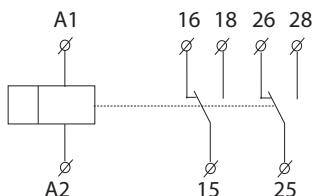




EAN code
CRM-82TO/UNI: 8595188137614

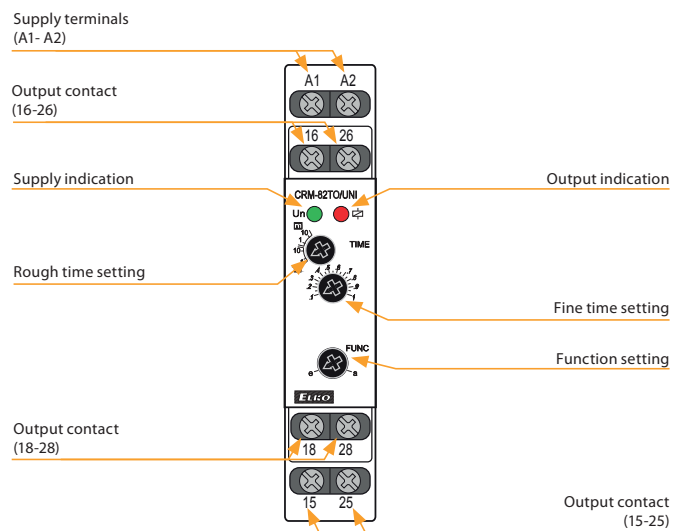
Technical parameters		CRM-82TO
Number of functions:	a - TRUE OFF DELAY / e - ON DELAY	
Supply terminals:	A1 - A2	
Voltage range:	AC/DC 12 - 240 V (AC 50-60 Hz)	
Burden (max.):	3 VA / 1.7 W	
Max. dissipated power (Un + terminals):	2.5 W	
Supply voltage tolerance:	-15 %; +10 %	
Supply indication:	green LED	
Time ranges:	0.1 s - 10 min	
Time setting:	potentiometer	
Time deviation:	5 % - mechanical setting	
Repeat accuracy:	0.2 % - set value stability	
Temperature coefficient:	0.1 %/°C, at = 20 °C (0.1 %/°F, at = 68 °F)	
Output		
Number of contacts:	2x changeover/DPDT (AgNi/Silver Alloy)	
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:	red LED	
Mechanical life:	2.000.000 ops.	
Electrical life (AC1):	200.000 ops.	
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)	
Dielectric strength:	4 kV (supply-output)	
Operating position:	any	
Mounting:	DIN rail EN 60715	
Protection degree:	IP40 from front panel / IP10 terminals	
Overvoltage category:	III.	
Pollution degree:	2	
Max. cable size (mm ²):	solid wire max. 2x 2.5 or 1x 4, with sleeve max. 2x 1.5 or 1x 2.5 (AWG 12)	
Dimensions:	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	
Weight:	73 g (2.6 oz.)	
Standards:	EN 61812-1	

Symbol



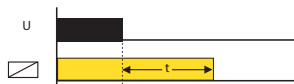
- „TRUE OFF DELAY“ relay starts timing after power supply failure. Example of use case: back-up source for DELAY OFF in case power supply failure. (e.g. emergency lighting, emergency respirator, or protection of el. controlled doors - in case of fire).
- 2 time functions adjustable by rotary switch:
a - delayed return after disconnecting of supply
e - delayed start.
- Time range (adjustable by rotary switch and fine setting by potentiometer): 0.1 s - 10 min.
- Interruptions in the power supply must take time steps (tens to hundreds of milliseconds).
- Output status indicated by red LED (only in case of supply voltage connection).

Description



Function

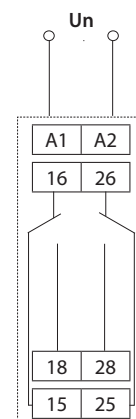
a - TRUE OFF DELAY



e - ON DELAY



Connection





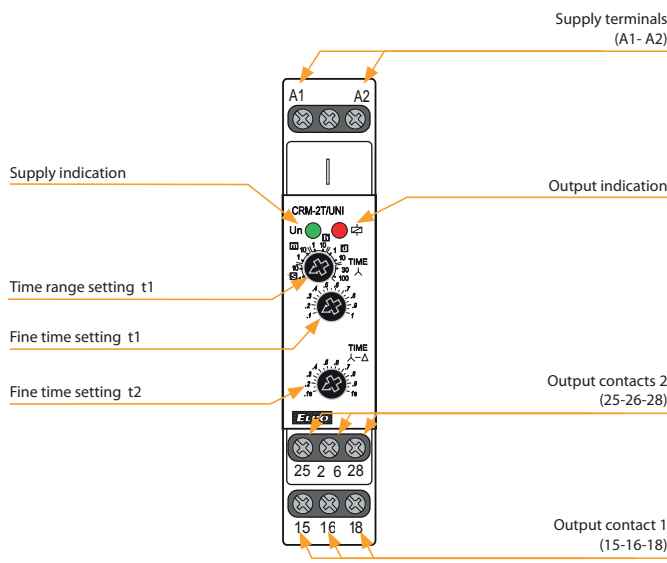
EAN code
CRM-2T/230V: 8595188112291
CRM-2T/UNI: 8595188112437

Technical parameters CRM-2T

Power supply	
Supply terminals:	A1 - A2
Voltage range:	UNI AC/DC 12 - 240 V (AC 50-60 Hz)
Power input (max.):	2 VA/1.5 W
Voltage range:	230 AC 230 V (50-60 Hz)
Power input (max.):	AC 3 VA/1.4 W
Supply voltage tolerance:	-15 %; +10 %
Supply indication:	green LED
Function	
Time scale:	t1: 0.1 s - 100 days, t2: 0.1 s - 1 s
Time setting:	rotary switch and potentiometer
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	
Number of contacts:	2x changeover/SPDT (AgNi)
Current rating:	16 A/AC1
Breaking capacity:	4000 VA/AC1, 384 W/DC
Inrush current:	30 A/< 3 s
Switching voltage:	250 V AC/24 V DC
Max. power dissipation:	1.2 W
Output indication:	multifunction red LED
Mechanical life:	10.000.000 ops.
Electrical life (AC1):	100.000 ops.
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)
Dielectric strength:	
supply - output 1	4 kV AC
supply - output 2	4 kV AC
output 1 - output 2	4 kV AC
Operating position:	any
Mounting:	DIN rail EN 60715
Protection degree:	IP40 from front panel/IP20 terminals
Overvoltage category:	III.
Pollution degree:	2
Terminal wire capacity (mm ²):	max.1x 2.5, 2x1.5, 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:	UNI - 78 g (2.8 oz.), 230 - 73 g (2.6 oz.)
Standards:	EN 61812-1

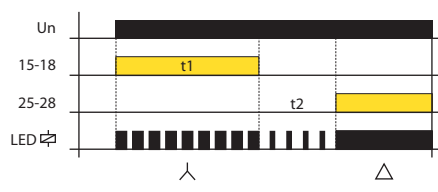
Description

- It serves for delay ON of motors star/delta.
- Time t1 (star):
 - time range setting by rotary switch
 - fine time setting by potentiometer.
- Time t2 (delay) between λ/Δ
 - fine time setting by potentiometer.
- Multifunction red LED flashes or shines depending on the operating status.

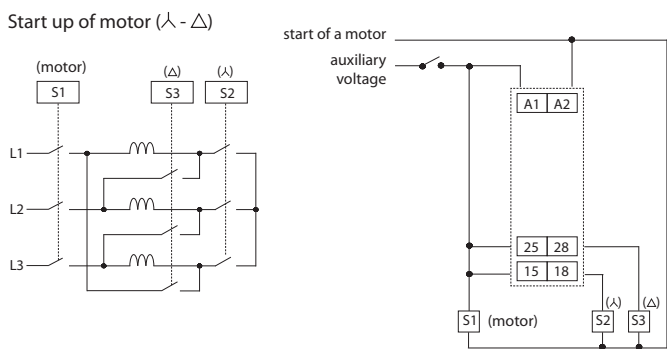


Function

STAR/DELTA timer



Connection



Symbol

