Coupling relay - PSR-PS40-1NO-1DO-24DC-SC - 2700398

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Coupling relay for SIL 3 high- and low-demand applications, couples digital output signals to the I/O, 1 enabling current path, 1 digital signal output, safe state off applications, test pulse filter, fixed screw terminal block

Your advantages

- Up to SIL 3 according to IEC 61508
- Forcibly guided contacts according to EN 50205
- Easy proof test according to IEC 61508 thanks to integrated signal contact
- Approved for Class I, Zone 2 applications
- Low housing width of just 6.8 mm
- Self-regulation with device-internal lock
- Manually monitored and automatic activation in a single device
- Long service life thanks to filtering of controller test pulses
- 1 enabling current path, 1 digital signal output
- Couples digital output signals from failsafe controllers to I/O devices (valves, etc.) for electrical isolation and power adaptation

Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 912884
GTIN	4046356912884
Weight per Piece (excluding packing)	69.660 g
Custom tariff number	85364900
Country of origin	Germany

Technical data

Note

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

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Technical data

Dimensions

Width	6.8 mm
Height	93.1 mm
Depth	102.5 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °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)
Maximum altitude	≤ 2000 m (Above sea level)

Power supply

Rated control circuit supply voltage U_S	24 V DC -15 % / +10 % (A1/A2)
	20.4 V DC ... 26.4 V DC
Rated control supply current I_S	typ. 50 mA (depending on load M1 +100 mA)
Power consumption at U_S	typ. 1.2 W
Inrush current	typ. 400 mA (Δt < 10 µs at U_s)
Filter time	max. 2 ms (at A1-A2; test pulse width)
	≥ 100 ms (at A1-A2; test pulse rate)
Protective circuit	Serial protection against polarity reversal 33 V suppressor diode

Digital inputs

Input name	Start circuit
Number of inputs	2 (Non-safety-related start inputs: Y1/Y2)
Inrush current	< 10 mA
Current consumption	< 5 mA
Voltage at input/start and feedback circuit	24 V DC -15 % / +10 %
Max. permissible overall conductor resistance	150 Ω

Relay outputs: enabling current path

Output name	Enabling current path
Output description	2 N/O contacts in series, without delay, floating
Number of outputs	1 (safety-related N/O contacts: 13/14)
Contact type	1 enabling current path
Contact material	$AgSnO_2$
Switching voltage	min. 12 V AC/DC
	max. 250 V AC/DC (Observe the load curve)
Limiting continuous current	6 A (High demand)
	4 A (Low demand)
Inrush current	min. 3 mA
	max. 6 A
Sq. Total current	36 A^2 (observe derating)