

Coupling relay - PSR-PC20-1NO-1NC-24DC-SP - 2700578

Technical data

Relay outputs: enabling current path

Sq. Total current	36 A ² (13/14, see to derating)
	16 A ² (13F/14, see to derating)
Switching capacity	min. 60 mW
Switching frequency	max. 0.5 Hz
Mechanical service life	10x 10 ⁶ cycles
Switching capacity according to IEC 60947-5-1	4 A (24 V (DC13); N/O contact 13/14)
	5 A (250 V (AC15); N/O contact 13/14)
	4 A (250 V (AC15); N/O contact 13F/14)
Output fuse	6 A gL/gG (N/O contact 13/14)
	4 A gL/gG (for low-demand applications)

Relay outputs: return current/signaling current path

Output name	Confirmation current path
Output description	2 N/C contacts in series, without delay, not floating (reference ground: A2)
Number of outputs	1 (safety-related N/C contacts: 31/32)
Contact type	1 confirmation current path
Contact material	AgCuNi, + Au
Switching voltage	min. 20.4 V DC
	max. 26.4 V DC
Limiting continuous current	100 mA
Inrush current	min. 1 mA
	max. 100 mA
Switching capacity	min. 20 mW
Switching frequency	max. 0.5 Hz
Mechanical service life	10x 10 ⁶ cycles
Output fuse	150 mA Fast-blow

Alarm outputs

Designation	M1
Output description	PNP
Number of outputs	1 (non-safety-related)
Voltage	approx. 22 V DC (U _D - 2 V)
Current	max. 100 mA
Maximum inrush current	500 mA (Δt = 1 ms at U _s)
Short-circuit protection	no
Output fuse	150 mA fast blow

Times

Typical pickup time at US	< 100 ms (with U _s when controlled via A1)
Typical release time at US	< 35 ms (when controlled via A1)
Recovery time	500 ms

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General

Relay type	Electromechanical relay with forcibly guided contacts in accordance with IEC/EN 61810-3 (EN 50205)
Nominal operating mode	100% operating factor
Net weight	182.1 g
Mounting position	vertical, horizontal, with front of module upward
Mounting type	DIN rail mounting
Assembly instructions	See derating curve
Degree of protection	IP20
Min. degree of protection of inst. location	IP54
Housing material	PBT
Housing color	yellow
Operating voltage display	1 x yellow LED
Status display	1 x green LED
Indication	1 x red LED

Connection capacity

Connection method	Push-in spring connection
pluggable	Yes
Conductor cross section solid	0.2 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross section AWG / kcmil	24 ... 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1.5 mm ² (only together with CRIMPFOX 6)
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 1.5 mm ² (only together with CRIMPFOX 6)
Stripping length	8 mm

Safety-related characteristic data

Stop category	0
Designation	IEC 61508 - High demand
Safety Integrity Level (SIL)	3
Designation	IEC 61508 - Low demand
Safety Integrity Level (SIL)	3
Designation	EN 50156
Safety Integrity Level (SIL)	3

Standards and Regulations

Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	DIN EN 50178, EN 60079-15
Rated insulation voltage	250 V AC
Rated surge voltage/insulation	Safe isolation, 6 kV reinforced insulation from control circuit, start circuit, confirmation current path, signal output to the enabling current path; 4 kV/basic insulation between all current paths and housing
Degree of pollution	2
Overvoltage category	III