



Timer
SSD - Star-delta relay with 2 no contacts
 11.25mm housing

Application

Start-up switching for three-phase motors.

Description

The **SSD star-delta relay** may be used with either a 24V DC/AC or 230V AC supply. The green LED indicates the connection to the power supply.

Function

Timing begins with the connection of the power supply to the terminals A1 and A2. The timing cycle is selected using the potentiometer and the DIP switches on the front panel of the unit. Upon the connection of the power supply, the contact 17/18 closes and the red LED turns on. Upon completion of the selected timing, the contact returns to its rest position and the red LED shuts off. After a set switching time of 100ms, the second contact 27/28 closes. If the power supply is interrupted during reset time, the relay returns to its original state. This also applies if the supply is disconnected during the timing period (see function diagram).

Options

Other timing ranges and voltages available upon request.

Part number

011017 **SSD Star-delta relay 24V AC/DC**
 011019 **SSD Star-delta relay 230 V AC**

Timing ranges

4 timing ranges with adjustable DIP switches

0.5 – 10 s 5 – 100 s
 1.5 – 30 s 15 – 300 s

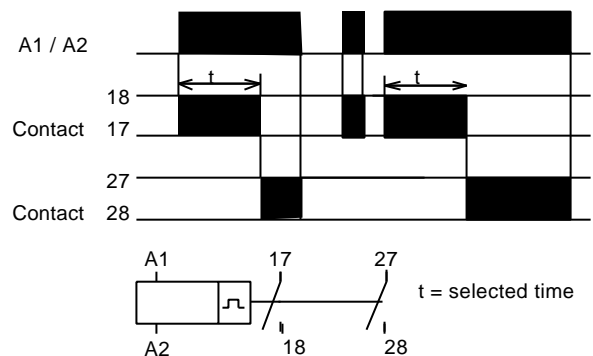
DIP switch adjustments



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 Part No. 011017: 24V AC/DC -15 / +10%
 Part No. 011019: 230V AC -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
 Repetitive accuracy: ± 0.2%
 Recovery time: < 100ms

Operation indicators

Supply voltage: LED, green
 Relay 1(17 / 18) in work position: LED, red

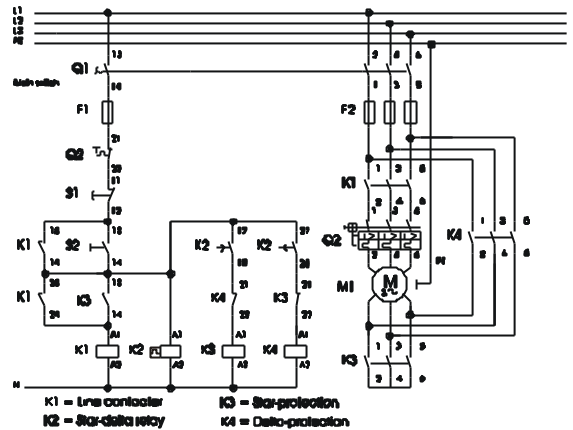
Contact

Number of closers: 2
 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

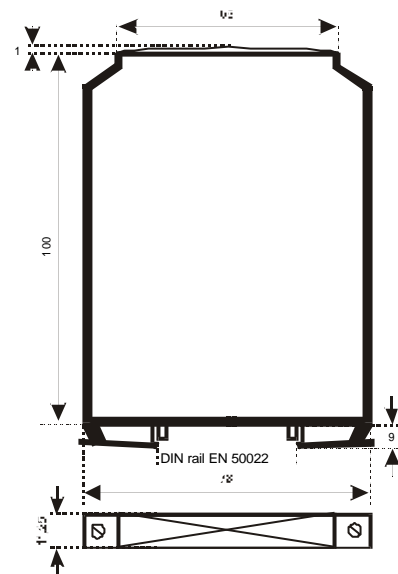
Ambient temperature: - 25 ... + 60°C
 Climate resistance: VDE 0435T.2021
 Mounting position: any
 Vibration resistance: VDE 0435T.2021
 Test voltage: 2.5kV
 Isolation group: VDE 0110 Group C 250
 Protection class: Terminals IP 20
 Housing IP 40
 Connection terminals: Crosshead screws;
 M3.5 self opening
 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 rail
 DIN EN 50022
 Dimensions l x w x h: 78mm x 11.25mm x 110mm
 Weight: 73g

Example



After actuation of element S2, the timing cycle begins.

Dimensions



Connections

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

LED side : A1 – nc – 27 – 17
 Potentiometer side : A2 – 28 – nc – 18