

Isolating switch DX³-IS

1 module per pole, 63A

Cat N°(s) : 4 064 53



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1. DESCRIPTION - USE

Isolating switch ensuring the breaking and the isolation of electrical circuits.

Fully visible breaking indication.

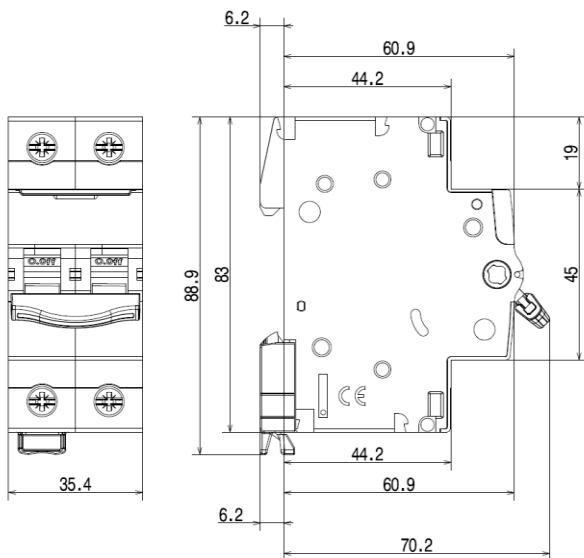
2. RANGE

Polarity and symbols :

2-poles 400V~ 63A



3. OVERALL DIMENSIONS



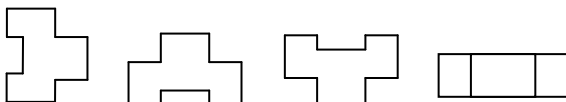
4. PREPARATION - CONNECTION

Mounting :

. On symmetrical EN 60.715 rail or DIN 35 rail.

Operating positions:

. Vertical Horizontal Upside down On the side



4. PREPARATION - CONNECTION (continued)

Power supply:

. Either from the top or the bottom.

Module maintenance :

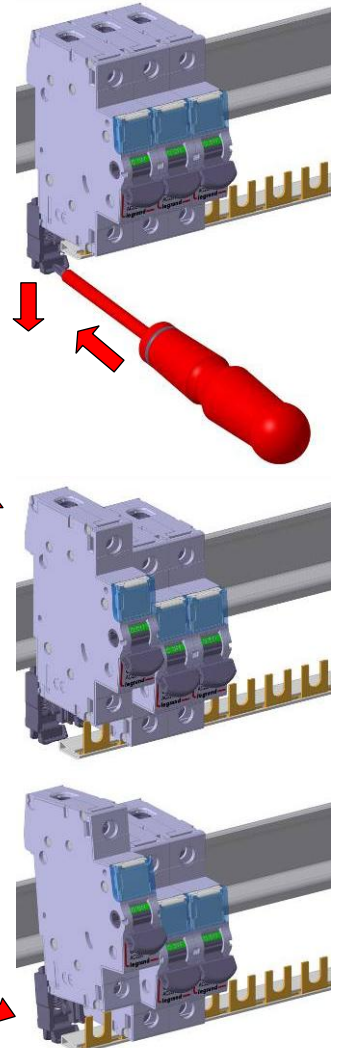
. Isolating switches may be replaced in the middle of a row supplied with busbars without disconnecting the other products.

Unscrew the terminals completely

Put the clamp in the unlocking position with a screwdriver

Pull the device upward

Pull the device downward in order to release it completely from the prongs of the busbar. Then pull the device forward.



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4. PREPARATION - CONNECTION (continued)

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.
- . Alignment and spacing of the terminals permitting connection with the other products in the range via prong supply busbars.

- . Terminal depth : 14 mm.
- . Screw head: mixed, slotted and Pozidriv no. 2.
- . Tightening torques:
 - Min: 2 Nm.
 - Recommended: 3 Nm.
 - Max: 3.5 Nm.

Conductor type:

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

	Without ferrule	With ferrule
Rigid cable	1 conductor 1.5 to 35 mm ² 2 conductors 1.5 to 16 mm ²	
Flexible cable	1 conductor 1.5 to 25 mm ² 2 conductors 1.5 to 10 mm ²	1 conductor 1.5 to 25 mm ²

Recommended tools:

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

Manual actuation of the Isolating switch:

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

Contact status display:

- . By marking of the handle:
 - "O-OFF" in white on a green background = contacts open.
 - "I-ON" in white on a red background = contacts closed.

Locking:

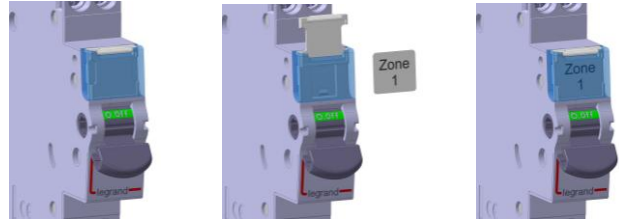
- . Padlocks possible in the open and closed positions with padlock support (Cat. No. 4 063 03) and Ø5 mm padlock (Cat. N°. 4 063 13) or Ø6 mm padlock (Cat. N°. 0 227 97).

Sealing:

- . Possible in the open or closed positions.

Labelling:

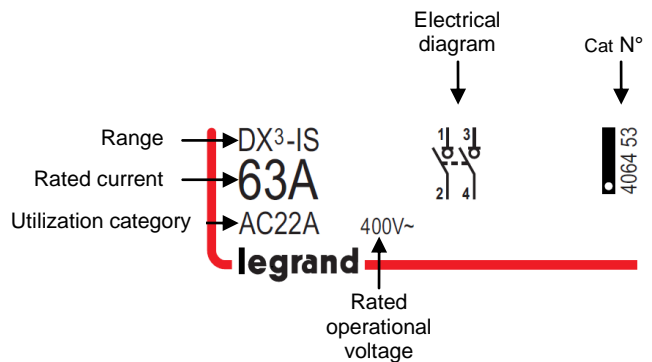
- . Circuit identification by way of a label inserted in the label holder situated on the front of the product.



5. GENERAL CHARACTERISTICS

Marking on the front side:

- . By permanent ink pad printing.



Marking on the upper panel:

- . By permanent ink pad printing

Approvals → BS 60669-2-4

Rated operational voltage :

- . U_e = 400 V ~

Rated frequency :

- . 50/60 Hz with standard tolerances.

Short-circuit withstand :

- . Rated conditional short-circuit current in combination: see coordination table on page 4.

- . Maximum capacity switching on short-circuit : 4500 A

Following IEC/EN 60947-3 :

- . I_{cw} = 2000 A

- . I_{cm} = 3000 A

Following IEC/EN 60669-2-4 :

- . I_{nc} = 4500 A with fuse of same rated current.

Insulation voltage:

- . U_i = 500 V

Rated impulse withstand voltage:

- . U_{imp} = 6 kV

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5. GENERAL CHARACTERISTICS (continued)

Direct current utilization :

. 48V (110V with 2 poles serial cabling).

Utilization category:

. AC22 : Mixed load.
. A : Frequent operations.

Degree of pollution:

. 3 in accordance with standard CEI 60664-1.

Power dissipated per pole :

1.67W

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 IK04 in accordance with standard EN 62262.

Plastic materials:

. Polyamide, PBT and PC

Enclosure heat and fire resistance:

. Resistance to glow wire tests at 960°C, in accordance with standard CEI 60695-2-10 & 60695-2-11.
. Classification V2, in accordance with standard UL94.

Higher heating potential:

. The heat potential is assessed at 2.46MJ

Closing and opening effort via the handle:

. To swith off: 13N
. To swith on: 34N

Mechanical endurance:

. Compliant with standard IEC/EN 60947-3 & IEC/EN 60669-2-4
. 200 000 operations with no load.

Electrical endurance:

. Compliant with standard IEC/EN 60947-3 & IEC/EN 60669-2-4
. 20 000 operations with load AC22A (in accordance with IEC/EN 60947-3).

Vibrations and tremors resistance :

. Compliant with appendix Q catégorie F of standard IEC/EN 60947-1.

Ambient temperatures:

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

5. GENERAL CHARACTERISTICS (continued)

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 400V~		Inc (kA)
Upstream protection		63A
MCB	DX ³ 4500A/6kA	6
	DX ³ 6000A/10kA	10
	DX ³ 10000A/16kA	10
	DX ³ 25kA	10
	DX ³ 36kA	10
	DX ³ 50kA	10
	DPX ³ 160A 16kA	10
	DPX ³ 160A 25kA	10
	DPX ³ 160A 36kA	10
	DPX ³ 160A 50kA	10
	DPX ³ 250A 25kA	10
DPX ³ 250A 36kA	10	
DPX ³ 250A 70kA	10	
Fuse gG / aM	63A	16
	80A	16
	100A	16
	125A	16

Packaged volume:

. Packaging: per 5
. Volume: 1.6 dm³

Average unit weight:

162g

6. COMPLIANCE AND APPROVALS

In accordance with standards:

. IEC/EN 60947-3.
. IEC/EN 60669-2-4.

Usage in special conditions:

. Compliant with appendix Q catégorie F of standard IEC/EN 60947-1.

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6. COMPLIANCE AND APPROVALS *(continued)*

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.

7. AUXILIARIES AND ACCESSORIES

Wiring accessories:

- . Fork-type supply busbars (Cat N°: 4 049 11, 4 049 12, 4 049 14, 4 049 17, 4 049 18, 4 049 20).
- . Sealable screwcover (Cat N°: 4 063 04).
- . Terminal for aluminium conductor gauge 50 mm² max for DX³-IS ≤ 63A (Cat N°: 4 063 10).
- . Insulating shield (Cat N°: 4 063 05).

Signalling auxiliaries (No busbar):

- . Auxiliary contact (0.5 module, Cat N°: 4 062 58).
- . Double Auxiliary contact (1 module, Cat N°: 4 062 66).

Installation software:

- . XL PRO³.