# CRM-111H, CRM-113H | Multifunction time relay with Inhibit delay

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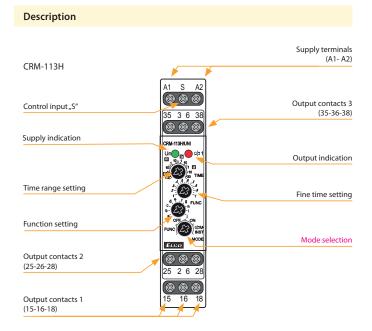




EAN code CRM-111H/UNI: 8595188175548 CRM-113H/UNI: 8595188180634

| Technical parameters                | CRM-111H                                      | CRM-113H              |
|-------------------------------------|---|-----------------------|
| Power supply                        |   |                       |
| Supply terminals: A1 - A2           |   |                       |
| Voltage range:                      | AC/DC 12 - 240                                | V (AC 50/60 Hz)       |
| Power input (max.):                 | 2 VA/1.5 W                                    | 2.5 VA/1.5 W          |
| Supply voltage tolerance:           | -15 %; +10 %                                  |                       |
| Supply indication:                  | green LED                                     |                       |
| Time circuit                        |   |                       |
| Number of functions:                | 11  | 10                    |
| Time ranges:                        | 50 ms - 30 days                               |                       |
| 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                              |   |                       |
| Number of contacts 1:               | 1x changeover/SPDT (AgNi)                     |                       |
| Current rating:                     | 16 A/AC1                                      |                       |
| Breaking capacity:                  | 4000 VA/AC1, 384 W/DC                         |                       |
| Electrical life (AC1):              | 100.000 ops.                                  |                       |
| Number of contacts 2 (3):           | x   | 2x chang./DPDT (AgNi) |
| Current rating:                     | x   | 8 A/AC1               |
| Breaking capacity:                  | x   | 2000 VA/AC1, 192 W/DC |
| Electrical life (AC1):              | x   | 50.000 ops.           |
| Switching voltage:                  |   | /24 V DC              |
| Max. power dissipation:             | 1.2 W   | 2.4 W                 |
| Output indication:                  | multifuncti                                   |                       |
| 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 °C to +55 °C (-4 °F to 131 °F)            |                       |
| Storage temperature:                | -30 °C to +70 °C (-22 °F to 158 °F)           |                       |
| Dielectric strength:                | 30 C (0 170 C (22 1 (0 150 1)                 |                       |
| supply - output 1                   | 4kV AC  |                       |
| supply - output 2 (3)               | x 1kV AC                                      |                       |
| output 1 - output 2                 |   |                       |
|                                     | X   | 1kV AC                |
| output 2 - output 3                 | х   | 1kV AC                |
| Operating position:                 | any<br>DIN rail EN 60715                      |                       |
| Mounting:                           |   |                       |
| Protection degree:                  | IP40 from front panel/IP20 terminals          |                       |
| Overvoltage category:               | III.  |                       |
| Pollution degree:                   | 2   |                       |
| Max. cable size (mm <sup>2</sup> ): | 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:                             | 62 g (2.2 oz.)                                | 85 g (3 oz.)          |
| Standards:                          | EN 61812-1                                    |                       |

- Multifunction 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).
- Mode selection according to the set function, permanently closed, permanently open, function of MEMORY LATCH with delay (CRM-111H)/ switching of the second output contact according to supply voltage (CRM-113H).
- Multifunction red LED flashes or shines depending on the operating status.



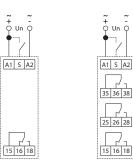
### Connection

CRM-111H

CRM-113H

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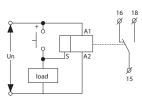


CRM-113H: The potential difference

between the supply terminals (A1-A2), output contact 2 (25-26-28) and output contact 3 (35-36-38) must be a maximum of 250 V AC rms/DC.

#### 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.



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#### Indication of operating states



Mode selection

#### FUNC. Settings function mode

The desired function a-j is set with the FUNC rotary switch.

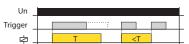
#### OFF. Output contact open mode



#### ON. Output contact closed mode



#### k. Function: MEMORY LATCH with delay (Only for CRM-111H)



When the supply voltage is applied, the relay is open. If the control contact is closed, the relay closes and the time delay T starts. It does not matter the length of the control pulse. When the timing is complete, the relay opens. If the control contact is closed during timing, the relay opens immediately. Each time the control contact closes during relay timing, it changes status.

ゆ2,3 INST. Second and third output contact instantaneous (Only for CRM-113H)



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

#### Function

For a description of the functions on page 21.