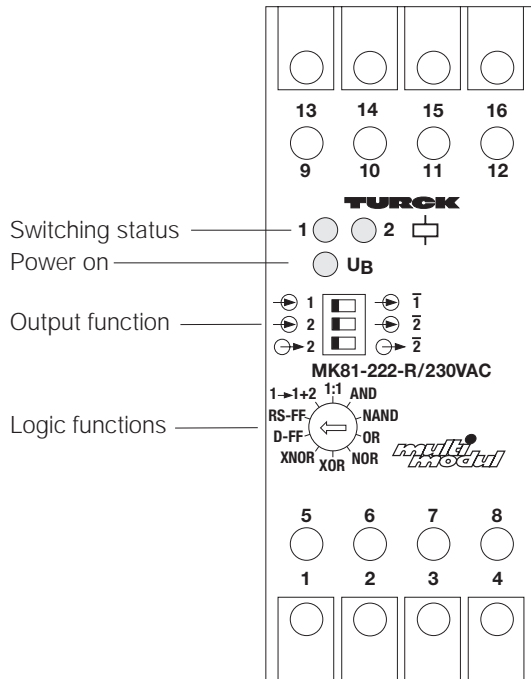


Amplifier Relay MK81-222-R



- **2 channel supply for 3-wire sensors (pnp and npn) and 2-wire sensors according to EN 50227 (NAMUR)**
- **Monostable transmission, multiplication, 8 selectable logic functions**
- **Separately adjustable output function of each channel**
- **2 relay outputs with 1 SPDT contact each**

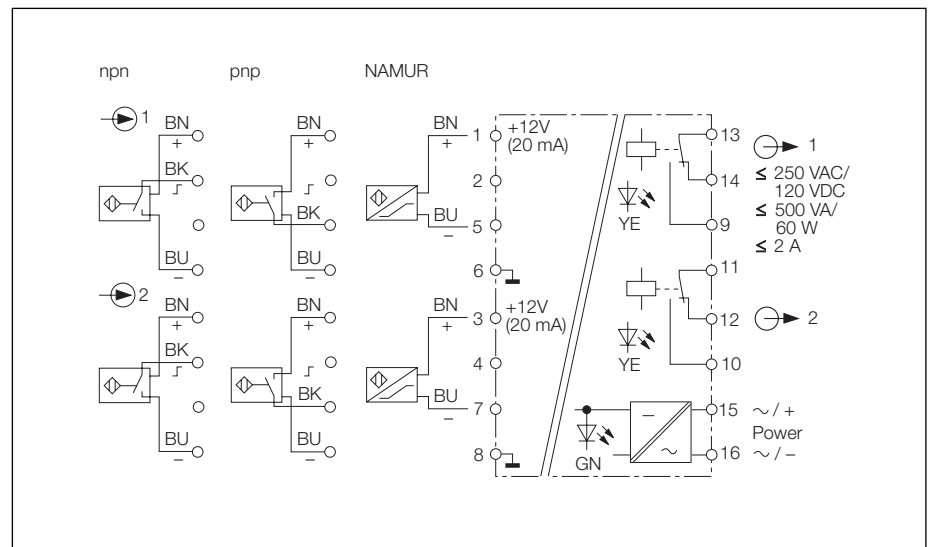
The amplifier relay MK81-222-R is suited for connection of two proximity switches according to EN 50227 or 3-wire sensors (pnp or npn). The current consumption of each sensor may not exceed 20 mA (admissible total current 40 mA).

The device features two relay outputs with one hard gold plated SPDT contact per channel. A front panel rotary switch serves to adjust the following functions:

- transmission 1:1 (monostable)
- multiplication, two relay outputs are assigned to input 1
- AND logic
- NAND logic
- OR logic
- NOR logic
- XOR logic
- XNOR logic
- RS flipflop
- D flipflop

The output function mode can be adjusted via front panel switches. The input states may be inverted to adapt the logic functions to the sensors. In the monostable function mode, an inversion accords to a change of the output function. Additionally, it is possible to change the output function mode of relay 2 via the third switch.

The switching status of each relay is indicated via a yellow LED.



Power Supplies and Power Monitors



Type	MK81-222-R/230VAC	MK81-222-R/24VDC
Ident-No.	75 450 02	75 450 01
Operating Voltage U_B	184...264 VAC	10...30 VDC
Line frequency	48...62 Hz	-
Power/current consumption	≤ 5 VA	≤ 5 W
Galvanic isolation	between input circuit and output circuit and supply voltage	between input circuit and output circuit and supply voltage
Input Circuits	3-wire sensors, pnp 3-wire sensors, npn 2-wire sensors, NAMUR	3-wire sensors, pnp 3-wire sensors, npn 2-wire sensors, NAMUR
Sensor supply	12 V \pm 5 %, stabilised	12 V \pm 5 %, stabilised
- Ripple W_{pp}	≤ 1 %	≤ 1 %
- Maximum load	≤ 40 mA	≤ 40 mA
Output Circuits	2 relay outputs	2 relay outputs
Number of contacts	each 1 SPDT contact, AgCdO + 3 μ Au	each 1 SPDT contact, AgCdO + 3 μ Au
Switching voltage	≤ 250 VAC	≤ 250 VAC
Switching current	≤ 2 A	≤ 2 A
Switching capacity	< 500 VA/60 W	< 500 VA/60 W
LED Indications		
- Power "ON"	green	green
- Switching status	2 x yellow	2 x yellow
Housing	16-pole, 36 mm wide, Polycarbonate/ABS flammability class V-0 per UL 94	16-pole, 36 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	snap-on clamps for top-hat rail (DIN 50022) or screw terminals for panel mounting
Connection	via flat terminals with self-lifting pressure plates	via flat terminals with self-lifting pressure plates
Connection profile	$\leq 2 \times 2.5$ mm ² or 2×1.5 mm ² with wire sleeves	$\leq 2 \times 2.5$ mm ² or 2×1.5 mm ² with wire sleeves
Degree of protection (IEC 60529/EN 60529)	IP20	IP 20
Operating temperature	-25...+60 °C	-25...+60 °C

