

MR48LWD

Conductivity measurement and control device with limit contact



The MR48LWD is a high-resolution conductivity measurement, display and control device. It is equipped with a digital display, a limit switch and a potentiometer for cell adjustment. The desired limit can be adjusted by a second potentiometer. An LED indicates the limit switch condition. The limit can be displayed by using an additional button. The compact design according to DIN IEC 61554 is made of flame-retardant noryl and designed for panel mounting. The device is connected via screw-type connectors on the back side.

Features

- high-impedance converter for direct connection of a conductivity measuring cell
- 3 ½-digit LCD-display, digit height 12.7 mm
- limit value (changeover contact) programmable and can be displayed
- limit switch contact selectable as exceeding or undercut switch
- switching status indicated by LED
- precise cell adjustment by potentiometer
- selectable measuring range
- selectable current output
- selectable power supply
- selectable temperature compensation
- quick and easy installation in the panel outbreak via spring clips that can be attached to the housing wall

Application fields

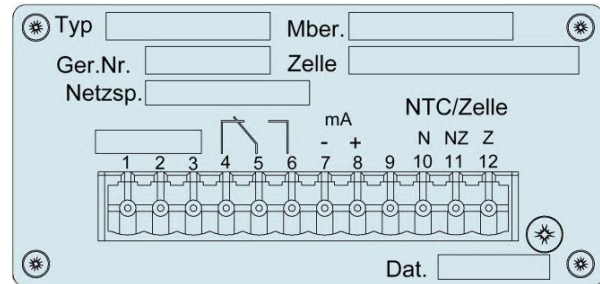
- swimming pools, fish farming and breweries
- sewage treatment plants, landfills and power plants
- continuous and batch wastewater treatment plants
- pure and ultra-pure water plants, desalination
- exhaust and recirculation systems

Technical data

Parameter	Description	Order code: MR48LWD-
measuring ranges (factory set, other ranges on request)	0 to 20 $\mu\text{S}/\text{cm}$, $K = 0.01 \text{ cm}^{-1}$	M002/0.01
	0 to 200 $\mu\text{S}/\text{cm}$, $K = 0.1 \text{ cm}^{-1}$	M020/0.1
	0 to 2000 $\mu\text{S}/\text{cm}$, $K = 0.1 \text{ cm}^{-1}$	M2/0.1
	0 to 2000 $\mu\text{S}/\text{cm}$, $K = 1.0 \text{ cm}^{-1}$	M2/1.0
	0 to 20 mS/cm , $K = 1.0 \text{ cm}^{-1}$	M20/1.0
	0 to 200 mS/cm , $K = 10.0 \text{ cm}^{-1}$	M200/10.0
resolution	0.05 %	
measuring voltage	0.14 V AC, ± 20 %	
voltage supply (factory set)	230 V AC, 50–60 Hz / 6 VA, -15 % to +10 %	230AC
	120 V AC, 50–60 Hz / 6 VA, -15 % to +10 %	120AC
	24 V AC	24AC
	24 V DC	24DC
current output (factory set, non-isolated)	0 to 20 mA	S0
	4 to 20 mA	S4
max. limit control output contact (potential free)	250 V AC, 2 A 250 V DC, 2 A	
switching point	undercut	SN
	exceeding	SH
limit adjustment range	according to measuring range	
max. load	600 Ω	
temperature compensation	none	-
	automatic, with NTC in measuring cell (2 %/°C)	AT
front	3 ½-digit LCD display, digit height 12.7 mm	
	limit-state indication by yellow LED	
	button to display the limits	
	potentiometer for setting limits	
	potentiometer for adjustment cells (± 15 %)	
connection	12-pin connector	
dimension	96 mm x 48 mm x 150 mm (W x H x D including connectors)	
panel cut out	91.3 mm x 45.2 mm, ± 0.2 mm	
permitted storage and operating conditions	0 to +45° C, < 90 % RH	
permitted degree of pollution	2 (according to DIN EN 60664-1)	
protection	front: IP40	
	rear: IP20	

Connections

No.	Description
1	power supply
2	power supply
3	power supply
4	relay, break contact (RK)
5	relay, middle contact (MK)
6	relay, normal open (AK)
7	0 to 20 mA / 4 to 20 mA (-)
8	0 to 20 mA / 4 to 20 mA (+)
9	not assigned
10	NTC (N)
11	NTC/cell (NZ)
12	cell (Z)



Please specify selected measuring range, signal output, power supply, switch and whether a temperature compensation is desired when ordering.

Specifications are subject to modifications.