

EAN code
CRM-100: 8595188174534

| Technical parameters | CRM-100 |
| :---: | :---: |
| Number of functions: | 17 |
| Supply terminals: | A1-A2 |
| Voltage range: | AC/DC $24-240 \mathrm{~V}(50-60 \mathrm{~Hz})$ |
| Consumption (max): | $4 \mathrm{VA} / 3 \mathrm{~W}$ |
| Max. dissipated power <br> (Un + terminals): | 4 W |
| Supply voltage tolerance: | -15\%; +10 \% |
| Time ranges: | 0.1 s - 999 hrs. |
| Time setting: | Buttons SET/ADJ |
| Repeat accuracy: | $\pm 0.5$ \% - of selected range |
| Variation in timing due to voltage change: | $\pm 2 \%$ |
| Variation in timing due to temperature change: | $\pm 5 \%$ |
| Output |  |
| Number of contacts: | 1x changeover / SPDT (AgNi) |
| Current rating: | 8 A/AC1 |
| Breaking capacity: | 2000 VA/AC1, 192 W/DC |
| Inrush current: | $10 \mathrm{~A} /<3 \mathrm{~s}$ |
| Switching voltage: | 250 V AC/24 V DC |
| Output indication: | multifunction red LED |
| Mechanical life: | 20.000.000 ops. |
| Electrical life (AC1): | 100.000 ops. |
| Controlling |  |
| Control terminals: | A1-B1 |
| Other information |  |
| Operating temperature: | $-10 . .+55^{\circ} \mathrm{C}\left(14 . .131{ }^{\circ} \mathrm{F}\right)$ |
| Storage temperature: | $-30 . .+70^{\circ} \mathrm{C}\left(-22 . .158^{\circ} \mathrm{F}\right)$ |
| Isolation (Between Input and Output): | 2.5 kV |
| Operating position: | any |
| Mounting: | DIN rail EN 60715 |
| Protection degree: | IP30 from front panel/IP20 terminals |
| Overvoltage cathegory: | III. |
| Pollution degree: | 2 |
| Max. cable size ( $\mathrm{mm}^{2}$ ): | solid wire max. $1 \times 2.5$ or $2 \times 1.5 /$ with sleeve max. $1 \times 2.5$ (AWG 12) |
| Dimensions: | $85 \times 18.2 \times 76 \mathrm{~mm}\left(3.3^{\prime \prime} \times 0.7{ }^{\prime \prime} \times 2.99^{\prime \prime}\right)$ |
| Weight: | 78 g (2.8 oz.) |
| Standards: | EN 61812-1 |

## Symbol



- Digital multifunction relay can be used for controlling lights, heating, motors, pumps, machines and appliances where you need set time functions.
- 17 most used functions.
- Thanks to digital display and settings you exact set reguired time (without any mechanical tolerance).
- Time range 0.1 s - 999 hours.
- Universal power supply 24-240 V AC/DC brings you variability of powering
- Visible time function for non-autoratized.


## Description



## Description of displayed elements on the screen



## Connection

Function


ON delay [0]
Timing commences when supply is present. Renergizes at the end of the timing period.


Cyclic OFF/ON \{OFF Start, (Sym, Asym)\} [ $]$
T-ON and T-OFF can be same or different. The relay $(R)$ keeps on changing its status till power is removed.


Cyclic ON/OFF \{On Start,(Sym,Asym)\} [2]
This function is quite similar to the function ' 1 ' but initially the relay $(\mathrm{R})$ is ON for period T-ON after the power is applied.


Impulse ON energizing [3]
After power ON, R energizes and timing starts. $R$ de-energizes after timing is over.


## Accumulative delay ON signal [ [ ]

Time commences as supply is present and switch B1 is open. Closing switch B1 pauses timing. Timing resumes when switch B1 is opened again. R energizes at the end of timing.

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## Accumulative delay ON inverted signal [5]

Time commences as supply is present and switch B1 is closed. Opening switch B1 pauses timing. Timing resumes when switch B1 is closed again. $R$ energizes at end of timing.


Accumulative impulse ON signal [6]
When supply is $O N, R$ energizes. When switch B1 is closed timing is suspended and remains suspended till switch B1 is opened again. Interrupting supply resets timer.

## Signal ON delay [7]

Permanent supply required. Timing starts when switch B1 is closed. R energizes at end of timing period and de-energizes when B1 is opened.


| $B$ | $U$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $B 1$ | $\square$ |  |  |
|  |  |  |  |  |
|  |  |  |  | $T$ |



Delayed impulse [G]
When switch B1 is closed, $\mathrm{T}_{\text {OEF }}$ starts. Relay energizes at the end of $\mathrm{T}_{\text {off }}$ period. Then, $\mathrm{T}_{\text {off }}$ starts irrespective of signal level and relay de-energizes at the end of $\mathrm{T}_{\text {ON }}$ period.

Leading edge impulse1 [C]
A permanent supply is needed. When B1 is closed, output relay energizes until timing irrespective of any further action of B1.

Leading edge impulse $2[D]$
Permanent supply is required. when switch B1 is closed, and remains closed output relay energizes until timing is over. If B1 is opened during timing, R resets.

Trailing edge impulse1 [ $\varepsilon$ ]
Permanent supply required. when B1 is opened $R$ energizes and de-energizes when timing is over. If B 1 is closed during timing R resets.

Trailing edge impulse2 [ $F$ ]
Permanent supply is required. When switch B1 is opened, $R$ energizes and will de-energize when timing is over. If B1 is pulsed during timing period it will have no effect on $R$.
When switch B1 is closed or opened for preset time,$T$, the relay changes its state after time duration T .
Impulse ON/OFF [ 8 ]
Permanent supply is required. $R$ energizes for the timing period when B1 is opened or closed. When timing commences, changing state of B1 does not affect $R$ but resets timer.


Inverted signal ON delay [ 8 ]
Timing will commence when supply is present and switch B1 is open. R energizes after timing. If B 1 is closed during timing period, timing resets to the beginning of cycle.

## Signal OFF delay [9]

Permanent supply is required. R energizes when switch B1 is closed. Timing commences after S is opened and then the relay de-energizes.

