



Level control relay multifunction. Single voltage. Modular version LVM40 Multifunction: emptying and alarms, filling and alarms, emptying with priority start-up change, filling with priority start-up change, well draining and tank filling and alarms

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 | 4.5 | |
| Power dissipation Max | W | 2.8 | |

Output characteristics

| | | | |
|----------------------------------|---|----------------------|--|
| Number of connectable electrodes | Nr. | 5 | |
| Type of electrode | Electrode and electrode holders: SN1 / SCM / CGL / PS31 / PS3S or similar | | |
| Electrode voltage | 10 Vpp | | |
| Sensitivity | kohm | 2.5...200 adjustable | |

Time delay

| | | | |
|----------------------|---------|---|--|
| Tripping time | s | 1 | |
| Resetting time | s | 1 | |
| Probe tripping delay | 1...10s | | |

Relay outputs

| | | | |
|------------------|--|---|--|
| Number of relays | Nr. | 2 | |
| Relay state | Normally de-energised, energises at tripping | | |

| | | |
|---|---|--------------------|
| Contact arrangement | 1 changeover contact C/O-SPDT + 1 contact NO-SPST | |
| 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 | 30x10 ⁶ |

Indications

| | | |
|------------|--|--|
| Indication | 1 green LED indicator for power on 2 red LEDs for relay state 2 red LEDs for probe state | |
|------------|--|--|

Functions

| | |
|--|-----|
| 3 detecting electrodes (MIN, MAX and COM) | No |
| 5 detecting electrodes (MIN1, MAX1, MIN2, MAX2 and COM) | Yes |
| Sensitivity adjustment 2.5...50k Ω | No |
| Sensitivity adjustment 2.5...100k Ω | No |
| Sensitivity adjustment 2.5...200k Ω | Yes |
| Adjustable sensitivity full-scale value 25-50-100-200 k Ω | Yes |
| Separate sensitivity adjustment for MAX probe (foam detection) | Yes |
| Emptying function | Yes |
| Filling function | Yes |
| Emptying function with MIN and/or MAX alarm | Yes |
| Filling function with MIN and/or MAX alarm | Yes |
| Emptying function with pump priority change | Yes |
| Filling function with pump priority change | Yes |
| Tank filling, well drawing and alarm | Yes |
| Filling-emptying adjustment selector | No |
| Programming selector for 5 different | Yes |
| Motor start-up priority change | No |

Connections

| | | | |
|---------------------------------|-----------|------------------|---------------------|
| Tightening torque for terminals | max | Nm | 0.8 |
| | max | I _{bin} | 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 |

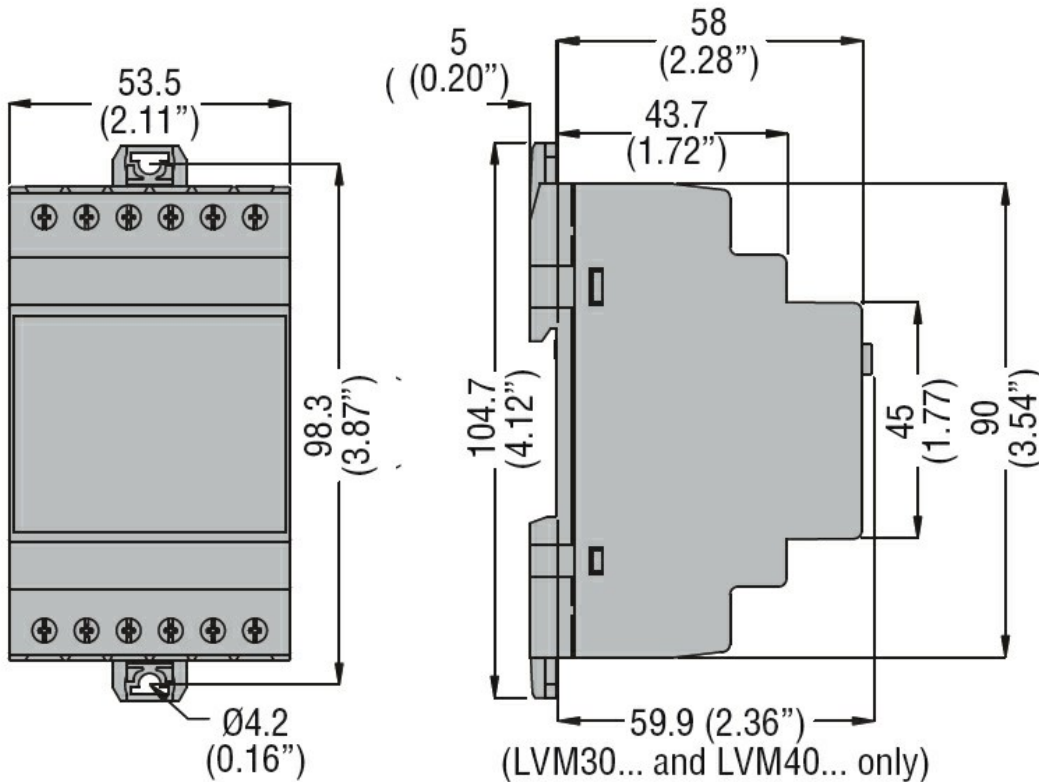
Storage temperature

| | | |
|-----|----|-----|
| min | °C | -30 |
| max | °C | +80 |

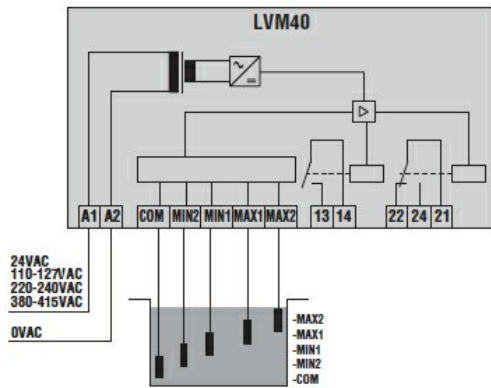
Housing

| | | |
|--------------------------|---|---------------------|
| Execution | Modular DIN rail mounting | |
| N° of modules | 3 | |
| 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 | 53.5 x 104.7 x 64.9 |
| Weight | g | 278 |

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