

Time Control Technique

MINITIMER
Timer, On-delay
AA 7512

Translation
of the original instructions



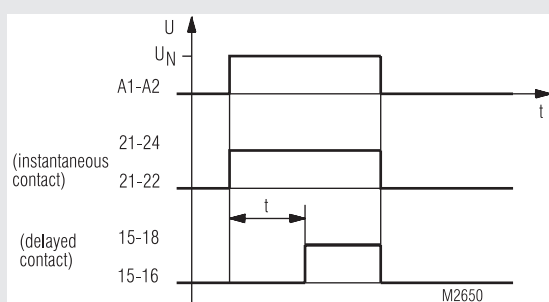
Your Advantage

- 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



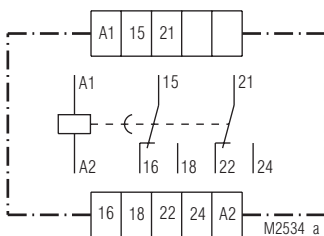
Applications

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, 110, 127, 230, 240 V	
	50 or 60 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 110 V AC 230 V

Cos φ 1 ... 0.7: 2 A 2 A

Cos φ 0.4: 1 A 1 A

DC 110 V DC 220 V

Ohmic: 0.25 A 0.25 A

Inductive: 0.03 A 0.02 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 IEC/EN 60947-5-1

Mechanical life:

> 3 x 10⁶ switching cycles

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) IEC/EN 61000-4-2

HF-irradiation: 10 V/m IEC/EN 61000-4-3

Fast transients: 2 kV IEC/EN 61000-4-4

Surge voltages

Between

wires for power supply: 1 kV IEC/EN 61000-4-5

Between wire and ground: 2 kV IEC/EN 61000-4-5

HF-wire guided: 10 V IEC/EN 61000-4-6

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 12, 24, 42, 48, 110, 220 V,
DC 12 ... 220 V

Ordering example for variant

