



Level control relay for emptying function. Single voltage. Modular version LVM20 Emptying

Product designation

Product type designation

Function

Auxiliary supply

Supply voltage Type Single voltage

Rated auxiliary supply voltage U_s
AC

min VAC 24

Operating voltage range 0.85...1.1 U_s

Rated frequency Hz 50/60

Power consumption Max VA 3.5

Power dissipation Max W 1.8

Output characteristics

Number of connectable electrodes Nr. 3

Type of electrode

Electrode and electrode holders: SN1 / SCM / CGL / PS31 / PS3S or similar

Electrode voltage 7.5 VAC

Sensitivity k Ω 2.5...50 adjustable

Time delay

Tripping time s ≤ 0.6

Resetting time s ≤ 0.75

Relay outputs

Number of relays Nr. 1

Relay state

Normally de-energised, energises at tripping

Contact arrangement

1 changeover contact C/O-SPDT

Rated operational voltage AC (IEC) VAC 250

Maximum switching voltage VAC 400

IEC Conventional free air thermal current I_{th} A 8

UL/CSA and IEC/EN 60947-5-1 designation B300

Electrical life (with rated load) cycles 10^5

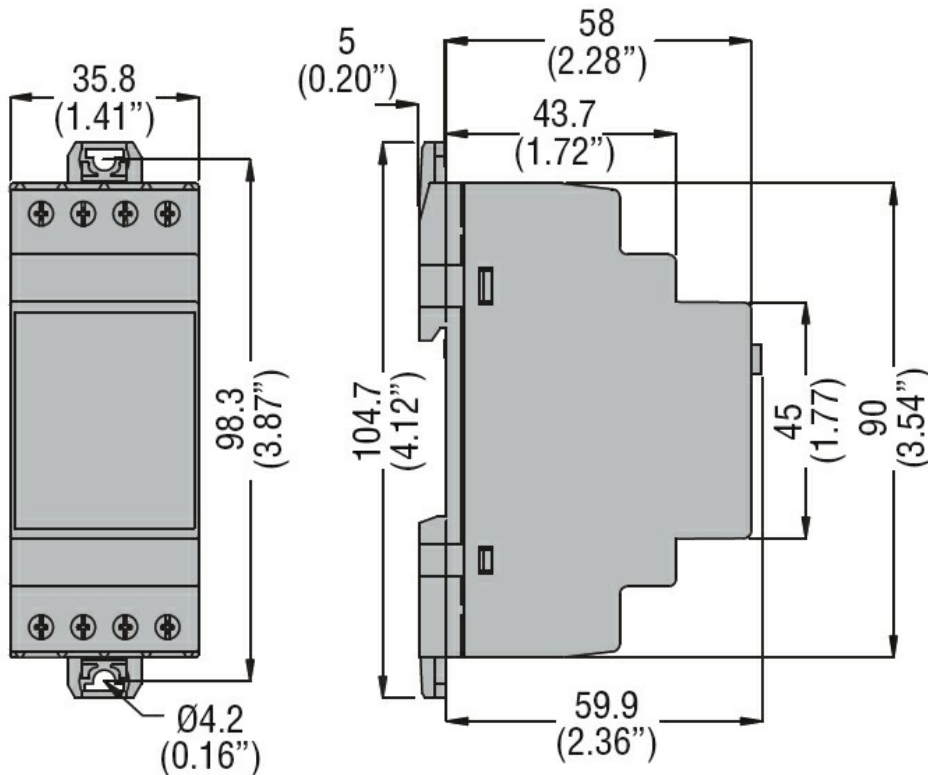
Mechanical life cycles 30×10^6

Indications

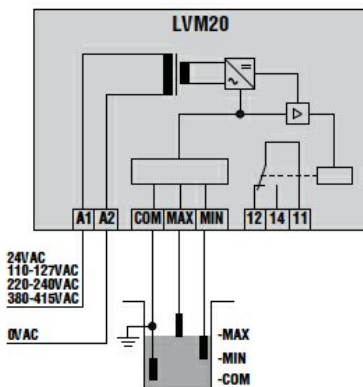
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|--|-----------------------|-----|--------------------|--|
| Indication | | | | 1 green LED for power on 1 red LED for relay state |
| Functions | | | | |
| 3 detecting electrodes (MIN, MAX and COM) | | | | Yes |
| 5 detecting electrodes (MIN1, MAX1, MIN2, MAX2 and COM) | | | | No |
| Sensitivity adjustment 2.5...50k Ω | | | | Yes |
| Sensitivity adjustment 2.5...100k Ω | | | | No |
| Sensitivity adjustment 2.5...200k Ω | | | | No |
| Adjustable sensitivity full-scale value 25-50-100-200 k Ω | | | | No |
| Separate sensitivity adjustment for MAX probe (foam detection) | | | | No |
| Emptying function | | | | Yes |
| Filling function | | | | No |
| Emptying function with MIN and/or MAX alarm | | | | No |
| Filling function with MIN and/or MAX alarm | | | | No |
| Emptying function with pump priority change | | | | No |
| Filling function with pump priority change | | | | No |
| Tank filling, well drawing and alarm | | | | No |
| Filling-emptying adjustment selector | | | | No |
| Programming selector for 5 different | | | | No |
| Motor start-up priority change | | | | No |
| Connections | | | | |
| Terminals type | | | | Screw |
| Tightening torque for terminals | | max | Nm | 0.8 |
| | | max | Ibin | 7 |
| Conductor cross section | | | | |
| | AWG/Kcmil | min | AWG | 24 |
| | | Max | AWG | 12 |
| | IEC | min | mm ² | 0.2 |
| | | Max | mm ² | 4 |
| Insulations | | | | |
| Rated insulation voltage U_i | | | V | 415 |
| Rated impulse withstand voltage U_{imp} | | | kV | 6 |
| Operating frequency withstand voltage | | | kV | 4 |
| Double insulation Supply / relay / electrode | | | VAC | ≤ 250 |
| Ambient conditions | | | | |
| Temperature | | | | |
| | Operating temperature | min | $^{\circ}\text{C}$ | -20 |
| | | max | $^{\circ}\text{C}$ | +60 |
| | Storage temperature | min | $^{\circ}\text{C}$ | -30 |
| | | max | $^{\circ}\text{C}$ | +80 |
| Housing | | | | |
| Execution | | | | Modular DIN rail mounting |
| N° of modules | | | | 2 |
| Material | | | | Self-extinguishing polyamide |

| | | |
|--------------------------|---|---------------------|
| Mounting | 35mm DIN rail (IEC/EN 60715) or by screws using extractable clips | |
| IEC degree of protection | IP40 on front / IP20 on terminals | |
| Dimensions (W x H x D) | mm | 35.8 x 104.7 x 64.9 |
| Weight | g | 215 |

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

- CSA C22.2 n° 14.
- IEC/EN 60255-5
- IEC/EN 61000-6-2
- IEC/EN 61000-6-3
- UL508

Certificates

cULus
EAC

ETIM classification

ETIM 8.0

EC001447 - (Fill)
level monitoring
relay