

## Connection ESM-ES3..



Parameter	Value		Unit	
Operating voltage	ESM-ES301	24 ± 10% <sup>1)</sup>	V AC/DC	
	ESM-ES302	115 ± 10%	V AC	
	ESM-ES303	230 ± 10%	V AC	
Reverse polarity protection	On ESM-ES301			
Rated supply frequency	50 ... 60		Hz	
Power consumption	Approx. 4 VA / 2 W			
Control voltage at inputs	18.6 ... 26		V DC	
Control cable length (cross-section 0.75 mm <sup>2</sup> )	Max. 1000		m	
External contact fuse (safety circuit) acc. to EN IEC 60269-1	10 A gG (T4A / F6A)			
Test voltage (control voltage/contacts)	2.5		kV	
Rated impulse withstand voltage, Leakage path and air gaps acc. to DIN VDE 0110-1	4		kV	
Rated insulation voltage	250		V	
Over voltage category according to DIN VDE 0110-1	3			
Cumulative current on all contacts acc. to $\text{Ⓢ}$	Max. 10.5		A	
<b>Safety contacts</b>	<b>3 NO contacts (redundant)</b>			
Min. switching current at 24 V DC	20		mA	
Switching voltage max.	50		V DC	
	250		V AC	
Breaking capacity acc. to $\text{Ⓢ}$ (per contact)	6 A 250 V AC			
	2 A 24 V DC			
Utilization category <sup>2)</sup>	<b>U<sub>e</sub></b>	<b>I<sub>e</sub></b>	<b>Σ I<sub>e</sub></b>	
According to EN 60947-5-1	AC-12	250 V	6 A <sup>3)</sup>	10.5 A
	AC-15	230 V	4 A	
	DC-12	24 V	1.25 A <sup>3)</sup>	
	DC-13	24 V	2 A	
LED indicators	2, status display for relays K1 and K2			
<b>Auxiliary contact</b>	<b>1 NC contact</b>			
Continuous current max.	500 <sup>4)</sup>		mA	
Switching voltage max.	24		V AC/DC	
<b>Reliability values acc. to EN ISO 13849-1</b>				
Category	4			
Performance Level PL	e			

1) All the electrical connections must either be isolated from the mains supply by a safety transformer according to EN 61558-2-6 with limited output voltage in the event of a fault, or by other equivalent isolation measures.

2) See page 26 for information about the utilization category.

3) With Ohmic load.

4) As monitoring contact for safety relay.

U<sub>e</sub> = switching voltage      I<sub>e</sub> = max. switching current per contact

Σ I<sub>e</sub> = max. switching current on all safety contacts (cumulative current)