



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	380
Max	VAC	415

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
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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 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

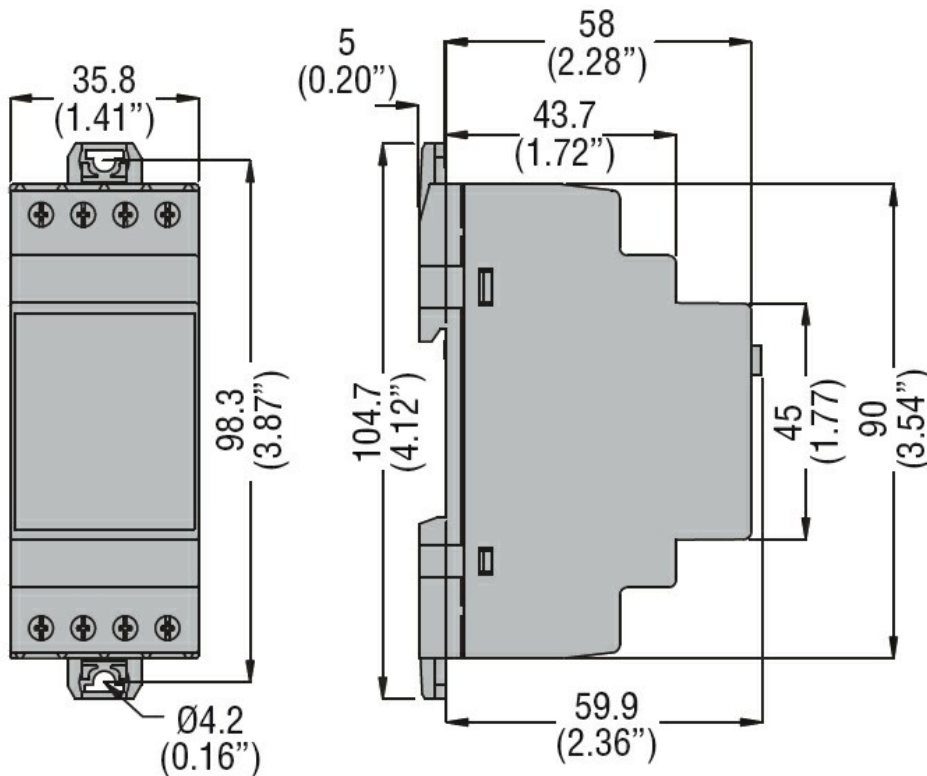
Temperature			
Operating temperature	min	°C	-20
	max	°C	+60
Storage temperature	min	°C	-30
	max	°C	+80

Housing

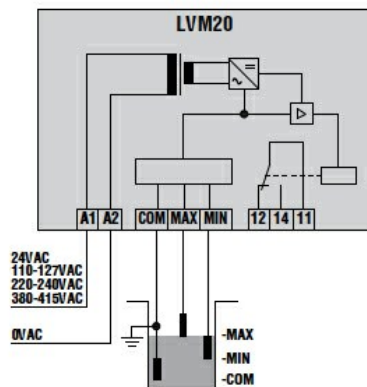
Execution	Modular DIN rail mounting
N° of modules	2

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