MINITIMER
Timer, On Delayed
AA 7512


## Function Diagram



## Circuit Diagram



AA 7512.32

## Your Advantage

- Non sensitive to electromagnetical influence by pneumatic time element


## Features

- According to IEC/EN 61 812-1
- Delay up to 180 s
- Repeat accuracy $< \pm 5 \%$
- without auxiliary voltage
- 1 changeover contact delayed, 1 changeover contact without delay
- Width 45 mm


## Approvals and Marking

## C $\epsilon$

## Application

Time dependent controls

## Function

With the on-delayed timer AA 7512 the delay is achieved by a pair of bellows that is compressed by a magnet system. With an adjustable regulating system the time for the expansion of the bellows is defined. The bellow then operates the switch contacts.

## Notes

For the DC-version the mounting distance should not be smaller than 8 mm .

## Technical Data

Time circuit

| Time ranges: | $0.2 \ldots 30 \mathrm{~s} 0.2 \ldots 180 \mathrm{~s}$ |
| :--- | :--- |
| Time setting: | infinitely |
| Repeat accuracy: | $\leq \pm 5 \%$ of the final range value |
| Min. transition time: | 25 ms |
| Temperature influence: | $0.5 \% / \mathrm{K}$ <br> under certain circumsances, variation <br> and temperature errors can be added. |
|  | and |
|  |  |

Input

| Nominal voltage $U_{N}:$ | AC $24,42,110,127,230,240 \mathrm{~V}$ |  |
| :--- | :--- | :--- |
|  | 50 or 60 Hz |  |
| Voltage range: | AC $0.85 \ldots 1.1 \mathrm{U}_{\mathrm{N}}$ |  |
|  | DC $0.8 \ldots 1.1 \mathrm{U}_{\mathrm{N}}$ |  |
| Nominal consumption: | Initial position | Active position |
|  | 22 VA | 7 VA |
|  | 5.5 W | 5.5 W |
| Nominal frequency: | 50 Hz |  |


| Technical Data |  |
| :---: | :---: |
| Output |  |
| Contacts |  |
| AA 7512.32: | 1 changeover contact, without delay 1 changeover contact, delayed |
| Operate time of contacts: | $<50 \mathrm{~ms}$ |
| Release time of contacts: | $<25 \mathrm{~ms}$ |
| Thermal current $\mathrm{I}_{\mathrm{th}}$ : | 4 A |
| Nominal breaking capacity | AC 110 V AC 230 V |
| $\cos \varphi 1$... 0.7 | $2 \mathrm{~A} \quad 2 \mathrm{~A}$ |
| $\cos \varphi$ 0.4: | $1 \mathrm{~A} \quad 1 \mathrm{~A}$ |
|  | DC 110 V DC 220 V |
| ohmic: | $0.25 \mathrm{~A} \quad 0.25 \mathrm{~A}$ |
| inductive: | $0.03 \mathrm{~A} \quad 0.02 \mathrm{~A}$ |
| Electrical life: | $1.2 \times 10^{6}$ switching cycles <br> 1500 switches/h <br> at $30 \%$ of the switching capacity <br> $0.8 \times 10^{6}$ switching cycles <br> 1000 switches/h <br> at $50 \%$ of the switching capacity <br> $0.3 \times 10^{6}$ switching cycles <br> 500 switches/h <br> at $100 \%$ of the switching capacity |
| Permissible switching frequency: | 1500 switching cycles / h |
| Short circuit strength max. fuse rating: | 2 A gL IEC/EN 60 947-5-1 |
| Mechanical life: | > $3 \times 10^{6}$ switching cycles |
| General Data |  |
| Operating mode: | Continuous operation |
| Temperature range: | $-10 \ldots+55^{\circ} \mathrm{C}$ |
| Clearance and creepage distances rated impuls voltage / pollution degree: | $4 \mathrm{kV} / 2 \quad$ IEC 60 664-1 |
| EMC |  |
| Electrostatic discharge: | 8 kV (air) IEC/EN 61 000-4-2 |
| HF-irradiation: | $10 \mathrm{~V} / \mathrm{m}$ IEC/EN 61 000-4-3 |
| Fast transients: | 2 kV IEC/EN 61 000-4-4 |
| Surge voltagesbetween |  |
|  |  |
| wires for power supply: | 1 kV IEC/EN 61 000-4-5 |
| between wire and ground: | 2 kV IEC/EN 61 000-4-5 |
| HF-wire guided: | 10 V IEC/EN 61 000-4-6 |
| Interference suppression: | Limit value class B EN 55011 |
| Degree of protection |  |
| Housing: | IP 40 IEC/EN 60529 |
| Terminhhals: | IP 10 IEC/EN 60529 |
| Housing: | Thermoplast with Vo-behaviour according to UL subject 94 |
| Vibration resistance: | Amplitude 0.35 mm IEC/EN 60 068-2-6 frequency $10 \ldots 55 \mathrm{~Hz}$ |
| Climate resistance: | The device is only to be used in dry rooms, in closed switch cabinets or switch boxes |
| Terminal arrangement: | DIN 46 199-5 |
| Terminal designation: | EN 50005 |
| Wire connection: | $2 \times 2.5 \mathrm{~mm}^{2}$ solid or |
|  | $2 \times 1.5 \mathrm{~mm}^{2}$ stranded wire with sleeve DIN 46 228-1/-2/-3/-4 |
| Wire fixing: | Flat terminals with self-lifting |
| Mounting: | DIN rail IEC/EN 60715 |
| Weight: |  |
| AC: | 270 g |
| DC: | 310 g |
| Dimensions |  |
| Width x height x depth: | $45 \times 77 \times 124 \mathrm{~mm}$ |


| Standard Type |  |
| :--- | :--- |
| AA 7512.32 AC $230 \mathrm{~V} \quad 50 \mathrm{~Hz} \quad 0.2 \ldots .30 \mathrm{~s}$ |  |
| Article number: | 0009429 |
| - Output: | 1 changeover contact, instantaneous |
| - Nominal voltage $\mathrm{U}_{\mathrm{N}}:$ | 1 changeover contact, delayed |
| - Time range: | AC 230 V |
| - Width: | $0.2 \ldots 30 \mathrm{~s}$ |
| Variant | 45 mm |
| AA 7512.32/001: |  |
|  |  |
|  | DC-version, as option: |
|  | DC $12,24,42,48,110,220 \mathrm{~V}$, |
|  | DC $12 \ldots 220 \mathrm{~V}$ |

## Ordering example for variant



