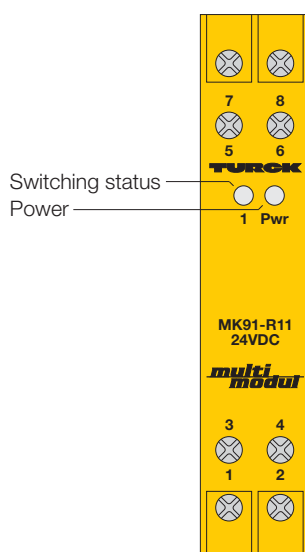


## Level Control MK91-R11/24VDC 1-channel



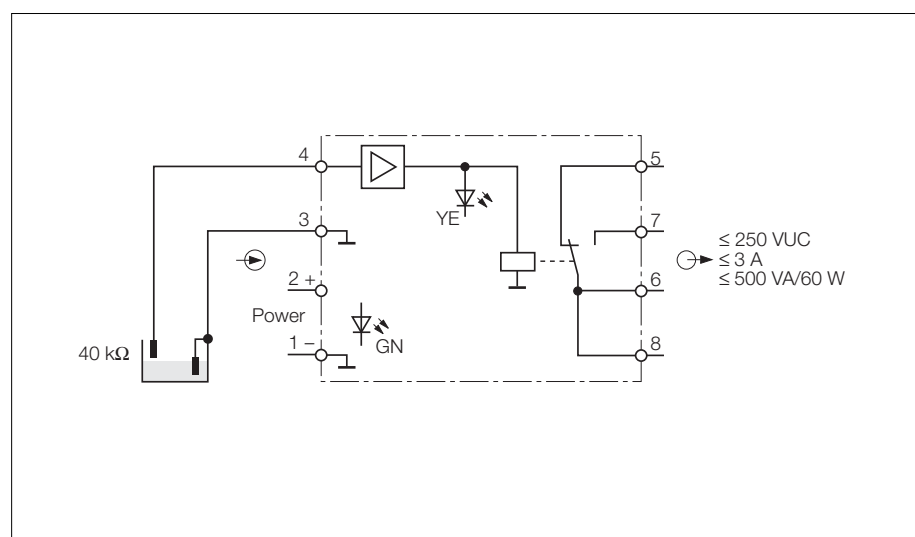
- **1-channel level control**
- **Galvanic isolation between input circuit, output circuit and supply voltage**
- **Relay output (1 SPDT contact)**
- **Switch point at 40 k $\Omega$**
- **Hysteresis approx. 5 %**

The MK91-R11 is a single channel level control for regulating conductive liquid levels. Electrodes connected to the device analyse the resistance of the liquid against the body of the container.

A rectangular AC voltage signal is applied to the electrode. This enables DC-free and therefore electrolytic-free measurement of the liquid resistance.

The switching point is firmly defined at  $R_m = 40 \text{ k}\Omega$  (other values on request). When the switch point is reached, the output relay will close. A yellow LED indicates the switching status; a green LED indicates that the device is powered.

The device provides protection against reverse polarity and transient overvoltage.



## Level Control MK91-R11

<b>Type</b>	MK91-R11/24VDC
Ident-no.	7525202
<b>Supply voltage</b> $U_B$	19...29 VDC
Current consumption	$\leq 20$ mA at 24 VDC
Galvanic isolation	between input circuit, output circuit and supply voltage for 250 V <sub>rms</sub> , test voltage 4 kV/8 mm input circuit and supply voltage galvanically connected
Clearances and creepage distances	
– Input circuit and output circuit	$\geq 4$ kV/8 mm
<b>Input circuits</b>	
Switch point	$40\text{ k}\Omega \pm 10\%$ (other values on request)
Hysteresis	approx. 5 %
Switch point deviation in supply voltage range	$\leq 1\%$
Operation characteristics	$U_B = 24\text{ V}$ , $R_m = 40\text{ k}\Omega$
– Rectangular signal	$f = 3\text{ Hz}$
– Amplitude of electrode voltage	$\pm 2\text{ V}$
– Amplitude of electrode current	$\pm 50\text{ }\mu\text{A}$
<b>Output circuits</b>	
Number of contacts	1 relay output
Switching voltage	1 SPDT contact, silver-alloy + 3 $\mu\text{m Au}$
Switching current	$\leq 3\text{ A}$
Switching capacity	$\leq 500\text{ VA/60 W}$
Switching frequency	$\leq 5\text{ Hz}$
<b>LED indications</b>	
– Power	green
– Switching status	yellow
<b>Housing</b>	8-pole, 18 mm wide, Polycarbonate/ABS, flammability class V-0 per UL 94
Mounting	snap-on clamps for top-hat rail (DIN 50022) or screw terminals for panel mounting
Connection	via flat terminals with self-lifting pressure plates
Connection profile	$\leq 2 \times 2.5\text{ mm}^2$ or $2 \times 1.5\text{ mm}^2$ with wire sleeves
Degree of protection (IEC 60529/EN 60529)	IP20
Operating temperature	-25...60 °C

