Timers - StarDelta start-up

E3ZS20

ENYA series

4 Time ranges (Start-up time)

Wide input range

2 change over contacts

Width 35mm

Installation design



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 (fixed)

40ms
60ms
80ms
100ms

3. Indicators

Green LED U/t ON: indication of supply voltage delta-contactor in on-position (terminals 25-28)
Green LED U/t flashes: indication of time period - start-up time
Yellow LED ON/OFF: indication of star-conductor (terminals 15-18)

4. Mechanical design

Self-extinguishing plastic housing, IP rating IP40
Mounted on DIN-rail TS 35 according to EN 60715
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 2.5mm² 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:	12 to 240V AC/DC
Terminals:	A1(+)-A2
Tolerance:	-10% to +10%
Rated consumption:	4VA (1.5W)
Rated frequency:	AC 48 to 63Hz
Duty cycle:	100%
Reset time:	100ms
Residual ripple to DC:	10%
Drop-out voltage:	>30% of minimum rated supply voltage
Overvoltage category:	III (in accordance with IEC 60664-1)
Rated surge voltage:	4kV

6. Output circuit

2 potential free change over contacts

Rated voltage:	250V AC
Switching capacity:	2000VA (8A / 250V)
Fusing:	8A fast acting
Mechanical life:	20 x 10^6 operations
Electrical life:	2 x 10^5 operations at 1000VA resistive load
Switching frequency:	max. 6/min at 1000VA resistive load (in accordance with IEC 60947-5-1)
Overvoltage category:	III (in accordance with IEC 60664-1)
Rated surge voltage:	4kV

7. Accuracy

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

8. Ambient conditions

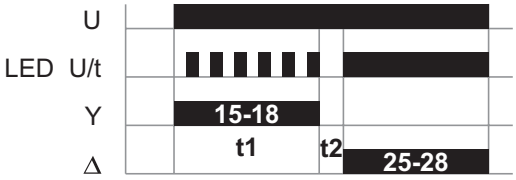
Ambient temperature:	-25 to +55°C
Storage temperature:	-25 to +70°C
Transport temperature:	-25 to +70°C
Relative humidity:	15% to 85% (in accordance with IEC 60721-3-3 class 3K3)
Pollution degree:	2, if built in 3 (in accordance with IEC 60664-1)

9. Weight

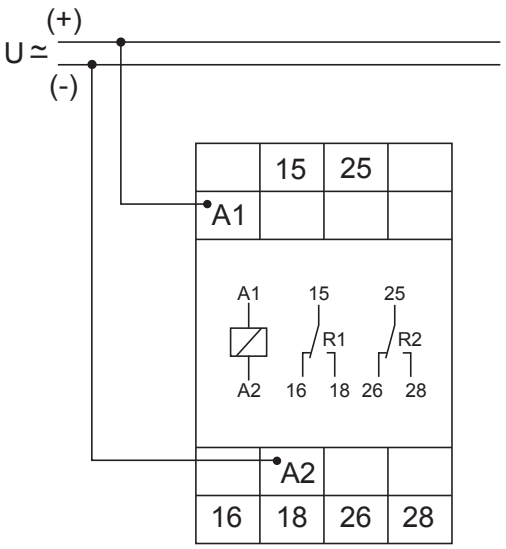
Single packing:	106g

Functions

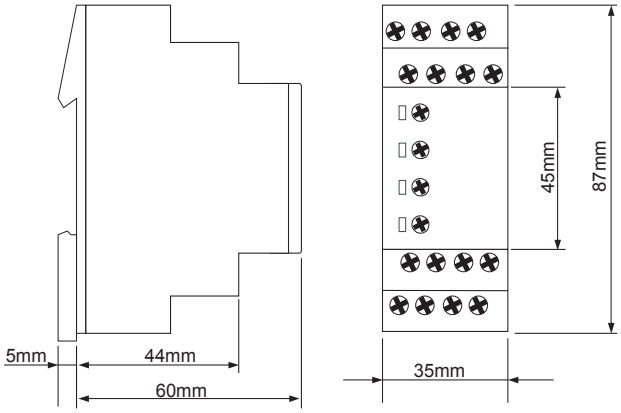
Star-Delta start-up
When the supply voltage U is applied, the star-contact switches into on-position (yellow LED illuminated) and the set star-time t1 begins (green LED U/t flashes). After the interval t1 has expired (green LED U/t illuminated) the star-contact switches into off-position (yellow LED not illuminated) and the set transit-time t2 begins. After the interval t2 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



Dimensions



Ordering Informations

Types	Functiones	Supply Voltage	Part. No.
E3ZS20 12-240V AC/DC	S (Star-Delta) start up	12-240V AC/DC	111300