



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 | 220 |
| Max | VAC | 240 |

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

kohm 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

| | |
|------------|--|
| 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 | lbin | 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

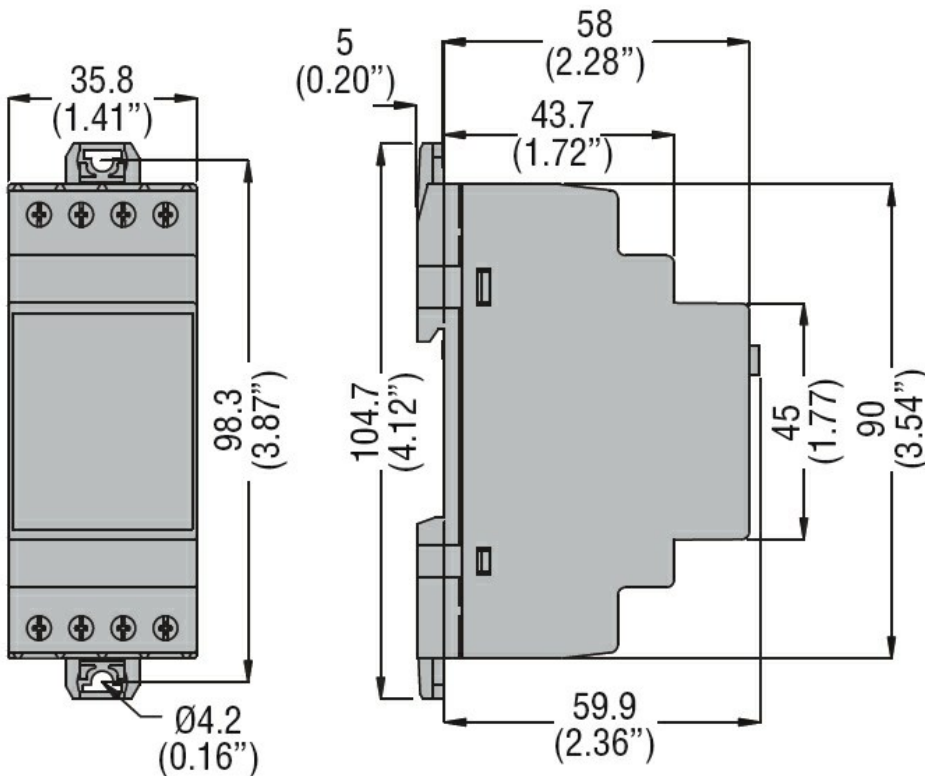
| | | | |
|-----------------------|-----|----|-----|
| Temperature | | | |
| Operating temperature | min | °C | -20 |
| | max | °C | +60 |
| Storage temperature | min | °C | -30 |
| | max | °C | +80 |

Housing

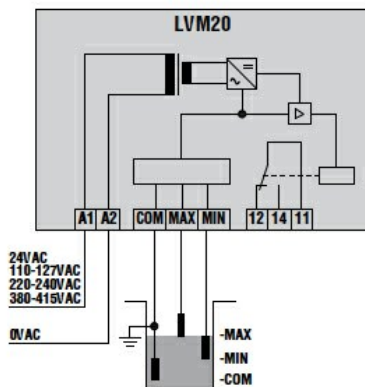
| | |
|---------------|---------------------------|
| Execution | Modular DIN rail mounting |
| N° of modules | 2 |

| | | |
|--------------------------|---|---------------------|
| 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 [mm (in)]



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