## Timers - DELTA series

Industrial design

- Width 22.5 mm
- OFF delay without auxiliary voltage

4 time ranges
2 change over contacts

## Technical data

## 1. Functions

A OFF delay without auxiliary voltage

- 2. Time ranges

| Time range | Adjustment range |  |  |
| :--- | :--- | :--- | :--- |
| 1 s | 100 ms | 1 s |  |
| 10 s | 1 s | 10 s |  |
| 1 min | 6 s | 1 min |  |
| 3 min | 18 s | 3 min | (D12DA 3min) |
| 10 min | 1 min | 10 min | (D12DA 10min) |

3. Indicators Green LED ON: indication of supply voltage

## 4. Mechanical design

Self-extinguishing plastic housing, IP rating IP40
Mounted on DIN-Rail TS 35 according to EN 50022
Mounting position: any
Shockproof terminal connection according to VBG 4
(PZ1 required), IP rating IP20
Initial torque: max. 1Nm
Terminal capacity:
$1 \times 0.5$ to $2.5 \mathrm{~mm}^{2}$ with/without multicore cable end
$1 \times 4 \mathrm{~mm}^{2}$ without multicore cable end
$2 \times 0.5$ to $1.5 \mathrm{~mm}^{2}$ with/without multicore cable end
$2 \times 2.5 \mathrm{~mm}^{2}$ flexible without multicore cable end
5. Input circuit

Supply voltage:
24 V DC
24 V AC
110 to 240 V AC
Tolerance:
24V DC
24 V AC
110 to 240 V AC
Rated frequency:
Rated consumption:

$$
24 \mathrm{~V} \text { DC }
$$

$24 V$ AC
110 V AC
230 V AC
Duration of operation:
Reset time:
Residual ripple for DC:
Drop-out voltage:

## 6. Output circuit

2 potential free change over contacts
Switching capacity (distance < 5mm): 750VA (3A / 250V AC)
Switching capacity (distance $>5 \mathrm{~mm}$ ): $1250 \mathrm{VA}(5 \mathrm{~A} / 250 \mathrm{~V}$ AC)
Fusing:
Mechanical life
Electrical life:
terminals A1(+)-A2 voltage selector engaged terminals A1-A2 voltage selector engaged terminals A1-A2 voltage selector not engaged
$\pm 10 \%$
$-15 \%$ to $+10 \%$
$-15 \%$ to $+10 \%$
48 to 63 Hz

## 250 mW

1VA ( 500 mW )
2VA ( 500 mW )
8VA (1.3W)
100\% (min. 2s)
500ms
10\%
$>10 \%$ of the supply voltage

Switching frequency:

Insulation voltage:
Surge voltage:

- 7. Accuracy

Base accuracy:

Adjustment accuracy:
Repetition accuracy:
Voltage influence:
Temperature influence:
max. $10 / \mathrm{min}$ at 100 VA resistive load max. $3 / \mathrm{min}$ at 1000 VA resistive load (according to IEC 947-5-1)
250 V AC (according to IEC 664-1)
4 kV , overvoltage category III (according to IEC 664-1)
$-2 \%$ to $+8 \%$
(of maximum scale value) $-5 \%$ to $+15 \%$
(of maximum scale value for time ranges 3 min , 10min) $\leq 8 \%$ (of maximum scale value) $<2 \%$ or $\pm 5 \mathrm{~ms}$
$\leq 0.1 \% / 1 \%$ supply voltage change $\leq 0.01 \% /{ }^{\circ} \mathrm{C}$

- 8. Ambient conditions

Ambient temperature: $\quad-25$ to $+55^{\circ} \mathrm{C}$ (according to IEC 68-1) -25 to $+40^{\circ} \mathrm{C}$ (according to UL 508)
Storage temperature: $\quad-25$ to $+70^{\circ} \mathrm{C}$
Transport temperature: $\quad-25$ to $+70^{\circ} \mathrm{C}$
Relative humidity:
Pollution degree:

15\% to 85\%
(according to IEC 721-3-3 class 3K3)
3 (according to IEC 664-1)

- 9. Dimensions



## Functions

OFF delay without auxiliary voltage (A)
When the supply voltage $U$ is applied (green LED illuminated), the output relay R switches into on-position. If the supply voltage is interrupted (green LED not illuminated), the set interval t begins. After the interval $t$ has expired the output relay switches into off-position.
If the supply voltage is re-applied before the interval $t$ has expired, the interval already expired is erased and is restarted with the next cycle.


Connections


