

- Industrial design
- Width 22.5mm
- Star-Delta start-up
- 2 change over contacts



► Technical data

► 1. Functions

S Star-Delta start-up

► 2. Time ranges

Start-up time

Time range	Adjustment range	
10s	500ms	10s
30s	1500ms	30s
1min	3s	1min
3min	9s	3min

Transit time

Time range (fixed)
40ms
60ms
80ms
100ms

► 3. Indicators

Green LED ON: indication of supply voltage delta-contactor in on-position (terminals 25-28)

Green LED flashes: indication of star-time
Yellow LED ON/OFF: indication of star-contactor (terminals 15-18)

► 4. Mechanical design

Self-extinguishing plastic housing, IP rating IP40
Mounted on DIN-Rail TS 35 according to EN 50022
Mounting position: any
Shockproof terminal connection according to VBG 4 (PZ1 required), IP rating IP20
Initial torque: max. 1Nm

Terminal capacity:
1 x 0.5 to 2.5mm² with/without multicore cable end
1 x 4mm² without multicore cable end
2 x 0.5 to 1.5mm² with/without multicore cable end
2 x 2.5mm² flexible without multicore cable end

► 5. Input circuit

Supply voltage:
24V DC terminals A1(+)-A2 voltage selector engaged
24V AC terminals A1-A2 voltage selector engaged
110 to 240V AC terminals A1-A2, voltage selector not engaged (B2-B3 bridged)
230 to 415V AC terminals A1-A2 voltage selector not engaged

Tolerance:
24V DC ±10%
24V AC -15% to +10%
110 to 240V AC -15% to +10%
230 to 415V AC -15% to +10%

Duration of operation: 100%
Reset time: 100ms
Residual ripple for DC: 10%
Drop-out voltage: >30% of the supply voltage

Rated frequency: 48 to 63Hz
Rated consumption:
24V AC/DC 1.5VA (1W)
110V AC 2VA (1W)
230V AC 8VA (1.4W) (B2-B3 bridged)
230V AC 4VA (1W) (B2-B3 not bridged)
400V AC 12VA (1.5W)

► 6. Output circuit

2 potential free change over contacts
Switching capacity (distance < 5mm): 1250VA (5A / 250V AC)
Switching capacity (distance > 5mm): 2000VA (8A / 250V AC)
Fusing: 8A fast acting
Mechanical life: 20 x 10⁶ operations
Electrical life: 2 x 10⁵ operations at 1000VA resistive load
Switching frequency: max. 60/min at 100VA resistive load
max. 6/min at 1000VA resistive load (according to IEC 947-5-1)
Insulation voltage: 250V AC (according to IEC 664-1)
Surge voltage: 4kV, overvoltage category III (according to IEC 664-1)

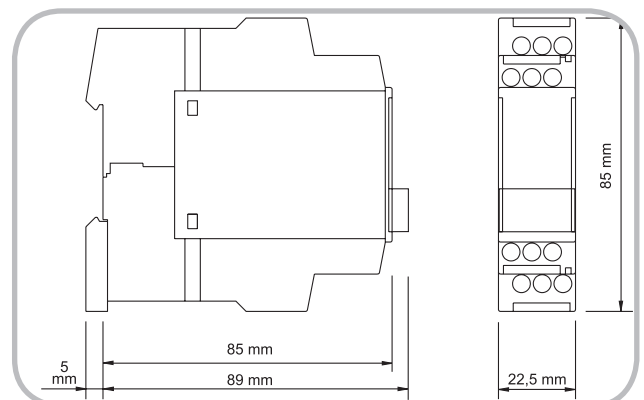
► 7. Accuracy

Base accuracy: ±1% (of maximum scale value)
Adjustment accuracy: ≤5% (of maximum scale value)
Repetition accuracy: <0.5% or ±5ms
Voltage influence: -
Temperature influence: ≤0.01% / °C

► 8. Ambient conditions

Ambient temperature: -25 to +55°C (according to IEC 68-1)
-25 to +40°C (according to UL 508)
Storage temperature: -25 to +70°C
Transport temperature: -25 to +70°C
Relative humidity: 15% to 85% (according to IEC 721-3-3 class 3K3)
Pollution degree: 3 (according to IEC 664-1)

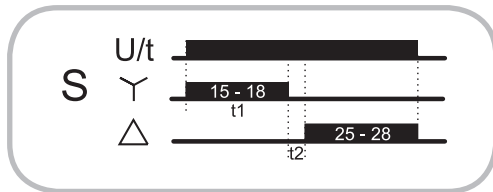
► 9. Dimensions



► Functions

Star-Delta start-up (S)

When the supply voltage U is applied, the contact for the star-contactor switches into on-position (yellow LED illuminated) and the set star-time t_1 begins (green LED flashes). After the interval t_1 has expired (green LED illuminated) the contact switches into off-position (yellow LED not illuminated) and the set transit-time t_2 begins. After the interval t_2 has expired the contact for the delta-contactor switches into on-position. To restart the function the supply voltage must be interrupted and re-applied.



► Connections

