

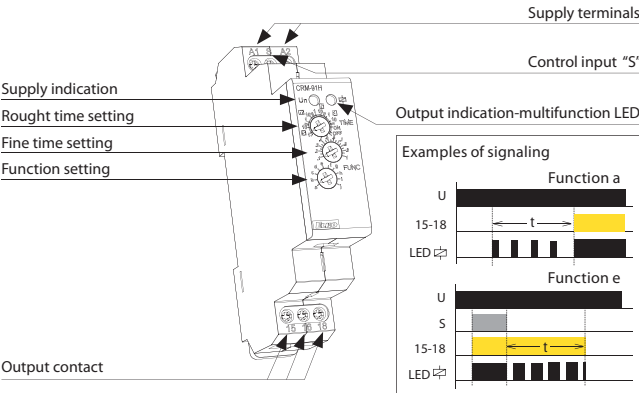


EAN code
CRM-91 / 230 V: 8595188112444
CRM-91 / UNI: 8595188112420
CRM-93H / 230 V: 8595188112789
CRM-93H / UNI: 8595188112468
CRM-9S / UNI: 8595188116008

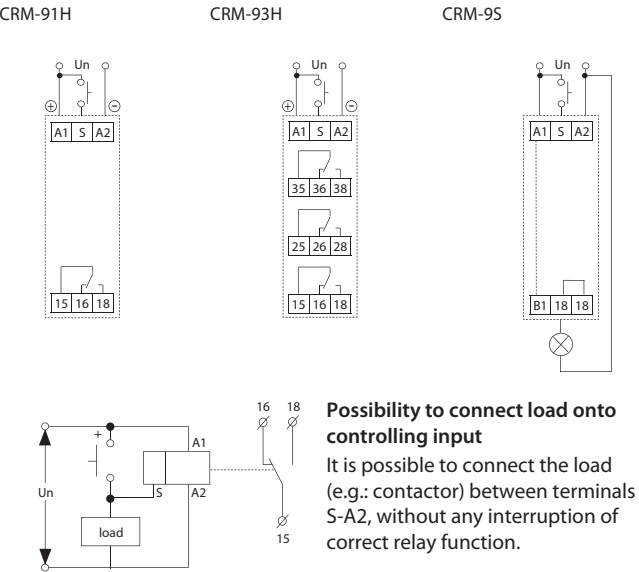
| Technical parameters | | CRM-91H | CRM-93H | CRM-9S |
|--|--|--|--|---|
| Number of functions: | | 10 | | |
| Supply terminals: | | A1 - A2 | | |
| Voltage range: | | UNI | AC/DC 12 - 240 V (AC 50 - 60 Hz) | |
| Burden: | | | AC 0.7 - 3 VA / DC 0.5 - 1.7 W | |
| Voltage range: | | 230 | AC 230 V / 50 - 60 Hz | |
| Consumption (apparent): | | | AC max. 12 VA | AC max. 12 VA |
| Dissipated power: | | max. 2 W | max. 2.5 W | max. 1 W |
| Supply voltage tolerance: | | -15 %; +10 % | | |
| Supply indication: | | green LED | | |
| Time ranges: | | 0.1 s - 10 days | | |
| 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: | | 1x changeover/ SPDT (AgNi / Silver Alloy) | 3x changeover/ SPDT (AgNi / Silver Alloy) | 1x static contactless output (triac) |
| Current rating: | | 16 A / AC1 | 8 A / AC1 | 0.7 A |
| Breaking capacity: | | 4000 VA / AC1, 384 W / DC | 2000 VA / AC1, 192 W / DC | x |
| Inrush current: | | 30 A / < 3 s | 10 A / < 3 s | 60 A / < 10 ms |
| Switching voltage: | | 250 V AC1 / 24 V DC | | |
| Voltage drop on switch: | | x | | |
| Load on B1 terminal: | | x | | |
| Output indication: | | multifunction red LED | | |
| Mechanical life: | | 3x10 ⁷ | | |
| Electrical life (AC1): | | 0.7x10 ⁵ | | |
| Controlling | | | | |
| Power on control input: | | AC 0.025 - 0.2 VA / DC 0.1 - 0.7 W (UNI), AC 0.53 VA (AC 230 V), AC 0.025 - 0.2 VA (AC 12 - 240 V) | | |
| Load between S-A2: | | Yes | | |
| Control. terminals: | | A1-S | | |
| Glow tubes connections: | | 230 V - Yes / UNI - No | | |
| Max. amount of glow lamps connected to controlling input: | | UNI - glow lamps cannot connected/NO 230 V - max.20 pcs (measured with glow lamp 0.68 mA / 230 V AC) | | |
| Impulse length: | | min. 25 ms / max. unlimited | | |
| 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: | | 4kV (supply-output) | | |
| Operating position: | | any | | |
| Mounting: | | DIN rail EN 60715 | | |
| Protection degree: | | IP40 from front panel / IP20 terminals | | |
| Overvoltage category: | | 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: | | 90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5") | | |
| Weight: | | (UNI)-65 g (2.3 oz.); (230)-62 g (2.2 oz.) | (UNI)-87 g (3.1 oz.); (230)-85 g (3 oz.) | 55 g (1.9 oz.) |
| Standards: | | EN 61812-1, EN 61010-1 | | |

- Multifunction time relay can be used for electrical appliances, control of lights, heating, motors, pumps and fans (10 functions, 10 time ranges, multi-voltage, 16 A or 3x 8 A contacts)
- Fulfills all requirements for time relays
- 10 functions:
 - 5 time functions controlled by supply voltage
 - 4 time functions controlled by control input
 - 1 function of latching relay
- Comfortable and well-arranged function and time-range setting by rotary switches
- Time scale 0.1 s - 10 days divided into 10 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 h - 10 hrs / 0.1 day - 1 day / 1 day - 10 days / only ON / only OFF)
- **CRM-91H, CRM-93H:**
 - universal supply voltage AC/DC 12 - 240 V or AC 230 V,
 - Output contact: CRM-91H: 1x changeover/SPDT 16 A;
 - CRM-93H: 3 x changeover/SPDT 8 A
- **CRM-9S:**
 - universal supply voltage AC 12 - 240 V AC 12 - 240 V, absolutely noise-less switching
 - 1x static contactless output (triac) 0.7 A (60 A / < 10 ms), switches potential A1
- Multifunction red LED output indicator flashes or shines depending on the status of output
- 1-MODULE, DIN rail mounting

Description

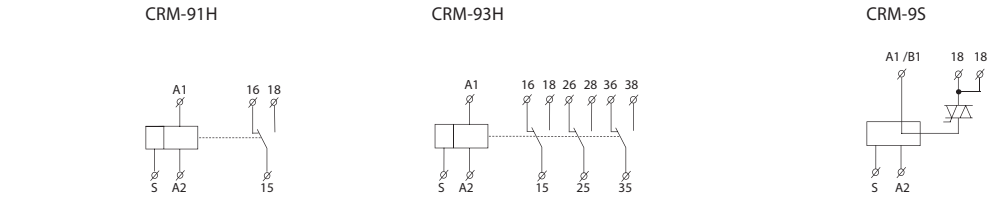


Connection

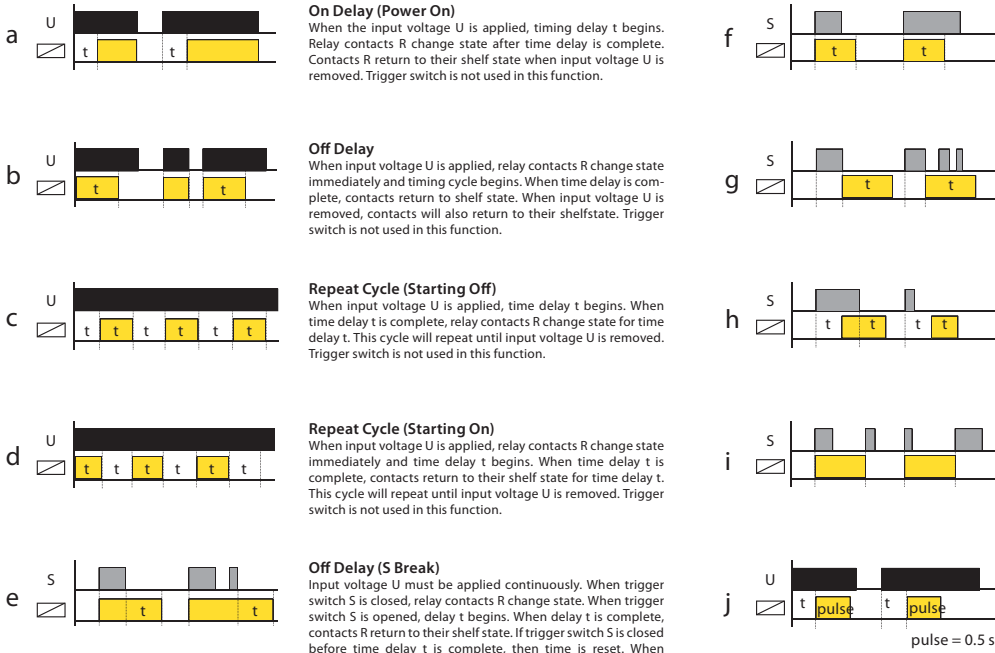


Possibility to connect load onto controlling input
It is possible to connect the load (e.g.: contactor) between terminals S-A2, without any interruption of correct relay function.

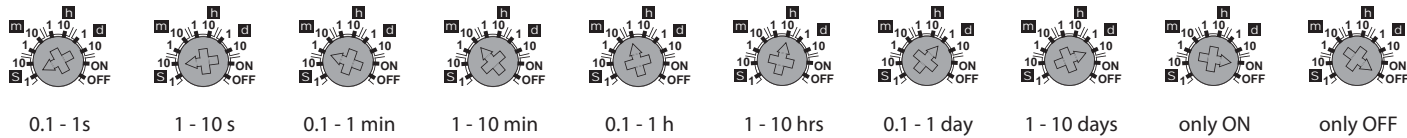
Symbol



Function



Time ranges



Notes

- 1) Output contacts of CRM-93H do not allow switching of different phases or 3-phase voltages (voltage > 250 V).
- 2) When mounting into steal-plated switchboards, it is necessary to keep a safety distance of min. 3 mm from terminal's screws 35-36-38 and 25-26-28 towards the shutter of a switchboard.