

Timer
ZA1/1 - Delay-on operate with 1 immediate / 1 delayed changeover
 17.5mm housing



Application

Timing control

Description

The ZA1/1 timer – **delay-on operate** offers 16 different timing intervals in one unit. The timing intervals can be adjusted with DIP switches on the front panel of the relay. The timer can operate on either 230V AC using terminals A1 and A2 or 24V DC using terminals A3 and A2. The green LED indicates the connection to the power supply.

Function

The timing starts with the connection of the power supply. The instantaneous changeover switches immediately to its operating position. Upon completion of the selected timing cycle, the delayed changeover switches to its work position. This is indicated by the red LED. The continuous switching status remains until the power supply is disconnected.

Options

Other timing ranges and voltages available upon request.

Part number
 011064

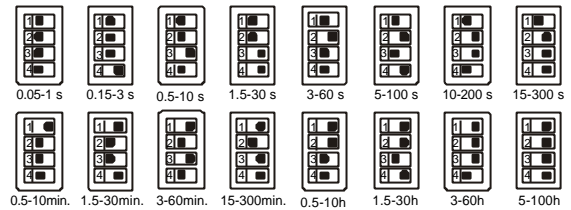
ZA1/1 1 immediate + 1 delayed
16 Timing ranges / 1 + 1 Changeovers

Timing ranges

16 timing ranges adjustable with DIP switches

0.05 – 1 s	0.5 – 10 min
0.15 – 3 s	1.5 – 30 min
0.5 – 10 s	3 – 60 min
1.5 – 30 s	15 – 300 min
3 – 60 s	0.5 – 10 h
5 – 100 s	1.5 – 30 h
10 – 200 s	3 – 60 h
15 – 300 s	5 – 100 h

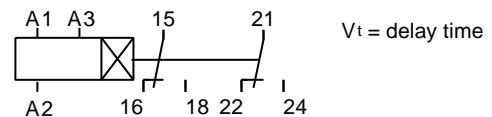
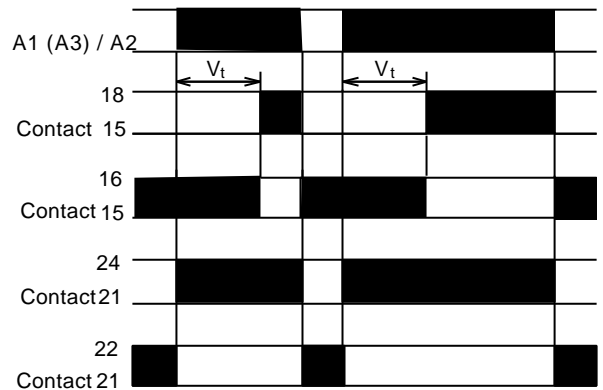
DIP switch adjustments



Approvals



Function diagram



Mounting

Snap-on mounting using a standard DIN rail EN 50022. The unit is designed to allow side-by-side mounting, with an ambient temperature of < 60°C.

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Technical data

Supply

Supply voltage A1/A2: 230V AC -15 / +10%
 A3 / A2: 24V AC/DC -15 / +10%

Frequency range: 0 / 50 ... 60Hz
 Power consumption: approx. 1.5W / DC
 approx. 6VA / AC

Operating mode: continuous
 Supply voltage influence: < 0.01% over voltage range

Temperature influence: < 0.01%/°C
 Recovery time: < 100ms
 Repetitive accuracy: ± 0.2%

Operating indicators

Supply voltage: LED, green
 Relay in working position: LED, red

Contact

Number of changeovers
 immediate: 1
 delayed: 1

Contact material: AgSnO₂
 maximum switching voltage: 250V AC
 maximum switching current: 4A
 Drop-off time of switching element: approx. 20ms
 Mechanical life: 30 Mio.
 Electrical life (with rated load): 0.8 Mio.

General data

Ambient temperature: - 25 ... + 60°C
 Climate influence: VDE 0435T.2021
 Mounting position: any
 Vibration resistance: VDE 0435T.2021
 Test voltage: 2.5kV
 Isolation group: VDE 0110 Group C 250

Protection class: Terminals IP 20
 Housing IP 40

Connection terminals: Crosshead screws; M3.5 self-opening

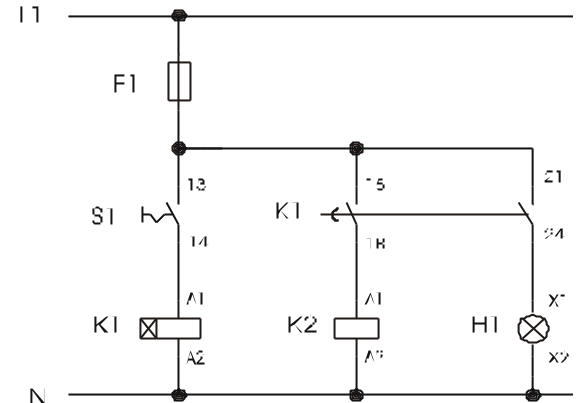
Connection cross section: Multi-strand wire with wire sleeves 2 x 2.5mm²
 single-wire 2 x 2.5mm²

Finger touch protection: VDE 0106T.100 and VBG4

Mounting: Symmetrical DIN rail
 EN 50022

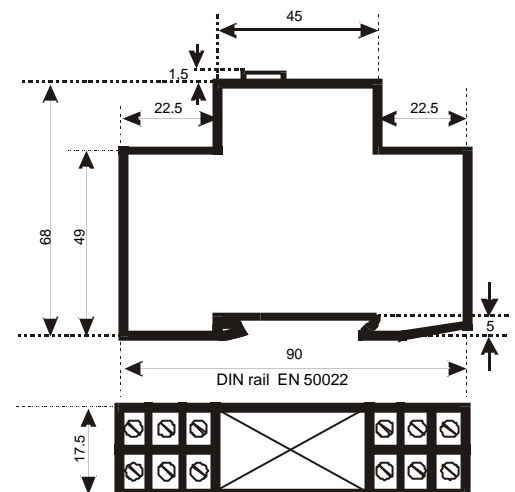
Dimensions l x w x h: 90mm x 17.5mm x 69.5mm
 Weight: 104g

Example



When the contact S1 closes, H1 lights immediately and K2 energizes after the selected delay time.

Dimensions



Connections

The terminal assignment for the connections is located on the front panel of the relay. **Reading the front panel from top to bottom**, the connections are in the following order:

LED side	Right:	nc – 16 – A3
	Left:	18 – 15 – A1
Potentiometer side	Right:	nc – 21 – 24
	Left:	nc – A2 – 22