

Motor driven remote control device with automatic resetting

Cat. N°(s) : 4 062 93, 4 062 95



CONTENTS	PAGE
1. Description - Use	1
2. Product range	1
3. Overall dimensions	1
4. Preparation – Connection.....	2
5. General characteristics	4
6. Conformities and approvals.....	5
7. Auxiliaries and accessories	5

1. DESCRIPTION - USE

- . This motor driven remote control can be associated to
 - DNX³ and DX³ Legrand MCBs
1P+N one module ;
1P, 1P+N, 2P, 3P, 4P ≤63A and ≤10 000A one
module per pole
 - RCBOs up to 63 A
 - RCCBs up to 100 A
- . This remote control allows
 - To open and close the associated device
 - To automatically reset the associated product after a
fault trip (overload, short circuit or earth fault) in order
to assure a continuity of exploitation
 - To lock the associated product in open position

Technology :

- . DC electric motor with permanent magnets

2. RANGE

- . Cat. N°(s) 406 293 : 24 – 48 V ~/=
- . Cat. N°(s) 406 295 : 230 V ~/=

Rated Voltage / Frequency:

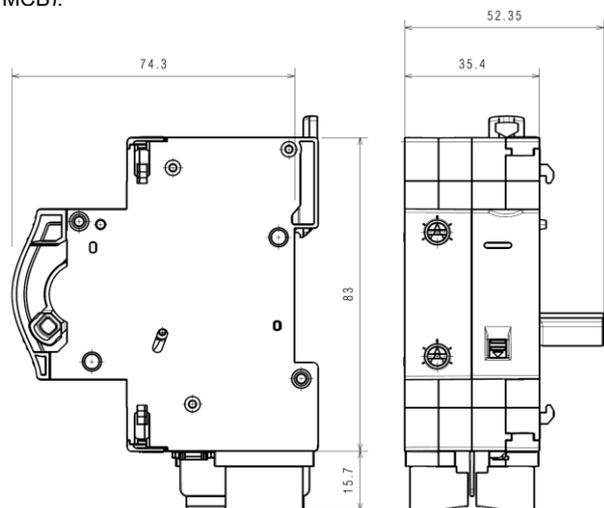
- . Cat. N° 406 293
 - 24 to 48 V ~ 50 / 60 Hz with standard tolerances
 - 24 to 48 V d.c current
- . Cat. N° 406 295
 - 230 V ~ 50 / 60 Hz with standard tolerances.
 - 230 V d.c current

Operating voltages:

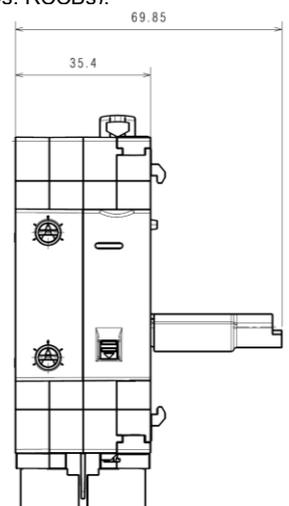
- . Cat. N° 406 293
 - Minimum (0,85 x Un) : V
 - Maximum (1,1 x Un) : V
- . Cat. N° 406 295
 - Minimum (0,85 x Un) : 195,5 V
 - Maximum (1,1 x Un) : 253 V

3. OVERALL DIMENSIONS

Device with short handle to fit one module wide device (1P or 1P+N MCB).



Device with the extension handle to fit two module wide – or more - devices (MCBs 2P, 3P, 3P+N, 4P, RCBOs, RCCBs).



Motor driven remote control device with automatic resetting

Cat. N°(s) : 4 062 93, 4 062 95

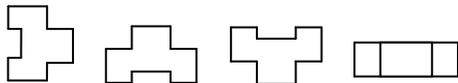
4. PREPARATION - CONNECTION

Fixing:

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

Operating positions:

- . Vertical, Horizontal, backwards, on the side

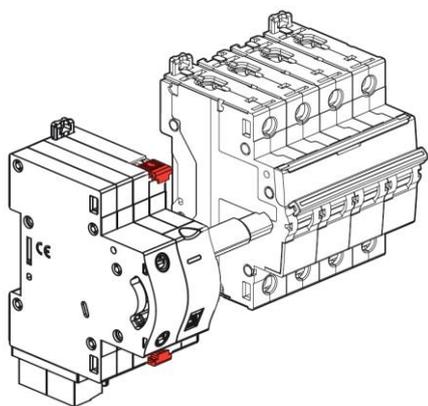


Supply:

- . Only from the bottom by the removable terminals.

Association:

- . On the left of MCBs (P+N, 1P, 2P, 3P et 4P 1 module per pole wide), RCCBs and RCBOs
- . No tool required. Clipped by mean of plastic clamps on the associated device.



Connection:

- . Terminals protected against direct contact (IP20 device wired).

Terminal depth :

- . 10 mm.

Connectable section:

	Copper cables	
	Without ferrule	Without ferrule
Rigid cable	1 x 2,5mm ² 2 x 1,5mm ²	-
Flexible cable	1 x 2,5mm ² 2 x 1,5mm ²	1 x 2,5mm ² 2 x 1,5mm ²

Stripping length recommended:

- . 7 mm.

Screw head:

- . Slotted, diameter 3.5 mm.

Tightening torque:

- . Recommended torque 0.4 to 0.5 Nm.

Tools required:

- . For the terminals: flat screwdriver 3.5 mm.
- . For fixing: flat screwdriver 5.5 mm (6 mm maximum).

4. PREPARATION - CONNECTION (continued)

Lockout:

- . By the sliding front face.
 - Sliding front face downward, the associated device is switched into OFF position. In this position, it is impossible to switch it ON manually or automatically
 - Sliding front face upward, the remote control operates.

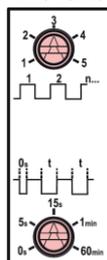
- . When the sliding front face is in low position, it is possible to lock it by the mean of a Φ 4mm padlock. Mechanical and electrical controls are then disabled

Selector AUTO / MAN:

- . This selector activates or locks the automatic remote control.
- . Positions:
 - AUTO: ability to control the opening and closing of the associated device in automatically or manually
 - MAN: manual control only.
- . Signalling by LED:
 - Green fixed: power on and remote control device in AUTO mode.
 - Green flashing: power on and remote control device in MAN mode.

Re-closing settings:

- . The remote control module has two settings on the front face:



- 1. Number of closing attempts.

- 2. Temporization between two closing attempts.

- . The first re-closing attempt is always instantaneous (< 300ms).
- . The delay for the following re-closings is set with the lower button.
- . In case of power failure during the re-closing manoeuvres, the number of operations already performed is recorded. When the power is on again, the remaining attempts are operated. The number of operations performed is recorded even if the power failure occurs in conjunction with the tripping of the associated product.
- . After a full cycle of unsuccessful re-closings, the motor driven remote control module locks into fault position.
- . After the disappearance of the fault, the reset is then performed either by an ON command of the motor driven unit or by a manual operation.

Signalling:

- . Signalling by LED:
 - Green fixed: power on and remote control device in AUTO mode.
 - Green flashing: power on and remote control device 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 are switched-off

Motor driven remote control device with automatic resetting

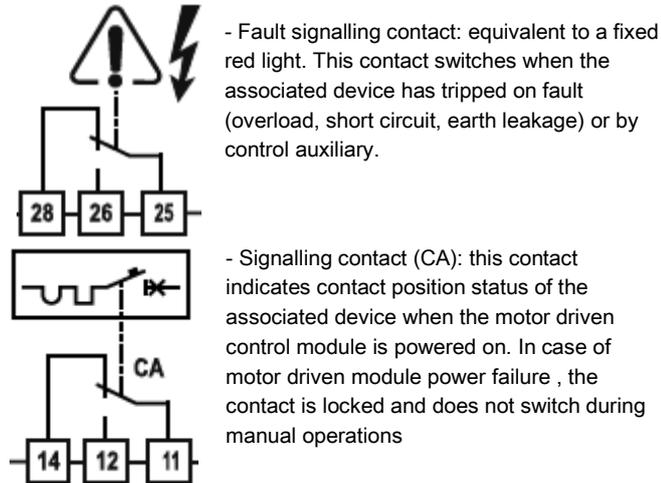
Cat. N°(s) : 4 062 93, 4 062 95

4. PREPARATION - CONNECTION (continued)

Signalling (continued):

· Signalling by integrated contacts:

The two integrated changeover contacts (example: on alarm) enables to monitor device status



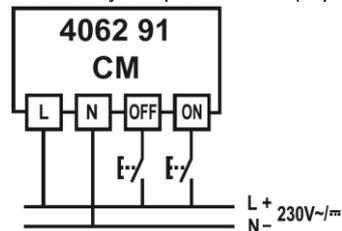
Contacts characteristics:

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

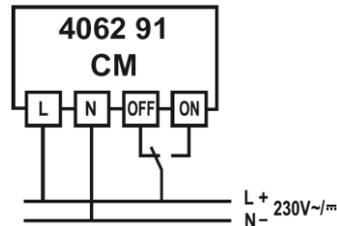
Control logics of the remote control unit:

· The device is fitted with an electronic card. The control pulse must be longer than 100ms. One single pulse is enough for the command. The device can manage the following types of remote control:

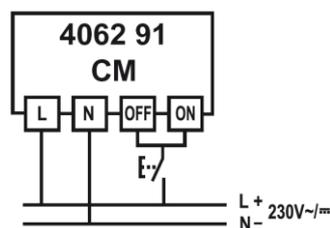
- Control by two push buttons (impulse)



- Control by changeover switch (sustained voltage)



- Control by one single push button (impulse cyclic control)



4. PREPARATION - CONNECTION (continued)

Control logics of the remote control unit: (continued):

· The device doesn't execute any control operation in the following cases

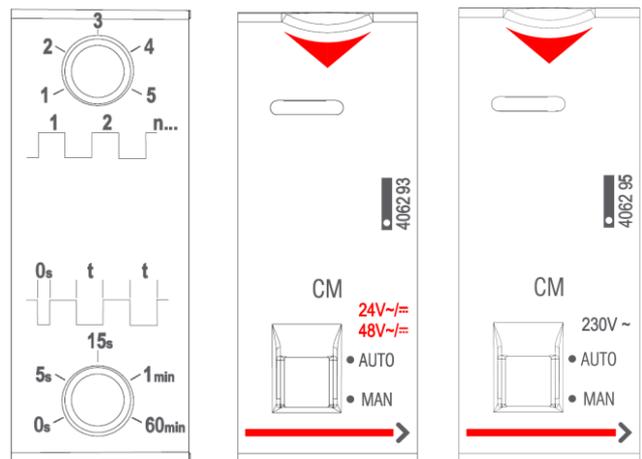
- when controlled by a change-over switch (sustained voltage), if the associated device is manually operated or if it has tripped on default (overload, short-circuit, differential default or tripping by control auxiliary)
- when the power is turn on, the motor driven control module is controlled by a sustained executable control
- when controlled by a change-over switch (sustained voltage), if the selector AUTO / MAN moves from the MAN position to the AUTO position and if the sustained control is different from the status of the associated device.

· When controlled by a change-over switch (sustained voltage), it is necessary to wait for at least 1.5 seconds between two commands of the same type.

5. GENERAL CHARACTERISTICS

Front side marking:

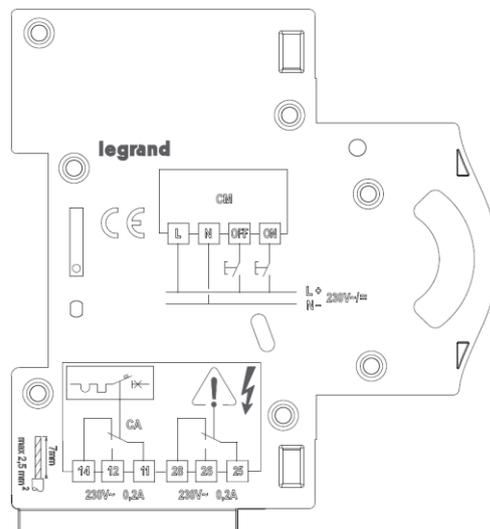
· By permanent ink pad printing



Lateral side marking:

· By laser.

left side



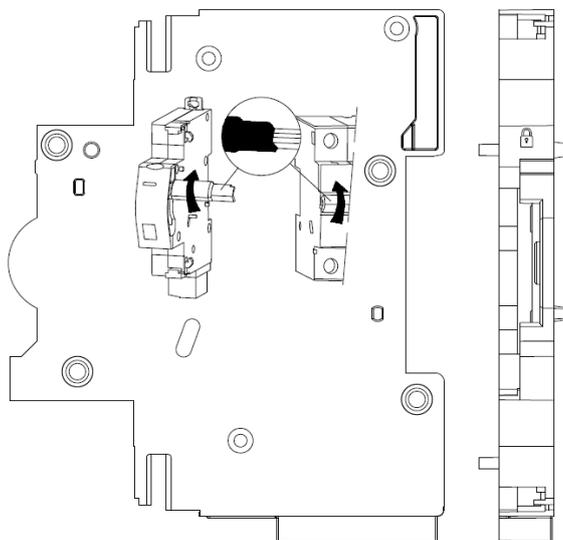
Motor driven remote control device with automatic resetting

Cat. N°(s) : 4 062 93, 4 062 95

5. GENERAL CHARACTERISTICS (continued)

Lateral side marking: (continued)

- . By laser.
- right side



Pulse rated voltage:

- . $U_{imp} = 4 \text{ kV}$

Insulation rated voltage:

- . $U_i = 500 \text{ V}$

Pollution degree:

- . 2 according to IEC/EN 60898-1.

Dielectric strength:

- . 2500 V

Mechanical endurance:

- . 20000 operations.

Electrical endurance:

- . According to the standards of the associated protection device.

Switching frequency:

- . 120 operations per hour (30 seconds between two successive operations)

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:

- . 0,157 kg.

Volume when packed:

- . 1,20 dm³. Device packed by one

5. GENERAL CHARACTERISTICS (continued)

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 box against solid and liquid bodies: IP 40 (according to IEC 529, EN 60529 et NF C 20-010).
- . Protection index against mechanical shocks: IK 02 (according to EN 50102 et NF C 20-015).

Resistance to sinusoidal vibrations:

- . According to IEC 60068-2-6.
- . Axis : x, y, z.
- . Frequency range: 5÷100 Hz ; duration 90 minutes
- . Displacement (5÷13,2 Hz) : 1mm
- . Acceleration (13,2÷100 Hz) : 0,7g ($g=9,81 \text{ m/s}^2$).

Maximum power consumption:

- . <20VA rms (<80VA peak)

Standby power consumption:

- . <1,5VA

Maximum activation time:

- <0,5s to open or close the contacts of the associated device
- <1s to complete the operation (opening and closing)

6. CONFORMITIES AND APPROVALS

Compliance to standards :

- . CEE guidelines : 73/23/CEE + 93/68/CEE
- . Electromagnetic compatibility: EN 61543
- . Legrand devices can be used under the conditions of use as defined by IEC / EN 60947.

Motor driven remote control device with automatic resetting

Cat. N°(s) : 4 062 93, 4 062 95

7. AUXILIARIES AND ACCESSORIES

Signalling auxiliaries:

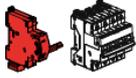
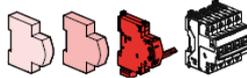
- . Auxiliary contact (½ module – cat n° 4 062 58).
- . Fault signalling changeover switch (½ module – cat n° 4 062 60).
- . Auxiliary contact / Fault signalling switch (½ module – cat n° 4 062 62).
- . Auxiliary contact + fault signalling switch / 2 auxiliary contacts (1 module - cat n° 4 062 66).

Control auxiliaries:

- . It is imperative not to associate control auxiliaries (cat. n° 4 062 7x / 8x) to motor driven control module with automatic resetting.

Possible combinations with the signalling auxiliaries:

- . Auxiliaries are clipped on the left of the motor driven modules.
- . Two signalling auxiliaries maximum (cat. n° 4 062 58 / 60 / 62 / 66).
- . If two auxiliaries are fitted to motor driven remote control unit, the control auxiliary 1 module wide (cat n° 4 062 78 / 82 / 84) must be fitted to the left of the auxiliary ½ module wide (cat. n° 4 062 58 / 60 / 62 / 66).

	CA / SD		CM	
				
			406293 / 95	
		4062.. 58 / 60 / 62 / 66		
	4062.. 58 / 60 / 62 ----- 4062.. 58 / 60 / 62 / 66	4062 .. 58 / 60 / 62 ----- 4062 66		