

## DX<sup>3</sup> Undervoltage release (MT)

Cat. N°(s): 4 062 80, 82

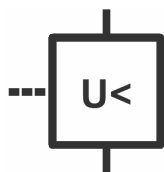


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### 1. DESCRIPTION - USE

- Undervoltage release (MT): enable the remote tripping of the associated device.
- This device is equipped by a time delay adjustable from 0 to 300ms to avoid unwanted tripping due to voltage dips of the supply

#### Symbol:

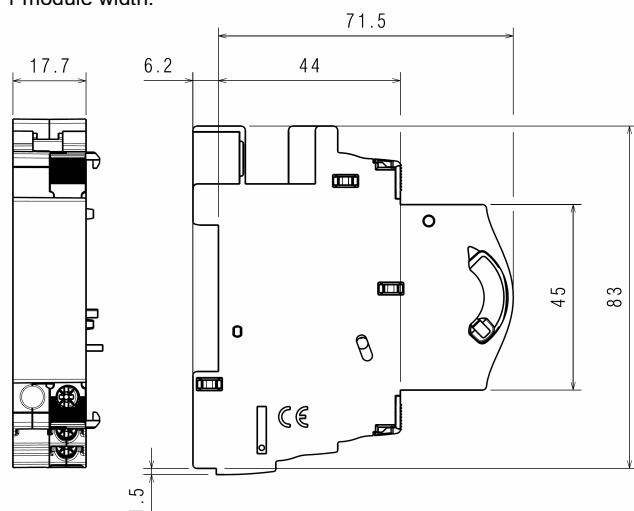


### 2. RANGE

- Cat n° 406 280 : 24 and 48 V ~/(a.c. / d.c.).
- Cat n° 406 282 : 230 V ~ (a.c.).

### 3. OVERALL DIMENSIONS

1 module width.



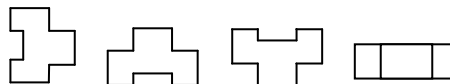
### 4. PREPARATION CONNECTION

#### Fixing:

- On symmetric 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 <sup>2</sup> to 1,5 mm <sup>2</sup> 2 x 1,5 mm <sup>2</sup>	-
Flexible Cable	1 x 0,5 mm <sup>2</sup> to 1,5 mm <sup>2</sup> 2 x 1,5 mm <sup>2</sup>	1 x 0,5 mm <sup>2</sup> to 1,5 mm <sup>2</sup> 2 x 1,5 mm <sup>2</sup>

#### Manual action of the MT:

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

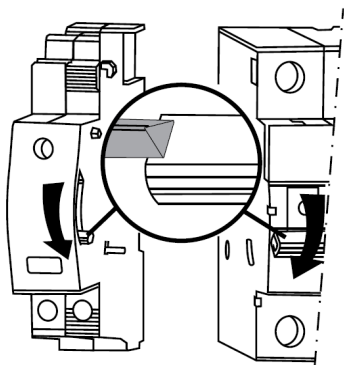
## 4. PREPARATION –CONNECTION (continued)

## Display of Undervoltage release 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, IS, RCBO or RCCB and isolating switches 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 shunt release 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).
- 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).

## List of allowed associations (Particular rules):

- With an isolating switch DX-IS:
  - only one signalling auxiliary CA type (Cat. n°(s) 4 062 58 or 4 062 66).
- With a remote trip head isolating switch DX-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.

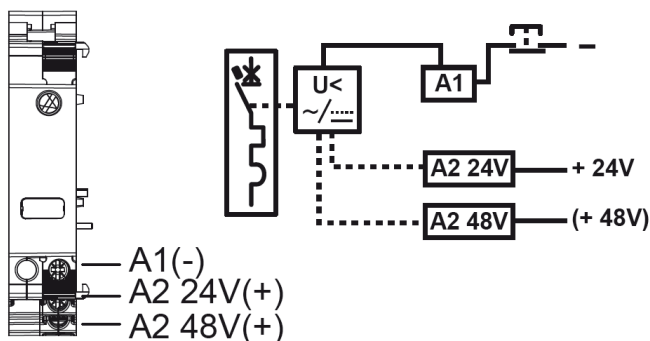
## 4. PREPARATION –CONNECTION (continued)

## Combinations of the auxiliaries:

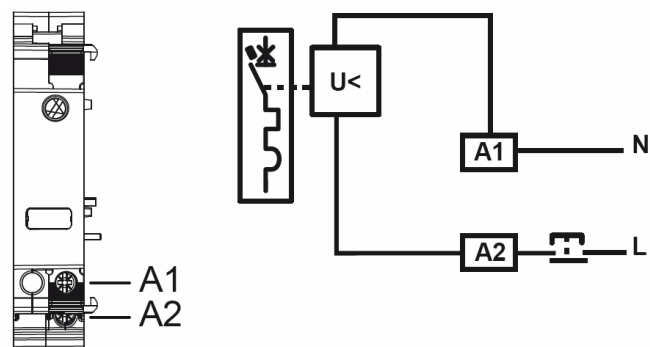
		4062 .. 58 / 60 / 62 / 66 76 / 78 / 80 / 82 84 / 87	
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4062 .. 76/78/80 82/84/87	4062 .. 58 / 60 / 62	4062 .. 58 / 60 / 62	
	4062 .. 58 / 60 / 62 / 66	4062 66	

## Electric wiring diagrams:

- Cat. n° 4 062 80.



- Cat. n° 4 062 82.

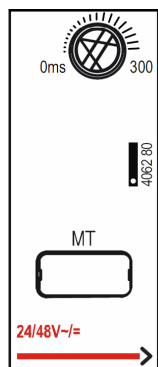


## 5. GENERAL CHARACTERISTICS

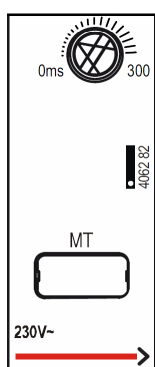
## Marking on the front side:

- By permanent ink pad printing:

Cat. n° 4 062 80



Cat. n° 4 062 82



- Function name :  
MT = Undervoltage release
- Operating voltage
- Time delay setting
- Legrand reference code and Logo

## Operating voltage (Un):

- Cat n° 406 280: 24 and 48 V ~/- (a.c. / d.c.).
- Cat n° 406 282: 230 V~ (a.c.).

## Tripping voltage:

- 35% of Un.

## Voltage threshold:

- 70% of Un.

## Tripping time:

- $t \leq 40$  ms with the time delay setting at "0".
- $t = 400$  ms (+/- 50%) with the time delay setting at "300".

## Power absorbed:

- Cat. n°4 062 80 :
  - 24 V d.c. = 0,1 W
  - 24 V a.c. = 0,1 VA
  - 48 V d.c. = 0,2 W
  - 48 V a.c. = 0,2 VA
- Cat. n°4 062 82 :
  - 230 V a.c. = 1 VA.

## Rated impulse withstand voltage:

- Uimp = 5kV.

## Electromagnetic compatibility:

- Burst: 4 kV.
- Surge 1,2/50  $\mu$ s : 4 kV differential mode and 5 kV common mode.

## Insulation voltage:

- Ui = 500 V

## Dielectric strength:

- 2500 V.

## 5. GENERAL CHARACTERISTICS (continued)

## Tripping force:

- 3 Nm.

## Mechanical endurance:

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

## Ambient temperatures:

- Operation: from -25°C. to +70°C
- Storage: from -40°C. to +70°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÷100 Hz ; duration 90 minutes
- Displacement (5÷13,2 Hz) : 1mm
- Acceleration (13,2÷100 Hz) : 0,7g (g=9,81 m/s<sup>2</sup>)

## Average weight per device:

- 0,063 kg.

## Volume when packed:

- 0,21 dm<sup>3</sup>.

## Power dissipated (W) :

- Cat. n° 4 062 80 :
  - 24 V ac / d.c = 0,1 W.
  - 48 V ac / d.c. = 0,2 W.
- Cat. n° 4 062 82 :
  - 230 V a.c. = 1 VA.

## 6. COMPLIANCE AND APPROVALS

### In accordance with:

- .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