

Safety relays - PSR-MC37-3NO-1NC-24DC-SC - 2702411

Technical data

Digital inputs

Max. permissible overall conductor resistance	150 Ω
Protective circuit/component	Suppressor diode

Relay outputs: enabling current path

Output name	Enabling current path
	13/14, 23/24, 33/34
Output description	safety-related N/O contacts
Number of outputs	3 (undelayed)
Contact type	3 enabling current paths
Contact material	AgSnO ₂
Switching voltage	min. 5 V AC/DC
	max. 250 V AC/DC (Observe the load curve)
Limiting continuous current	6 A (observe derating)
Inrush current	min. 10 mA
	max. 6 A
Sq. Total current	72 A ² (observe derating)
Switching capacity	min. 50 mW
Switching frequency	0.5 Hz
Interrupting rating (ohmic load) max.	1500 VA (250 V AC, τ = 0 ms)
	For additional values, see load curve
Maximum interrupting rating (inductive load)	48 W (24 V DC, τ = 40 ms)
	40 W (48 V DC, τ = 40 ms)
	36 W (60 V DC, τ = 40 ms)
	35 W (110 V DC, τ = 40 ms)
	33 W (220 V DC, τ = 40 ms)
	1500 VA (250 V AC, τ = 40 ms)
Mechanical service life	10x 10 ⁶ cycles
Switching capacity according to IEC 60947-5-1	5 A (24 V (DC13))
	5 A (250 V (AC15))
Output fuse	6 A gL/gG (N/O contact)

Relay outputs: return current/signaling current path

Output name	Signaling current path
Output description	non-safety-related N/C contact
Number of outputs	1 (undelayed)
Contact type	1 signaling current path
Contact material	AgSnO ₂
Switching voltage	min. 5 V AC/DC
	max. 250 V AC/DC
Limiting continuous current	1 A
Inrush current	min. 10 mA

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Relay outputs: return current/signaling current path

	max. 6 A ($\Delta t = 100 \text{ ms}$)
Sq. Total current	1 A ²
Switching capacity	min. 50 mW
Switching frequency	0.5 Hz
Mechanical service life	10x 10 ⁶ cycles
Output fuse	1 A gL/gG

Alarm outputs

Designation	Y32
Output description	non-safety-related
Number of outputs	1 (digital)
Voltage	23 V DC ($U_s - 1 \text{ V}$)
Current	max. 100 mA
Maximum inrush current	1 A ($\Delta t = 5 \text{ ms}$ at U_s)
Short-circuit protection	Yes

Times

Typical pickup time at US	< 100 ms (when controlled via A1)
Typical response time at US	< 100 ms (automatic start)
Typical release time at US	< 20 ms (when controlled via A1 or S12)
Restart time	< 1 s (Boot time)
Recovery time	< 500 ms

General

Relay type	Electromechanical relay with forcibly guided contacts in accordance with EN 50205
Nominal operating mode	100% operating factor
Net weight	183.88 g
Mounting position	vertical or horizontal
Mounting type	DIN rail mounting
Assembly instructions	See derating curve
Degree of protection	IP20
Min. degree of protection of inst. location	IP54
Housing color	yellow
Operating voltage display	1 x green LED
Status display	3 x green LED

Connection data

Connection method	Screw connection
pluggable	Yes
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section flexible min.	0.2 mm ²