

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.

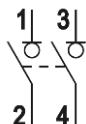
2. RANGE

Polarity and symbols :

2-poles 400V~

40A

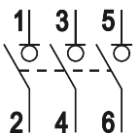
63A



3-poles 400V~

40A

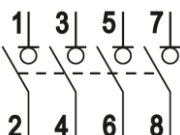
63A



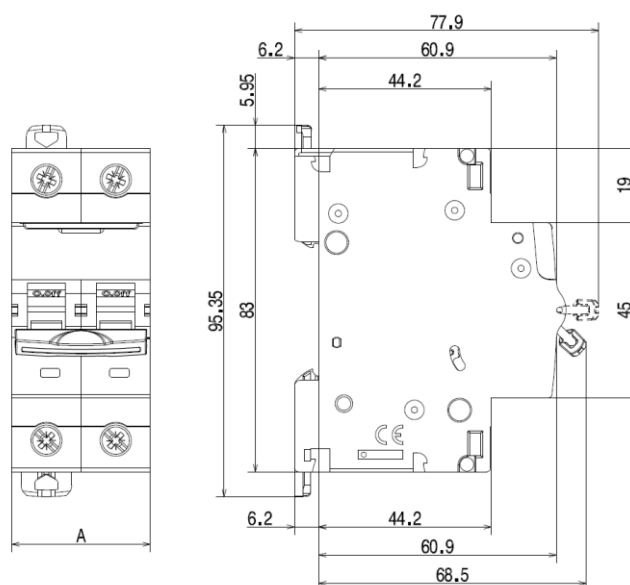
4-poles 400V~

40A

63A



3. OVERALL DIMENSIONS



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

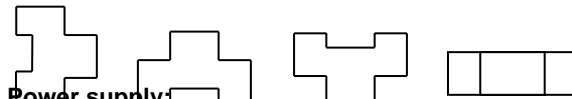
4. PREPARATION - CONNECTION

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

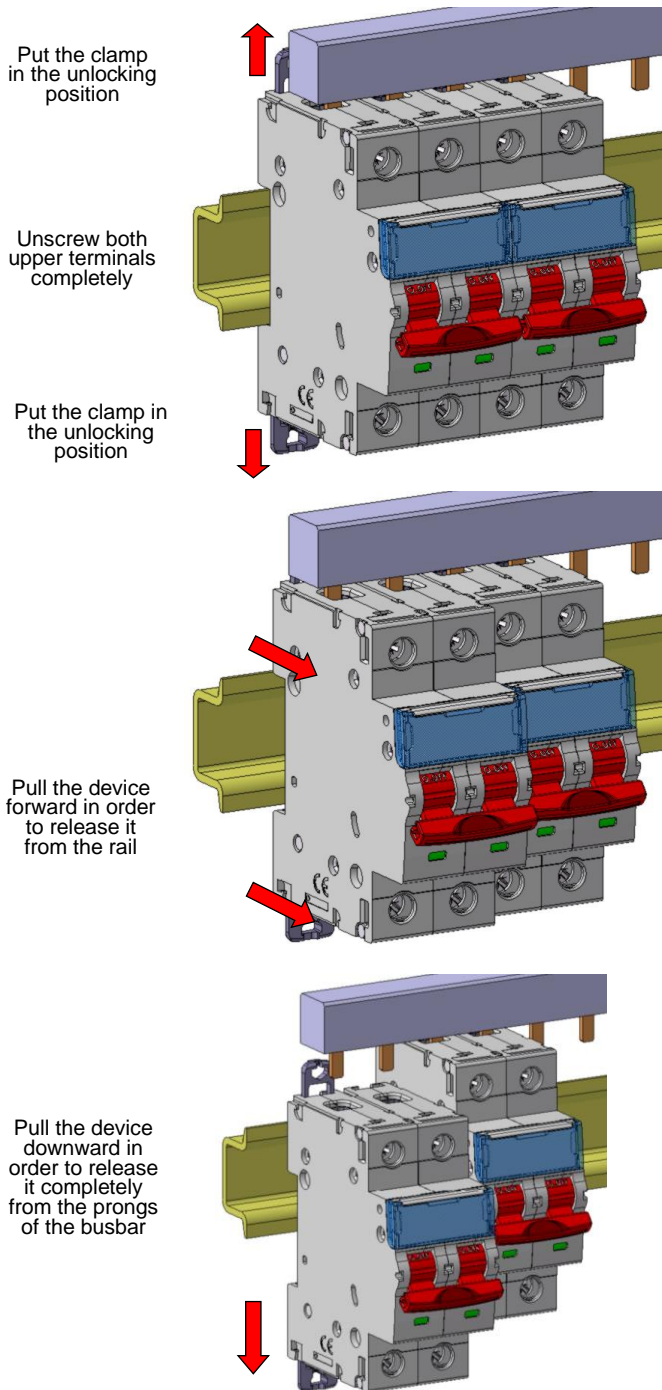
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4. PREPARATION - CONNECTION (continued)

Module maintenance:

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



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

- . HX³ Prong 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:

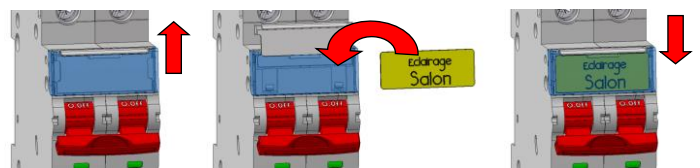
- . Padlocks possible in the open and closed positions with padlock support (Cat. N°. 4 063 03) and Ø5 mm padlock (Cat. N°. 4 063 13) or Ø6 mm padlock (Cat. N°. 0 227 97)

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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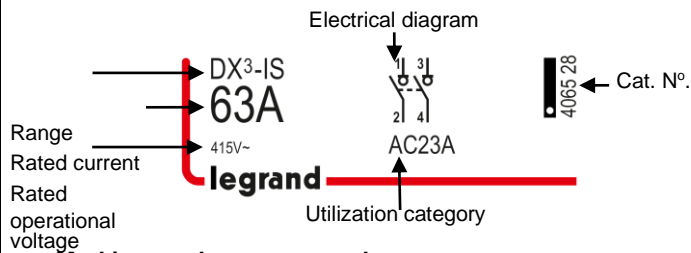
5. GENERAL CHARACTERISTICS

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

Approval



→ IEC 60947-3

Minimum operating voltage:

. U = 12 V AC

Standard

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:46
 - HX³ Prong busbar screw terminal (Cat. N°. 4 049 46, 9 47, 9 48, 9 50, 9 51, 9 52, 9 54, 9 55)
 - Fork busbar (Cat. N°. 4 049 59, 9 63, 9 64, 9 36)
- . 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