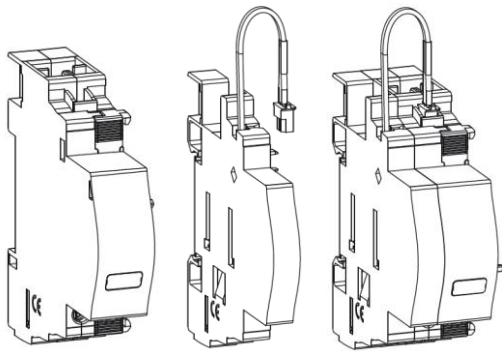


## DX<sup>3</sup> Autonomous shunt trip (DA) for NC pushbutton

Cat. Nos: 4 062 84, 85, 87



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### 1. DESCRIPTION - USE

- . Autonomous shunt trip (DA) for NC pushbutton enables the remote tripping of the associated device. It assures the tripping with positive security on the command circuit by a NC pushbutton.
- . Thanks to its battery (Cat. n° 4 062 85), it also avoids the tripping of the associated device in the absence of supply voltage, while retaining the possibility to tripping by a command for 60 hours minimum.
- . This product is not suitable for power supply circuits of moving machinery (ex. Machine tools)

#### Symbols:

. Cat.nos:

4 062 84

4 062 85

4 062 87

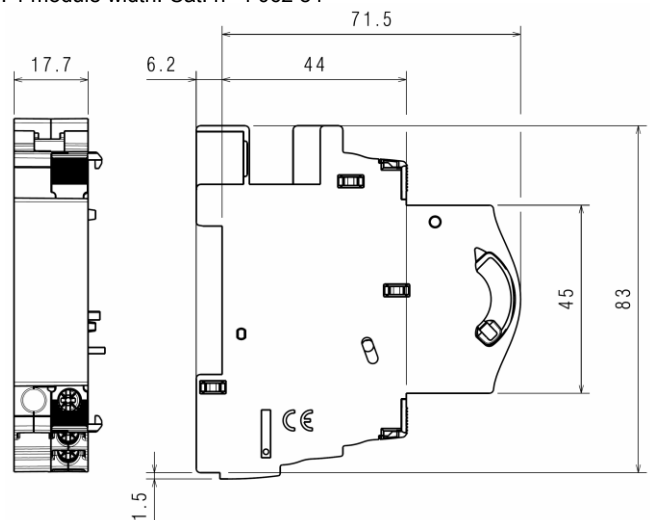


### 2. RANGE

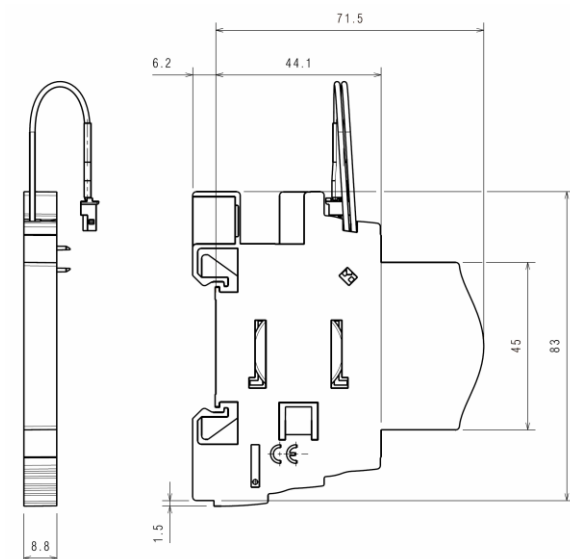
- . Cat. N° 4 062 84: autonomous shunt trip (DA) for NC pushbutton 230V~ (delivered without battery cat n° 4 062 85).
- . Cat. n° 4 062 85: battery to be associated to the autonomous shunt trip for NC pushbutton Cat n° 4 062 84 or spare battery for the autonomous shunt trip for NC pushbutton with associated battery Cat. n° 4 026 87.
- . Cat. n° 4 062 87: autonomous shunt trip (DA) for NC pushbutton 230V~ with associated battery. It consists of using Cat. nos: 4 062 84 and 4 062 85.

### 3. OVERALL DIMENSIONS

. 1 module width: Cat. n° 4 062 84



. 0,5 module width: Cat. n° 4 062 85

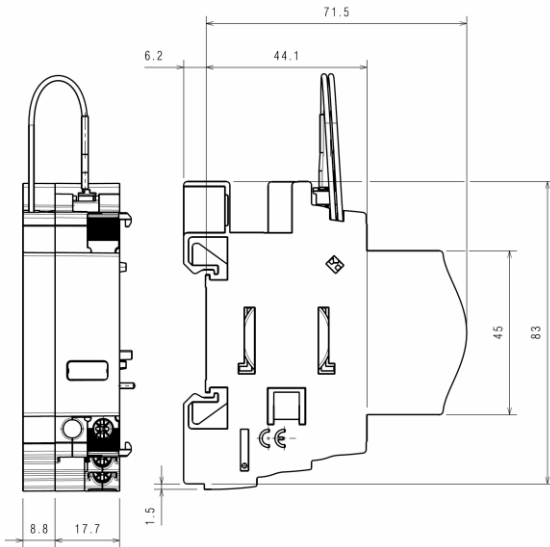


# DX<sup>3</sup> Autonomous shunt trip (DA) for NC pushbutton

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## 3. OVERALL DIMENSIONS *(continued)*

. 1,5 modules width: Cat. n° 4 026 87 is the combination of two references: 4 062 84 and 4 062 85.



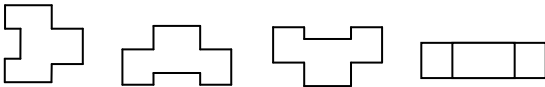
## 4. PREPARATION –CONNECTION

### Fixing:

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

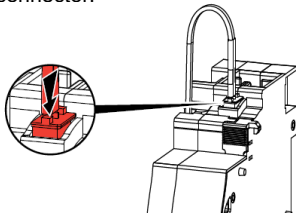
### Operating positions:

. Vertical, Horizontal, Upside down, On the side



### Power Supply:

. Only from the bottom.  
. The battery is connected at the top of the shunt trip by a built-in connector.



### 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.

## 4. PREPARATION –CONNECTION *(continued)*

### 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 DA:

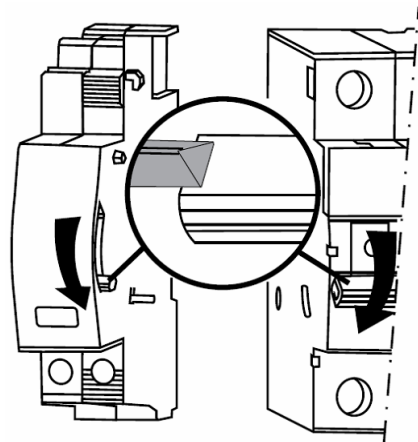
. By the handle of the associated device, for reset the release.

### Display of shunt trip state:

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

### Assembling:

. On the left side of Legrand MCB, IS, RCBO and RCCB 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, autonomous shunt trip for N/C push-button (4 062 87) then only 1 module signalling auxiliaries can be added (auxiliary + fault signalling contact or auxiliary contact + auxiliary contact 4 062 64). In this set up the ½ module signalling auxiliaries will not operate. Nothing changes for the other modular references.

# DX<sup>3</sup> Autonomous shunt trip (DA) for NC pushbutton

Cat.Nos: 4 062 84, 85, 87

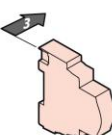



## 4. PREPARATION –CONNECTION (continued)

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

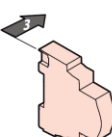
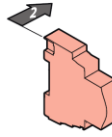

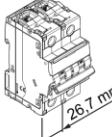
- . With an isolating switch DX-IS:
  - only one signalling auxiliary CA type (Cat. n°(s) 4 062 50, 58 64, 66).
- . With a remote trip head isolating switch DX-IS, three auxiliaries maximum which:
  - one or two signalling auxiliaries CA type (Cat. n°(s) 4 062 50, 58 64, 66).
  - one control auxiliary 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.

### Combination tables of the auxiliaries:

. For devices 1 module per pole width:

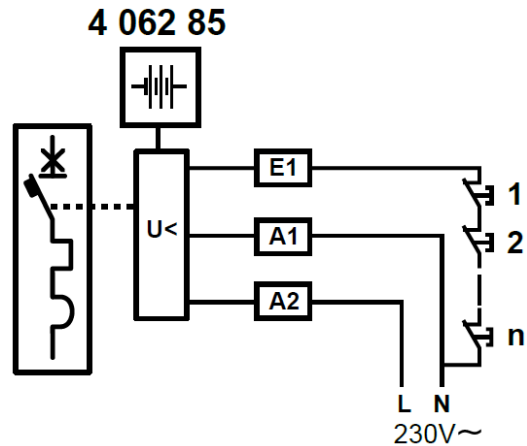
			
		4 062 .. 50 / 52 / 56 / 58 / 60 / 62 / 66 / 76 / 78 / 80 / 82 / 84 / 86 / 87	
	4 062 .. 50 / 52 / 56 / 58 / 60 / 62 / 76 / 78 / 80 / 82 / 84 / 86 / 87	4 062 .. 50 / 52 / 56 / 58 / 60 / 62	
	4 062 .. 50 / 52 / 56 / 58 / 60 / 62 / 64 / 66 / 76 / 78 / 80 / 82 / 84 / 86 / 87	4 062 .. 64 / 66	
4 062 .. 76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

## 4. PREPARATION –CONNECTION (continued)

### Electric wiring diagram:

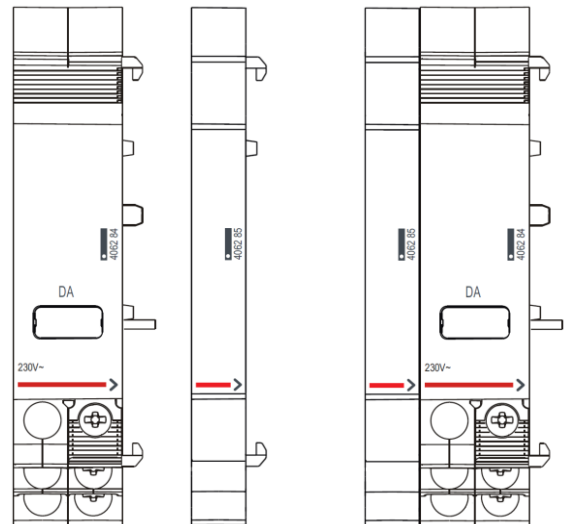



## 5. GENERAL CHARACTERISTICS

### Front side marking:

. By permanent ink pad printing:

Cat n° 4 062 84      Cat n° 4 062 85      Cat n° 4 062 87



- Function name: DA = Autonomous shunt trip
- Operating voltage
- Legrand reference code and Logo .

### Operating voltage (Un):

. 230 V~ (the battery supplies a voltage of 3 V d.c.).

### Minimum operating voltage: (% Un):

. 85% of Un.

### Maximum operating voltage: (% Un):

. 110% of Un .

# DX<sup>3</sup> Autonomous shunt trip (DA) for NC pushbutton

Cat.Nos: 4 062 84, 85, 87

## 5. GENERAL CHARACTERISTICS *(continued)*

### Tripping time:

.  $t \leq 20$  ms.

### Power consumption at the activation:

. 1VA

### Maximum impedance of the control circuit:

. 500  $\Omega$ .

### Pulse rated voltage:

.  $U_{imp} = 5$  kV.

### Electromagnetic compatibility:

. Burst: 4 kV.

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

### Insulation rated voltage:

.  $U_i = 500$  V

### Dielectric strength:

. 2500 V.

### Tripping force:

. 3 Nm.

### Mechanical endurance:

. 3000 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 according to 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: IP 20 (in accordance with standards IEC 529, EN 60529 and NF C 20-010).

. Protection index of the box against solid and liquid bodies: IP 40 (in accordance with standards IEC 529, EN 60529 and NF C 20-010).

. Protection index against mechanical shocks: IK 02 (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 range: 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>)

## 5. GENERAL CHARACTERISTICS *(continued)*

### Average weight per device:

. Cat n° 4 062 84 = 0,090 kg.

. Cat n° 4 062 85 = 0,014 kg.

. Cat n° 4 062 87 = 0,104 kg.

### Volume when packed:

. Cat n° 4 062 84 = 0,21 dm<sup>3</sup>.

. Cat n° 4 062 85 = 0,21 dm<sup>3</sup>.

. Cat n° 4 062 87 = 0,368 dm<sup>3</sup>.

### Labelling:

. Identification of the circuit by insertion of a label in the label holder.

### Battery type:

. Lithium.

### Battery voltage:

. 3 V d.c.

### Battery current:

. 100 mAh.

### Number of battery charge and discharge cycles

. 50 cycles.

### Number of possible tripping by the battery

. 1 tripping by the NC pushbutton after 230V~ power interruption

### Autonomy :

. Is the time in which the autonomous shunt trip can trip by the NC pushbuttons, after the switching off of the supply 230 V~.

. Autonomy of the internal capacitor (shunt trip module, cat. n° 4 062 84, without battery module, cat n° 4 062 85) :

.  $t = 3$  minutes (after 5minutes of charge).

. Autonomy of the battery:

.  $t > 60$  h (after 150 hours of charge).

. When the internal capacitor (autonomy of 3 min.) or the battery (autonomy of 60 hours), reaches the end of autonomy, the device will cause the release of the device to which it is associated as in the case of tripping caused by the pressure of the emergency button.

## 6. COMPLIANCE AND APPROVALS

### In accordance with:

. Standard: IEC/EN 23-105.

. Standards: 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

. For the Lithium battery (Cat n° 4 062 85)



### 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