

Coupling relay - PSR-SCP- 24UC/URM/5X1/2X2 - 2963747

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Safe coupling relay with force-guided contacts, 5 N/O contacts, 2 N/C contacts, 1-channel, plug-in screw terminal block, width: 22.5 mm

Why buy this product

- Suitable up to category 1, PL c (EN ISO 13849-1), SILCL 1 (EN 62061), SIL 1 (IEC 61508)
- Safe readback due to force-guided signal contact in accordance with EN 50205
- Easy proof test according to IEC 61508 thanks to integrated signal contact
- One or two-channel activation
- 5 enabling current paths, 2 confirmation current paths



Key Commercial Data

Packing unit	1 STK
GTIN	 4 017918 482145
GTIN	4017918482145
Weight per Piece (excluding packing)	175.000 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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Dimensions

Width	22.5 mm
Height	114.5 mm
Depth	99 mm

Ambient conditions

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Ambient conditions

Ambient temperature (operation)	-20 °C ... 55 °C
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	max. 2000 m (Above sea level)

Input data

Rated control circuit supply voltage U_s	24 V AC/DC -15 % / +10 %
Rated control supply current I_s	typ. 47 mA
Power consumption at U_s	typ. 1.2 W
Inrush current	typ. 350 mA DC ($\Delta t < 1 \mu s$ at U_s)
	typ. 350 mA AC ($\Delta t = 2 ms$ at U_s)
Typ. starting time with U_s	typ. 20 ms (when controlled via A1)
Typical release time	typ. 20 ms (when controlled via A1)
Recovery time	< 500 ms
Operating voltage display	1 x green LED
Protective circuit	Surge protection Varistor
Maximum switching frequency	0.5 Hz

Output data

Contact type	5 enabling current paths
	2 confirmation current paths
Contact material	AgSnO ₂
Maximum switching voltage	230 V AC/DC (Observe the load curve)
Minimum switching voltage	5 V AC/DC
Limiting continuous current	6 A (N/O contact)
	3 A (N/C contact)
Maximum inrush current	6 A
Inrush current, minimum	10 mA
Sq. Total current	72 A ²
Interrupting rating (ohmic load) max.	144 W (N/O contact, 24 V DC, $\tau = 0 ms$)
	288 W (N/O contact, 48 V DC, $\tau = 0 ms$)
	240 W (N/O contact, 60 V DC, $\tau = 0 ms$)
	110 W (N/O contact, 110 V DC, $\tau = 0 ms$)
	88 W (N/O contact, 220 V DC, $\tau = 0 ms$)
	1380 VA (N/O contact, 230 V AC, $\tau = 0 ms$)
Maximum interrupting rating (inductive load)	42 W (N/O contact, 24 V DC, $\tau = 40 ms$)
	42 W (N/O contact, 48 V DC, $\tau = 40 ms$)
	42 W (N/O contact, 60 V DC, $\tau = 40 ms$)
	42 W (N/O contact, 110 V DC, $\tau = 40 ms$)
	42 W (N/O contact, 220 V DC, $\tau = 40 ms$)

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Output data

Switching capacity	min. 50 mW
Mechanical service life	10x 10 ⁶ cycles
Switching capacity (360/h cycles)	4 A (24 V (DC13))
	4 A (250 V (AC15))
Switching capacity according to IEC 60947-5-1	3 A (24 V (DC13))
	3 A (250 V (AC15))
Output fuse	10 A gL/gG (N/O contact)
	4 A gL/gG (N/O contact, for low-demand applications)
	6 A gL/gG (N/C contact)

General

Relay type	Electromechanical relay with forcibly guided contacts in accordance with EN 50205
Nominal operating mode	100% operating factor
Net weight	175 g
Mounting position	vertical or horizontal
Mounting type	DIN rail mounting
Degree of protection	IP20
	IP54
Min. degree of protection of inst. location	IP54
Housing material	PBT
Housing color	yellow

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
Conductor cross section flexible max.	2.5 mm ²
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
Designation	IEC 61508 - High demand
Safety Integrity Level (SIL)	1
Designation	IEC 61508 - Low demand
Safety Integrity Level (SIL)	1
Designation	EN ISO 13849

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Technical data

Safety-related characteristic data

Performance level (PL)	c
Category	1
Safety Integrity Level Claim Limit (SIL CL)	1

Standards and Regulations

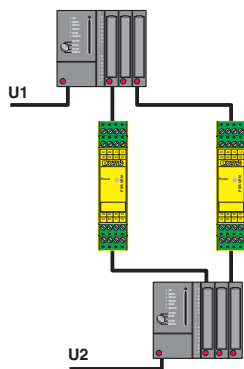
Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	DIN EN 50178
Rated insulation voltage	250 V
Rated surge voltage/insulation	Safe isolation 4 kV between all current paths and housing
Degree of pollution	2
Overvoltage category	II
Shock	15g (In the event of stress caused by shock, contact reactions are possible for up to 2 ms.)
Vibration (operation)	10 Hz ...150 Hz, 2g (In the event of stress caused by vibration, contact reactions are possible for up to 1 ms.)
Conformance	CE-compliant

Environmental Product Compliance

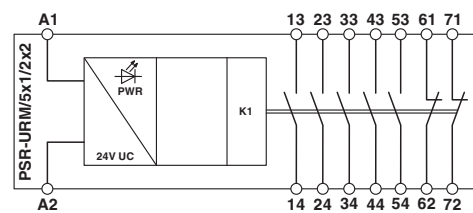
REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Application drawing



Block diagram



Reliable signal exchange between two systems with confirmation function.

Approvals

Approvals

Coupling relay - PSR-SCP- 24UC/URM/5X1/2X2 - 2963747

Approvals

Approvals

UL Listed / cUL Listed / EAC / EAC / cULus Listed

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140324
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cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140324
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EAC			EAC-Zulassung
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EAC			RU C- DE.A*30.B.01082
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cULus Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	
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