

## Safe contact expander

1 or 2 independent channels

4 contact sets per channel



ASRE-2R-R4R4

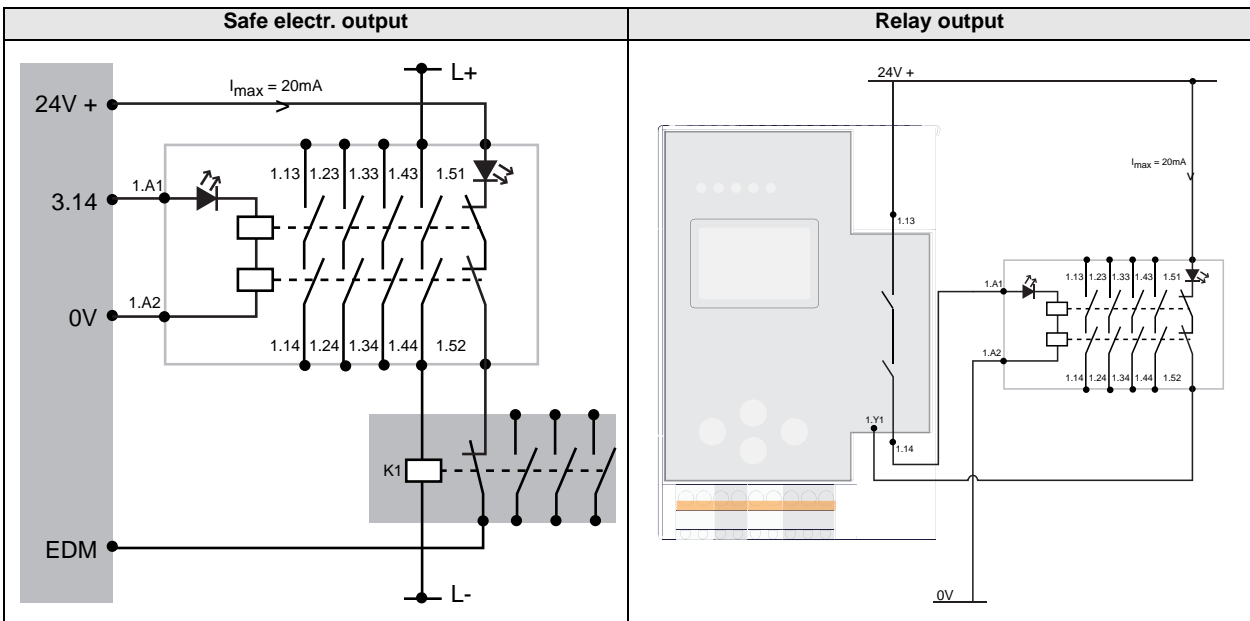
<b>Article no.</b>	<b>ASRE-2R-R4R4</b>
<b>General data</b>	
Type of device	safe contacts, instantaneous
Number of contact sets per channel	4
<b>Input</b>	
Signal level	0-signal: < 2,4V DC 1-signal: 18 ... 26,5V DC
Permissible test pulse time	max. 1,5 ms
Rated current	60mA per channel
<b>Output</b>	
Connection	force-guided
Short circuit protection of output circuits (external)	3A quick; 2A slow
Electrical life (switching operations)	AC1 (360 S/h) ca. 100 000
Operate delay / delay time	< 20 ms / <20 ms
Switching frequency	15Hz
Rated impulse voltage	4 kV <sup>1</sup>
<b>Contact load EDM (1.51, 1.52 and 2.51, 2.52)</b>	
Switching current	max. 20mA
<b>Contact load contact set (1.13, 1.14, 1.23, 1.24 and 2.13, 2.14, 2.23, 2.24)</b>	
Switching voltage AC	10 ... 230V
Switching voltage DC	10 ... 230V
Insulation to input	double insulation
Switching current	5mA... 3A
<b>Contact load contact set (1.33, 1.34, 1.43, 1.44 and 2.33, 2.34, 2.43, 2.44)</b>	
Switching voltage AC	10 ... 230V
Switching voltage DC	10 ... 230V
Insulation to input	basic insulation
Switching current	5mA... 3A
Total current (per channel)	12A (see "Diagram: Total current through all the contact sets of a channel:")
Usage category (DIN EN60 347-4-1 / EN 60 947-5-1)	AC1: 230V/3A (ca. 150 x 10 <sup>3</sup> cycles) AC 15: 230V/3A (ca. 80 x 10 <sup>3</sup> cycles) DC 1: 24V/3A (ca. 500 x 10 <sup>3</sup> cycles) DC 13: 24V/3A/0,1 Hz (ca. 50 x 10 <sup>3</sup> cycles)
B <sub>10d</sub> (AC15)	1,96 x 10 <sup>6</sup> cycles
B <sub>10d</sub> (DC13)	780 x 10 <sup>3</sup> cycles
<b>LED displays</b>	
LED 1 (CH 1)	safe input 1
LED 3 (EDM 1)	EDM channel 1
<b>Environment</b>	
Overvoltage category	III
Degree of pollution	2
Ambient temperature	-20°C ... 50°C (-4°F ... 122°F)

<b>Article no.</b>	<b>ASRE-2R-R4R4</b>
Storage temperature	-40°C ... 70°C (-40°F ... 158°F)
Relative humidity	not condensing
Mechanical lifetime	approx. 10 x 10 <sup>6</sup> swi
Protection class (DIN 60 529)	housing IP20 (only suitable for use in electrical operating rooms / control cabinets with IP54 minimum protection rating)
Dimensions (L / W / H in mm)	99 / 22,5 / 114

1. Safe isolation, reinforced insulation and 6 kV between A1/A2, 51/52, 43/44, 33/34 and 23/24, 13/14. Outputs one below the other have basic insulation.

<b>Article no.</b>	<b>ASRE-2R-R4R4</b>
Number of independent channels	2
LED 2 (CH 2)	safe input 2
LED 4 (EDM 2)	EDM channel 2
Mass	270 g

**Connection examples:**



**Diagram: Total current through all the contact sets of a channel:**

