

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



2981363

<https://www.phoenixcontact.com/sk/products/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 documentation. Our general terms of use for downloads are valid.



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), SIL 1 (EN IEC 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
- 1 or 2-channel control
- 2 changeover contacts (EN 50205 type B)

Commercial data

Item number	2981363
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	DNA
Product key	DNA162
Catalog page	Page 247 (C-6-2019)
GTIN	4017918946906
Weight per piece (including packing)	61.49 g
Weight per piece (excluding packing)	56.667 g
Customs tariff number	85364900
Country of origin	DE

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



2981363

<https://www.phoenixcontact.com/sk/products/2981363>

Technical data

Product properties

Product type	Coupling relay
Product family	PSRclassic
Application	Safe switch off
	High demand
	Low demand
Mechanical service life	10x 10 ⁶ cycles
Relay type	Electromechanical relay with force-guided contacts in accordance with IEC/EN 61810-3

Times

Restart time	< 1 s (Boot time)
Recovery time	< 500 ms

Electrical properties

Maximum power dissipation for nominal condition	5.87 W (at $U_B = 26.4$ V DC, $U_S = 24$ V, $I_S = 30$ mA, $n = 1$, $I_L^2 = 50$ A ² , $R_{\text{contact}} = 0.1 \Omega$ IEC 60950)
Nominal operating mode	100% operating factor

Air clearances and creepage distances between the power circuits

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).

Input data

General

Rated control circuit supply voltage U_S	24 V AC/DC -15 % / +10 %
Power consumption at U_S	typ. 0.72 W
Rated control supply current I_S	typ. 30 mA
Input voltage range	20.4 V AC/DC ... 26.4 V AC/DC
Typ. starting time with U_S	typ. 10 ms
Typical release time	typ. 10 ms
Recovery time	< 500 ms
Maximum switching frequency	0.5 Hz
Operating voltage display	1 x yellow LED

Output data

Contact switching type	2 changeover contacts
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)

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



2981363

<https://www.phoenixcontact.com/sk/products/2981363>

	3.5 A (N/C contact)
Maximum inrush current	6 A
Inrush current, minimum	10 mA
Sq. Total current	50 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)
	88 W (N/O contact, 110 V DC, $\tau = 0$ ms)
	110 W (N/O contact, 220 V DC, $\tau = 0$ ms)
	1500 VA (N/O contact, 230 V AC, $\tau = 0$ ms)
Switching capacity	min. 50 mW
Switching capacity in accordance with IEC 60947-5-1	3 A (24 V (DC13))
	3 A (230 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)

Connection data

Connection technology

pluggable	no
-----------	----

Conductor connection

Connection method	Screw connection
Conductor cross section rigid	0.2 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross-section AWG	24 ... 12
Stripping length	7 mm
Screw thread	M3
Tightening torque	0.6 Nm

Signaling

Operating voltage display	1 x yellow LED
---------------------------	----------------

Dimensions

Width	17.5 mm
Height	75 mm
Depth	60.5 mm

Material specifications

Housing material	PBT
------------------	-----

Characteristics

Safety data

Stop category	0
---------------	---

Safety data: EN ISO 13849

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



2981363

<https://www.phoenixcontact.com/sk/products/2981363>

Category	1
Performance level (PL)	c
Safety data: IEC 61508 - High demand	
Safety Integrity Level (SIL)	1
Safety data: IEC 61508 - Low demand	
Safety Integrity Level (SIL)	1
Safety data	
Safety Integrity Level (SIL)	1

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Min. degree of protection of inst. location	IP54
Ambient temperature (operation)	-20 °C ... 50 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C
Maximum altitude	≤ 2000 m (Above sea level)
Max. permissible humidity (storage/transport)	75 % (on average, 85% infrequently, non-condensing)
Max. permissible relative humidity (operation)	75 % (on average, 85% infrequently, non-condensing)
Shock	N/O contact: 10g, N/C contact: 5g
Vibration (operation)	10 Hz ... 150 Hz, 2g

Approvals

CE

Certificate	CE-compliant
-------------	--------------

Standards and regulations

Air clearances and creepage distances between the power circuits

Standards/regulations	DIN EN 60947-1
-----------------------	----------------

Mounting

Mounting type	DIN rail mounting
Mounting position	vertical or horizontal
Connection method	Screw connection

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

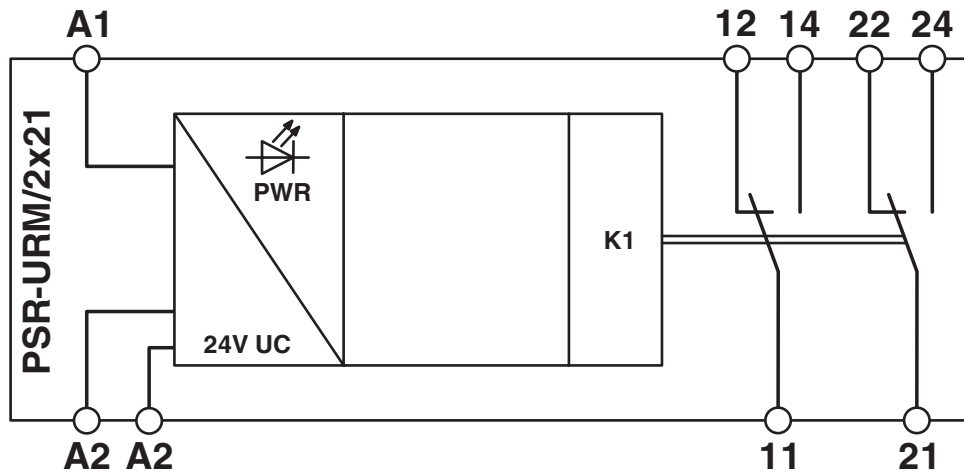


2981363

<https://www.phoenixcontact.com/sk/products/2981363>

Drawings

Block diagram



Block diagram

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



2981363

<https://www.phoenixcontact.com/sk/products/2981363>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/sk/products/2981363>



EAC

Approval ID: TR_TS_D_00573_c



UL Listed

Approval ID: FILE E 140324



cUL Listed

Approval ID: FILE E 140324



Functional Safety

Approval ID: 44-780-15124312



Functional Safety

Approval ID: 44-205-15124312

cULus Listed

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



2981363

<https://www.phoenixcontact.com/sk/products/2981363>

Classifications

ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

ETIM

ETIM 8.0	EC001437
----------	----------

UNSPSC

UNSPSC 21.0	39122300
-------------	----------

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



2981363

<https://www.phoenixcontact.com/sk/products/2981363>

Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT s.r.o.

Námestie Mateja Korvína 1

811 07 Bratislava

+421 2 3210 1470

obchod.sk@phoenixcontact.com