

NEW



EAN code
CRM-101/UNI: 8595188184113

Technical parameters CRM-101

Power supply

Supply terminals:	A1-A2
Supply voltage:	AC/DC 12 – 240 V (AC 50-60 Hz)
Consumption (max.):	2 VA/1.5 W
Supply voltage tolerance:	-15 %; +10 %

Time circuit

Time delay (t0):	90 s
Time delay (t1a + t1b):	1 – 60 min (t1=t1a + t1b)
Time delay (t2):	0.5 – 120 s*
Time setting:	rotary switches and potentiometers
Time deviation:	5 % – mechanical setting
Repeat accuracy:	0.2 % – set value stability
Temperature coefficient:	0.01 %/°C, at = 20 °C (0.01 %/°F, at = 68 °F)

Output

Contact type:	1x changeover/ SPDT (AgNi)
Current rating:	16 A/AC1; 1 HP 240 Vac, 1/2 HP 120 Vac; PD. B300
Breaking capacity:	4000 VA/AC1, 384 W/DC1
Switching voltage:	250 V AC/24V DC
Power dissipation (max.):	1.2 W
Mechanical life:	10.000.000 ops.
Electrical life (AC1):	100.000 ops.

Control

Control terminals:	A1-S (voltage dependent contact)
Load between S-A2:	Yes
Control terminals:	IN1-IN1, IN2-IN2 (potential-free contacts)
Impulse length:	min. 25 ms / max. unlimited
Reset time:	max. 150 ms

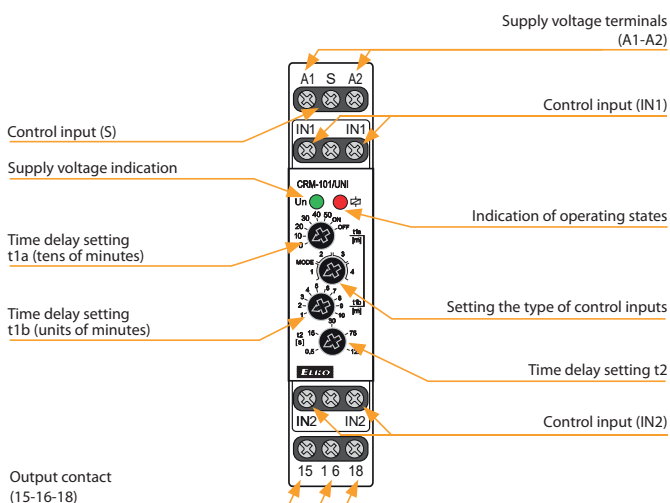
Other information

Operating temperature:	-20 .. +55 °C (-4 .. 131 °F)
Storage temperature:	-30 .. +70 °C (-22 .. 158 °F)
Dielectric strength:	AC 4kV (supply – output)
Operating position:	any
Mounting:	DIN rail EN 60715
Protection degree:	IP40 front panel / IP20 terminals
Overvoltage category:	III.
Pollution degree:	2
Cross-wire section – solid/ stranded with ferrule (mm²):	max. 1x 2.5, 2x 1.5/ max. 1x 2.5 (AWG 14)
Dimensions:	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")
Weight:	70 g (2.5 oz)
Standards:	EN 61812-1

* Time t2 can be limited by time t1
(t1 = 1 m, t2 = max. 30 s)
(t1 = 2 m, t2 = max. 1 m)

- Time relay for automatic switching on and off of electricity, with the help of connected sensors (can be combined with a regular card switch)
- 2 control inputs – **potential-free contacts**:
IN1 (MD) – motion detector
IN2 (MC) – magnetic door contact
- 1 control input – **voltage dependent contact**:
S (MD) – motion detector
- Adjustable configuration of control inputs:
(closing – NO / opening – NC, according to the type of connected sensors)
- Time delay t1 (delayed switch-off of electricity)
Adjustable in the range of 1 – 60 min in minute steps
- Time delay t2 (blocking input for motion detector)
Adjustable continuously in the range of 0.5 – 120 s

Description



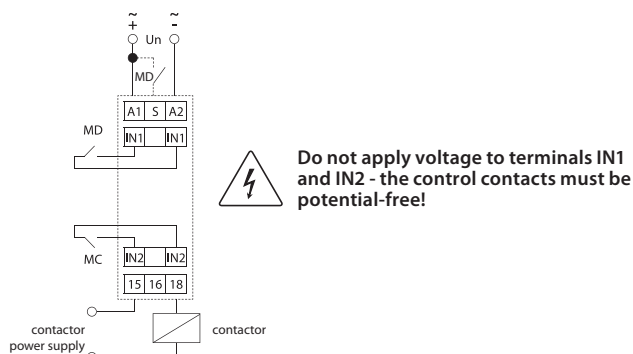
Setting the type of control inputs

MODE	IN1/S	IN2
1	NO	NO
2	NO	NC
3	NC	NO
4	NC	NC

Setting example:

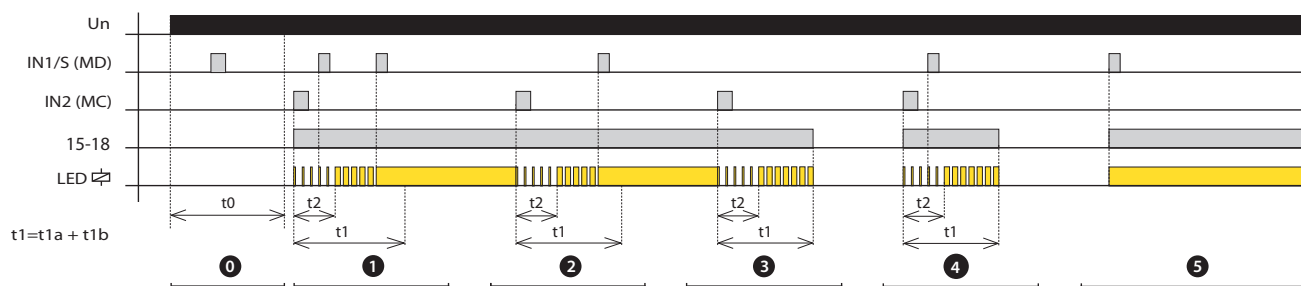
- Door contact is NC (closed when the door is closed)
- Motion detector has NC contact (closed at rest, opens when motion is detected)
- MODE must be set to position 4

Connection



Function

Graph and description of the function corresponds to the setting of MODE 1 control inputs.



0 Motion detector blocking

After switching on the power supply, inputs IN1/S (MD - motion detector) are blocked for a period of t_0 .

1 Arrival of persons in the room

When people enter the room, IN2 is activated (MC - magnetic door contact)

- Closes the relay (turns on the electricity) and at the same time the delay t_1 and t_2 starts
- The red LED flashes depending on the delay in progress.

Contact IN1/S, responds to the movement of people in the room

- During the delay t_2 , the MD operation is blocked
- If IN1/S is activated after the delay t_2 has elapsed, the delay t_1 ends and the red LED lights up permanently. The relay remains permanently closed.

2 Person leaving the room

When the person leaves the room, contact IN2 is activated

- Delays t_1 and t_2 start at the same time
- If there is a movement in the room after the delay t_2 has elapsed, IN1/S is activated, the delay t_1 is terminated and the relay remains closed.

3 Last person leaving the room

When the person leaves the room, contact IN2 is activated

- Delays t_1 and t_2 start at the same time
- If IN1/S is not activated after the delay t_2 has elapsed (no movement in the room), then after the delay t_1 the red LED goes out and the relay opens (switches off the electricity).

4 No movement after delay t_2

When people enter the room, IN2 is activated (MC - magnetic door contact)

- Closes the relay (turns on the electricity) and at the same time the delay t_1 and t_2 starts
- If IN1/S is not activated after the delay t_2 has elapsed (e.g. a brief insight into the room), then after the delay t_1 the red LED goes out and the relay opens (switches off the electricity).

5 Movement at rest

If, after the person leaves the room, the IN1/S is not activated after the t_2 delay, it opens the relay (turns off the electricity). However, another person remains in the room motionless (e.g. sleeping)

- If IN1/S is activated (e.g. by waking up a sleeping person), the relay closes without delay (turns on the electricity).