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02-81/2016 Rev.: 1

EN

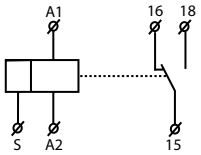
CRM-61

Multifunction time relay

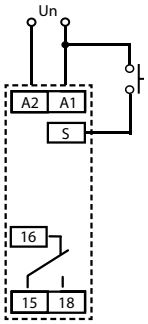
Characteristics

- to be used for electrical appliances, control of lights, heating, motors, pumps, fans, etc.
- 6 functions: - 3 time functions controlled by supply voltage
  - 3 time functions controlled by control input
- easy to use function and time-range setting by rotary switches
- time scale 0.1 s - 10 hrs divided into 6 range:
  (0.1 s - 1 s / 1 s - 10 s / 0.1 min - 1 min / 1 min - 10 min / 0.1 hrs - 1 hrs/ 1 hrs - 10 hrs)
- universal supply voltage: AC 24-240 V, DC 24 V
- output contact: 1x changeover 8 A / SPDT
- multifunction red LED output indicator flashes or shines depending on the status of output
- 1-MODULE, DIN rail mounting

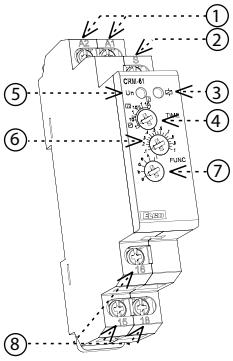
Symbol



Connection



Description



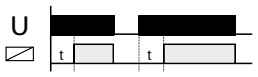
1. Supply terminals
2. Control input
3. Output indication
4. Rough time setting
   (0.1 s - 1 s / 1 s - 10 s / 0.1 min - 1 min / 1 min - 10 min / 0.1 hrs - 1 hrs/ 1 hrs - 10 hrs)
5. Supply indication
6. Fine time setting (fluent setting of rough range)
7. Function setting
8. Output contact

Type of load	cos φ ≥ 0.95 AC1	AC2	AC3	AC5a uncompensated	AC5a compensated	HAL.230V AC5b	AC6a	AC7b	AC12
Mat. contacts AgNi, contact 8A	250V / 8A	250V / 3A	250V / 2A	230V / 1.5A (345VA)	x	300W	x	250V / 1A	250V / 1A
Type of load	AC13	AC14	AC15	DC1	DC3	DC5	DC12	DC13	DC14
Mat. contacts AgNi, contact 8A	x	250V / 3A	250V / 3A	24V / 8A	24V / 3A	24V / 2A	24V / 8A	24V / 2A	x

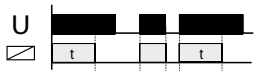
Technical parameters

CRM-61	
Function:	6
Supply terminals:	A1-A2
Supply voltage:	AC 24 - 240 V (AC 50 - 60 Hz) and DC 24 V
Consumption:	AC 0.7 - 3 VA / DC 0.5 - 1.7 W
Supply voltage tolerance:	-15 %; +10 %
Supply indication:	green LED
Time range:	0.1 s - 10 h
Time setting:	rotary switch and potentiometer
Time deviation:	5 % - při mechanickém nastavení
Repeat accuracy:	0.2 % - set value stability
Temperature coefficient:	0.01 % / °C, at = 20 °C
Output	
Changeover contacts:	1x changeover / SPDT (AgNi / Silver Alloy)
Rated current:	8 A / AC 1
Switching capacity:	2000 VA / AC1, 240 W /DC
Output indication:	multifunction red LED
Mechanical life:	$1x10^7$
Electrical life (AC1):	$1x10^5$
Control	
Control. voltage:	AC 24 - 240 V (AC 50 - 60 Hz) and DC 24 V
Consumption of input:	AC 0.025 - 0.2 VA / DC-0.1 - 0.7 W
Load between S-A2:	Yes
Glow-tubes:	No
Control. terminals:	A1 - S
Max. capacity of cable control:	0.1 µF
Impulse length:	min. 25 ms / max. unlimited
Reset time:	max. 120 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)
Mounting:	any
Operating position:	DIN rail EN 60715
Protection degree:	IP40 from front panel / IP10 terminals
Overvoltage cathegory:	III.
Pollution degree:	2
Max. cable size (mm^2):	max. 2x 2.5, max. 1x 4 / with sleeve max. 1x 2.5, 2x 1.5 (AWG 12)
Dimensions:	90 x 17.6 x 64 mm (3.5˝ x 0.7˝ x 2.5˝)
Weight:	69 g (2.4 oz.)
Standards:	EN 61812-1, EN 61010-1

Function

ⓐ 

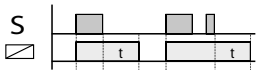
Delay ON after energization

ⓑ 

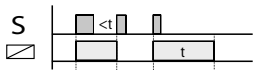
Delay OFF after energization

ⓓ 

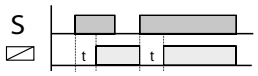
Cycler beginning with impulse after energization

ⓔ 

Delay OFF after de-energization, instant make of output

ⓚ 

Impulse relay with delay, press its delay ON and next press its delay OFF output if it happens before expiration time

ⓛ 

Delay ON after make of the switch till break

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 potentiomenter.

For fine time setting aim for 8 s on potentiometer, then recheck accuracy (using stopwatch etc).

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

Warning

Device is constructed for connection in 1-phase main alternating current 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 disturbancies 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 disturbancies 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 it is possible to dismount the device after its lifetime, recycle, or store in protective dump.