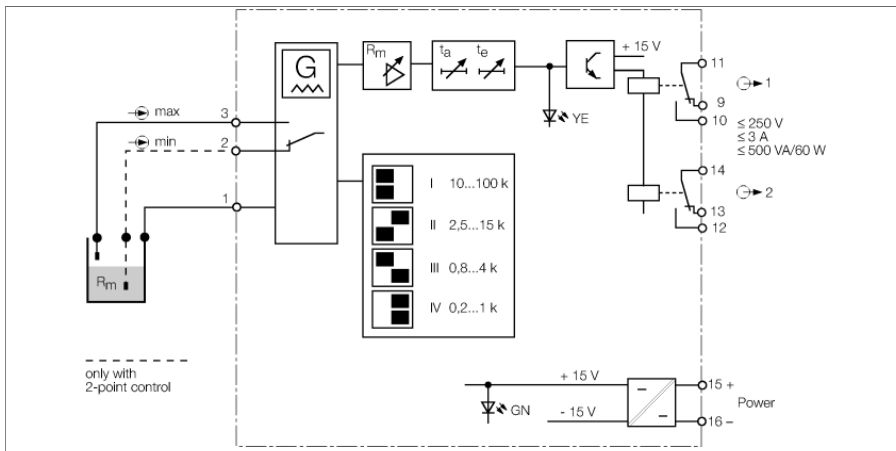


**Level controller  
1-channel  
MK91-12-R/24VDC**



The 1-channel level controller MK91-12-R/24VDC monitors and regulates conductive liquid levels.

As a dual level regulator, it can be used to control pumps or solenoid valves, as monitoring device it is designed for run-dry or over flow protection.

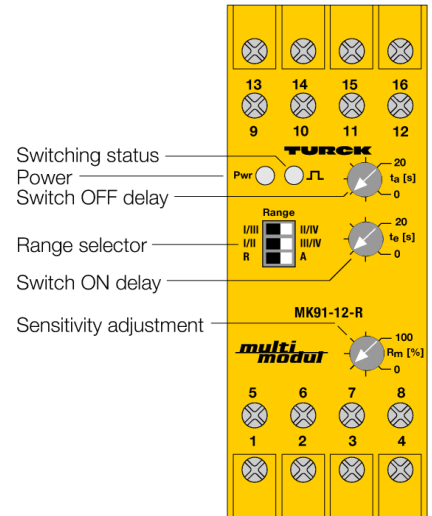
The level controller not only provides optimum reliability in differentiating liquids, it is also suited for the distinction between foam and liquid. The responsivity (liquid resistance) is adjustable between 0.2 ... 100 kΩ. First, select one of the four sensitivities with the "Range" switch. Then you can finetune the switchpoint via the potentiometer at the front.

The separately adjustable switch-on and switch-off delay is very important for turbulent liquid levels. You can set a delay time between 0 ... 20 s via the potentiometers at the front.

Two relay outputs each with one changeover contact are available to output the switching commands. The output configuration of both outputs can be changed from NC mode (R) to NO mode (A) for all measuring ranges using the "Range" switch.

The switching status of the output is indicated by a yellow LED and operational readiness by a green LED.

For further information, please order out installation guidelines.



- **Responsivity: 0.2...100 kΩ**
- **Hysteresis: 10%**
- **Output: 2 relays with 1 changeover contact**
- **Electronic switching of electrodes**
- **Switch-on/off delay 0...20 s, separately adjustable**
- **Reliable distinction between foam and liquid**
- **Galvanic isolation of input circuits, output circuits and power supply**

# Level controller

## 1-channel

### MK91-12-R/24VDC

<b>Type</b>	MK91-12-R/24VDC
ID	7545077
<b>Nominal voltage</b>	24 VDC
Operating voltage	20...28 VDC
Power consumption	≤ 1.5 W
<b>Input circuits</b>	2 electrodes or alternatively 3 electrodes
Schaltpunkt	0,2-100 kΩ
Probe voltage	0,02...5 Vpp/150 Hz (triangle)
Schaltswelle	0,2...1 kΩ
Schaltswelle	0,8...4 kΩ
Schaltswelle	2,5...15 kΩ
Schaltswelle	10...100 kΩ
Einschaltverzögerung	0...20 s
Ausschaltverzögerung	0...20 s
Hysterese	10 %
<b>Output circuits</b>	
Output circuits (digital)	2 x relays (change-over)
Output switching voltage relay	≤ 30 VDC / ≤ 250 VAC
Switching current per output	≤ 3 A
Switching capacity per output	≤ 500 VA/60 W
Switching frequency	≤ 5 Hz
<b>Galvanic isolation</b>	
Test voltage	2.5 kV RMS
<b>Displays/Operating elements</b>	
Switching state	Yellow
<b>Protection class</b>	IP20
Ambient temperature	-25...+60 °C
Storage temperature	-40...+80 °C
Dimensions	89 x 36 x 70 mm
Weight	150 g
Mounting instructions	DIN rail (NS35) or panel
Housing material	Polycarbonate/ABS
Electrical connection	4 × 4-pin flat terminals with self-lifting pressure plates
Terminal cross-section	1 × 2.5 mm <sup>2</sup> /2 × 1.5 mm <sup>2</sup>

#### Dimensions

