G2ZS20

Manufacturer data sheet: V.066

Timing relay - Star-delta start-up

Status: Available Data sheet created: 01.07.2025

Item Number: 120300 - **Serie:** Gamma - **EAN:** 9008662000292



- Timer relay series GAMMA
- Star-delta
- 4 time ranges (star time)
- 4 fixed changeover times
- Supply voltage selectable via transformer series TR2/SNT2
- 2 changeover contacts
- width 22,5mm
- industrial design

Description

Precise and reliable switching and control in industrial and commercial applications.

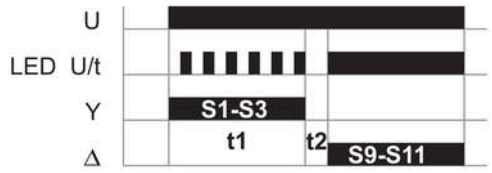
General information

Short description	Star-delta start, 2 changeover contacts
Item Number	120300
EAN	9008662000292
Main category	Timing Relays
Series	Gamma
Type	G2ZS20
Design	Industrial design
Supply	12-400V AC
Dimensions	22.5 x 90 x 103 mm

Functions and measurands

The selection of the time function must be made in the de-energized state.

Amount of functions 1



Star-Delta Start-up - ZS20 (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 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 reapplied.

Time ranges

Number Of Areas 4

Time ranges

Star-time

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

Switching time (fixed)

Time range
40 ms
60 ms
80 ms
100 ms

Indicators

Supply/time lapse 1	Green LED U ON: Supply voltage applied. Output relay for delta contactor energized (terminals 25-28).
Supply/time lapse 3	Green LED flashes: Display of the time lapse sidereal time
Relay state	Yellow LED ON/OFF: position of output relay for star contactor (terminals 15-18)

Mechanical design

Housing material	made of self-extinguishing plastic
Housing - protection degree	IP40
Mounting	top hat rail TH 35 7,5-15 according to IEC 60715:2017 / EN 60715:2017
Terminals/connections	Touch-proof clamping yoke terminals according to DGUV 3 (Screwdriver PZ1 required)
Terminals - protection degree	IP20
Mounting position	any
Max. Tightening Torque	1 Nm

Terminal capacity

- 1 x 0.5 to 2.5mm² with/without ferrule
- 1 x 4mm² without wire end ferrule
- 2 x 0.5 to 1.5mm² with/without end sleeves
- 2 x 2.5mm² flexible without ferrules

Supply circuit

Terminals/connections	A1-A2 (galvanically isolated)
Rated consumption d.c.	1,5 W / 2 VA
Supply voltage a.c.	12 ... 400 V
Supply voltage tolerance a.c.	According to power supply unit specification
Rated frequency [Hz]	laut Angabe Netzteil
Rated consumption a.c.	1,5 W / 2 VA
Duty cycle	100%
Recovery time	100 ms
Drop-out voltage	>30% the supply voltage
Overvoltage category	III (IEC 60664-1)
Rated surge voltage	4 kV

Output curcuit

Type	Relay
Contact 1	1 changeover contacts
Terminals 1	15-16-18
Contacts 2	1 changeover contact
Terminals/connections 2	25-26-28
Rated voltage	250 V a.c.
Fuse Protection	5A quick
Mechanical life	20 x 10^6 Switching cycles
Electrical life	2 x 10^5 switching cycles with (1000VA) resistive load
Switching frequency	max. 60/min at 100VA resistive load
Switching frequency 2	max. 6/min at 1000VA resistive load (according to IEC 60947-5-1)
Rated surge voltage	4 kV
Overvoltage category	III (nach IEC 60664-1)

Accuracy

Base accuracy	±1 % (from full scale)
Adjustment accuracy	≤5 % from full scale
Repetition accuracy	<0.5 % or ±5 ms
Temperature influence	≤0.01 % / °C

Ambient conditions and general specifications

Ambient temperature IEC	-25 ... +55 °C (IEC 60068-1)
Ambient temperature UL	-25 ... +40 °C (UL 508)
Storage temperature	-25 ... +70 °C
Transport temperature	-25 ... +70 °C
Relative humidity	15 ... 85 % (IEC 60721-3-3 class 3K3)
Vibration resistance	10 ... 55Hz 0.35mm (IEC 60068-2-6)
Shock resistance	15g 11ms (IEC 60068-2-27)
Pollution degree	2, pollution level can be increased by installation in suitable enclosures (according to IEC 60664-1)

Logistics

Minimum Quantity	1
Tariff Number	85364900
EAN	9008662000292
Country of Origin	AT
Product Weight (g)	131

Available declarations / conformities

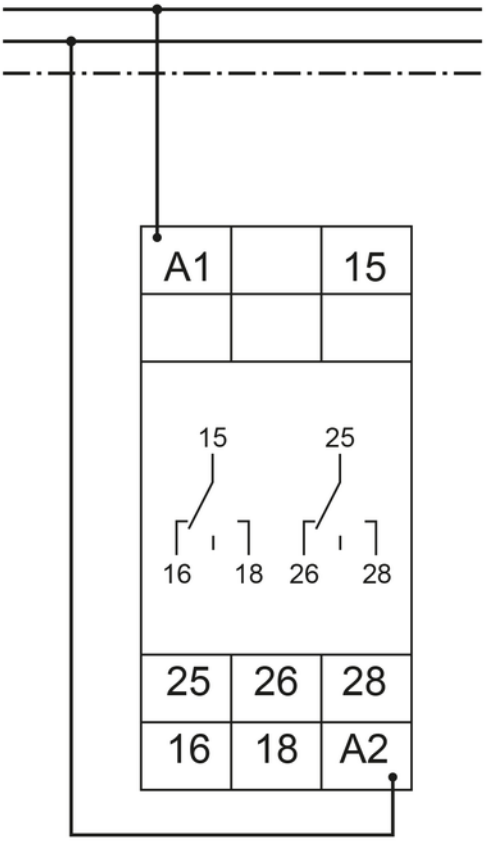
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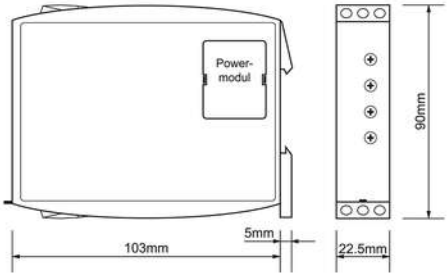
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