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Made in Czech Republic

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## CRM-2HE

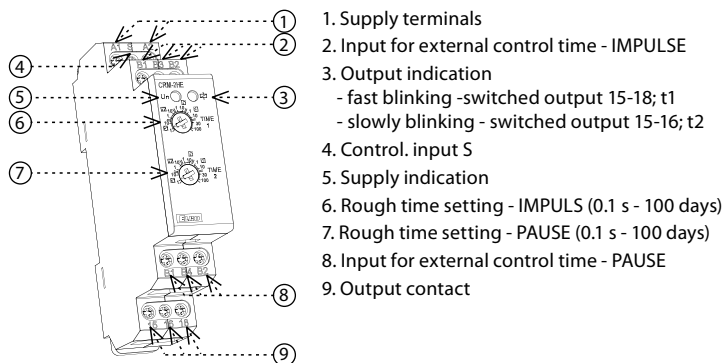
### Assymmetric cycler with external potentiometer



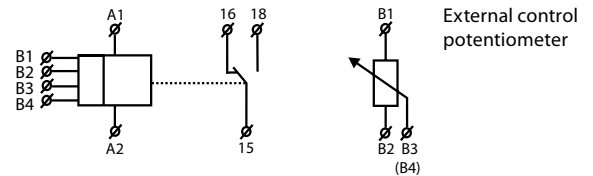
#### Characteristics

- control by external control unit - potentiometer (can be placed / mounted for example on switch board doors or in panel)
- 2 time functions:
  - cycler beginning with pulse
  - cycler beginning with pause
- function selected via external wired link on control input „S-A1“
- time scale 0.1 s - 100 days divided into 10 time ranges:
  - (0.1 s - 1 s / 1 s - 10 s / 0.1 min - 1 min / 1 min - 10 min / 0.1 hrs - 1 h / 1 hrs - 10 hrs / 0.1 day - 1 day / 1 day - 10 days / 3 days - 30 days / 10 days - 100 days)
- rough time setting via rotary switch
- universal supply voltage AC/DC 12 - 240 V
- output contact: 1x changeover 16A
- output indication: multifunction red LED
- 1-MODULE, DIN rail mounting

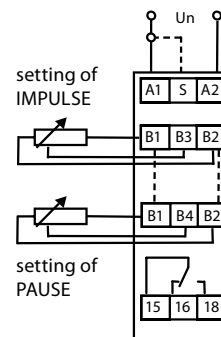
#### Description



#### Symbol



#### Connection



Type of load	$\cos \varphi \geq 0.95$								
Mat. contacts AgNi, contact 16A	250V / 16A	250V / 5A	250V / 3A	230V / 3A (690VA)	x	800W	x	250V / 3A	250V / 10A
Type of load									
Mat. contacts AgNi, contact 16A	250V / 6A	250V / 6A	250V / 6A	24V / 16A	24V / 6A	24V / 4A	24V / 16A	24V / 2A	24V / 2A

CRM-2HE

Number of functions:	2
Supply terminals:	A1 - A2
Voltage range:	AC/DC 12 - 240 V (AC 50 - 60 Hz)
Power input (max.):	AC 0.7 - 3 VA / DC 0.5 - 1.7 W
Max. dissipated power (Un + terminals):	4 W
Supply voltage tolerance:	-15%; + 10%
Supply indication:	green LED
Time ranges:	0.1 s - 100 days
Time settings:	rotary switch and external potentiometers
Time deviation:	5 % - mechanical setting
Repeat accuracy:	0.2 % - set value stability
Temperature coefficient:	0.01 % / °C, at = 20 °C

Output

Number of contacts:	1x changeover / SPDT (AgNi / Silver Alloy)
Rated current:	16 A / AC 1
Breaking capacity:	4000 VA / AC1, 384 W / DC
Inrush current:	30 A / < 3 s
Switching voltage:	250 V AC / 24 V DC
Output indication:	multifunction red LED
Mechanical life:	3x10 <sup>7</sup>
Electrical life (AC1):	0.7x10 <sup>5</sup>

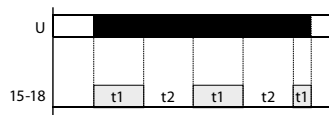
Controlling

Control. voltage:	AC/DC 12 - 240 V (AC 50 - 60 Hz)
Power the control input:	AC 0.025 - 0.2 VA / DC 0.1 - 0.7 W
Load between S-A2:	Yes
Glow tubes connetions:	No
Control. terminals:	A1-S
Reset time:	max. 150 ms

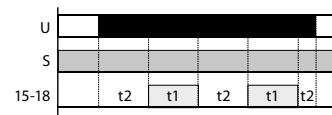
Other information

Operating temperature:	-20 °C to 55 °C (-4 °F to 131 °F)
Storage temperature:	-30 °C to 70 °C (-22 °F to 158 °F)
Electrical strength:	4 kV (supply - output)
Operating position:	any
Mounting:	DIN rail EN 60715
Protection degree:	IP40 from front panel / IP20 terminals
Overvoltage cathegory:	III.
Pollution degree:	2
Max. cable size (mm <sup>2</sup> ):	solid wire max. 1x 2.5 or 2x 1.5 / with sleeve max. 1x 2.5 (AWG 12)
Dimensions:	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")
Weight:	78 g (2.8 oz.)
Standards:	EN 61812-1, EN 61010-1

Cycler beginning with pulse



Cycler beginning with pause



More accurate setting of timing for long periods of time

Example of time setting to 8 hours period:

For rough setting use time scale 1 - 10 s on the potentiometer.

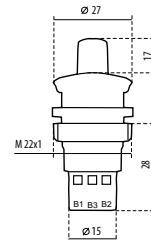
On the external potentiometer for fine adjustment of time to adjust 8 s, check accuracy (eg. a stopwatch).

On rough time setting, set potentiometer to originally desired scale 1 - 10 hours, leave a fine setting as it is.

Potentiometer

It is possible to connect the external operating potentiometer up to the distance of maximally 10 meters (32.8 ft.) from relay CRM-2HE, for example in switchboard. The external potentiometer has cover IP65 from the front side and IP20 from the rear side. It is absolutely necessary to connect potentiometer with the device in correct way. The terminals on the device must be connected to the equally marked terminal on the potentiometer.

Potentiometer:	47 kΩ, linear
Protection degree:	IP65 from front side / IP20 from back side
Max. cable size (mm <sup>2</sup> ):	1.5 with sleeve / without sleeve max. 2.5 (AWG 12)
Weight:	15 g (0.5 oz.)



Warning

Device is constructed for connection in 1-phase installation of AC/DC 12-240 V main and must be installed according to norms valid in the state of application. Connection according to the details in this direction. Installation, connection, setting and servicing should be installed by qualified electrician staff only, who has learnt these instruction and functions of the device. This device contains protection against overvoltage peaks and disturbances in supply. For correct function of the protection of this device there must be suitable protections of higher degree (A, B, C) installed in front of them. According to standards elimination of disturbances must be ensured. Before installation the main switch must be in position "OFF" and the device should be de-energized. Don't install the device to sources of excessive electro-magnetic interference. By correct installation ensure ideal air circulation so in case of permanent operation and higher ambient temperature the maximal operating temperature of the device is not exceeded. For installation and setting use screw-driver cca 2 mm. The device is fully-electronic - installation should be carried out according to this fact. Non-problematic function depends also on the way of transportation, storing and handling. In case of any signs of destruction, deformation, non-function or missing part, don't install and claim at your seller.