

- Industrial design
- Width 22.5mm
- Star-Delta start-up
- 2 normally opened 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 17-28)
Green LED flashes:	indication of star-time
Yellow LED ON/OFF:	indication of star-contactor (terminals 17-18)

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
Tolerance:	
24V DC	±10%
24V AC	-15% to +10%
110 to 240V AC	-15% to +10%
Rated frequency:	48 to 63Hz
Rated consumption:	
24V AC/DC	1.5VA (1W)
110V AC	2VA (1W)
230V AC	8VA (1.3W)
Duration of operation:	100%
Reset time:	100ms
Residual ripple for DC:	10%
Drop-out voltage:	>30% of the supply voltage

6. Output circuit

2 potential free normally opened 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)

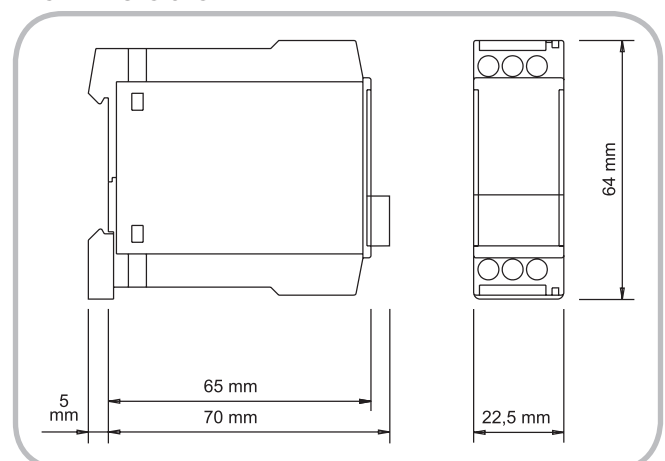
7. Accuracy

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

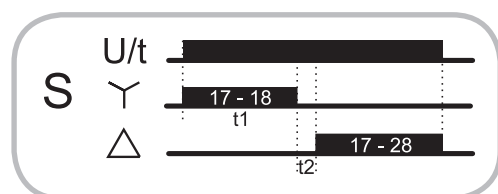


Functions

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

