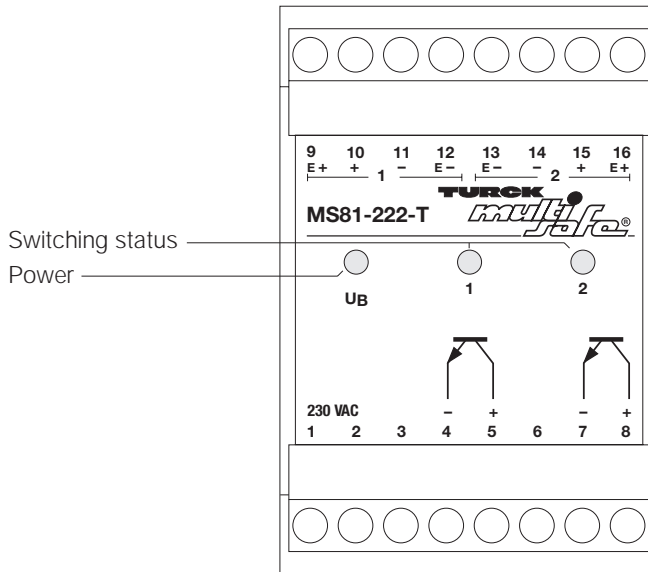


## Amplifier Relay MS81-222-T



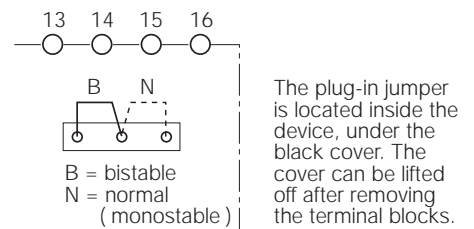
- **2 channel power supply for 3-wire proximity sensors (pnp, npn) or 2-wire sensors per EN 50227 (NAMUR)**
- **Monostable or bistable function (selectable)**
- **Programmable NO or NC output function of each channel**
- **2 short-circuit protected, potential-free transistor outputs for switching of inductive loads**

Each channel has one optically coupled isolated transistor output. The outputs are reverse-polarity protected by means of a diode connected in parallel. They are equipped with a thermic short-circuit protection (a short-circuit during a polarity reversal will destroy the device).

They may be used for all types of DC loads such as contactors, lamps and valves. A protective circuitry against inductive switching peaks is integrated in the device. The outputs can be connected in parallel or in series.

The operating mode of each channel may be changed from NO to NC by jumpering two terminals. Status indications of the respective outputs are provided by two yellow LEDs. The green LED illuminates when the device is powered.

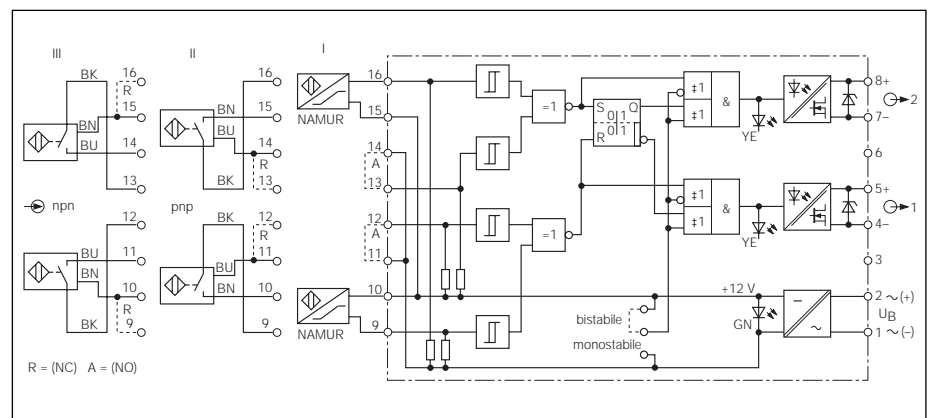
### Programming via Jumper Block



The device can be changed to bistable operation by setting the jumper block under the front cover of the device. In the bistable mode, one input serves as a set input and the other as a reset input. The outputs are triggered alternatively (complementary output function).

When power is applied, the device resets to standard (preferred state) mode: channel 1, relay de-energised (LED 1, off) channel 2, relay energised (LED 2, on).

The MS81-222-T amplifier relays provide a power source for two proximity sensors. Available input selections include two 3-wire proximity sensors with NO or NC outputs, or NAMUR sensors. The maximum power consumption of each device is 40 mA. It is therefore suitable for sensors with a power consumption of 20 mA each.



<b>Type</b>	MS81-222-T/230VAC	MS81-222-T/115VAC
Ident-No.	05 110 00	05 110 20
<b>Operating Voltage</b> $U_B$	184...264 VAC	92...132 VAC
Line frequency	48...62 Hz	48...62 Hz
Power/current consumption	$\leq 4.5$ VA	$\leq 5$ VA
Galvanic isolation	between input circuit and output circuit	between input circuit and output circuit
<b>Input Circuits</b>	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 $W_{PP}$	$\leq 1$ %	$\leq 1$ %
- Maximum load	$\leq 40$ mA	$\leq 40$ mA
<b>Output Circuits</b>	2 potential-free transistor outputs	2 potential-free transistor outputs
Switching voltage	$\leq 65$ VDC	$\leq 65$ VDC
Switching current	$\leq 2$ A	$\leq 2$ A
Voltage drop	$\leq 0.3$ V	$\leq 0.3$ V
<b>LED Indications</b>		
- Power "ON"	green	green
- Switching status	2 x yellow	2 x yellow
<b>Housing</b>	50 mm wide, Polycarbonate/ABS	
Mounting	panel mounting or snap-on clamps for top-hat rail (DIN 50022)	
Connection	2 x 8 self-lifting pressure plates	
Connection profile	$\leq 2 \times 2.5$ mm <sup>2</sup> or $2 \times 1.5$ mm <sup>2</sup> with wire sleeves	
Degree of protection (IEC 60529/EN 60529)	IP20	
Operating temperature	-25...+60 °C	

