Safety relays - PSR-MC20-3NO-1DO-24DC-SC - 2700466

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Safety relay for emergency stop and safety doors up to SILCL 1, Cat. 1, PL c, depending on the application up to SILCL 3, Cat. 4, PL e, 1-channel operation, automatic/manual start, 3 enabling current paths, U_S = 24 V DC, plug-in screw terminal block

Why buy this product

- Up to Cat. 1/PL c according to ISO 13849-1, SILCL 1 according to IEC 62061
- Depending on the application, up to Cat. 4/PL e according to ISO 13849-1, SILCL 3 according to IEC 62061
- Low housing width of just 12.5 mm
- Single-channel control
- 3 enabling current paths, 1 digital signal output
- Manually monitored and automatic activation in a single device

Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 912730
GTIN	4046356912730
Weight per Piece (excluding packing)	177.400 g
Custom tariff number	85371099
Country of origin	Germany
Note	Made to Order (non-returnable)

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area

Dimensions

Width	12.5 mm
Height	112.2 mm

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Depth	114.5 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 55 °C (observe derating)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	75 % (on average, 85% infrequently, non-condensing)
Max. permissible humidity (storage/transport)	75 % (on average, 85% infrequently, non-condensing)
Shock	15g
Vibration (operation)	10 Hz ...150 Hz, 2g
Maximum altitude	≤ 2000 m (Above sea level)

Input data

Rated control circuit supply voltage U_S	24 V DC -15 % / +10 %
Power consumption at U_S	typ. 1.92 W
Rated control supply current I_S	typ. 80 mA
Inrush current	5 A (Δt = 200 µs at U_s)
Current consumption	< 5 mA (with U_s/I_x to S12)
	< 10 mA (with U_s/I_x to S34)
	> -5 mA (with U_s/I_x to S34)
Voltage at input/start and feedback circuit	24 V DC -15 % / +10 %
Typical response time	< 175 ms (automatic start)
	< 175 ms (manual, monitored start)
Typ. starting time with U_s	< 250 ms (when controlled via A1)
Typical release time	< 20 ms (when controlled via A1 or S12)
Recovery time	< 500 ms
Status display	3 x green LED
Maximum switching frequency	0.5 Hz
Max. permissible overall conductor resistance	150 Ω
Filter time	1 ms (at A1 in the event of voltage dips at U_s)
	max. 1.5 ms (at S12; test pulse width)
	min. 7.5 ms (at S12; test pulse rate)
	Test pulse rate = 5 x Test pulse width

Output data

Contact type	3 enabling current paths
Contact material	$AgSnO_2$
Minimum switching voltage	12 V AC/DC
Maximum switching voltage	250 V AC/DC (Observe the load curve)
Limiting continuous current	6 A (observe derating)
Inrush current, minimum	3 mA
Maximum inrush current	6 A
Sq. Total current	48 A^2 (observe derating)