Timers - GAMMA series

G2ZS20

- 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	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
Tightening torque: max. 1Nm
Terminal capacity:
1 x 0.5 to 2.5mm^2 with/without multicore cable end
1 x 4mm^2 without multicore cable end
2 x 0.5 to 1.5mm^2 with/without multicore cable end
2 x 2.5mm^2 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 (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:	750VA (3A / 250V AC)
If the distance between the devices is less than 5mm!	
Switching capacity:	1250VA (5A / 250V AC)
If the distance between the devices is greater than 5mm!	
Fusing:	5A fast acting
Mechanical life:	20 x 10^6 operations
Electrical Life:	2 x 10^5 operations at 1000VA resistive load
Switching frequency:	max. 60/min at 100VA resistive load 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 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

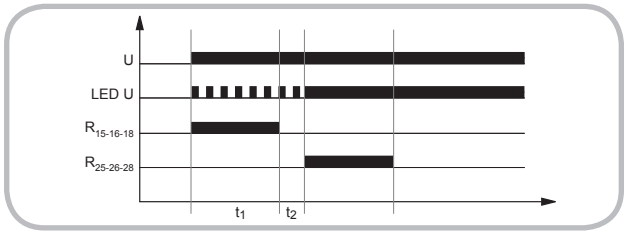
8. Ambient conditions

Ambient temperature:	-25 to +55°C (in accordance with IEC 60068-1) -25 to +40°C (in accordance with UL 508)
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:	3 (in accordance with IEC 60664-1)
Vibration resistance:	10 to 55Hz 0.35mm (in accordance with IEC 60068-2-6)
Shock resistance:	15g 11ms (in accordance with IEC 60068-2-27)

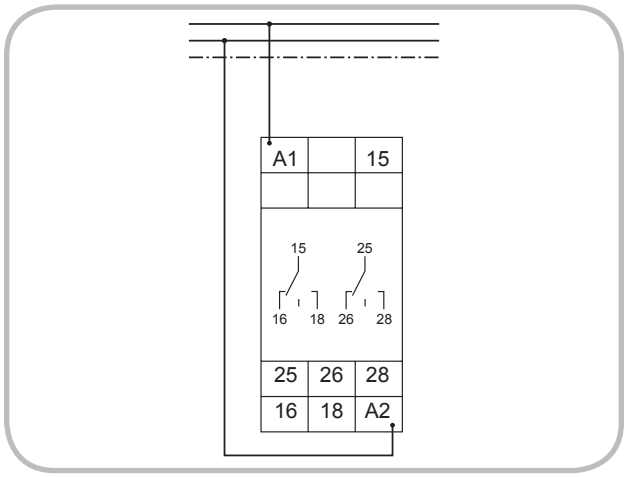
Subject to alterations and errors

Functions

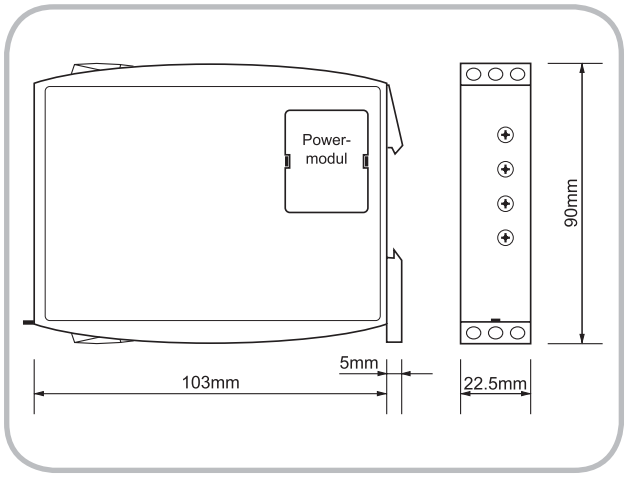
Star-Delta start-up (S)
When the supply voltage U is applied, the star-contact switches into on-position (yellow LED illuminated) and the set star-time t1 begins (green LED flashing). After the interval t1 has expired (green LED illuminated) the star-contact switches into off-position (yellow LED not illuminated) and the set transit-time t2 begins. After the interval t2 has expired the delta-contact switches into on-position.
To restart the function the supply voltage must be interrupted and reapplied.



Connections



Dimensions



Subject to alterations and errors