



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 $\Omega$  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  $10^5$

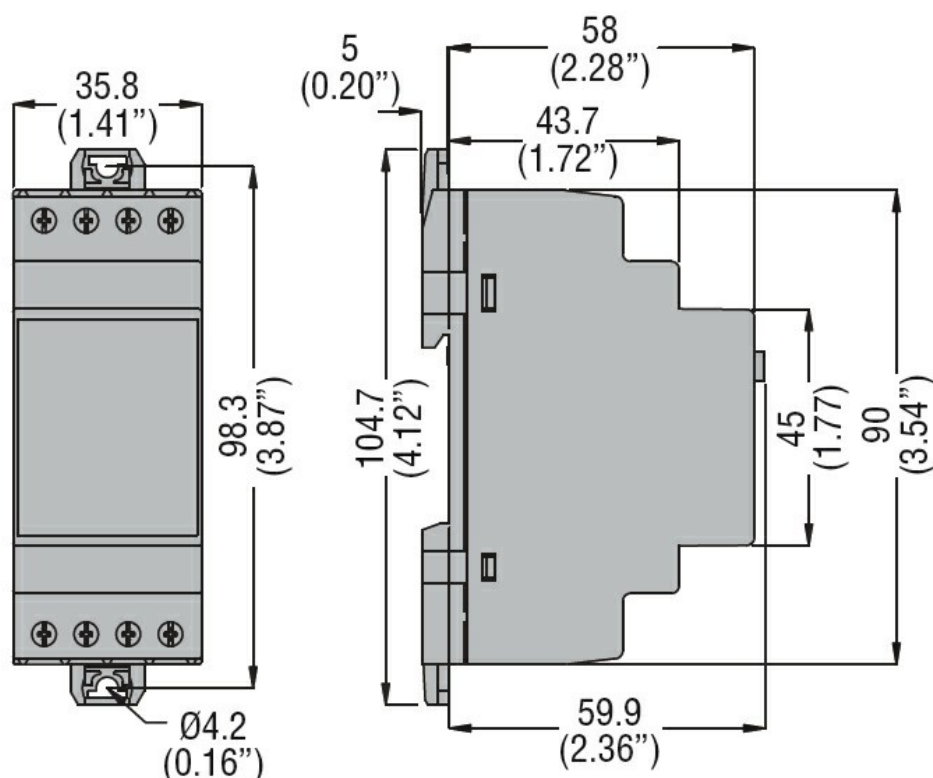
Mechanical life cycles  $30 \times 10^6$

#### Indications

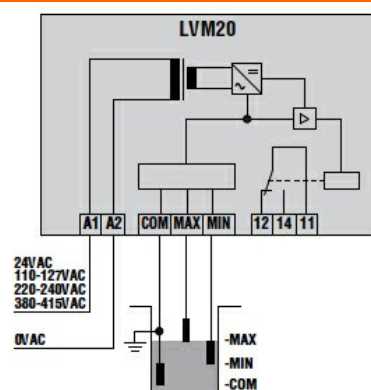
Indication				1 green LED for power on 1 red LED for relay state
Functions				
3 detecting electrodes (MIN, MAX and COM)				Yes
5 detecting electrodes (MIN1, MAX1, MIN2, MAX2 and COM)				No
Sensitivity adjustment 2.5...50k Ω				Yes
Sensitivity adjustment 2.5...100k Ω				No
Sensitivity adjustment 2.5...200k 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	mm²	0.2	
	Max	mm²	4	
Insulations				
Rated insulation voltage Ui			V	415
Rated impulse withstand voltage Uimp			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



#### 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