## Programmable staircase switch CRM-42



## Advantages

- 1-module, DIN rail mounted.
- Supply voltage: AC 230 V
- Intelligent staircase switch, the same use as CRM-4, but with increased possibility of control. In mode "PROG" it is possible to select the time of delayed OFF by number of button-pressing sequences. Each pressing multiplies the time set by potentiometer, which that the time is set to 5 min and the button is pressed on 3 times, the output is automatically prolonged to 15 min . The output can also be switched off earlier (reset) by a long pressing of button (longer than 2 sec )
- Output relay contact 16A/AC1 with inrush current up to 80 A enables switching of electrical bulbs and also fluorescent lights.
- Selector switch:
- ON - Output permanent ON
- AUTO - timing according to adjusting by potentiometer in range of $30 \mathrm{~s}-10 \mathrm{~min}$
- PROG - timing with time prolongation option by a number of button pressing
- Timing (in mode AUTO and PROG) can be stopped by long pressing of the button (longer than 2 sec )
■ Output indication: multifunctional red LED, flashing at certain states
- Possibility to connect up to 100 buttons equipped with glow lamps (up-to 100 mA )
- 3-wire or 4-wire connection (it is possible to control input $S$ by potential A1 or A2)

■ Warning before switch OFF- output double flash 40 and 30 sec before switch OFF

| Programmable staircase switch CRM-42 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | In | Code No. | Weight | Packaging |  |  |
|  | $[\mathrm{A}]$ |  | $[\mathrm{g}]$ | $[\mathrm{pcs}]$ |  |  |
| CRM-42 | 16 | 002470078 | 65 | $1 / 10$ |  |  |

## Digital time switch SHT-1, SHT-1/2, SHT-3 and SHT-3/2

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Advantages
■ 2-modules, DIN rail mounting
\square Daily, weekly program in one device (SHT-1;SHT-1/2)
\square Daily, weekly, monthly, yearly program (SHT-3, SHT-3/2)
\square Supply voltage AC230 V or AC/DC 12-240 V
\square Switching: according to the program (AUTO)/constantly manual/
manually until next program change/random (CUBE)
■ Automatic conversion summer/winter time
\square Sealable cover of the front panel
\square }100\mathrm{ memory places, clear LCD display
■ Min. interval 1s
\square Pulse/cyclic output
\square Output contact: 1x 16A changeover }->\mathrm{ SHT-1, SHT-3.
■ Output contact: 2x 16A changeover }->\mathrm{ SHT - 1/2, SHT-3/2.
```

| Digital time switch SHT-1 and SHT-1/2 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Type | $\begin{gathered} \mathrm{I}_{\mathrm{n}} \\ {[\mathrm{~A}]} \end{gathered}$ | Code No. | Weight <br> [g] | Packaging [pcs] |
| SHT-1 UNI | 16 | 002470051 | 130 | 1 |
| SHT-1 230V | 16 | 002470050 | 110 | 1 |
| SHT-1/2 UNI | 16 | 002470054 | 130 | 1 |
| SHT-1/2 230V | 16 | 002470053 | 110 | 1 |
| SHT-3 UNI | 16 | 002470056 | 110 | 1 |
| SHT-3 230V | 16 | 002470055 | 130 | 1 |
| SHT-3/2 UNI | 16 | 002470058 | 110 | 1 |
| SHT-3/2 230V | 16 | 002470057 | 130 | 1 |

Analog electromechanical time switch APC-D1, APC-DR1

| Technical data |  |  |
| :---: | :---: | :---: |
|  | APC-DR1 | APC-D1 |
| Supply voltage | 230 VAC | 230 VAC |
| Power reserve | yes (100 hrs) | no |
| Dial/minimum switching time | 15 min | 15 min |
| Operating accuracy | +/- 1 s/day at $22^{\circ} \mathrm{C}$ | +/- $1 \mathrm{~s} /$ day at $22^{\circ} \mathrm{C}$ |
| Program | Daily | Daily |
| Output contact | $1 \times \mathrm{NO}$ | $1 \times \mathrm{NO}$ |
| Switching capability | 16A 125/250V AC1 | 16A 125/250V AC1 |
| Power consumption | 0,5W | 0,5W |
| Operating temperature | $-25 . . .+55^{\circ} \mathrm{C}$ | $-10 . . .+45^{\circ} \mathrm{C}$ |
| Mounting | DIN rail EN 60715 | DIN rail EN 60715 |
| Protection category | IP20 | IP20 |
| Overvoltage category | II. | 11. |
| Dimensions | $90 \times 17,5 \times 66$ | $90 \times 17,5 \times 66$ |
| Standards | EN 60730-2-7 | EN 60730-2-7 |

Dimensions


Connection


Programming

## Multifunction relays SMR-T, SMR-H, SMR-B

| Technical data |  |  |  |
| :---: | :---: | :---: | :---: |
|  | SMR-T | SMR-H | SMR-B |
| Number of functions | 9 | 9 | 10 |
| Connection | 3 -wires, without neutral | 4-wires, with neutral | 4-wires, with neutral |
| Supply voltage |  | $230 \mathrm{VAC} / 50-60 \mathrm{~Hz}$ |  |
| Consumption (no operation/make) | 0,8/3 VA | 0,8/3 VA | 3VA |
| Supply voltage tolerance |  | -15\%; + 10\% |  |
| Time ranges | 0,1 s-10 days | 0,1 s-10 days | x |
| Time setting via | via rotary switch and potentiometer | via rotary switch and potentiometer | X |
| Time deviation | 10\% mechanical setting | 10\% mechanical setting | X |
| Repeat accuracy | $2 \%$ set value stability | $2 \%$ set value stability | x |
| Temperature coefficient | $0,1 \%,{ }^{\circ} \mathrm{C}$ at $20^{\circ} \mathrm{C}$ | $0,1 \%,{ }^{\circ} \mathrm{C}$ at $20^{\circ} \mathrm{C}$ | x |
| Output | 1x triac |  | 1xNO (AgSn02) |
| Resistive load | 10-160 VA | 0-200 VA | 16A 125/250 V AC1 |
| Inductive load | 10-100 VA | $0-100 \mathrm{VA}$ | $8 \mathrm{~A} 250 \mathrm{VAC}(\cos \mathrm{fi}>0,4)$ |
| Controlling |  |  |  |
| Voltage | 230 VAC |  |  |
| Current | 3 mA |  |  |
| Impulse length | min. $50 \mathrm{~ms} /$ max. unlimited |  |  |
| Operating temperature | $0 . . .+50^{\circ} \mathrm{C}$ |  |  |
| Operating position | any |  |  |
| Mounting | free at connecting wires |  |  |
| Protection degree | IP 30 from front panel |  |  |
| Overvoltage category | III |  |  |
| Pollution degree | 2 |  |  |
| Fuse | F1 A / 250 V | F1 A/ 250 V | F1,6A / 250 V |
| Outlets | 3 x solid wires $0,75 \mathrm{~mm}^{2}$ length 90 mm |  |  |
| Glow-laps in button (pcs) | max. 10 |  |  |
| Dimensions | $48,5 \times 48,5 \times 13 \mathrm{~mm}$ |  |  |
| Standards | EN 61010-1 |  |  |

## Function

Function a - delay off on entrering edge output times when it is switched. Each following pressing (max. 5 x ) increases time Long pressing switches output off

Function b - delay off on downward edge
output times after button is switched off, switches immediately

Function c - delay off on downward edge after switching off output switches on and times.

Function d - cycler - flasher impulser output cycles in regular interval, cycler starts with an impulse

Function e - puls shift
delay on after the switch is switched on and delay on after it is switched off


Function $f$-delay on
delay on after switch is switched on until it
is switched off


Function g - pulse relay
switches on by a press, another pressing switches the output off. The length of pressing doesn't matter, it is possible to set reaction delay by a potentiometer and thus eliminate rebound of a button

Function h - impulse relay with delay
one press switches on, another one switches the output off in case it is done before the end of timing

Function i - delay on after switched off
output cycles in regular intervals, cycler starts with a gap

Functionj*- cycler starting with gap
delay on after switching on until it is de-energized or a switch is pressed again.

*function $j$ is valid only for SMR-B

## Time ranges



## Connection SMR-B, SMR-H, SMR-T



