

EAN code CRM-100: 8595188174534

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Time relay - DIGITAL

Technical parameters	CRM-100
Number of functions:	17
Supply terminals:	A1 - A2
Voltage range:	AC/DC 24-240 V (50-60 Hz)
Consumption (max):	4 VA / 3 W
Max. dissipated power	
(Un + terminals):	4 W
Supply voltage tolerance:	-15 %; +10 %
Time ranges:	0.1 s - 999 hrs.
Time setting:	Buttons SET/ADJ
Repeat accuracy:	\pm 0.5 % - of selected range
Variation in timing due to	
voltage change:	± 2%
Variation in timing due to	
temperature change:	± 5%
Output	
Number of contacts:	1x changeover / SPDT (AgNi)
Current rating:	8 A/AC1
Breaking capacity:	2000 VA/AC1, 192 W/DC
Inrush current:	10 A/<3 s
Switching voltage:	250 V AC/24 V DC
Output indication:	multifunction red LED
Mechanical life:	20.000.000 ops.
Electrical life (AC1):	100.000 ops.
Controlling	
Control terminals:	A1-B1
Other information	
Operating temperature:	–10 +55 °C (14 131 °F)
Storage temperature:	−30 +70 °C (−22 158 °F)
Isolation (Between Input and	
Output):	2.5 kV
Operating position:	any
Mounting:	DIN rail EN 60715
Protection degree:	IP30 from front panel/IP20 terminals
Overvoltage cathegory:	III.
Pollution degree:	2
Max. cable size (mm ²):	solid wire max. 1x 2.5 or 2x 1.5/
	with sleeve max. 1x 2.5 (AWG 12)
Dimensions:	85 x 18.2 x 76 mm (3.3″ x 0.7″ x 2.99″)
Weight:	78 g (2.8 oz.)
Standards:	EN 61812-1

Symbol



- Digital multifunction relay can be used for controlling lights, heating, motors, pumps, machines and appliances where you need set time functions.
- 17 most used functions.
- Thanks to digital display and settings you exact set reguired time (without any mechanical tolerance).
- Time range 0.1 s 999 hours.
- Universal power supply 24 240 V AC/DC brings you variability of powering.
- Visible time function for non-autoratized.



Description of displayed elements on the screen



Connection



Function



ON delay [*0*] Timing commences when supply is present. Renergizes at the end of the timing period.



Impulse ON/OFF [8]

Signal OFF/ON [8]

ration T.

Permanent supply is required. R energizes for the timing period when B1 is opened or closed. When timing commences, changing state of B1 does not affect R but resets timer.

When switch B1 is closed or opened for preset

time ,T, the relay changes its state after time du-

A permanent supply is needed. When B1 is

closed, output relay energizes until timing irre-

Permanent supply is required. when switch B1

is closed, and remains closed output relay energizes until timing is over. If B1 is opened during

spective of any further action of B1.



Cyclic OFF/ON {OFF Start, (Sym, Asym)} []] T-ON and T-OFF can be same or different. The relay (R) keeps on changing its status till power is removed.



ΓT.

U

B1

С

Leading edge impulse1 [[]

2 U R T_{ON} T_{ON} T_{ON} **Cyclic ON/OFF {On Start,(Sym,Asym)}** [*2*] This function is quite similar to the function '1' but initially the relay(R) is ON for period T-ON after the power is applied.



Impulse ON energizing [3] After power ON, R energizes and timing starts. R de-energizes after timing is over.

4 U B1 t1 t2 R T+t1+t2 T

Accumulative delay ON signal [4]

Time commences as supply is present and switch B1 is open. Closing switch B1 pauses timing. Timing resumes when switch B1 is opened again. R energizes at the end of timing.



timing, R resets.

Leading edge impulse2 [D]

Trailing edge impulse1 [E]

Permanent supply required. when B1 is opened, R energizes and de-energizes when timing is over. If B1 is closed during timing R resets.



Accumulative delay ON inverted signal [5] Time commences as supply is present and switch B1 is closed. Opening switch B1 pauses timing. Timing resumes when switch B1 is closed again. R energizes at end of timing.



Accumulative impulse ON signal [6]

When supply is ON, R energizes. When switch B1 is closed timing is suspended and remains suspended till switch B1 is opened again. Interrupting supply resets timer.



Signal ON delay [7]

Permanent supply required. Timing starts when switch B1 is closed. R energizes at end of timing period and de-energizes when B1 is opened.



Inverted signal ON delay [8]

Timing will commence when supply is present and switch B1 is open. R energizes after timing. If B1 is closed during timing period, timing resets to the beginning of cycle.



Signal OFF delay [9]

Permanent supply is required. R energizes when switch B1 is closed. Timing commences after S is opened and then the relay de-energizes.



U

B1

F



Trailing edge impulse2 [F]

Permanent supply is required. When switch B1 is opened, R energizes and will de-energize when timing is over. If B1 is pulsed during timing period it will have no effect on R.

Delayed impulse [6]

When switch B1 is closed, T_{OFF} starts. Relay energizes at the end of T_{OFF} period. Then, T_{OFF} starts irrespective of signal level and relay de-energizes at the end of T_{ON} period.

