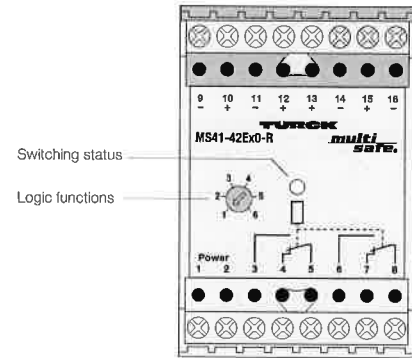
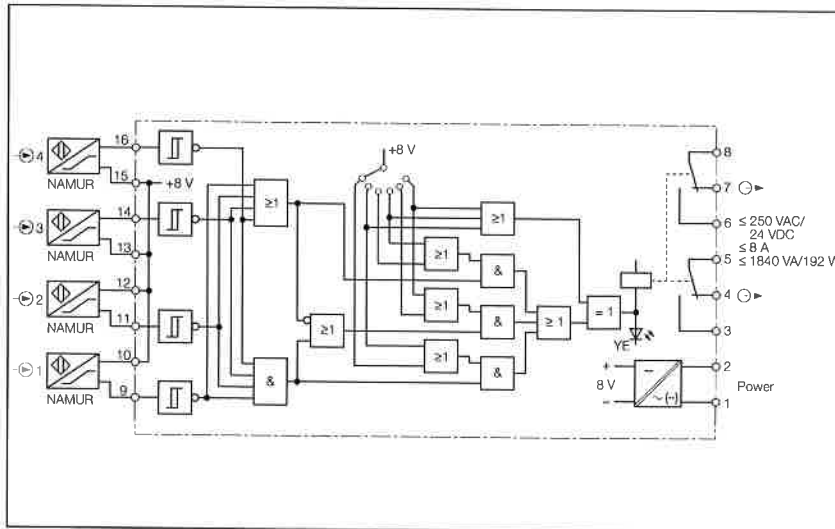


amplifier relays with logic functions
4-channel
MS41-42EX0-R



The logic amplifier relay MS41-42EX0-R has four intrinsically safe inputs which can be combined logically with each other. The device has one relay output with two changeover contacts. Sensors according to EN 60947-5-6 (NAMUR) or mechanical contacts can be connected.

The logic amplifier relay MS41-42EX0-R has four intrinsically safe inputs which can be combined logically with each other. The device has one relay output with two changeover contacts. NAMUR sensors according to EN 60947-5-6 or mechanical contacts can be connected.

The functions are described in detail on the following pages.

For applications requiring less than four inputs, please observe the following:

- The unused inputs should be left open when selector positions 1 and 2 (AND/NAND functions) are used.
- The unused inputs should be bridged when selector positions 3 and 4 (OR/NOR) are used.

The IDENTITY and NON-IDENTITY functions can only be attained with four input sources.

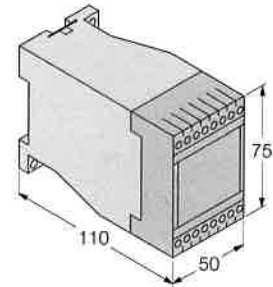
The switching status of the output is indicated by a yellow LED.

- **Intrinsically safe input circuits EEx ia**
- **Application area according to ATEX : II (1) GD and I (M1)**
- **Input: NAMUR sensors or mechanical contacts**
- **Output: Two relays (change-over)**
- **removable terminal blocks**
- **Universal operating voltage (20...250VAC/ 20...125VDC)**
- **Galvanic isolation of input circuits to output circuits and supply voltage**

amplifier relays with logic functions
4-channel
MS41-42EX0-R

Type	MS41-42EX0-R												
Ident-No.	5365701												
Nominal voltage	Universal voltage supply unit												
Operational voltage range:	20 ... 250 VAC												
Frequency	≥ 40 ... ≤ 70 Hz												
Operational voltage range:	20 ... 125 VDC												
Power consumption	≤ 3W												
NAMUR	EN-60947-5-6												
No-load voltage	8VDC												
Short-circuit current	4.5mA												
Input resistance	1kΩ												
Cable resistance	≤ 50Ω												
Switch-on threshold:	1.55mA												
Switch-off threshold:	1.75mA												
Output circuits (digital)	2 x relay (change-over)												
Relay switching voltage	≤ 250 VAC/60VDC												
Switching current per output	≤ 4 A												
Switching capacity per output	≤ 1000 VA/60 W												
Switching frequency	≤ 10Hz												
Contact quality	AgNi, 3μ Au												
Galvanic Isolation													
Test voltage	2.5 kV												
Ex approval acc. to conformity certificate	DMT 01 ATEX E 119												
Application area	II (1) GD; I (M1)												
Protection type	[EEx Ia] IIC												
Max. output voltage U_o	≤ 11V												
Max. output current I_o	≤ 55mA												
Max. output power P_o	≤ 150mW												
Rated voltage	250V												
Characteristic	linear												
External inductance/capacitance L_o/C_o													
	<table border="1"> <thead> <tr> <th></th> <th>EEx Ia IIC</th> <th>EEx Ia IIB</th> <th>EEx Ia I</th> </tr> </thead> <tbody> <tr> <td>L_o [mH]</td> <td>1</td> <td>3</td> <td>10</td> </tr> <tr> <td>C_o [μF]</td> <td>0,5</td> <td>2,5</td> <td>10,0</td> </tr> </tbody> </table>		EEx Ia IIC	EEx Ia IIB	EEx Ia I	L_o [mH]	1	3	10	C_o [μF]	0,5	2,5	10,0
	EEx Ia IIC	EEx Ia IIB	EEx Ia I										
L_o [mH]	1	3	10										
C_o [μF]	0,5	2,5	10,0										
Indication													
Switching state	yellow												
Protection class	IP20												
Ambient temperature	-25 ...+ 60 °C												
Dimensions	75 x 50 x 110 mm												
Mounting Instruction	Mounting on DIN rail or mounting panel												
Housing material	Polycarbonate/ABS												
Electrical connection	2 x 8-pole removable terminal blocks, reverse polarity protected, screw connection												
Terminal cross-section	1 x 2.5 mm ² / 2 x 1.5 mm ²												

Dimensions



Output relay electrical lifetime

