

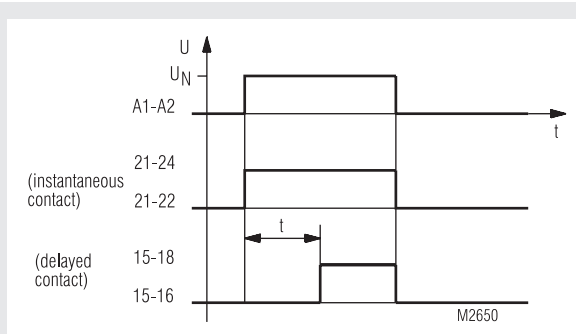
## MINITIMER

Time Relay, operate delay  
AA 7512

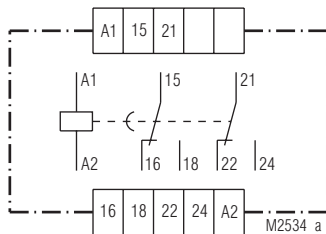


- According to IEC/EN 61 812-1
- Delay up to 180 s
- Repeat accuracy  $< \pm 5 \%$
- without auxiliary voltage
- 1 changeover contact delayed, 1 changeover contact without delay
- Width 45 mm

### Function Diagram



### Circuit Diagram



AA 7512.32

### Approvals and Marking



### Notes

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

### Technical Data

#### Time circuit

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

#### Input

<b>Nominal voltage <math>U_N</math>:</b>	AC 24, 42, 110, 127, 230, 240 V
	50 or 60 Hz
<b>Voltage range:</b>	AC 0.85 ... 1.1 $U_N$
	DC 0.8 ... 1.1 $U_N$
<b>Nominal consumption:</b>	Initial position                      Active position
	22 VA 7 VA
	5.5 W 5.5 W
<b>Nominal frequency:</b>	50 Hz

#### Output

##### Contacts

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

**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

$\cos \varphi 1 \dots 0.7$ :                      2 A                      2 A

$\cos \varphi 0.4$ :                      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 10<sup>6</sup> switching cycles
- 1 500 switches/h
- at 30 % of the switching capacity
- 0.8 x 10<sup>6</sup> switching cycles
- 1 000 switches/h
- at 50 % of the switching capacity
- 0.3 x 10<sup>6</sup> switching cycles
- 500 switches/h
- at 100 % of the switching capacity

## Technical Data

<b>Permissible switching frequency:</b>	1 500 switching cycles / h
<b>Short circuit strength max. fuse rating:</b>	2 A gL IEC/EN 60 947-5-1
<b>Mechanical life:</b>	> 3 x 10 <sup>6</sup> switching cycles

## General Data

<b>Operating mode:</b>	Continuous operation
<b>Temperature range:</b>	- 10 ... + 55 °C
<b>Clearance and creepage distances</b> rated impuls voltage / pollution degree:	4 kV / 2 IEC 60 664-1
<b>EMC</b>	
Electrostatic discharge:	8 kV (air) IEC/EN 61 000-4-2
HF-irradiation:	10 V/m IEC/EN 61 000-4-3
Fast transients:	2 kV IEC/EN 61 000-4-4
Surge voltages between 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 55 011
<b>Degree of protection</b>	
Housing:	IP 40 IEC/EN 60 529
Terminhhals:	IP 10 IEC/EN 60 529
<b>Housing:</b>	Thermoplast with V0-behaviour according to UL subject 94
<b>Vibration resistance:</b>	Amplitude 0.35 mm IEC/EN 60 068-2-6 frequency 10 ... 55 Hz
<b>Climate resistance:</b>	The device is only to be used in dry rooms, in closed switch cabinets or switch boxes.
<b>Terminal arrangement:</b>	DIN 46 199-5
<b>Terminal designation:</b>	EN 50 005
<b>Wire connection:</b>	2 x 2.5 mm <sup>2</sup> solid or 2 x 1.5 mm <sup>2</sup> stranded wire with sleeve DIN 46 228-1/-2/-3/-4
<b>Wire fixing:</b>	Flat terminals with self-lifting clamping piece IEC/EN 60 999-1
<b>Mounting:</b>	DIN rail IEC/EN 60 715
<b>Weight:</b>	
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 stock item
• Output:	1 changeover contact, instantaneous 1 changeover contact, delayed
• Nominal voltage U <sub>N</sub> :	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

AA 7512	.32	/ 001	DC 24 V	180 s	
					Time range
					Nominal voltage
					Variant, if required
					Contacts
					Type