . Possible in the open or closed positions

Locking options:

- . Via padlock 5 mm in diameter (Cat. N° 4 063 13) or padlock 6 mm in diameter (Cat. N° 0 227 97) and padlock support (Cat. N° 4 063 03)

Installation software:

- . XL PRO³