

DX³ Power Overvoltage Protection (POP)

Cat. N°(s): 4 062 86

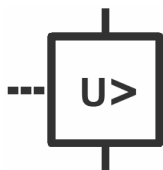


CONTENTS	PAGE
1. Description - Use	1
2. Range.....	1
3. Overall dimensions	1
4. Preparation - Connection	1
5. General Characteristics	3
6. Compliance and approvals.....	4

1. DESCRIPTION - USE

. Power Overvoltage Protection (POP) is an auxiliary which is intended to mitigate the effects of power frequency overvoltages between phase and neutral conductor (e.g. caused by loss of neutral conductor in the three phase supply upstream the POP) for downstream equipment by actuating the main protective device when an overvoltage between phase and neutral is detected.

.Symbol:

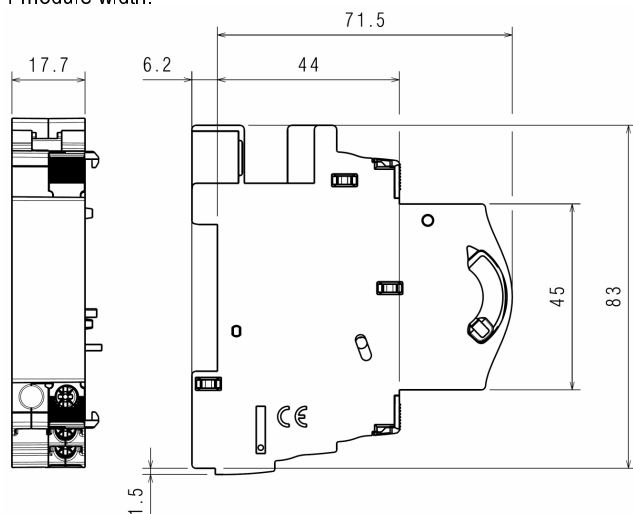


2. RANGE

. Cat n° 4 062 86 : 230 V ~ (a.c.).

3. OVERALL DIMENSIONS

1 module width.



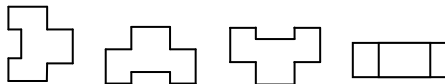
4. PREPARATION CONNECTION

Mounting:

. On symmetrical EN/IEC 60715 or DIN 35 rail, by the device which is associated.

Operating positions:

. Vertical Horizontal Upside down On the side



Power Supply:

. Only from the bottom.

Terminals:

. Terminal depth: 8 mm.
. Stripping length: 8 mm

Screw head:

. Mixed, slotted and Pozidriv n°1 (UNI7596 type Z1).

Recommended tightening torque:

. 1 Nm.

Recommended tools:

. For the terminals: Pozidriv n°1 or flat screwdriver 4 mm.
. For the adjustment pawl of the timer: flat screwdriver 4 mm.

Conductor type:

	Copper cable	
	Without ferrule	With ferrule
Rigid Cable	1 x 0,5 mm ² to 1,5 mm ² 2 x 1,5 mm ²	-
Flexible Cable	1 x 0,5 mm ² to 1,5 mm ² 2 x 1,5 mm ²	1 x 0,5 mm ² to 1,5 mm ² 2 x 1,5 mm ²

Manual action of the POP:

. By the handle of the associated device, for reset the release.

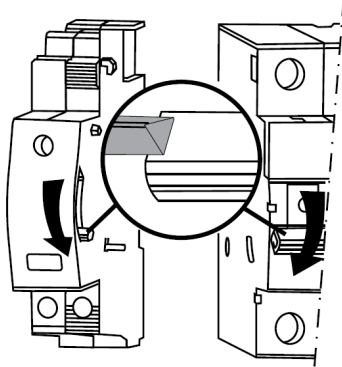
4. PREPARATION –CONNECTION (continued)

Display of POP state:

- By mechanical indicator on front face:
 - red: indicates the tripping of the device by the coil.
 - transparent: the undervoltage release is in ON position (armed position, ready for tripping).

Assembling:

- On the left side of Legrand MCB, RCBO, RCCB or Isolating switch equipped or not with signalling auxiliaries
- No tool required. Clipped by mean of plastic clamps on the associated device.
- Assembling products in OFF position
- The switching device of the POP must be positioned above of the handle of the associated device or the signalling auxiliary.



List of allowed associations (General rules):

- Three auxiliaries maximum which:
 - two signalling auxiliaries maximum. (Cat n°(s) 4 062 58, 60, 62, 66).
 - Only one control auxiliary (Cat n°(s) 4 062 76, 78, 80, 82, 84, 86, 87).
- If signalling and control auxiliaries are associated on the same circuit breaker, the command auxiliary must be placed to the left of the signal auxiliary (Cat. n°(s) 4 062 5x / 6x).

- For devices 1,5 modules per pole width:
 - If a Remote tripping auxiliary is already mounted on this kind of device, POP (4 062 86) then only 1 module signalling auxiliaries can be added (auxiliary + fault signalling contact or auxiliary contact + auxiliary contact 4 062 64 / 66). In this set up the ½ module signalling auxiliaries will not operate.
 - Nothing changes for the other modular references.

4. PREPARATION –CONNECTION (continued)

List of allowed associations (Particular rules):

- With an isolating switch DX3-IS:
 - only one signalling auxiliary CA type (Cat. n°(s) 4 062 58 or 4 062 66).
- With a remote trip head isolating switch DX3-IS, three auxiliaries maximum which:
 - one or two signalling auxiliaries CA type (Cat. n°(s) 4 062 58 or 4 062 66).
 - one control auxiliary Cat. n°(s) 4 062 7x / 8x.
- With a MCB, IS, RCBO or RCCB three auxiliaries maximum which:
 - one or two signalling auxiliaries maximum, CA type or SD type (Cat. n°(s) 4 062 58, 60, 62, 66).
 - one control auxiliary Cat. n°(s) 4 062 7x / 8x.

Combination tables of the auxiliaries:

- For devices 1 module per pole width:

			4 062 .. 50 / 52 / 56 / 58 / 60 / 62 / 66 / 76 / 78 / 80 / 82 / 84 / 86 / 87
	4 062 .. 50 / 52 / 56 / 58 / 60 / 62 / 76 / 78 / 80 / 82 / 84 / 86 / 87	4 062 .. 50 / 52 / 56 / 58 / 60 / 62	
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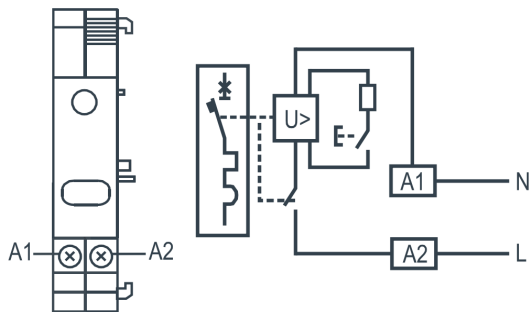
- For devices 1,5 modules per pole width:

			4 062 .. 50 / 52 / 56 / 58 / 60 / 62 / 66 / 76 / 78 / 80 / 82 / 84 / 86 / 87
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5. GENERAL CHARACTERISTICS

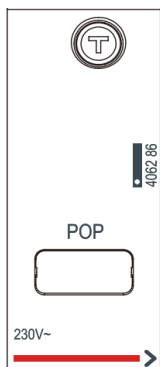
Electric wiring diagram:

. Cat. n° 4 062 86.



Marking on the front side:

. By permanent ink pad printing:



- Function name : POP = Power Voltage Protection
- Operating voltage
- T = Test button
- Legrand reference code and Logo

Power absorbed:

. 230 V a.c. = 0,45 VA.

Rated impulse withstand voltage:

. $U_{imp} = 5\text{ kV}$.

Electromagnetic compatibility:

- . Burst: 4 kV.
- . Surge 1,2/50 μs : 4 kV differential mode and 5 kV common mode.

Insulation voltage:

. $U_i = 500\text{ V}$

Dielectric strength:

. 2500 V.

Tripping force:

. 3 Nm.

Mechanical endurance:

- . 3 000 electrical tripping.
- . These devices support the mechanical cycles of the associated devices

5. GENERAL CHARACTERISTICS (continued)

Ambient temperatures:

- . Operation: from -25°C . to $+70^\circ\text{C}$
- . Storage: from -40°C . to $+70^\circ\text{C}$

Enclosure material:

- . Polycarbonate charged 10% glass fiber.
- . Characteristics of this material: self extinguishing, heat and fire resistant in accordance with standard EN 60898-1, glow-wire test at 960°C for external parts made of insulating material necessary to retain in position current-carrying parts and parts of protective circuit (650°C for all other external parts made of insulating material).

Degree of class protection:

- . Protection index of terminals against solid and liquid bodies: IP20 (in accordance with standards IEC 529, EN 60529 and NF C 20-010).
- . Protection index of the box against solid and liquid bodies: IP40 (in accordance with standards IEC 529, EN 60529 and NF C 20-010).
- . Protection index against mechanical shocks: IK02 (in accordance with standards EN 50102 and NF C 20-015).

Sinusoidal vibration resistance in accordance with IEC 60068-2-6:

- . Axes: x, y, z.
- . Frequency: $5\pm 100\text{ Hz}$; duration 90 minutes
- . Displacement ($5\pm 13,2\text{ Hz}$) : 1mm
- . Acceleration ($13,2\pm 100\text{ Hz}$) : 0,7g ($g=9,81\text{ m/s}^2$)

Average weight per device:

. 0,055 kg.

Volume when packed:

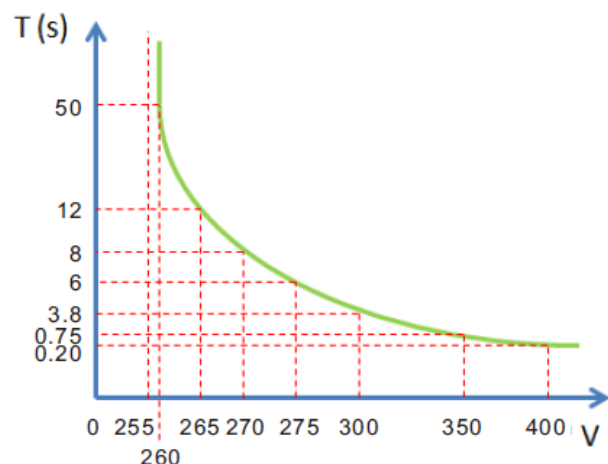
. 0,21 dm^3 .

Tripping time:

. Limit values of breaking time and non actuation time at a voltage

	$\leq 255\text{ V}$	275 V	300 V	350 V	400 V
Maximum tripping time	No tripping	15 s	5 s	0.75 s	0.20 s
Minimum non actuation time		3 s	1 s	0.25 s	0.07 s

Tripping curve (average indicative values)



6. COMPLIANCE AND APPROVALS

In accordance with:

- . EN 50550:2010
- .Standards IEC/EN 23-105, EN 60439-1 (Low Voltage Directive 2006/95/EC), EN 60439-3 (Directive EMC 2004/108/EC).
- . CEE guidelines : 73/23/CEE + 93/68/CEE

Plastic materials :

- . Halogens-free plastic materials.
- . Marking of parts according to ISO 11469 and ISO 1043.

Packaging:

- . Design and manufacture of packaging in accordance with Decree 98-638 of 07.20.98 and Directive 94/62/EC