

Features

- Multi-function time relay for universal use in automation, control and regulation or in house installations.
- All functions initiated by the supply voltage, except for the flasher function, can use the control input to inhibit the delay (pause).
- Relay mode selection - according to the set function, permanently closed, permanently open, function of memory latch.
- Output contact CRM-112H: 2x changeover / SPDT 16 A
- Multifunction red LED flashes or shines depending on the operating status.

RS PRO Timer Relays

0360691



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

Product Description

- *Multi-function time relay for universal use in automation, control and regulation or in house installations.*
- *All functions initiated by the supply voltage, except for the flasher function, can use the control input to inhibit the delay (pause).*
- *Relay mode selection - according to the set function, permanently closed, permanently open.*
- *Universal supply voltage AC/DC 12 – 240 V.*
- *Time scale 50 ms - 30 days divided into 10 ranges: (50 ms - 0.5 s / 0.1 - 1 s / 1 - 10 s / 0.1 - 1 min / 1 - 10 min / 0.1 - 1 h / 1 - 10 h / 0.1 - 1 d / 1 - 10 d / 3 - 30 d).*
- *Output contact CRM-112H: 2x changeover / SPDT 16 A*
- *Multifunction red LED flashes or shines depending on the operating status.*

Power supply

Supply terminals:	A1-A2
Supply voltage:	AC/DC 12 – 240 V (AC 50-60 Hz)
Consumption (max.):	2.5 VA/1.5 W
Supply voltage tolerance:	- 15 %; + 10 %
Supply indication:	green LED

Time circuit

Number of functions:	10
Time range:	50 ms – 30 d
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 1, 2:	1 × changeover/SPDT (AgNi)
Current rating:	16 A/AC1
Breaking capacity:	4000 VA/AC1, 384 W/DC1
Electrical life (AC1):	100.000 ops.
Switching voltage:	AC 250V/DC 24 V
Power dissipation (max.):	2.4 W
Mechanical life:	10.000.000 ops.

Control

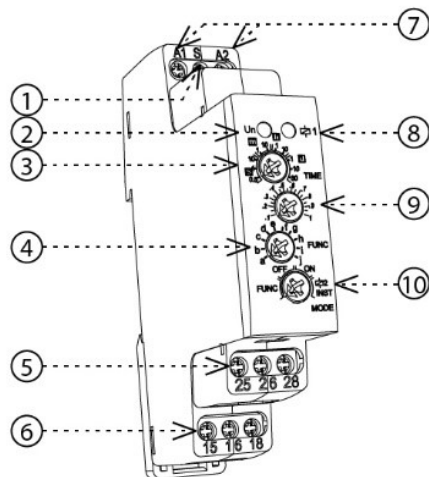
Control terminals:	A1-S
Load between S-A2:	Yes
Impulse length:	min. 25 ms/max. unlimited
Reset time:	max. 150 ms

Other information

Operating temperature:	−20 .. +55 °C (−4 .. +131 °F)
Storage temperature:	−30 .. +70 °C (−22 .. +158 °F)
Dielectric strength:	
supply – output 1, 2	AC 4 kV
output 1 – output 2	AC 4 kV
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. 1 × 2.5 or 2 × 1.5/ max. 1 × 2.5 (AWG 12)
Dimensions:	90 × 17.6 × 64 mm (3.5" × 0.7" × 2.5")
Weight:	85 g (3 oz)
Standards:	EN 61812-1

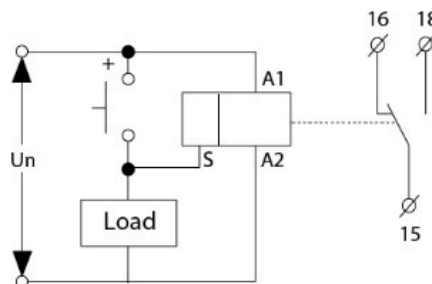
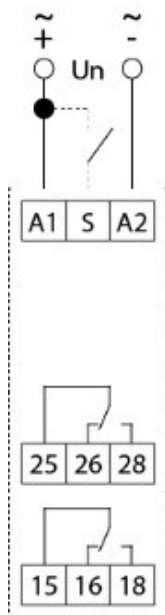
* for delay < 100 ms, a time deviation of ± 10 ms applies

Description



1. Control input (S)
2. Supply indication
3. Time range setting
4. Function setting
5. Output contact 2 (25-26-28)
6. Output contact 1 (15-16-18)
7. Supply terminals (A1-A2)
8. Output indication
9. Fine time setting
10. Mode selection

Connection and symbol

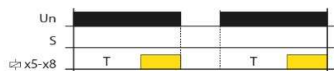


Possibility to connect load onto controlling input

It is possible to connect the load (e.g.: contactor) between terminals S-A2, without any interruption of correct relay function.

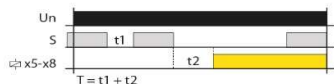
Function

a ON DELAY



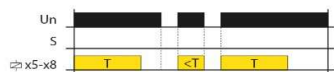
When the supply voltage is applied, the time delay T begins. When the timing is complete, the relay closes and this condition continues until the supply voltage is disconnected.

ON DELAY with Inhibit



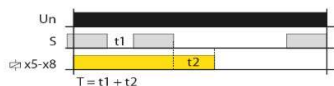
If the control contact is closed and the supply voltage is connected, the relay is opened and timing does not start until the control contact opens. When the timing is complete, the relay closes. If the control contact is closed during timing, the timing is interrupted and continues only after the control contact opens.

b INTERVAL ON



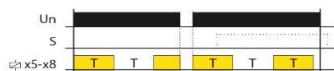
After supply voltage relay closes and starts the delay time T . After the end of the timing relay opens and this state lasts until the supply voltage is disconnected.

INTERVAL ON with Inhibit



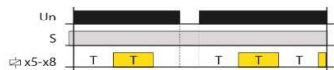
If the control contact is closed and the supply voltage is connected, the relay will close and the timing will start only after the control contact has been opened. When the timing is complete, the relay opens. If the control contact is closed during timing, the timing is interrupted and continues only after the control contact opens.

c FLASHER - ON first



After supply voltage relay closes and starts the delay time T . After the end of the timing relay opens and again runs delay time T . When the timing is complete, the relay closes again and the sequence is repeated until the supply voltage is disconnected. If the control contact is closed during timing, this does not affect the operation of the cycler.

FLASHER - OFF first



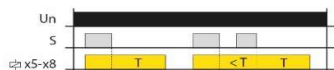
If the control contact is closed during timing; this does not affect the operation of the cycler. If the control contact is closed and the supply voltage is connected, the cycler starts with a pause (relay open).

d MEMORY LATCH



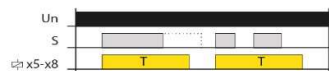
When the supply voltage is applied, the relay is open. When the control contact is closed, the relay closes. The status does not change when the control contact is opened. When the control contact is closed again, the relay opens. Each time the control contact is closed, the relay changes status.

e OFF DELAY



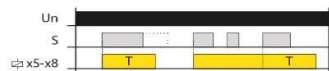
When the supply voltage is applied, the relay is open. When the control contact is closed, the relay closes. When the control contact opens, the time delay T begins. If the control contact is closed during timing, the time is reset and the relay remains closed. When the control contact opens, the time delay T starts again and opens when the relay closes.

f SINGLE SHOT



When the supply voltage is applied, the relay is open. When the control contact is closed, the relay closes and the time delay T begins. Closing the control contact during timing is ignored.

g WATCHDOG



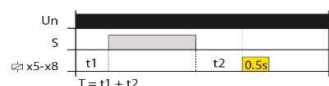
When the supply voltage is applied, the relay is open. When the control contact is closed, the relay closes and the time delay T begins. Closing the control contact during timing triggers a new time delay T - the relay closing time is thus increased.

h PULSE GENERATOR 0.5 s



After the supply voltage has been applied, the time delay T begins. When the timing is complete, the relay closes for a fixed time (0.5 s).

PULSE GENERATOR 0.5 s with Inhibit



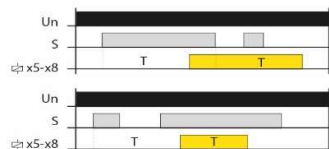
After supply voltage starts the time delay T . By closing timing of the control contact during timing is suspended. When the control contact opens, the time interval is completed and the relay closes for a fixed time (0.5 s).

i INTERVAL ON/OFF



When the supply voltage is applied, the relay is open. When the control contact is closed, the relay closes and the time delay T begins. When the control contact is opened, the relay closes and the time delay T begins. If the control contact is open during timing, the relay remains closed for $2T$. When the timing is complete, the relay opens. Any other change of control contact status during timing is ignored.

j ON/OFF DELAY



When the supply voltage is applied, the relay is open. If control contact is closed, time delay T starts. When the control contact is opened, a new time delay T begins. If the control contact is open during timing, the relay closes at the end of the timing and opens the relay after the new time delay. Any other change of control contact status during timing is ignored.

k Function: MEMORY LATCH with delay

2,3 INST. Second or third output contact instantaneous



The second or third output contact switches according to the supply voltage. The first output contact switches according to the function (a-j) set by the trimmer FUNC.

Indication of operating states

