



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  $\leq 0.6$

Resetting time

s  $\leq 0.75$

**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  $30 \times 10^6$

### Indications

Indication	1 green LED for power on 1 red LED for relay state
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### Functions

3 detecting electrodes (MIN, MAX and COM)	Yes
5 detecting electrodes (MIN1, MAX1, MIN2, MAX2 and COM)	No
Sensitivity adjustment 2.5...50k $\Omega$	Yes
Sensitivity adjustment 2.5...100k $\Omega$	No
Sensitivity adjustment 2.5...200k $\Omega$	No
Adjustable sensitivity full-scale value 25-50-100-200 k $\Omega$	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 <sup>2</sup>	0.2
	Max	mm <sup>2</sup>	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	$\leq 250$

### Ambient conditions

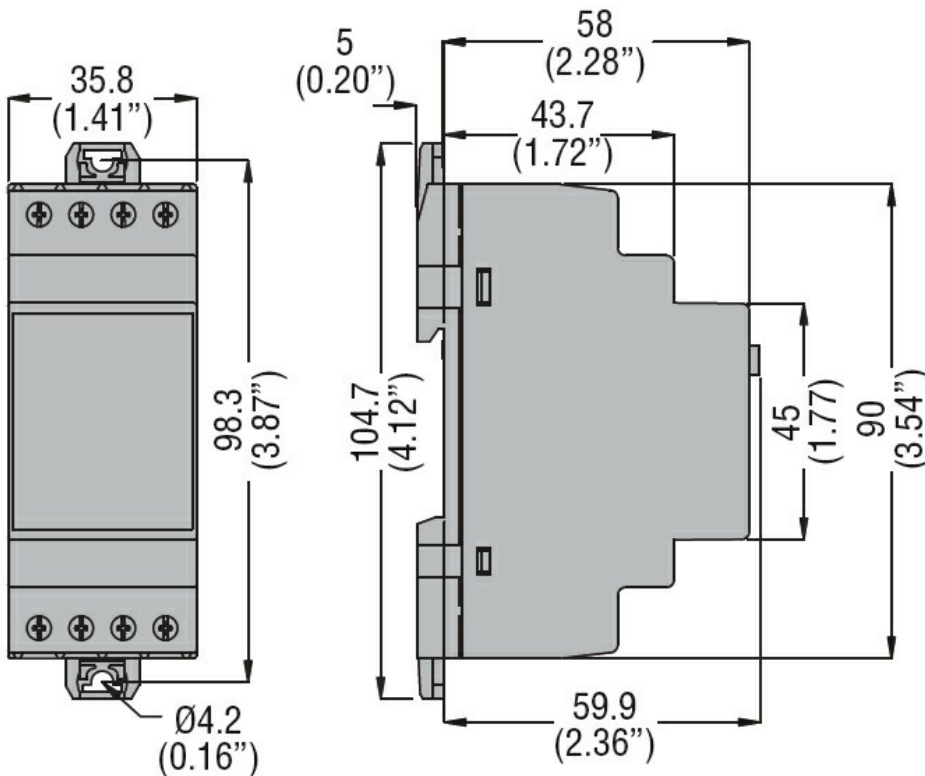
Temperature			
Operating temperature	min	°C	-20
	max	°C	+60
Storage temperature	min	°C	-30
	max	°C	+80

### Housing

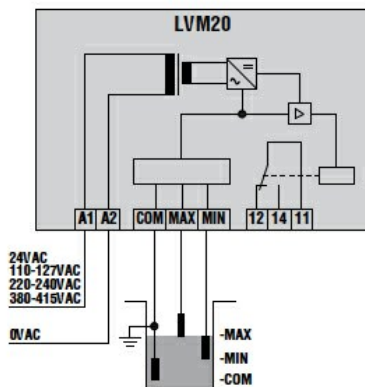
Execution	Modular DIN rail mounting
N° of modules	2

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

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UL508

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Certificates

cULus  
EAC

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ETIM classification

ETIM 8.0

EC001447 - (Fill)  
level monitoring  
relay