

PSR-MC82-5NO-1NC-1DO-24DC-SP - Extension module



2702383

<https://www.phoenixcontact.com/gb/products/2702383>

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.



Contact extension up to SIL 3, Cat. 4, PL e in conjunction with suitable evaluation device, 5 enabling current paths, $U_S = 24 \text{ V DC}$, pluggable Push-in terminal block

Your advantages

- Up to Cat. 4/PL e in accordance with ISO 13849-1, SIL 3 in accordance with EN IEC 62061 in conjunction with suitable evaluation device
- Low housing width of just 17.5 mm
- 1- and 2-channel control
- 5 enabling current paths, 1 confirmation current path, 1 digital signal output
- Automatic activation

Commercial data

Item number	2702383
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DNA181
Product key	DNA181
Catalog page	Page 228 (C-6-2019)
GTIN	4055626145488
Weight per piece (including packing)	215.2 g
Weight per piece (excluding packing)	210.1 g
Customs tariff number	85371098
Country of origin	DE

PSR-MC82-5NO-1NC-1DO-24DC-SP - Extension module



2702383

<https://www.phoenixcontact.com/gb/products/2702383>

Technical data

Product properties

Product type	Safety relays
Product family	PSRmini
Application	Extension module
Relay type	Electromechanical relay with force-guided contacts in accordance with IEC/EN 61810-3

Times

Typical response time	< 50 ms (Monitored/manual and auto-start)
Typ. starting time with U_S	< 50 ms (when controlled via A1/A2)
Typical release time	< 25 ms (when controlled via A1/A2)
Recovery time	< 100 ms

Electrical properties

Maximum power dissipation for nominal condition	15.2 W (at $U_S = 30$ V, $I_L^2 = 64$ A ²)
Nominal operating mode	100% operating factor

Air clearances and creepage distances between the power circuits

Rated insulation voltage	250 V AC
	250 V AC

Supply

Designation	A1/A2
Rated control circuit supply voltage U_S	19.2 V DC ... 30 V DC
Rated control circuit supply voltage U_S	24 V DC -20 % / +25 %
Rated control supply current I_S	typ. 80 mA
Power consumption at U_S	typ. 1.92 W
Inrush current	typ. 125 mA ($\Delta t = 7$ ms at U_S)
Filter time	4 ms (at A1 in the event of voltage dips at U_S)
	max. 1 ms (at A1/A2, test pulse width, blanking pulses/dark test)
	5 ms (at A1/A2, test pulse rate, blanking pulses/dark test)
	Where test pulse width < 1 ms: test pulse rate = 5 x test pulse width
	max. 1 ms (at A1/A2, test pulse width, switch-on pulses/light test)
	10 ms (at A1/A2; test pulse rate; switch-on pulses/light test)
	Deactivate the switch-on pulses for safety applications.
Protective circuit	Surge protection; Suppressor diode
	Reverse polarity protection; Universal diode

Output data

Relay: Enabling current paths (23/24 ... 63/64)

Output description	safety-related N/O contacts
Number of outputs	5 (undelayed)

PSR-MC82-5NO-1NC-1DO-24DC-SP - Extension module



2702383

<https://www.phoenixcontact.com/gb/products/2702383>

Contact switching type	5 enabling current paths
Contact material	AgSnO ₂
Switching voltage	min. 5 V AC/DC
	max. 24 V DC (Enabling current path 23/24)
	max. 250 V AC/DC (all other enabling current paths, observe load curve)
Switching capacity	min. 50 mW (5 V / 10 mA)
Inrush current	min. 10 mA
	max. 20 A (≤ 100 ms)
Switching capacity in accordance with IEC 60947-5-1	3 A (24 V (DC13))
	3 A (250 V (AC15))
Limiting continuous current	6 A (observe derating)
Sq. Total current	64 A ² (observe derating)
Switching frequency	max. 0.5 Hz
Mechanical service life	10x 10 ⁶ cycles
Output fuse	10 A gL/gG
	6 A gL/gG (for low-demand applications)

Relay: Confirmation current path (11/12)

Output description	Safety-related N/C contacts
Number of outputs	1 (undelayed)
Contact switching type	1 confirmation current path
Contact material	AgSnO
Switching voltage	min. 5 V AC/DC
	max. 24 V DC
Switching capacity	min. 50 mW
Inrush current	min. 10 mA
	max. 100 mA
Limiting continuous current	100 mA
Switching frequency	max. 0.5 Hz
Mechanical service life	10x 10 ⁶ cycles
Output fuse	1 A gL/gG

Signal: M1

Output description	non-safety-related
Number of outputs	1 (digital, PNP)
Voltage	typ. 23 V DC (U _S - 1 V)
Current	max. 100 mA
Maximum inrush current	500 mA (Δt = 1 ms at U _S)
Short-circuit protection	Yes

Connection data

Connection technology

pluggable	yes
-----------	-----

PSR-MC82-5NO-1NC-1DO-24DC-SP - Extension module



2702383

<https://www.phoenixcontact.com/gb/products/2702383>

Conductor connection

Connection method	Push-in connection
Conductor cross section rigid	0.2 mm² ... 1.5 mm²
Conductor cross section flexible	0.2 mm² ... 1.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 1.5 mm² (only together with CRIMPFOX 6)
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 1.5 mm² (only together with CRIMPFOX 6)
Conductor cross-section AWG	24 ... 16
Stripping length	8 mm

Signaling

Status display	2 x green LEDs
----------------	----------------

Dimensions

Width	17.5 mm
Height	116.6 mm
Depth	114.5 mm

Material specifications

Color (Housing)	yellow (RAL 1018)
Housing material	Polyamide

Characteristics

Safety data

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

Safety data: EN ISO 13849

Category	4 (In conjunction with suitable evaluating device)
Performance level (PL)	e (In conjunction with suitable evaluating device)

Safety data: IEC 61508 - High demand

Safety Integrity Level (SIL)	3 (In conjunction with suitable evaluating device)
------------------------------	--

Safety data: IEC 61508 - Low demand

Safety Integrity Level (SIL)	3 (In conjunction with suitable evaluating device)
------------------------------	--

Safety data: EN IEC 62061

Safety Integrity Level (SIL)	3 (In conjunction with suitable evaluating device)
------------------------------	--

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Min. degree of protection of inst. location	IP54
Ambient temperature (operation)	-20 °C ... 60 °C (observe derating)
Ambient temperature (storage/transport)	-40 °C ... 80 °C

PSR-MC82-5NO-1NC-1DO-24DC-SP - Extension module



2702383

<https://www.phoenixcontact.com/gb/products/2702383>

Maximum altitude	max. 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	15g (In the event of stress caused by shock, contact reactions are possible for up to 6 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.)

Approvals

CE

Identification	CE-compliant
----------------	--------------

Standards and regulations

Air clearances and creepage distances between the power circuits

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

Mounting

Mounting type	DIN rail mounting
Assembly note	See derating curve
Mounting position	vertical or horizontal

PSR-MC82-5NO-1NC-1DO-24DC-SP - Extension module

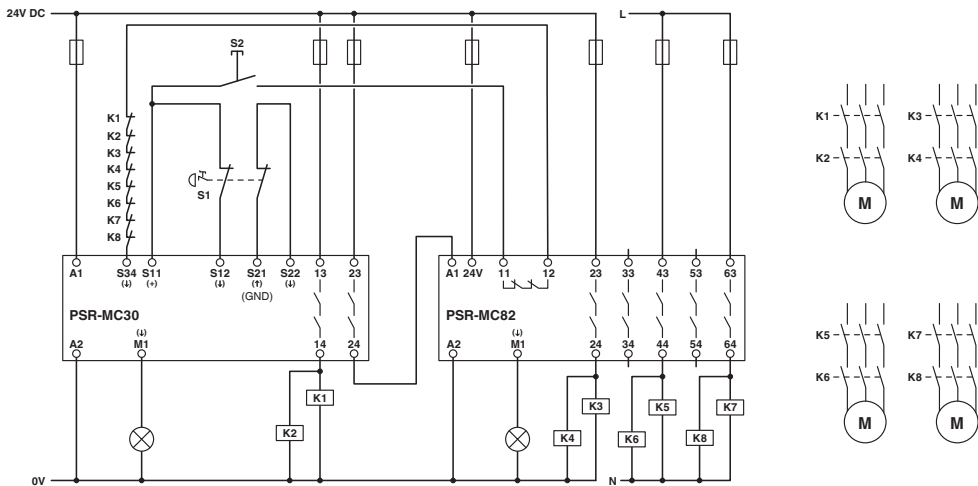


2702383

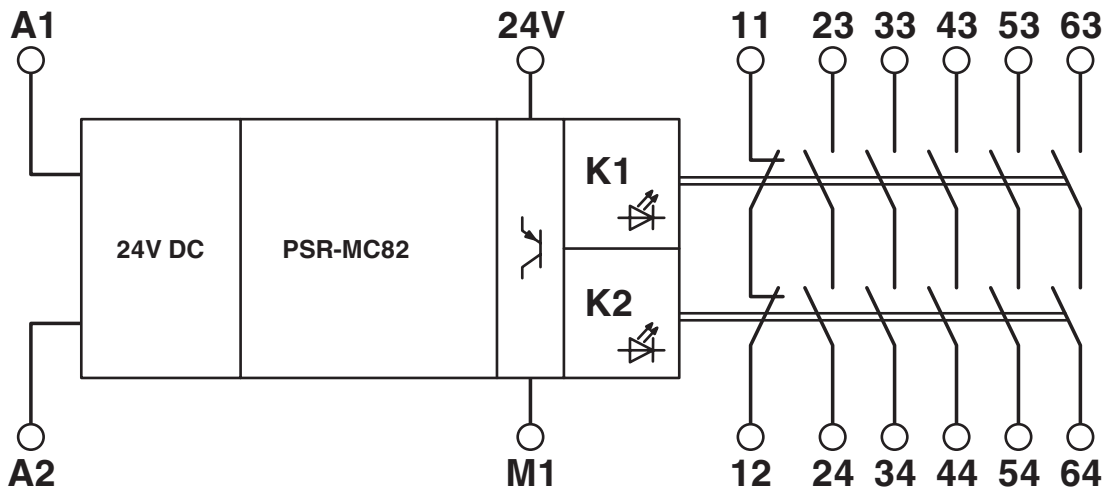
<https://www.phoenixcontact.com/gb/products/2702383>

Drawings

Circuit diagram



Block diagram



Block diagram

PSR-MC82-5NO-1NC-1DO-24DC-SP - Extension module



2702383
<https://www.phoenixcontact.com/gb/products/2702383>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/2702383>

	UL Listed Approval ID: FILE E 140324
	cUL Listed Approval ID: FILE E 140324
	Functional Safety Approval ID: 44-205-15124303
	EAC Approval ID: RU*-DE*B.00606/20
	Functional Safety Approval ID: 44-780-15124303
	cULus Listed

PSR-MC82-5NO-1NC-1DO-24DC-SP - Extension module



2702383
<https://www.phoenixcontact.com/gb/products/2702383>

Classifications

ECLASS

ECLASS-11.0	27371819
ECLASS-13.0	27371819
ECLASS-12.0	27371819

ETIM

ETIM 9.0	EC001449
----------	----------

UNSPSC

UNSPSC 21.0	39122200
-------------	----------

PSR-MC82-5NO-1NC-1DO-24DC-SP - Extension module



2702383
<https://www.phoenixcontact.com/gb/products/2702383>

Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	86f7cbf8-6903-49c5-b7cc-68930eb09995

PSR-MC82-5NO-1NC-1DO-24DC-SP - Extension module



2702383

<https://www.phoenixcontact.com/gb/products/2702383>

Accessories

CP-MSTB - Coding profile

1734634

<https://www.phoenixcontact.com/gb/products/1734634>

Coding profile, is inserted into the slot on the plug or inverted header, red insulating material



CR-MSTB - Coding section

1734401

<https://www.phoenixcontact.com/gb/products/1734401>

Coding section, inserted into the recess in the header or the inverted plug, red insulating material



PSR-MC82-5NO-1NC-1DO-24DC-SP - Extension module



2702383

<https://www.phoenixcontact.com/gb/products/2702383>

CRIMPFOX 6 - Crimping pliers

1212034

<https://www.phoenixcontact.com/gb/products/1212034>



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm² ... 6.0 mm², lateral entry, trapezoidal crimp

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT Ltd
Halesfield 13, Telford
Shropshire, TF7 4PG
01952 681700
info@phoenixcontact.co.uk