

## Coupling relay - PSR-SCF- 24UC/URM/2X21 - 2981363

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Safe coupling relay with force-guided contacts, 2 changeover contacts, 1-channel, fixed screw terminal block, width: 17.5 mm

### Your advantages

- 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
- 2 changeover contacts (EN 50205 type B)



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 946906
GTIN	4017918946906
Weight per Piece (excluding packing)	61.640 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
-------------------------	---

#### Dimensions

Width	17.5 mm
Height	75 mm

## Coupling relay - PSR-SCF- 24UC/URM/2X21 - 2981363

### Technical data

#### Dimensions

Depth	60.5 mm
-------	---------

#### Ambient conditions

Ambient temperature (operation)	-20 °C ... 50 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °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)

#### Input data

Rated control circuit supply voltage $U_s$	24 V AC/DC -15 % / +10 %
Rated control supply current $I_s$	typ. 30 mA
Power consumption at $U_s$	typ. 0.72 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. 10 ms
Typical release time	typ. 10 ms
Recovery time	< 500 ms
Operating voltage display	1 x yellow LED
Maximum switching frequency	0.5 Hz
Filter time	max. 1.5 ms (at S12; test pulse width) 7.5 ms (at S12; test pulse rate) Test pulse rate = 5 x Test pulse width

#### Output data

Contact type	2 PDT
Contact material	AgNi
Maximum switching voltage	230 V AC/DC (Observe the load curve)
Minimum switching voltage	5 V AC/DC
Limiting continuous current	5 A (N/O contact) 3.5 A (N/C contact)
Maximum inrush current	6 A
Inrush current, minimum	10 mA
Sq. Total current	50 A <sup>2</sup>
Interrupting rating (ohmic load) max.	144 W (N/O contact, 24 V DC, $\tau = 0 ms$ ) 288 W (N/O contact, 48 V DC, $\tau = 0 ms$ ) 88 W (N/O contact, 110 V DC, $\tau = 0 ms$ ) 110 W (N/O contact, 220 V DC, $\tau = 0 ms$ )

## Coupling relay - PSR-SCF- 24UC/URM/2X21 - 2981363

### Technical data

#### Output data

	1500 VA (N/O contact, 230 V AC, $\tau = 0$ ms)
Switching capacity	min. 50 mW
Mechanical service life	10x 10 <sup>6</sup> cycles
Switching capacity according to IEC 60947-5-1	3 A (24 V (DC13))
	3 A (250 V (AC15))
Output fuse	6 A gL/gG (N/O contact)
	4 A gL/gG (N/O contact, for low-demand applications)
	4 A gL/gG (N/C contact)

#### 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	61.82 g
Mounting position	vertical or horizontal
Mounting type	DIN rail mounting
Degree of protection	IP20
Min. degree of protection of inst. location	IP54
Housing material	PBT
Housing color	green

#### Connection data

Connection method	Screw connection
pluggable	no
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>
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

## Coupling relay - PSR-SCF- 24UC/URM/2X21 - 2981363

### Technical data

#### Safety-related characteristic data

Designation	EN ISO 13849
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
	250 V
Rated surge voltage/insulation	4 kV/basic insulation (safe isolation, reinforced insulation, and 6 kV between logic and signaling current paths).
Degree of pollution	2
Overvoltage category	III
Shock	N/O contact: 10g, N/C contact: 5g (In the event of stress caused by shock, contact reactions are possible for up to 1 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

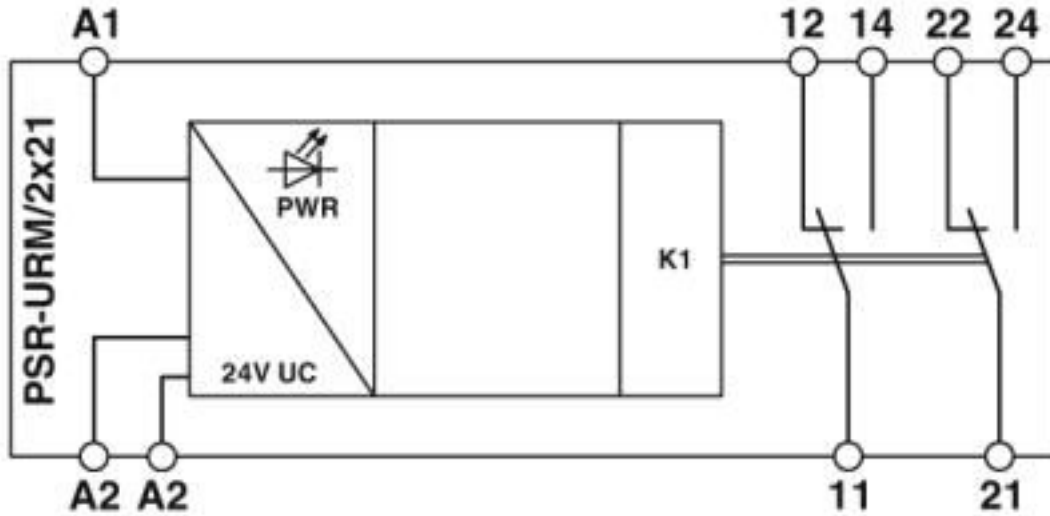
#### Environmental Product Compliance

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

### Drawings

# Coupling relay - PSR-SCF- 24UC/URM/2X21 - 2981363

Block diagram



## Classifications

eCl@ss

eCl@ss 10.0.1	27371601
eCl@ss 4.0	27371100
eCl@ss 4.1	27371100
eCl@ss 5.0	27371600
eCl@ss 5.1	27371600
eCl@ss 6.0	27371600
eCl@ss 7.0	27371601
eCl@ss 8.0	27371601
eCl@ss 9.0	27371601

## ETIM

ETIM 2.0	EC001449
ETIM 3.0	EC001449
ETIM 4.0	EC001449
ETIM 5.0	EC001437
ETIM 6.0	EC001437
ETIM 7.0	EC001437

## UNSPSC

UNSPSC 6.01	30211901
UNSPSC 7.0901	39121501
UNSPSC 11	39121501

# Coupling relay - PSR-SCF- 24UC/URM/2X21 - 2981363

## Classifications

### UNSPSC

UNSPSC 12.01	39121501
UNSPSC 13.2	39121501
UNSPSC 18.0	39122334
UNSPSC 19.0	39122334
UNSPSC 20.0	39122334
UNSPSC 21.0	39122334

## Approvals

### Approvals

#### Approvals

Functional Safety / UL Listed / cUL Listed / EAC / EAC / cULus Listed

#### Ex Approvals

### Approval details

Functional Safety			968/EL 649.01/15
UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
EAC			EAC-Zulassung
EAC			RU C- DE.A*30.B.01082

## Coupling relay - PSR-SCF- 24UC/URM/2X21 - 2981363

### Approvals

cULus Listed

