G2ZIF20

Manufacturer data sheet: V.077

Timing relay - Multifunction

Status: Available Data sheet created: 01.07.2025

Item Number: 120200 - **Serie:** Gamma - **EAN:** 9008662000278

- Timer relay GAMMA series
- Multifuntion
- 7 functions clock (2 times adjustable)
- 10 time ranges
- Remote potentiometer connection
- Potential free control contact
- Supply voltage selectable via transformer module
- 2 changeover contacts
- construction width 22,5mm
- Industrial design

Description

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

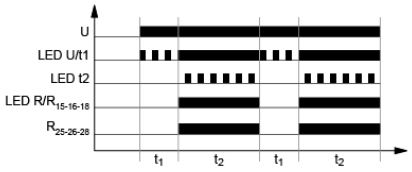
General information

Short description	Multifunction (7 fct.), 2 changeover contacts
Item Number	120200
EAN	9008662000278
Main category	Timing Relays
Series	Gamma
Type	G2ZIF20
Design	Industrial design
Supply	12-400V a.c.
Dimensions	22.5 x 90 x 103 mm

Functions and measurands

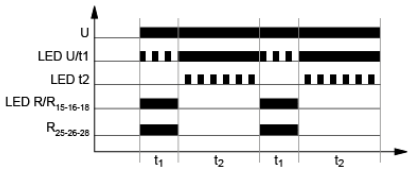
The selection of the time function must be made in the de-energized state.

Amount of functions 7



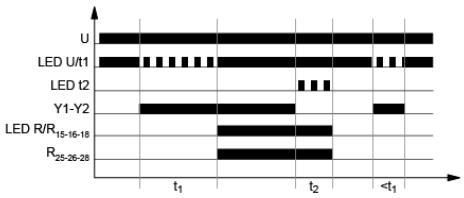
Asymmetric flasher pause first-G2ZIF20 (Ip)

When the supply voltage U is applied, the set interval t1 begins (green LED U/t1 flashes). After the interval t1 has expired (green LED U/ t1 illuminated), the output relay R switches into on-position (yellow LED illuminated) and the set interval t2 begins (green LED t2 flashes). After the interval t2 has expired (green LED t2 not illuminated), the output relay switches into off-position (yellow LED not illuminated). The output relay is triggered at the ratio of t1:t2 until the supply voltage is interrupted.



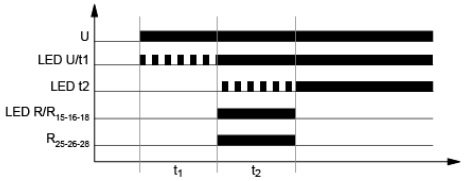
Asymmetric flasher pulse first-G2ZIF20 (Ii)

When the supply voltage U is applied, the output relay R switches into on-position (yellow LED illuminated) and the set interval t1 begins (green LED U/t1 flashes). After the interval t1 has expired (green LED U/t1 illuminated), the output relay switches into off-position (yellow LED not illuminated) and the set interval t2 begins (green LED t2 flashes). After the interval t2 has expired (green LED t2 not illuminated), the output relay switches into on-position (yellow LED illuminated). The output relay is triggered at the ratio of t1:t2 until the supply voltage is interrupted.



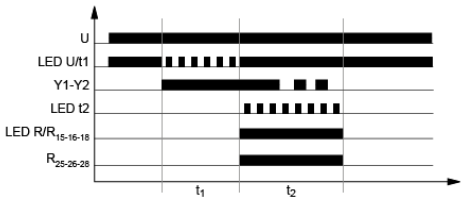
ON delay and OFF delay with control input - G2ZIF20 (ER)

The supply voltage U must be constantly applied to the device (green LED U/t1 illuminated). When the control contact S is closed, the set interval t1 begins (green LED U/t1 flashes). After the interval t1 has expired (green LED U/t1 illuminated), the output relay R switches into on-position (yellow LED illuminated). If the control contact is opened, the set interval t2 begins (green LED t2 flashes). After the interval t2 has expired (green LED t2 not illuminated) the output relay switches into off-position (yellow LED not illuminated). If the control contact is opened before the interval t1 has expired, the interval already expired is erased and is restarted with the next cycle.



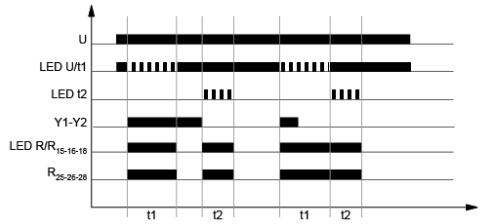
ON delay and single shot leading edge voltage controlled-G2ZIF20 (EWu)

When the supply voltage U is applied, the set interval t1 begins (gree LED U/t1 flashes). After the interval t1 has expired (green LED U/t1 illuminated), the output relay R switches into on-position (yellow LED illuminated) and the set interval t2 begins (green LED t2 flashes). After the interval t2 has expired (green LED t2 not illuminated), the output relay switches into off-position (yellow LED not illuminated). If the supply voltage is interrupted before the interval t1+t2 has expired, the interval already expired is erased and is restarted when the supply voltage is next applied.

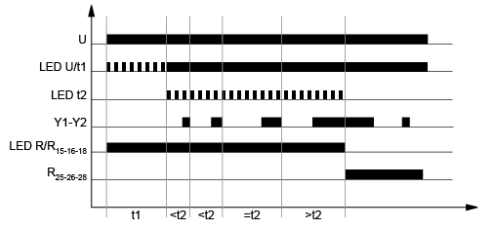


ON delay and single shot leading edge with control input - G2ZIF20 (EWs)

The supply voltage U must be constantly applied to the device (green LED U/t1 illuminated). When the control contact S is closed, the set interval t1 begins (green LED U/t1 flashes). After the interval t1 has expired (green LED U/t1 illuminated), the output relay R switches into on-position (yellow LED illuminated) and the set interval t2 begins (green LED t2 flashes). After the interval t2 has expired (green LED t2 not illuminated) the output relay switches into off-position (yellow LED not illuminated). During the interval, the control contact can be operated any number of times. A further cycle can only be started when the cycle run has been completed.



Single shot leading and single shot trailing edge with control input - G2ZIF20 (WsWa)
The supply voltage U must be constantly applied to the device (green LED U/t1 illuminated). When the control contact S is closed, the output relay R switches into on-position (yellow LED illuminated) and the set interval t1 begins (green LED U/t1 flashes). After the interval t1 has expired (green LED U/t1 illuminated), the output relay R switches into off-position (yellow LED not illuminated). If the control contact is opened, the output relay again switches into on-position (yellow LED illuminated) and the set interval t2 begins (green LED t2 flashes). After the interval t2 has expired (green LED t2 not illuminated) the output relay switches into off-position (yellow LED not illuminated). During the interval, the control contact can be operated any number of times.



Pulse sequence monitoring-G2ZIF20 (Wt)
When the supply voltage U is applied, the set interval t1 begins (green LED U/t1 flashes) and the output relay R1 (15-16-18) switches into on-position (yellow LED illuminated). After the interval t1 has expired (green LED U/t1 illuminated), the set interval t2 begins (green LED t2 flashes). So that the output relay R1 remains in on-position, the control contact must be closed and opened again within the set interval t2. If this does not happen, the output relay R1 switches into off-position (yellow LED not illuminated) and the output relay R2 (25-26-28) switches into on-position. All further pulses at the control contact are ignored. To restart the function the supply voltage must be interrupted and re-applied.

Time ranges

Number Of Areas	10		
	Time range	**Adjustment range**	
	1s	50ms	1s
	3s	0,15s	3s
	10s	0,5s	10s
	30s	1,5ms	30s
Time ranges	60s	3s	60s
	180s	9s	180s
	10min	0,5min	10min
	60min	3min	60min
	10h	0,5min	10h
	100h	5h	100h

Indicators

Supply/time lapse 1	Green LED U/t1 ON: Supply voltage applied
Supply/time lapse 2	Green LED U/t1 flashes: Display of timeout t1
Supply/time lapse 3	Green LED t2 flashes: Display of timeout t2
Relay state	Yellow LED ON/OFF: output relay position

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)
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
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)

Control input

Terminals/connections	Bridge Y1-Y2
Control voltage	max. 5V
Loadable	No
Maximum line length	10 m
Minimum control pulse length a.c.	min. 50 ms (außer Funktion Wt), min. 7ms (nur Funktion Wt)

Accuracy

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

Remote potentiometer

Info	The remote potentiometer is not included in the scope of delivery. When connecting a remote potentiometer, the internal potentiometer will be deactivated!
Connection	1MΩ potentiometer (type RONDO R2),terminals Y2-Z1 or Y2-Z2
Cable type	twisted pair or twin wires
Control voltage	max. 5V
Short circuit current	max. 5□A
Cable length	max. 5m

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	9008662000278
Country of Origin	AT
Product Weight (g)	142

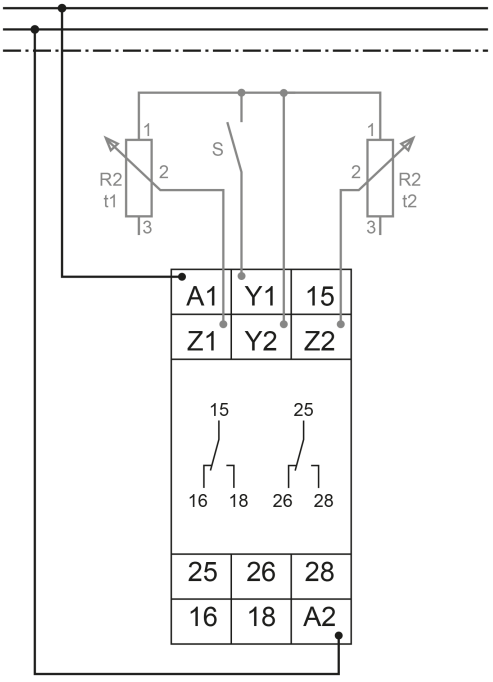
Available declarations / conformities

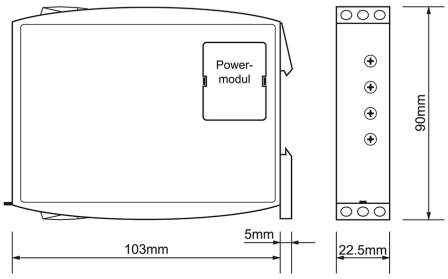
EAC	✓
CE	Open document
UL	Open document
c(UL)	Open document
REACH	Open document
WEEE	Open document
TSCA	Open document
RoHs	Open document
CMRT	Open document

CAD Files

STEP_G2_TRAFO_en.STEP	Download file
STEP_G2_en.STEP	Download file

Media & drawings





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