G2LM20 24VAC

Manufacturer data sheet: V1.070

Monitoring relay- Level monitoring of conductive liquids

Status: Available Data sheet created: 01.07.2025

Item Number: 2390201 - **Serie:** Gamma - **EAN:** 9008662002548



- Monitoring relays series GAMMA
- Level monitoring of conductive liquids
- Safe isolation of the measuring circuit
- Sensitivity adjustable
- Supply voltage 24V AC
- 2 changeover contacts
- construction width 22,5mm
- Industrial design

Description

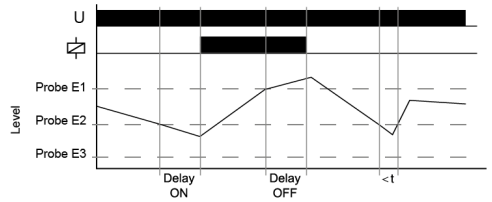
Level monitoring of conductive liquid, timing for tripping delay and turn-off delay separately adjustable.

General information

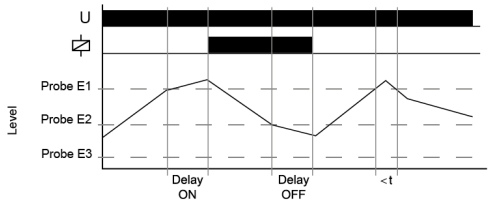
Short description	Level monitoring of conductive liquids, 24V, 2 changeover contacts
Item Number	2390201
EAN	9008662002548
Main category	Monitoring Relays
Series	Gamma
Type	G2LM20 24VAC
Design	Industrial design
Supply	24V AC
Dimensions	22.5 x 90 x 108 mm

Functions and measurands

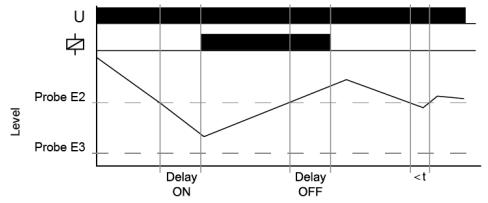
Amount of functions 4



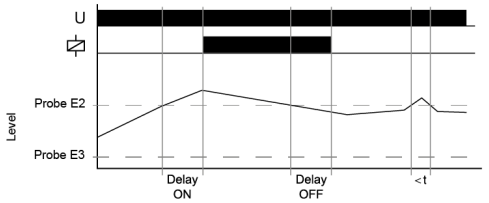
Pump Up (Pump Up)
Connection of the probe rods E1, E2 and E3. Alternatively the electrically conducting container can be connected in lieu of the test probe E3. When the air-fluid level falls below the minimum probe E2 the interval of tripping delay (Delay ON) begins. After the expiration of the interval, the output relays R switches into on-position (yellow LED illuminated). When the air-fluid level again rises above the maximum probe E1, the interval of turn-off delay (Delay OFF) begins. After the expiration of the interval the output relays R switches into off-position (yellow LED not illuminated).



Pump down (Pump down)
Connection of the probe rods E1, E2 and E3. Alternatively the electrically conducting container can be connected in lieu of the test probe E3. When the maximum probe E1 gets moistened the interval of tripping delay (Delay ON) begins. After the expiration of the interval the output relays R switches into on-position (yellow LED illuminated). When the airfluid level falls below the minimum probe E2, the interval of turn-off delay (Delay OFF) begins. After the expiration of the interval, the output relays R switches into off-position (yellow LED not illuminated).



Minimum monitoring (Pump up)
Connection the probe rods E2 and E3 (bridge E1-E3). Alternatively the electrically conducting container can be connected in lieu of the test probe E3. When the air-fluid level falls below the probe E2 the interval of tripping delay (Delay ON) begins. After the expiration of the interval, the output relays R switches into on-position (yellow LED illuminated). When the air-fluid level again rises above the probe E2, the interval of turn-off delay (Delay OFF) begins. After the expiration of the interval the output relays R switches into off-position (yellow LED not illuminated).



Maximum monitoring (Pump down)
Connection of probe rods E2 and E3 (bridge E1-E3). Alternatively the electrically conducting container can be connected in lieu of the test probe E3. When the probe E2 gets moistened the interval of tripping delay (Delay ON) begins. After the expiration of the interval the output relays R switches into on-position (yellow LED illuminated). When the air-fluid level sinks below the probe E2, the interval of turn-off delay (Delay OFF) begins. After the expiration of the interval the output relays R switches into off-position (yellow LED not illuminated).

Time ranges

Number Of Areas	2	
	Setting range	
Time ranges	Switch-on delay	0,5s ... 10s
	Relapse delay	0,5s ... 10s

Indicators

Supply/time lapse 1	Green LED U ON: Supply voltage applied
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
Stripping length	7 mm
Max. Tightening Torque	1 Nm
Terminal capacity	• 1 x 0.5 to 2.5mm² with/without ferrule • 1 x 4mm² without ferrule • 2 x 0.5 to 1.5mm² with/without ferrules • 2 x 2.5mm² flexible without ferrules

Supply circuit

Terminals/connections	Klemmen A1-A2
Supply voltage a.c.	24 V
Supply voltage tolerance a.c.	-15% ... +10%
Rated frequency [Hz]	48 ... 63 Hz
Rated consumption a.c.	1,5 W / 2 VA
Duty cycle	100%
Recovery time	500 ms
Drop-out voltage	>30% the supply voltage
Overvoltage category	III (IEC 60664-1)
Rated surge voltage	4 kV
Rated impulse withstand voltage	250 V a.c.

Output curcuit

Type	Relay
Contact 1	1 change over contact
Terminals 1	15-16-18
Contacts 2	1 change over contact
Terminals/connections 2	25-26-28
Rated voltage	250 V a.c.
conditional short-circuit current	1 kA
Fuse Protection	5 A quick
Mechanical life	15 x 10^6 Switching cycles
Electrical life	100 x 10^3 Switching cycles (1000 VA)
Utilization categorie	AC 15
Switching frequency	max. 60/min at 100 VA resistive load
Switching frequency 2	max. 6/min at 1000 VA resistive load (IEC 60947-5-1)
Rated surge voltage	4 kV
Overvoltage category	III (IEC 60664-1)

Measuring circuit

Measurand	Level

Measuring circuit - level

Measuring input	conductive probes (type SK1, SK2, SK3) terminals E1-E2-E3
Sensitivity	0.25 ... 100 kΩ (4 mS ... 10 µS)
Probe voltage	12 V a.c.
Probe current	max. 7 mA
Probe cable length (line capacitance 100nF/km)	max. 1000 m (set value <50%) max. 100 m (set value 100%)
Overvoltage category	III (in accordance with IEC 60664-1)
Rated surge voltage	6 kV

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 ... 55 Hz 0.35 mm (IEC 60068-2-6)
Shock resistance	15 g 11 ms (IEC 60068-2-27)
Pollution degree	3 (IEC 60664-1)
Installation altitude	Up to 2000 m above sea level

Logistics

Minimum Quantity	1
Tariff Number	85364900
EAN	9008662002548
Country of Origin	AT
Product Weight (g)	186

Available declarations / conformities

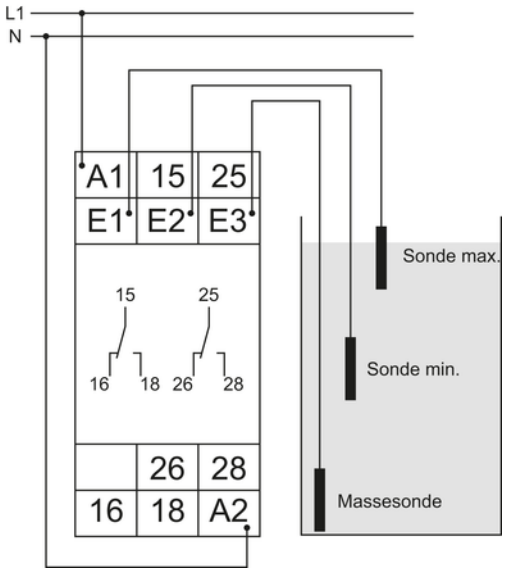
EAC	✓
CE	✓
UL	Open document
c(UL)	Open document
REACH	Open document
WEEE	Open document
TSCA	Open document
RoHs	Open document
CMRT	Open document

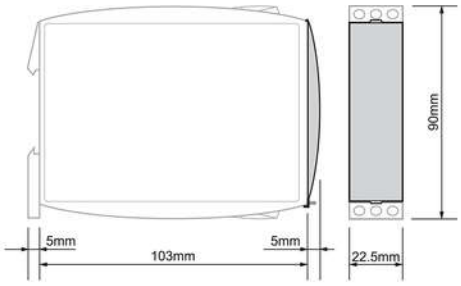
CAD Files

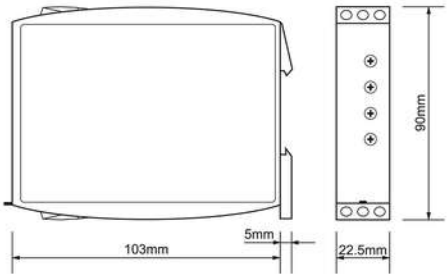
STEP_G2_en.STEP	Download file

Media & drawings













Tele Haase Steuergeräte Ges.m.b.H
Vorarlberger Allee 38
1230 Vienna
Austria

CALL US +43 / 1 / 614 74 - 0
ONLINE SUPPORT support@tele-haase.at

Changes and errors excepted