

MR48mVD

Redox measurement and control device with limit switch



The MR48mVD is a high-resolution redox measurement, display and control device. It is equipped with a digital display and a limit switch. The desired value can be adjusted by a 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 redox electrode
- 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
- measurement range from -1000 to +1000 mV
- 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

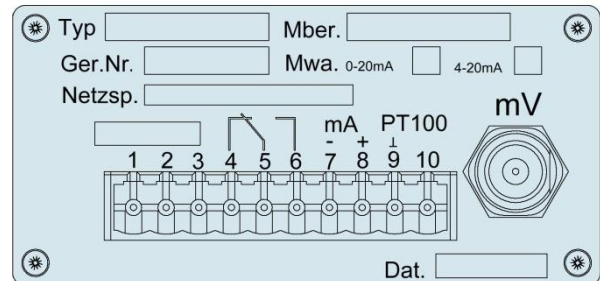
- swimming pools, fish farming, breweries
- continuous and batch waste water treatment plants
- redox potential measurement and monitoring
- high impedance voltage measurements (potentiometry)

Technical data

parameter	Description	Order code: MR48mVD-
measurement range	-1000 to +1000 mV	
resolution	1 mV	
power 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
limit control output contact (potential free)	250 V AC, 2 A or 250 V DC, 2 A	
switching point	undercut	SH
	exceeding	SN
limit adjustment range	according to measuring range	
max. load	600 Ω	
temperature compensation	none	-
	automatic, with PT100 (2-wire connection)	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	
connection	10-pin connector	
	BNC-connector (connection redox electrode)	
dimension	96 mm x 48 mm x 150 mm (W x H x D incl. connectors)	
panel cut out	91.3 mm x 45.2 mm, ±0.2 mm	
permitted storage and operating conditions	0 to +40°C, < 90 % RH	
permitted degree of pollution	2 (according to DIN EN 60664-1)	
protection	front: IP40	
	rear: IP20	

Connections

No.	Description
1	voltage supply
2	voltage supply
3	voltage 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	ground PT100 (PT \perp)
10	PT100 (PT)



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

Specifications are subject to modifications.