

## Safety relays - PSR-SCP- 24DC/ESD/5X1/1X2/300 - 2981428

### Technical data

#### Output data

Maximum switching voltage	250 V AC/DC (Observe the load curve)
Limiting continuous current	6 A (N/O contact, pay attention to the derating)
	6 A (N/C contact)
Inrush current, minimum	10 mA
Maximum inrush current	20 A ( $\Delta t$ # 100 ms, undelayed contacts)
	8 A (delayed contacts)
Sq. Total current	55 A <sup>2</sup> (observe derating)
Interrupting rating (ohmic load) max.	144 W (24 V DC, $\tau = 0$ ms)
	288 W (48 V DC, $\tau = 0$ ms)
	110 W (110 V DC, $\tau = 0$ ms, delayed contacts: 77 W)
	88 W (220 V DC, $\tau = 0$ ms)
	1500 VA (250 V AC, $\tau = 0$ ms, delayed contacts: 2000 VA)
Maximum interrupting rating (inductive load)	42 W (24 V DC, $\tau = 40$ ms, delayed contacts: 48 W)
	42 W (48 V DC, $\tau = 40$ ms, delayed contacts: 40 W)
	42 W (110 V DC, $\tau = 40$ ms, delayed contacts: 35 W)
	42 W (220 V DC, $\tau = 40$ ms, delayed contacts: 33 W)
Switching capacity min.	50 mW
Output fuse	10 A gL/gG (N/O contact)
	6 A gL/gG (N/C contact)

#### General

Relay type	Electromechanical relay with forcibly guided contacts in accordance with EN 50205
Mechanical service life	10 x 10 <sup>6</sup> cycles
Nominal operating mode	100% operating factor
Net weight	430 g
Mounting type	DIN rail mounting
Mounting position	any
Degree of protection	IP54
	IP20
Min. degree of protection of inst. location	IP54
Control	one and two channel
Housing material	PBT
Housing color	yellow

#### Connection data

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

# Safety relays - PSR-SCP- 24DC/ESD/5X1/1X2/300 - 2981428

## Technical data

### Connection data

Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Stripping length	7 mm
Screw thread	M3

### Safety-related characteristic data

Stop category	0
	1
Designation	IEC 61508 - High demand
Safety Integrity Level (SIL)	3 (for delayed contacts SIL 2)
Designation	IEC 61508 - Low demand
Safety Integrity Level (SIL)	3 (for delayed contacts SIL 2)
Designation	EN ISO 13849
Performance level (PL)	e (for delayed contacts PL d)
Category	4 (Undelayed contacts)
Designation	EN 62061
Safety Integrity Level Claim Limit (SIL CL)	3 (for delayed contacts SILCL 2)

### Standards and Regulations

Shock	15g
Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	DIN EN 50178/VDE 0160
Rated insulation voltage	250 V AC
Rated surge voltage/insulation	Basic insulation 4 kV: between all current paths and housing Safe isolation, reinforced insulation 6 kV: between 13/14, 23/24, 33/34, and the remaining current paths between 13/14, 23/24, 33/34 among one another
Degree of pollution	2
Overvoltage category	III
Vibration (operation)	10 Hz ... 150 Hz, 2g
Conformance	CE-compliant

### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings