

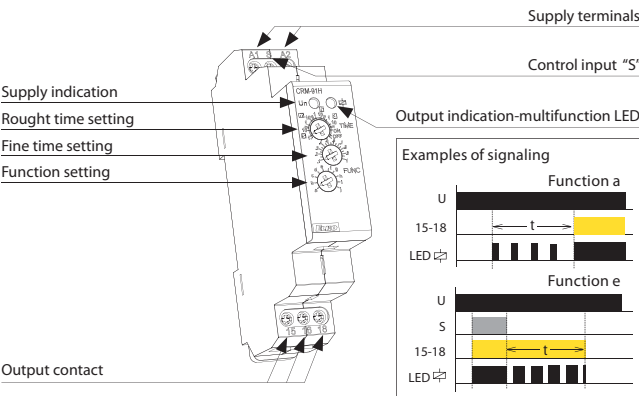


EAN code
CRM-91 / 230 V: 8595188112444
CRM-91 / UNI: 8595188112420
CRM-93H / 230 V: 8595188112789
CRM-93H / UNI: 8595188112468
CRM-9S / UNI: 8595188116008

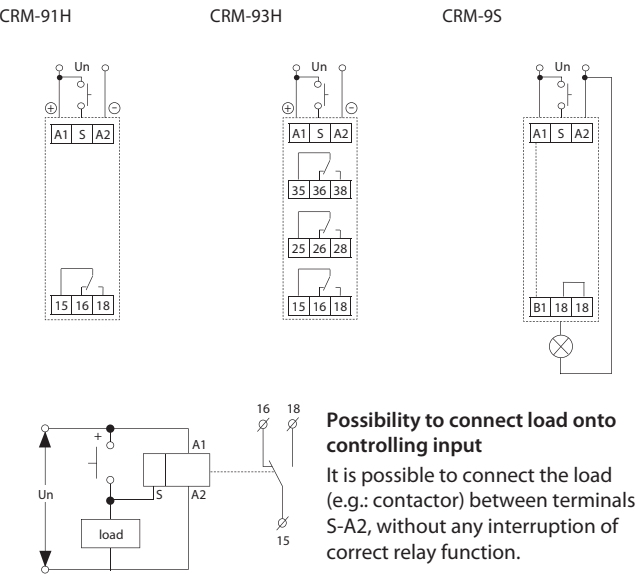
Technical parameters	CRM-91H	CRM-93H	CRM-9S
Number of functions:	10		
Supply terminals:	A1 - A2		
Voltage range:	AC/DC 12 - 240 V (AC 50 - 60 Hz)		AC 12-240 V (50-
Burden:	AC 0.7 - 3 VA / DC 0.5 - 1.7 W		60 Hz)
Voltage range:	AC 230 V / 50 - 60 Hz		AC max. 0.35VA
Consumption (apparent / loss):	AC max. 12VA / 1.3W	AC max. 12VA / 1.9W	x
Supply voltage tolerance:	-15 %; +10 %		x
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		x
Voltage drop on switch:	x		max. 0.9 V at I max.
Load on B1 terminal:	x		Yes / I max. 0.7 A
Output indication:	multifunction red LED		
Mechanical life:	3x10 ⁷		> 10 ⁸
Electrical life (AC1):	0.7x10 ⁵		>10 ⁸
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		x
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)		glow lamps cannot connected/NO
Impulse length:	min. 25 ms / max. unlimited		
Reset time:	max. 150 ms		max. 250 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)		x
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 (mm²):	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)-64 g (2.26 oz.); (230)-62 g (2.2 oz.)	(UNI)-89 g (3.1 oz.); (230)-87 g (3 oz.)	51 g (1.8 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 hrs / 1 hrs - 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

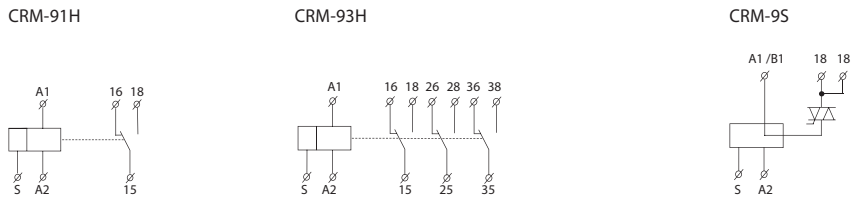


Connection

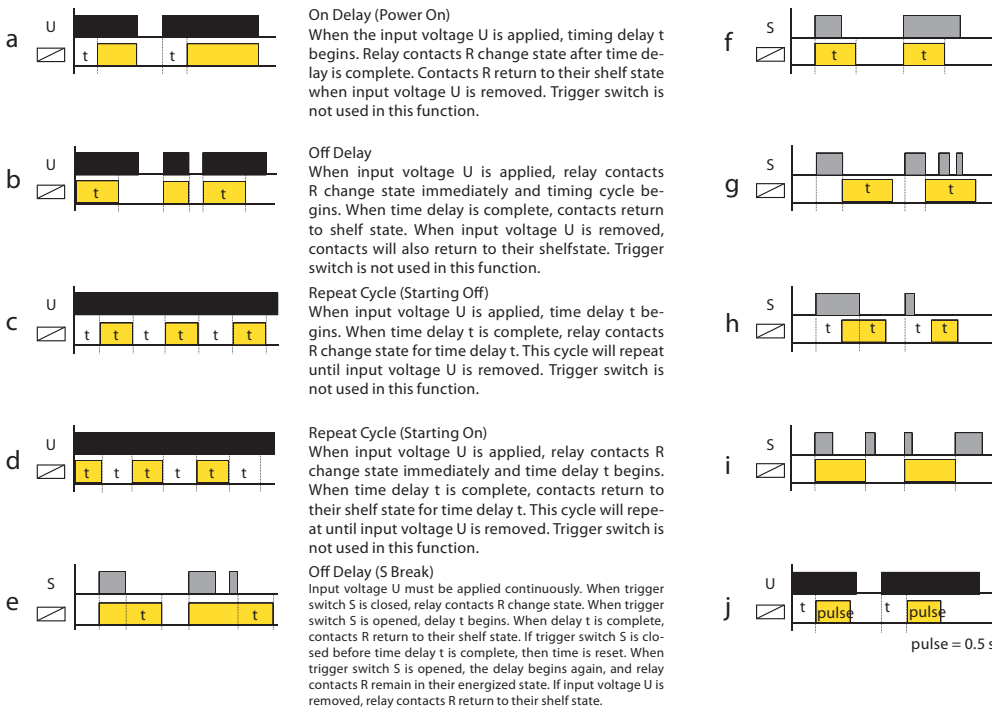


Possibility to connect load onto controlling input
It is possible to connect the load (e.g.: contactor) between terminals S-A2, without any interruption of correct relay function.

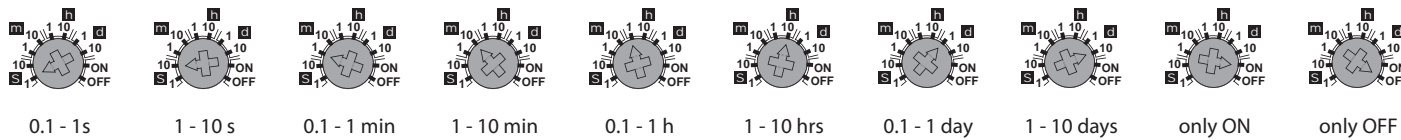
Symbol



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.