

TYPE	LVM20...	LVM25...	LVM30...	LVM40...
DESCRIPTION	Modular Automatic resetting			
Application (examples)	Single voltage Emptying function	Multi voltage Emptying or filling functions	Dual voltage Emptying or filling functions	Single voltage Multiple functions
Operating principle	Electrical conductivity of liquids			
AUXILIARY SUPPLY				
Supply voltage Us	24VAC 110-127VAC 220-240VAC 380-415VAC	24-240VAC/DC	24/220-240VAC 110-127/380-415VAC	24VAC 110-127VAC 220-240VAC 380-415VAC
Operating voltage range	0.85-1.1 Ue 50/60Hz ±5%			
Power consumption (maximum)	3.5VA	3VA	5.5VA	4.5VA
Power dissipation (maximum)	1.8W	1.2W	2.8W	2.8W
OUTPUTS				
Number of connectable electrodes	3	3	3	5
Type of electrode	Electrodes and electrode holders: SN1 / SCM / CGL / PS31 / PS3S or similar			
Electrode voltage	7.5VAC	5VPP	7.5VAC	5VPP
Sensitivity	2.5-50kohm	2.5-100kohm	2.5-50kohm	2.5-200kohm
TIME DELAYS				
Tripping time (minimum)	≤600ms	≤ 1s	1s	1s
Resetting time (minimum)	≤750ms	≤ 1s	1s	1s
Probe tripping delay	—	—	OFF-10s	1-10s
Relay energising delay	—	—	OFF-300s	0-30min
RELAY OUTPUTS				
Number of relays	1	1	1	2
Relay state	Normally de-energised, energises at tripping			
Contact arrangement	1 changeover / SPDT	1 changeover / SPDT	2 changeover / SPDT each	1 changeover / SPDT and 1 with 1 N/O - SPST
Rated utilisation voltage	250VAC			
Maximum switching voltage	400VAC			
IEC conventional free air thermal current Ith	8A			
UL/CSA and IEC/EN 60947-5-1 designation	B300			
Electrical life (with rated load)	10 ⁶ cycles			
Mechanical life	30x10 ⁶ cycles			
Indications	1 green LED for power on 1 red LED for relay state	1 green LED for power on 1 red LED for relay state	1 green LED for power on 1 red LED for relay state	1 green LED for power on 2 red LEDs for relay state 2 red LEDs for probe state
19 CONNECTIONS				
Tightening torque maximum	0.8Nm (7lbin; 7-9lbin er UL/CSA)			
Conductor section min-max	0.2-4mm ² (24-12AWG; 18-12 AWG per UL/CSA)			
INSULATION				
IEC rated insulation voltage Ui	415VAC	240VAC	415VAC	415VAC
IEC rated impulse withstand voltage Uimp	6kV	4kV	6kV	6kV
IEC power frequency withstand voltage	4kV	2kV	4kV	4kV
Double insulation Supply/relay/electrode	≤250VAC	≤250VAC ^❶	≤250VAC	≤250VAC
AMBIENT CONDITIONS				
Operating temperature	-20...+60°C			
Storage temperature	-30...+80°C			
HOUSING				
Material	Self-extinguishing polyamide			
Typical configuration (examples)	LVM20 + n° 3 SN1 electrodes	LVM25 + n° 3 SN1 electrodes	LVM30 + n° 3 SN1 electrodes	LVM40 + n° 5 SN1 electrodes
Maximum cable length	❷			

- ❶ Double insulation between supply, electrodes and output relay circuit.
- ❷ Voltage applied to input contacts, not insulated at power supply.
- ❸ Consult Customer Service; see contact details on inside front cover.

LV1E...	LV2E...	LVMP 05	LVMP 10	CSP2E
Plug-in		Modular		Plug-in
Automatic resetting	Automatic resetting	—	—	—
Single voltage	Dual voltage	Multivoltage	Multivoltage	Single voltage
– Minimum-maximum level threshold – Maintains level between minimum and maximum – Protection against dry pump running Electrical conductivity of liquids		Priority change relay for motors		
24VAC	24-48VAC	24-48VDC	24VAC	24VAC
110-120VAC	110-120VAC/220-240VAC	24-240VAC	110-127VAC	48VAC
220-240VAC	220-240VAC/380-415VAC		220-240VAC	110VAC
380-415VAC			380-415VAC	220VAC
0.8-1.1 Ue 50/60Hz				
5.5VA		1.6VA	4.8VA	5VA
2.8W		0.9W	3W	3W
3		—	—	—
Electrodes and electrode holders: SN1 / SCM / CGL / PS31 / PS3S / or similar		—	—	—
9VAC (voltage between probes)		—	—	—
7 - 8kohm adjustable		—	—	—
≤50ms		—	—	—
≤100ms		—	—	—
—		—	—	—
—		—	—	—
1		2	2	2
Normally de-energised, energises at tripping				
1 changeover contact / SPDT		1 N/O - SPST	1 N/O - SPST	1 N/O - SPST
220VAC		250VAC	250VAC	250VAC
380VAC		—	—	—
5A		8A	8A	5A
B300		B300	B300	B300
2,5x10 ⁶ cycles		10 ⁵ cycles	10 ⁵ cycles	10 ⁵ cycles
50x10 ⁶ cycles		30x10 ⁶ cycles	30x10 ⁶ cycles	30x10 ⁶ cycles
1 red LED for relay tripping		1 green LED for power on 1 red LED for relay state	1 green LED for power on 1 red LED for relay state	1 green LED for power on 1 red LED for relay state
—		0.8Nm (7Ibin; 7-9Ibin er UL/CSA)		—
—		0.2-4.0mm ² (24-12AWG; 18-12 AWG per UL/CSA)		—
415VAC		250VAC	415VAC	250VAC
5kV		4kV	4kV	4kV
2kV		2kV	2.5kV	2.5kV
—		—		
-20...+60°C				
-30...+80°C				
Self-extinguishing polycarbonate		Self-extinguishing polyamide	Self-extinguishing polyamide	Self-extinguishing polycarbonate
LV1E + n° 3 SN1 electrode		—	—	—
LV2E + n° 2 SN1 electrodes + reset button		—	—	—
500m/547yd single-core, double insulated cables		—	—	—