

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

Cat. N°(s): 4 062 80, 82

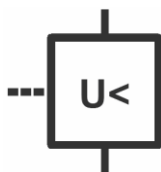


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### 1. DESCRIPTION - USE

- 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:

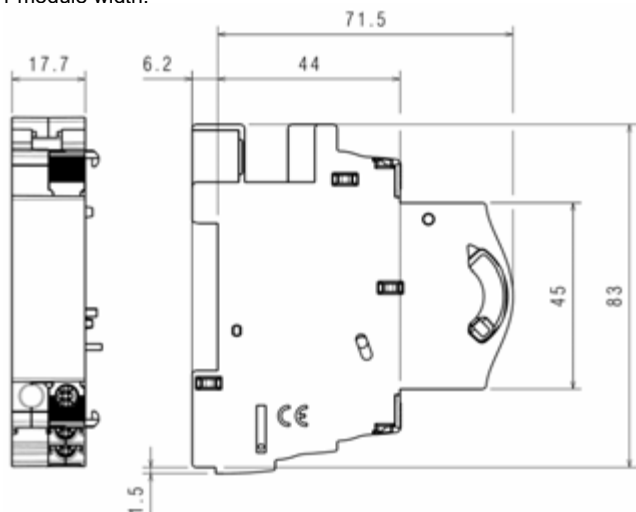


### 2. RANGE

- 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.



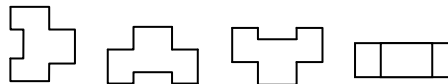
### 4. PREPARATION CONNECTION

#### 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:

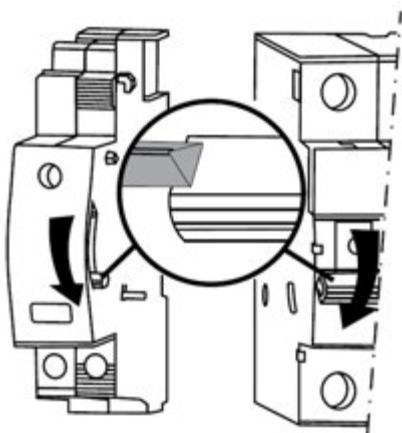
- By the handle of the associated device, for reset the release.

**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 (Cat. n°(s) 4 062 50, 52, 56, 58, 60, 62, 64, 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 (ref. 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, under-voltage releases (4 062 80/82) 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.

**List of allowed associations (Particular rules):**

With an isolating switch DX-IS:

- only one signalling auxiliary CA type (Cat. n°(s) 4 062 50, 58 64, 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 50, 58 64, 66).
- one control auxiliary cat n°(s) 4 062 7x / 8x.

With a MCB, IS, RCBO, RCCB three auxiliaries maximum which:

- one or two signalling auxiliaries, CA or SD type (Cat. n°(s) 4 062 50, 52, 56, 58, 60, 62, 64, 66).
- one control auxiliary Cat. n°(s) 4 062 7x / 8x.

**4. PREPARATION –CONNECTION** *(continued)***Combination tables of the auxiliaries:**

For devices 1 module per pole width:

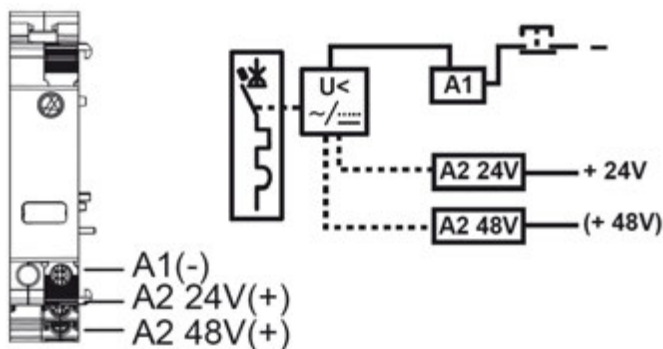
		4 062 .. 50 / 52 / 56 / 58 / 60 / 62 / 66 / 76 / 78 / 80 / 82 / 84 / 86 / 87	
	4 062 .. 50 / 52 / 56 / 58 / 60 / 62 / 76 / 78 / 80 / 82 / 84 / 86 / 87	4 062 .. 50 / 52 / 56 / 58 / 60 / 62	
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4 062 .. 76 / 78 / 80 / 82 / 84 / 86 / 87	4 062 .. 50 / 52 / 56 / 58 / 60 / 62	4 062 .. 50 / 52 / 56 / 58 / 60 / 62	
	4 062 .. 50 / 52 / 56 / 58 / 60 / 62 / 64 / 66	4 062 .. 64 / 66	

For devices 1,5 modules 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	4 062 .. 50 / 52 / 56 / 58 / 60 / 62	
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4 062 .. 76 / 78 / 80 / 82 / 84 / 86 / 87	4 062 .. 64 / 66	4 062 .. 64 / 66	

**Wiring diagrams:**

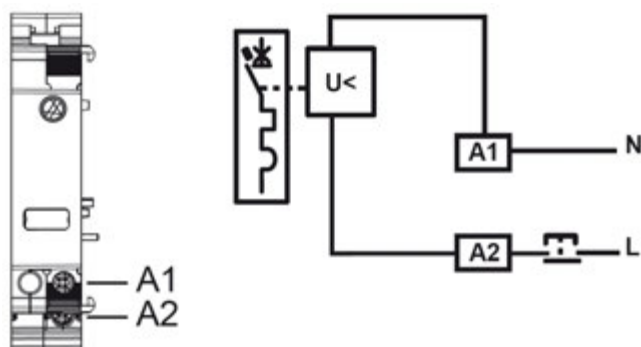
Cat. n° 4 062 80.



## 4. PREPARATION –CONNECTION (continued)

## Wiring diagrams: (continued)

. Cat. n° 4 062 82.



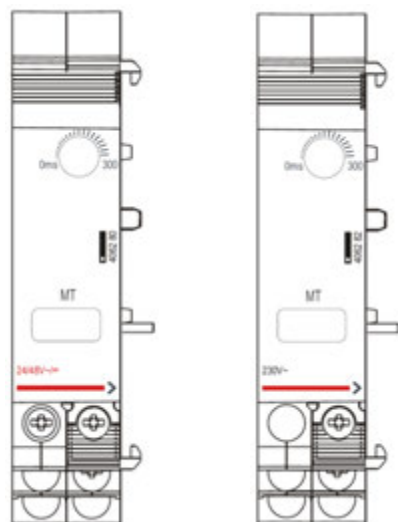
## 5. GENERAL CHARACTERISTICS

## Front side marking:

. 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".

## 5. GENERAL CHARACTERISTICS (continued)

## 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.

## 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).

**5. GENERAL CHARACTERISTICS** *(continued)***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