

Conductive Level Controller Type MCLC II

Rail Mounting

Features:

- Ideal for level control of any conductive liquid
- Compact plug-in, easy installation, DIN mounting
- 24/230 VAC operation possible
- 24 VDC version for vehicles and battery operated applications
- Low voltage (AC) electrodes
- Accurate and reliable measurement
- Automatic sensitivity adjustment
- One up to four points Control and Alarm
- Output up to 4 X 5A/250 VAC relay
- Up to five LED indications for relays and power



The MCLCII Conductive Level Controller provides reliable, up to 4-point liquid level control.

The unit uses electrodes to electrically detect the liquid level.

The MCLCII has no moving parts and may be used in water, wastewater, and any heavy-bodied conductive liquids.

The MCLCII controller includes an automatic sensitivity adjustment for reliable operation in a variety of conductive liquids.

The MCLCII can be connected to up to five Michshur's A20 - stainless steel 316 liquid level electrodes, which can easily be cut to the correct length for accurate level settings.

The five probes system with 8 operation modes enables simultaneous activation and control of multiple systems such as high level, low level, filling and emptying function, latch alarm and more.

The MCLCII can be supplied with 3 different voltages: 230, 24 VAC or 24 VDC for vehicle and battery operated applications.

Applications

For sewage, sea water and liquid with low conductive resistance

- Level control in tanks, reservoirs, sewage plants, underground wells, mixing plants etc.
- Level control for element protection in pipes, channels, and irrigation systems
- Flow detection in pipes, channels, and irrigation systems
- Ice bank control in cold drink dispensers, ice makers, water chillers, bulk milk tanks, and others.
- Indication of liquid buildup due to filter blockages
- Pollution / foul water detection in rivers, drains, etc.
- Alarm control warning of irregular Max. (high) or Min. (low) levels
- Flood detection at basements, warehouses, archives and museums

Operations:

Mode	description	Relays	Electrodes	Action	Jumpers
0	Filling and emptying tank -SPDT	K1	Ref + Lev1 + Lev2	SPDT, switch between high to low	Off-off-off
1	Low alarm	K1	Ref + Lev1	Low level control	Off- off -on
2	High alarm	K1	Ref + Lev1	High level control	Off- on-off
3	Filling and emptying tank -DPDT	K1 + K2	Ref + Lev1 + Lev2	Like mode "0" with DPDT	Off- on -on
4	Filling and emptying between electrode 2 +3, low alarm elec' 1 and high elec' 4	K1 + K2 + K3 + K4	Ref + Lev1 + Lev2 + Lev3 + Lev4	Mode 1 + Mode 2 + Mode 3	On- off -off
5	Each elec' drives a relay	K1 + K2 + K3 + K4	Ref + Lev1 + Lev2 + Lev3 + Lev4	Relay per Electrode	On -off -on
6	Like mode 4 with low alarm latch	K1 + K2 + K3 + K4	Ref + Lev1 + Lev2 + Lev3 + Lev4	Mode 4 + Latch on Level 1	On- on -off
7	Like mode 4 with high alarm latch	K1 + K2 + K3 + K4	Ref + Lev1 + Lev2 + Lev3 + Lev4	Mode 4 + Latch on Level 4	On - on -on

Technical Specifications

Power Supply	24 VAC or 24 VDC or 230 VAC
Power Consumption	Max. 2.5 VA
Temperature Range	316 SS: - 10 to 82 °C (- 14 to 180 °F) ETFE: - 10 to 120 °C (- 14 to 248 °F)
Output	5 Amp. N.O. / N.C. relay (250 VAC max)
Operation mode	8 operating modes (see table)
Sensitivity Adjustment	Auto Sensitivity Adjustment
Output voltage of electrodes	Less than 5 VAC
Insulation resistance	100 M Ω (at 500 VDC) *
Ambient temperature operating	- 10 °C to 55 °C
Ambient humidity operating	45% to 85%
Mechanical life expectancy	10,000,000 operations
Weight approx.	Max 220 g

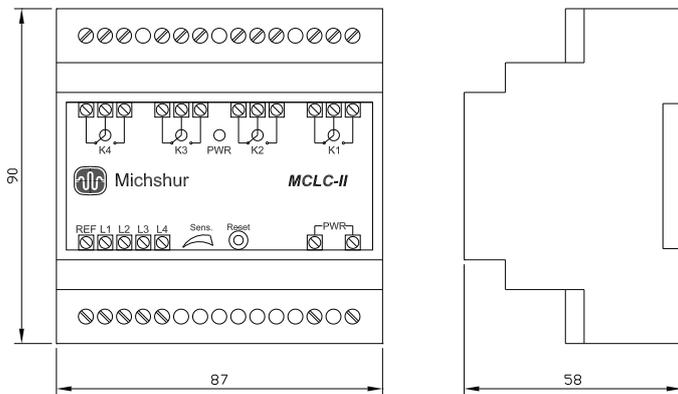
* between power terminals and electrode terminals, and between electrode terminals and contact terminals

Installation notes:

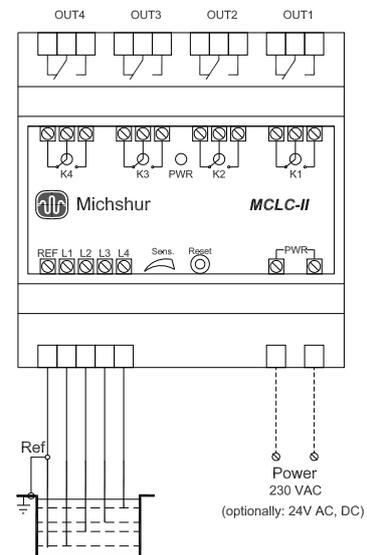
For sewage application, electrode holders must be installed at least 10 to 20 cm apart from each other. For acids, alkalis and sea water, electrode holders should be up to 1 meter apart in order to show best results.

When taping an electrode to prevent it from contacting the other electrodes when in water, do not tape it completely but leave at least 100 mm of its end exposed. When the required length of the electrode is more than 1 m, use a separator to prevent the electrodes from contacting each other.

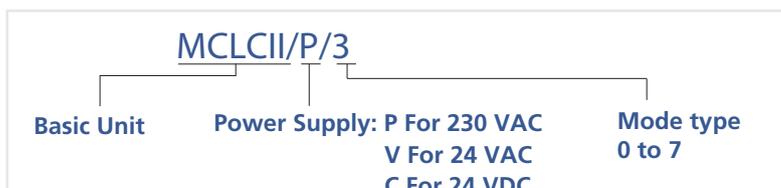
Dimension (mm)



Connection Diagram



How to order:



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