

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

Cat. N°(s): 4 062 80, 82

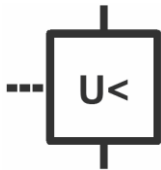


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### 1. DESCRIPTION - USE

- . 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:

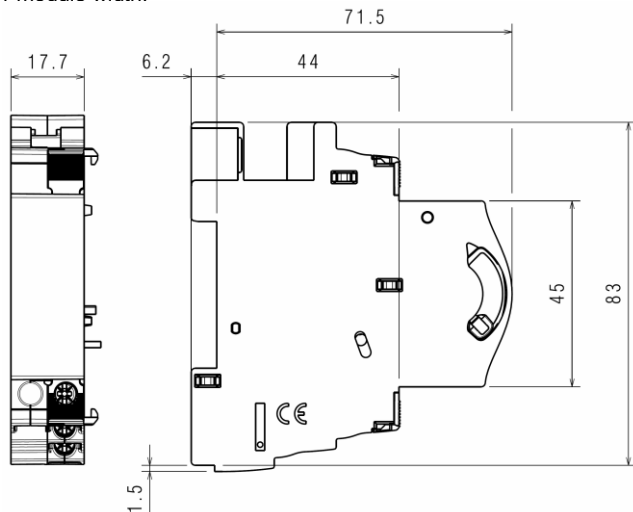


### 2. RANGE

- . 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.



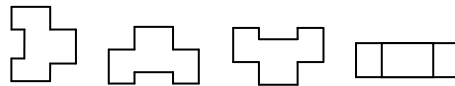
### 4. PREPARATION CONNECTION

#### 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.

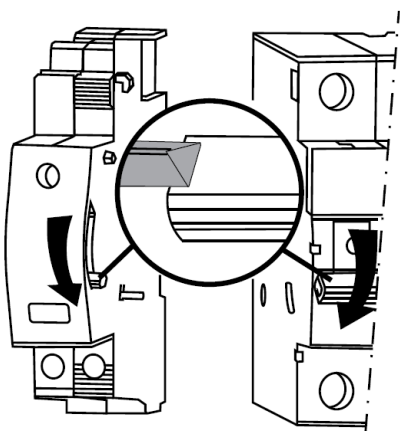
## 4. PREPARATION –CONNECTION (continued)

### 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:

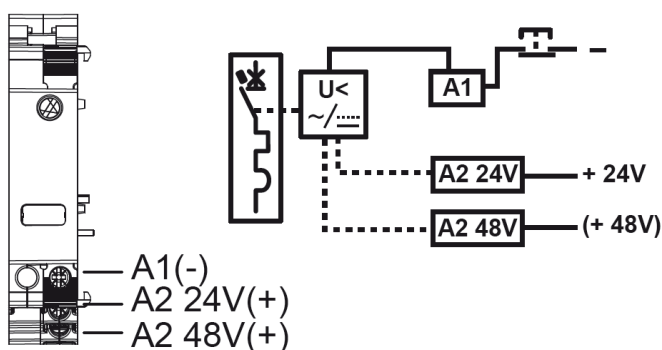
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For devices 1,5 modules per pole width:

			4 062 .. 50 / 52 / 56 / 58 / 60 / 62 / 66 / 76 / 78 / 80 / 82 / 84 / 86 / 87
	4 062 .. 50 / 52 / 56 / 58 / 60 / 62		4 062 .. 50 / 52 / 56 / 58 / 60 / 62
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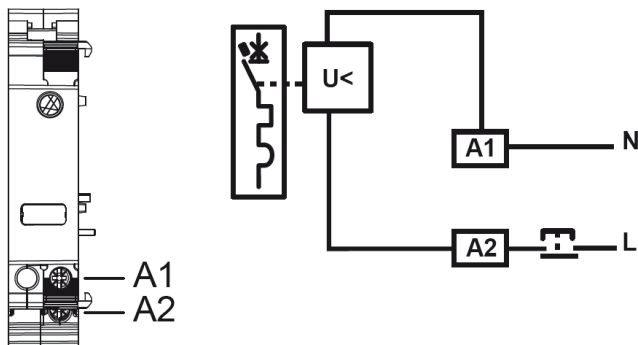
### Wiring diagrams:

Cat. n° 4 062 80.



**4. PREPARATION –CONNECTION** (continued)**Wiring diagrams:** (continued)

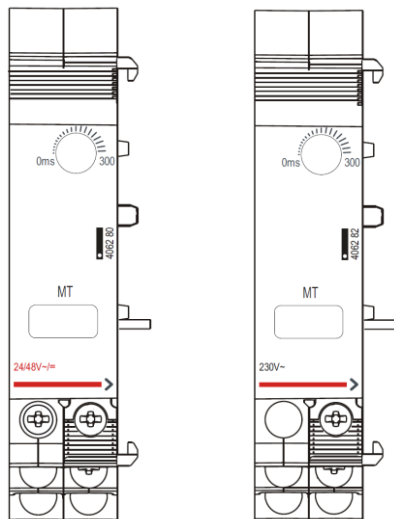
. Cat. n° 4 062 82.

**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  $\sim$  (a.c. / d.c.).
- . Cat n° 406 282: 230 V  $\sim$  (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