

- Star-Delta start-up
- Supply voltage selectable via power modules
- 2 change over contacts
- Width 22.5mm
- Industrial design



## ► Technical data

### ► 1. Functions

S Star-Delta start-up

### ► 2. Time ranges

Start-up time

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

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
Tightening torque: max. 1Nm
Terminal capacity:
1 x 0.5 to 2.5mm <sup>2</sup> with/without multicore cable end
1 x 4mm <sup>2</sup> without multicore cable end
2 x 0.5 to 1.5mm <sup>2</sup> with/without multicore cable end
2 x 2.5mm <sup>2</sup> flexible without multicore cable end

### ► 5. Input circuit

Supply voltage:	12 to 400V AC	terminals A1-A2 (galvanically separated) selectable via power modules TR2
Tolerance:	-	according to specification of power module
Rated frequency:	-	according to specification of power module
Rated consumption:	2VA (1.5W)	
Duration of operation:	100%	
Reset time:	100ms	
Residual ripple for DC:	-	
Drop-out voltage:	>30% of the supply voltage	
Overvoltage category:	III (according to IEC 60664-1)	
Rated surge voltage:	4kV	

### ► 6. Output circuit

2 potential free change over contacts
Rated voltage: 250V AC
Switching capacity (distance <5mm): 750VA (3A / 250V AC)
Switching capacity (distance >5mm): 1250VA (5A / 250V AC)
Fusing: 5A fast acting
Mechanical life: 20 x 10 <sup>6</sup> operations
Electrical Life: 2 x 10 <sup>5</sup> 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)
Overvoltage category: III (according to IEC 60664-1)
Rated surge voltage: 4kV

### ► 9. Accuracy

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

### ► 10. Ambient conditions

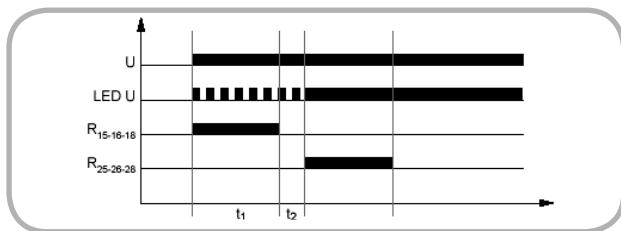
Ambient temperature:	-25 to +55°C (according to IEC 68-1)
Storage temperature:	-25 to +40°C (according to UL 508)
Transport temperature:	-25 to +70°C
Relative humidity:	15% to 85%
Pollution degree:	(according to IEC 721-3-3 class 3K3)
Vibration resistance:	3 (according to IEC 664-1)
Shock resistance:	10 to 55Hz 0.35mm (according to IEC 68-2-6)
	15g 11ms (according to IEC 68-2-27)

## ► Functions

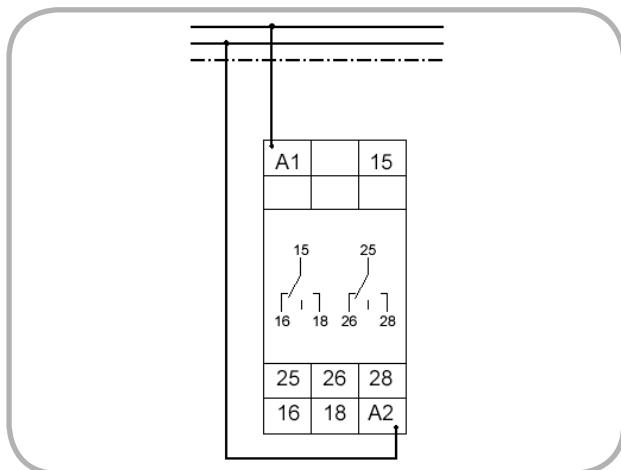
### Star-Delta start-up (S)

When the supply voltage U is applied, the star-contact switches into on-position (yellow LED illuminated) and the set star-time  $t_1$  begins (green LED flashing). After the interval  $t_1$  has expired (green LED illuminated) the star-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 delta-contact switches into on-position.

To restart the function the supply voltage must be interrupted and re-applied.



## ► Connections



## ► Dimensions

