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STOP & GO automatic resetting

Cat. N°(s) : 4 062 88 / 4 062 89

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1. DESCRIPTION - USE

STOP & GO motor driven unit is an automatic resetting device for MCB's, RCBO's (P+N or 2P) and RCCB's (2P).
STOP & GO automatic resetting main functions are:
. In case of tripping due to earth leakage or short circuit, it detects the presence of an insulation fault in the system before to reset.
. In case of transient fault, it automatically resets the electrical circuit.
. In case of permanent fault, (earth leakage or short circuit), it keeps the circuit open and notifies the user by a visual signal and, if necessary, by an acoustic signal (by an integrated contact)
. These functions allow the continuity of operation of the involved circuits.
. Cat. n° 4 062 89 is fitted with a self-test function that allows to test automatically every 56 days (hour and day of test are programmable) that the associated residual current device operates properly.

Technology :

. DC electric motor with permanent magnets

2. PRODUCT RANGE

Cat. N° 4 062 88:
. It automatically resets the associated device (P+N or 2P) in case of tripping after a transient fault.
. It checks the status of the installation before to reset.
. It reports any permanent fault (earth leakage or short circuit).
Cat. N° 4 062 89:
. In addition to the same functions as cat. n° 4062 88, it allows an automatic periodic test of the associated 30 mA residual current device.

Width = 2 modules (35,4 mm)

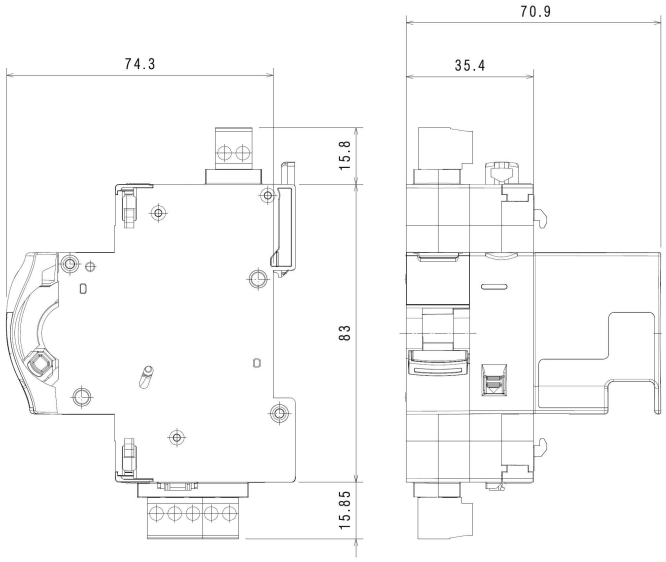
Rated Voltage & Frequency:

. 230 V ~ 50 / 60 Hz with standard tolerances.

Operating voltages:

. Minimum (0,85 x Un) : 195,5 V
. Maximum (1,1 x Un) : 253 V

3. OVERALL DIMENSIONS



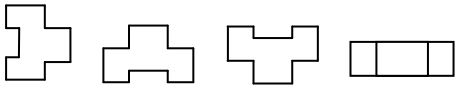
4. PREPARATION - CONNECTION

Fixing:

. On symmetric rail EN/IEC 60715 or DIN 35.

Operating positions:

. Vertical, Horizontal, backwards, on the side



Supply:

. Supply Phase and Neutral from the top on the extractable connector
. It is compulsory to connect Phase and Neutral downstream of the associated device and the protection conductor to the connector at the bottom of this device. Stop & Go will not work correctly if the protection conductor is not connected.

List of possible associations:

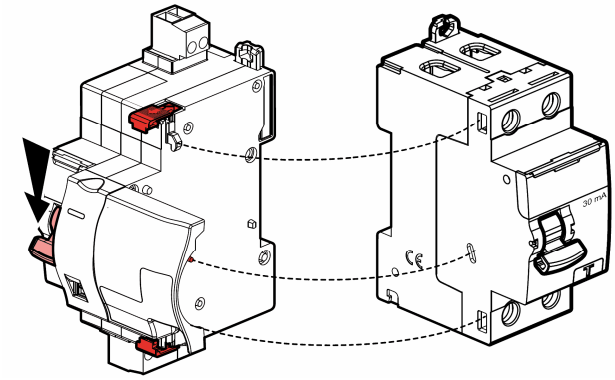
. 2P RCCBs
. 2P RCBOs (2 poles protected or P+N, 1 pole protected)
. 2P MCBs (2 poles protected or P+N, 1 pole protected)

4. PREPARATION - CONNECTION *(continued)*:

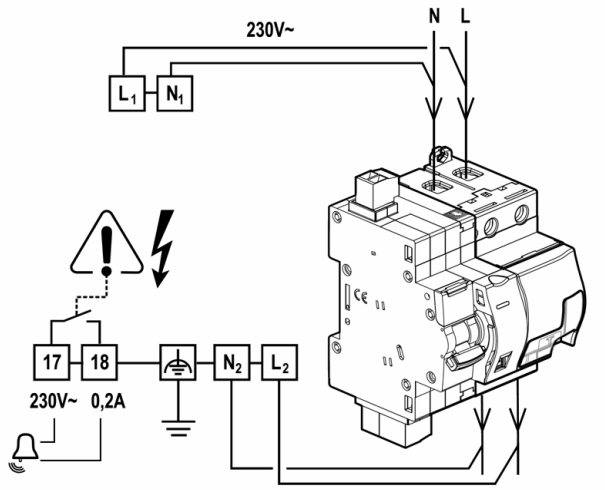
Association:

. To be fitted to the left of MCB's DX³ ≤10 000A (P+N, 1P, 2P - 1 module per pole wide), RCCB's DX³ 2P and RCBO's DX³ ≤10 000A (P+N et 2P ≤63A)

. No tool required. Clipped to the associated device by mean of plastic clamps.



Wiring diagram:



Protection of STOP&GO:

. It is not necessary to install specific protections upstream of the Stop & Go because it is self-protected

Connection:

. Terminals protected against accidental contact (IP20, wired device).

Depth of terminals :

. 10 mm.

Connectable section:

	Copper cables	
	Without ferrule	With ferrule
Rigid cable	**1 x 2,5mm²** **2 x 1,5mm²**	-
Flexible cable	**1 x 2,5mm²** **2 x 1,5mm²**	**1 x 2,5mm²** **2 x 1,5mm²**

4. PREPARATION - CONNECTION *(continued)*:

Stripping length recommended:

. 7 mm.

Screw head:

. Slotted, diameter 3.5 mm.

Recommended tightening torque:

. 0.4÷0.5 Nm.

Tools required:

. For the terminals: flat screwdriver 3.5 mm.

. For fixing: flat screwdriver 5.5 mm (6 mm maximum).

Lockout:

. By the sliding front face.

Sliding front face downward: the associated device goes into OFF position and manual or automatic closing operations are disabled.

Sliding front face upward: the device is operating.

. Lockout by padlock Φ4mm only when the sliding front face is down. Then mechanical and electrical controls are not possible.

Display of the device status and the status of the contacts of the associated device:

. By handle mark:

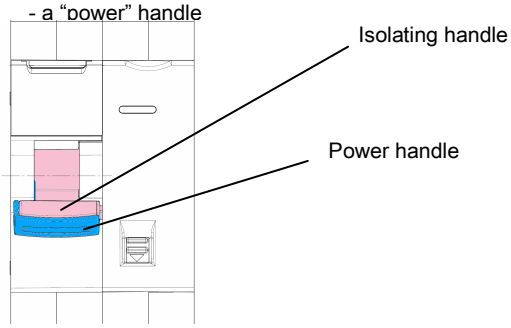
"O-Off" white on a green background = device switched-off and contacts opened.

"I-On" white on a red background = device powered-on and contacts closed.

Device handle status:

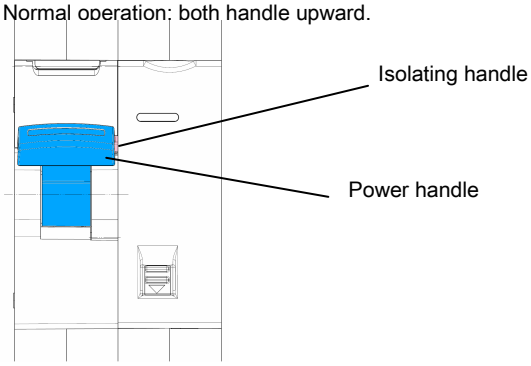
. The handle of the Stop & Go automatic resetting module, consists of two parts:

- an "isolating" handle
- a "power" handle



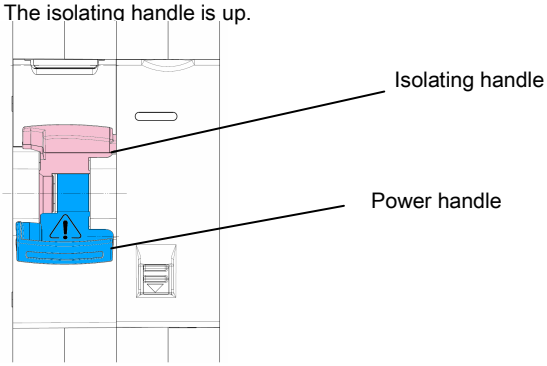
. Operation sequences:

- Normal operation: both handle upward.

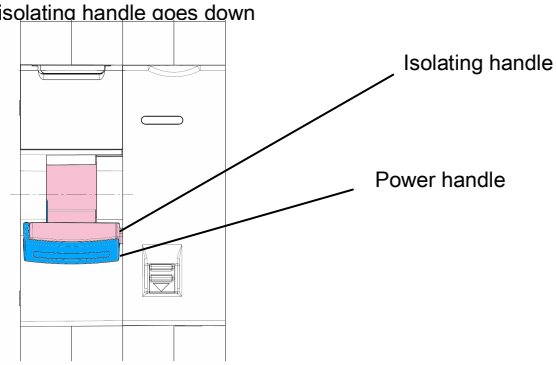


4. PREPARATION - CONNECTION *(continued)*:

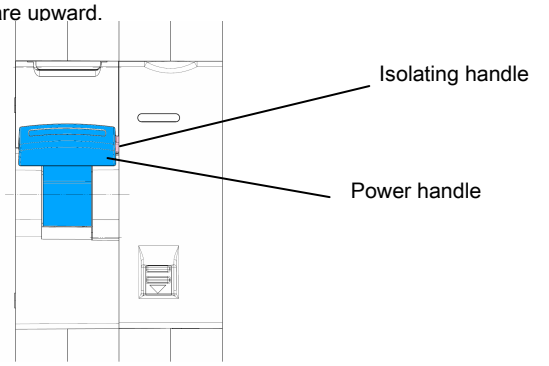
- In case of an unwanted tripping of the associated device and during the verification of the state of the electric circuit:
  The power handle is down.
  The isolating handle is up.



- If the Stop & Go detects a permanent fault after a tripping, the isolating handle goes down



- If the Stop & Go doesn't detect a permanent fault, it returns to normal operation (reset of the associated device): both handle are upward.



WARNING : the stop & go makes only one attempt of resetting.

Time of a re-setting cycle:

. < 2 sec

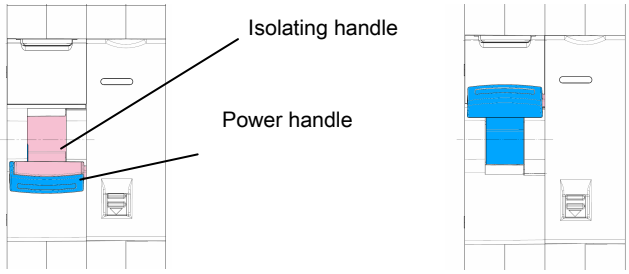
Tripping by the test button of the associated residual current device:

. In auto mode, when tripping the associated device by the test button, if the test button has been pushed more than 1 second, the Stop & Go unit will reset the associated device then switch it off again. It will be necessary to manually reset the Stop & Go.

4. PREPARATION - CONNECTION *(continued)*:

Resetting by the Stop & Go handle:

. When the permanent fault has disappeared, the resetting of the Stop & Go and of the associated device is carried out by the Stop & Go handle (isolating and power handles together)



Selector AUTO / MAN:

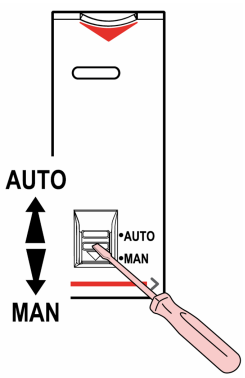
. The selector enables and disables the automatic remote control.
. Positions:
- AUTO: possibility to automatically or manually control tripping and re-setting.
- MAN: manual control only by the handle of the Stop & Go (isolating and power handles together)

. Signalling by LED:
- Green fixed: associated device "power on" and "Stop & Go" in AUTO mode.
- Green flashing: "Stop & Go" in MAN mode.

Signalling:

. Signalling by LED:
- Green fixed: associated device "power on" and "Stop & Go" in AUTO mode. Automatic resetting activated (and self-test activated for cat. n° 4 062 89).
- Green flashing: "Stop & Go" in MAN mode.
- Red flashing: waiting for reset.
- Red fixed: the device has tripped on fault (overload, short-circuit, residual current fault) or by control auxiliary.
- Sliding front face downward: LED switched-off.
- Yellow fixed (cat. n° 4 062 89 only): self-test function has detected a malfunction of the associated differential device.

Self-test programming (cat. n° 4 062 89):

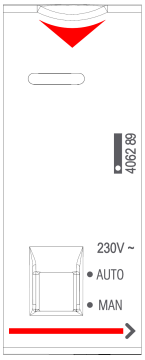


. After having connected cat. N° 4 068 89 to 230 V ~ network, put the handle on ON position, switch the selector from "AUTO" position to "MAN" position then again to "AUTO" position.
. The first automatic test of the residual current detection is carried out instantaneously. The next test will be carried out 56 days and 8 hours after the first test and this test will be shift during the night. Then the next test will occur every 56 days (8 weeks).

5. GENERAL CHARACTERISTICS

Front side marking:

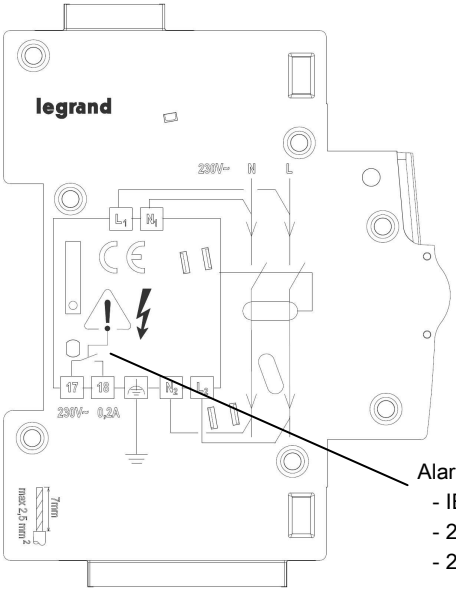
. By permanent pad printing



Lateral side marking:

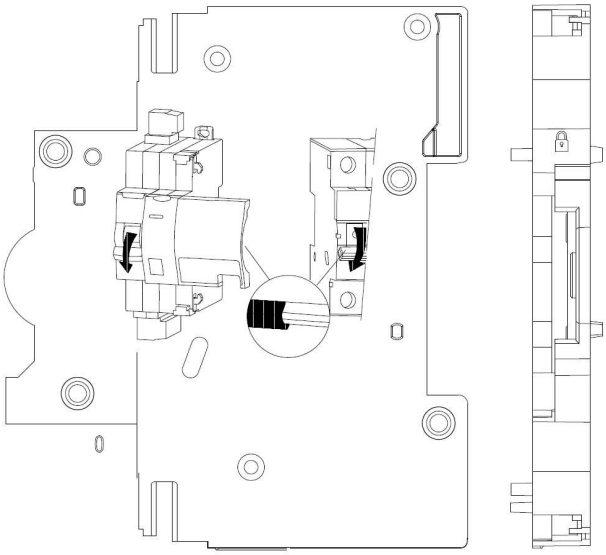
. By laser.

left side



Alarm contact:
- IEC/EN 60950
- 230V~, 0,2A
- 24 / 48V, 1A

right side



5. GENERAL CHARACTERISTICS *(continued)*

Characteristics of the fault detection:

- Rd (non operating rated resistance between the live parts and the earth) 225kΩ
- Rd0 (operating rated resistance between the live parts and the earth) 375kΩ
- Rcc (non operating rated resistance between the live parts) 0,75Ω
- Rcc0 (operating rated resistance between the live parts) 1,25Ω
- The Stop & Go device can be used in TT and TN earth systems

Pulse rated voltage:

. Uimp = 4 kV

Insulation rated voltage:

. Ui = 500 V

Pollution degree :

. 2 according to IEC/EN 60898-1.

Dielectric strength:

. 2500 V

Mechanical endurance:

. 20000 operations.

Electrical endurance:

. In accordance with the requirements of the standards of the associated protection device.

Enclosure material:

. 20% glass-fiber reinforced polycarbonate

. 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).

Average weight per pole:

. 0.174 kg.

Volume when packed :

. 1.20 dm³.

Ambient operating temperature:

. Min. = - 5 °C / Max. = + 60 °C.

Ambient storage temperature:

. Min. = - 25 °C / Max. = + 60 °C.

Protection class:

. Protection index of terminals against solid and liquid bodies:
IP 20 (according to IEC 529, EN 60529 et NF C 20-010).

. Protection index of the case against solid and liquid bodies:
IP 40 (according to IEC 529, EN 60529 et NF C 20-010).

5. GENERAL CHARACTERISTICS *(continued)*

Resistance to sinusoidal vibrations:
. According to IEC 60068-2-6.
. Axis : x, y, z.
. Frequency range: 5÷100 Hz ; duration 90 min.
. Displacement (5÷13.2 Hz) : 1mm
. Acceleration (13.2÷100 Hz) : 0.7g (g=9.81 m/s²).

Maximum power consumption:
. <20VA rms (<80VA peak) during resetting

Standby power consumption:
. <1,5VA

Recognition:
. Labelling of the circuits by label in the "label holder" on the front-side of the device.

6. CONFORMITIES AND APPROVALS

Compliance with standards:
. CEE guidelines : 73/23/CEE + 93/68/CEE
. IEC / EN 50557: device for automatic reset of MCB's, RCBO's, RCCB's for household and similar purposes.
. Electromagnetic compatibility: EN 61543
. Legrand devices can be used under the conditions of use as defined by IEC / EN 60947.

7. AUXILIARIES AND ACCESSORIES

Signalling auxiliaries:
. Auxiliary contact (½ module – cat n° 4 062 58).
. Fault signalling changeover switch (½ module – cat n° 4 062 60).
. Auxiliary contact modifiable in default signal (½ module – cat n° 4 062 62).
. Auxiliary contact + fault signalling switch - can be modified to 2 auxiliary contacts (1 module - cat n° 4 062 66).

Control auxiliaries:
. It is forbidden to associate control auxiliaries (cat. n° 4 062 7x / 8x) to motor driven control module with integrated automatic resetting.

Possible combinations with signalling auxiliaries:
. Auxiliaries are clipped on the left side of the Stop & Go unit
. Two signalling auxiliaries max. (cat. n° 4 062 58 / 60 / 62 / 66).
. If two signalling auxiliaries are associated to a same motor driven control unit, the 1 module wide control auxiliary (cat n° 4 062 66 / 78 / 82 / 84) must be located to the left of the ½ module wide auxiliary (cat. n° 4 062 58 / 60 / 62).