

Time Control Technique

MINITIMER
Timer, On-delay
AA 7512

Translation
of the original instructions



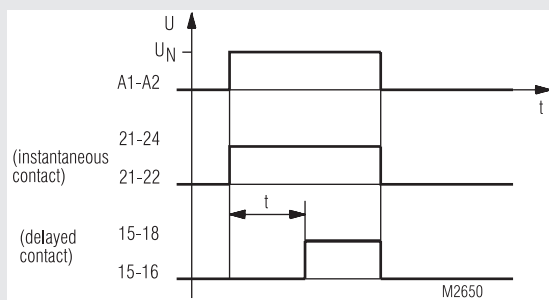
Your Advantage

- Non sensitive to electromagnetic influence by pneumatic time element

Features

- Power ON-delay relay according to EN 61812-1
- Delay up to 180 s
- Repeat accuracy $< \pm 5\%$
- 1 changeover contact delayed, 1 changeover contact without delay
- Width 45 mm

Function Diagram



Approvals and Markings



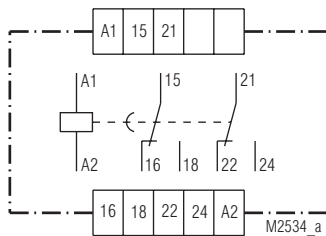
Applications

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 bellows then operates the switch contacts.

Circuit Diagram



AA 7512.32

Connection Terminals

| Terminal designation | Signal description |
|----------------------|---------------------------------|
| A1 | L / + |
| A2 | N / - |
| 15, 16, 18 | Changeover contacts delayed |
| 21, 22, 24 | Changeover contacts not delayed |

Notes

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

Technical Data

Time circuit

| | | |
|-------------------------------|-----------------------------------------------------------------------------|---------------|
| Time ranges: | 0.2 ... 30 s | 0.2 ... 180 s |
| Time setting: | Infinitely | |
| Repeat accuracy: | ≤ ± 5 % of the final range value | |
| Min. transition time: | 25 ms | |
| Temperature influence: | 0.5 % / K | |
| | under certain circumstances, variation and temperature errors can be added. | |

Input

| | | |
|------------------------------------------|-----------------------|-----------------|
| Nominal voltage U_N: | AC 24, 42, 230, 240 V | |
| | 50 Hz | |
| Voltage range: | AC 0.85 ... 1.1 U_N | |
| | DC 0.8 ... 1.1 U_N | |
| Nominal consumption: | Initial position | Active position |
| | 22 VA | 7 VA |
| | 5.5 W | 5.5 W |
| Nominal frequency: | 50 Hz | |

Output

Contacts

| | |
|-------------|-------------------------------------|
| AA 7512.32: | 1 changeover contact, without delay |
| | 1 changeover contact, delayed |

Contact material:

AgNi

Measured nominal voltage:

AC 250 V

Operate time of contacts:

< 50 ms

Release time of contacts:

< 25 ms

Thermal current I_{th} :

4 A

Nominal breaking capacity

AC 230 V

Cos φ 1 ... 0.7: 2 A

Cos φ 0.4: 1 A

DC 110 V

DC 220 V

Ohmic: 0.25 A

Inductive: 0.03 A

Electrical life:

1.2 x 10⁶ switching cycles

1500 switches/h

at 30 % of the switching capacity

0.8 x 10⁶ switching cycles

1000 switches/h

at 50 % of the switching capacity

0.3 x 10⁶ switching cycles

500 switches/h

at 100 % of the switching capacity

Permissible switching frequency:

1500 switching cycles / h

Short circuit strength

Max. fuse rating:

2 A gG / gL

Mechanical life:

> 3 x 10⁶ switching cycles

IEC/EN 60947-5-1

General Data

Operating mode:

Continuous operation

Temperature range

Operation: - 10 ... + 55 °C

Storage: - 10 ... + 55 °C

Altitude: ≤ 2000 m

Clearance and creepage distances

Rated impulse voltage / pollution degree:

4 kV / 2

IEC 60664-1

EMC

Electrostatic discharge:

8 kV (air)

HF-irradiation:

10 V/m

Fast transients:

2 kV

Surge voltages

Between wires for power supply:

1 kV

Between wire and ground:

2 kV

HF-wire guided:

10 V

Interference suppression:

Limit value class B

EN 55011

Technical Data

Degree of protection

Housing: IP 40 IEC/EN 60529

Terminhhals: IP 10 IEC/EN 60529

Housing: Thermoplast with V0-behaviour according to UL subject 94

Vibration resistance: Amplitude 0.35 mm IEC/EN 60068-2-6 frequency 10 ... 55 Hz

Climate resistance: The device is only to be used in dry rooms, in closed switch cabinets or switch boxes.

Terminal arrangement: DIN 46199-5

Terminal designation: EN 50005

Wire connection: 2 x 2.5 mm² solid or

2 x 1.5 mm² stranded wire with sleeve

DIN 46228-1/-2/-3/-4

Wire fixing: Flat terminals with self-lifting clamping piece IEC/EN 60999-1

Fixing torque: 0.8 Nm

Mounting: DIN rail IEC/EN 60715

Weight:

AC: 270 g

DC: 310 g

Dimensions

Width x height x depth: 45 x 77 x 124 mm

Standard Type

AA 7512.32 AC 230 V 50 Hz 0.2 ... 30 s

Article number: 0009429

• Output: 1 changeover contact, instantaneous
1 changeover contact, delayed

• Nominal voltage U_N : AC 230 V

• Time range: 0.2 ... 30 s

• Width: 45 mm

Variant

AA 7512.32/001: DC-version, as option:

DC 24, 110, 125, 220 V

Ordering example for variant

AA 7512 .32 /001 DC 24 V 180 s

