

RCB 0471 with relay delay for connection to fire alarm for CO2 Safety System



TECHNICAL DATA

Power supply:	Via CO2 Sensor
Relays:	1A/24V AC/DC
Material:	PC/ABS
Dimensions (WxHxD):	78x78x37 mm
Ingress protection:	IP 20

The remote connection box is delivered with one 1 meter cable and one RJ45 1-4 splitter.



FUNCTION

The RCB 0471 is a remote connection box, an accessory for the Mk9 and Mk10 CO2 alarm systems, that makes it possible to transmit alarm indications to external devices, for example a fire alarm panel or to start a ventilator.

It consists of an electronics box and cabling.

The RCB 0471 has two dedicated potential free (dry) turn over relays, one for pre-alarm and one for high alarm. It is also possible to activate both relays at pre-alarm or high alarm via the DIP-switch settings.

The RCB 0471 has one 1 meter CAT 5 cable, with a blue RJ45 connector. The cable is connected to the alarm output cable (also with a blue RJ45 connector) from the Mk9 or Mk10 CO2 sensors. Cable connection to external equipment is done via the pre-assembled cable gland. When the CO2 sensor indicates a pre-alarm or a high alarm, the selected function will be activated.

Install the connection box in a suitable place where it is mechanically protected. Remove the cover to access the mounting screw hole. The cover is a "twist-open" lid that opens by turning counterclockwise 1/8 turn.

Selectable functions:

- Direct activation of the relays.
- Selectable relay delay time (9.5 or 20 seconds) to avoid unintentional alarm call to the fire brigade when testing the CO2 alarm system.
- Selectable relay delay time (9.5 or 20 seconds) and latch. Manual reset is required. Possibility to mute the Horn/Strobe during high alarm. The function is not recommended for this model because a cover with reset button must be used.
- Direct activation of relays and if the alarm signal from the Mk9/Mk10 remains after (9.5 or 20 seconds - selectable) the latch function is activated. Manual reset is required. Possibility to mute the Horn/Strobe during high alarm. The function is not recommended for this model because a cover with reset button must be used.
- Selection of which relay to be activated at pre-alarm and high alarm. It is also possible to activate both relays at pre-alarm or high alarm.
- Separate selection for the two relays.
 - Normally activated in ON mode, no alarm mode:
This means that the relay deactivates in alarm and power OFF mode.
 - Not activated in ON mode, no alarm mode:
This means that the relay only activates when there is an alarm.

ORDERING EXAMPLE

Item code	Description
0471	RCB with delay for fire alarm, 1 m cable

RCB 0471 with relay delay for connection to fire alarm for CO2 Safety System



DIP-SWITCH SETTINGS

DIP1-5 Relay 1 (terminals 7-9)

Function selection*	DIP 1	DIP 2
Function 1	OFF	OFF
Function 2	ON	OFF
Function 3	OFF	ON
Function 4	ON	ON

Time setting	DIP 3	
9,5 seconds	OFF	
20 seconds	ON	

Relay activation	DIP 4	
Pre-alarm	OFF	
High Alarm	ON	

Relay function	DIP 5	
Normally inactivated	OFF	
Normally activated	ON	

DIP6-10 Relay 2 (terminals 10-12)

Function selection*	DIP 6	DIP 7
Function 1	OFF	OFF
Function 2	ON	OFF
Function 3	OFF	ON
Function 4	ON	ON

Time setting	DIP 8	
9,5 seconds	OFF	
20 seconds	ON	

Relay activation	DIP 9	
Pre-alarm	OFF	
High Alarm	ON	

Relay function	DIP 10	
Normally inactivated	OFF	
Normally activated	ON	

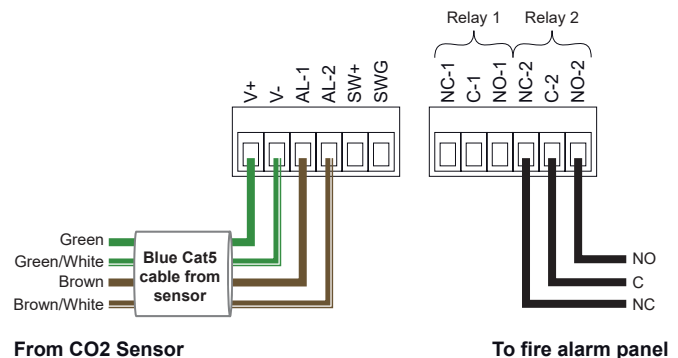
* Function:

1. Direct activation of the relay.
2. Delayed activation (9,5 or 20 seconds).
3. Delayed activation (9,5 or 20 seconds) then latch. Manual reset is required. Possibility to mute the Horn/Strobe during high alarm. The function is not recommended for this model because a cover with reset button must be used.
4. Direct activation of relays and if the alarm signal from the Mk9/Mk10 remains after (9.5 or 20 seconds) the latch function is activated. Manual reset is required. Possibility to mute the Horn/Strobe during high alarm. The function is not recommended for this model because a cover with reset button must be used.

WIRING DIAGRAM

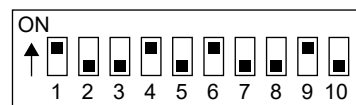
Installation example:

Connection to fire alarm panel - with 9.5 sec. delay.
Potential free (dry) switching relays.
Relay 2 (NC-2/C-2/NO-2) = High alarm.



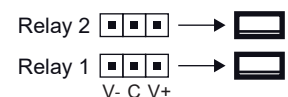
Example settings: Connection to fire alarm panel

DIP-Switch settings



Jumper settings

The relays are potential free (dry) when both jumpers are removed from the pin header.



Optional settings:

Jumper settings

It is possible to connect V- to common (C) on the relays by placing the jumper on the position V-/C.



To connect V+ to comon (C), place the jumper on C/V+.

