

13 Technical data

Table 13.1: Safety-relevant technical data

Category acc. to EN ISO 13849-1: 2009	4
Performance Level (PL) in accordance with EN ISO 13849-1: 2008	PL e
Category in accordance with EN ISO 13849-1	category 2
Probability of a dangerous failure per hour (PFH _b)	2.0 x 10 ⁻⁸
Mean time to dangerous failure (MTTF _d)	73 years
Service life (T _M)	20 years
B10 _d	DC 13: 10.0 million switching cycles AC 15: 1.4 million switching cycles
Stop category acc. to EN/IEC 60204-1	Stop 0

Table 13.2: Electrical data, protection rating, environment

Operating voltage U _B	24 V AC/DC, ±20%
Power consumption	3 W
External safeguarding for supply circuit	200 mA delay-action
Output contacts	3 normal open contacts, 1 normal closed contact (Ag alloy)
Switching capacity of the contacts acc. to EN/IEC 60947-5-1	AC-15: 230 V / 5 A 1.6x10 ⁵ switching cycles DC-13: 24 V / 3 A 1.3x10 ⁵ switching cycles
Max. continuous current per current path	3 A
Ext. contact fuse protection per current path	5 A quick-action or 3.15 A delay-action
Max. switching frequency	3600 switching cycles/h
Mechanical life time	10 million switching cycles
Pickup delay, manual start	30 ms
Pickup delay, automatic start	300 ms
Regression delay, response time	10 ms
Max. test pulse acceptance	1 ms
Time window for signal sequence monitoring	20 ms
Control voltage/current on S12, S22, S31	24 V DC / 40 mA
Max. input current	100 mA
Admissible input line resistance	< 30 Ω
Operating temperature	0° ... +55°C
Storage temperature	- 25° ... +70°C
Overvoltage category in accordance with VDE 0110 part 1	III for rating voltage 300 V AC

Dirt level	2
Interference emission	EN 55011, DIN EN 61000-6-3
Interference rejection	EN 61496-1: 2005 type 4
Protection class	Housing IP 40 Terminals IP 20
Permissible wire gauge screw terminals	0.2...2.5 mm ² (AWG 24-12)
Permissible wire gauge spring-cage terminals	0.2...1.5 mm ² (AWG 24-16)
Dimensions (H x W x D)	see chapter 13.1 „Dimensions“
Weight	170 g

13.1 Dimensions

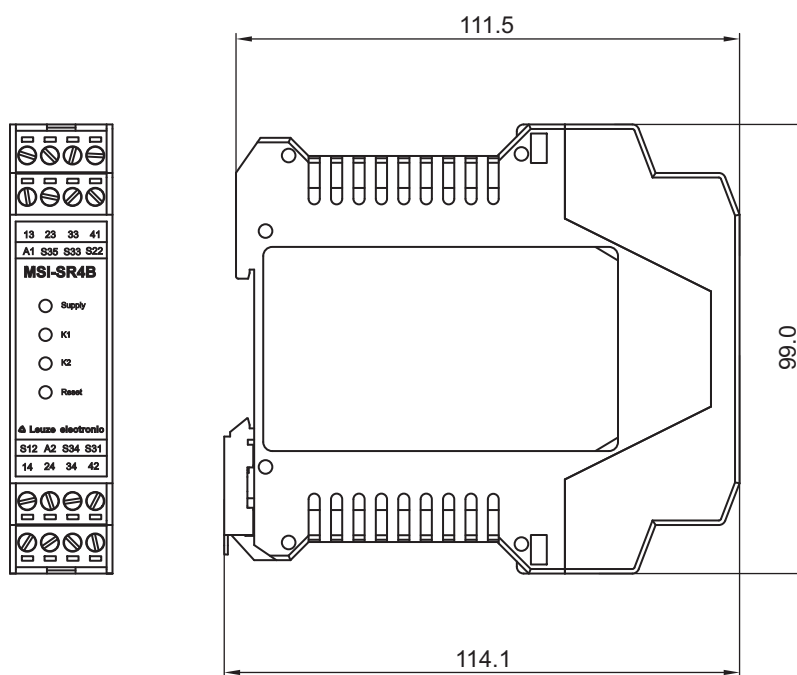


Figure 13.1: Dimensions MSI-SR4B-01