

MCR-PSP-DC - Limit value switch



2811925

<https://www.phoenixcontact.com/us/products/2811925>

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.



MCR threshold value switch, programmable, with electrically isolated input and 2 relay contacts

The figure shows version MCR-PSP

Commercial data

Item number	2811925
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C401
Product key	DK1XXX
GTIN	4017918105549
Weight per piece (including packing)	307.8 g
Weight per piece (excluding packing)	307.8 g
Customs tariff number	85389091
Country of origin	DE

Technical data

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
----------	---

Product properties

Product type	Limit value switch
No. of channels	1
Display resolution	0,1 °C / 0,01 V / 0,01 mA / 0,1 Ω

Electrical properties

Maximum power dissipation for nominal condition	1.8 W
Measuring rate	2 Hz
Test voltage input/power supply	1 kV AC (50 Hz, 60 s)
Protective circuit	Transient protection, polarity protection
Maximum temperature coefficient	≤ 0.01 %/K
Maximum transmission error	0.1 % (of final value)

Supply

Supply voltage range	20 V DC ... 30 V DC
Max. current consumption	< 60 mA

Input data

Signal

Description of the input	electrically isolated
Configurable/programmable	Yes, programmable
Voltage input signal	-30 V ... 30 V
Current input signal	-30 mA ... 30 mA
Available input sources	Resistance temperature detectors in 2-, 3- or 4-conductor technology (in accordance with DIN 43760/DIN IEC 751 or SAMA RC 21-4-1966), e.g., PT sensors, Ni sensors, etc.
	Thermocouple sensors (in acc. with DIN IEC 584-1/DIN 43710): B, E, J, K, L, N, R, S, T, U
	Resistance: 0 kΩ ... 8 kΩ (2-conductor circuit only)
	Current: - 30 mA...+ 30 mA
	Voltage: - 30 V...+ 30 V
Input resistance of voltage input	200 kΩ
Input resistance current input	50 Ω
Discontinuous control resolution	0,1 °C / 0,01 V / 0,01 mA / 0,1 Ω

Measurement

Temperature measuring range: Pt 10	-200 °C ... 850 °C (freely adjustable)
Temperature measuring range: Pt 100	-200 °C ... 850 °C (freely adjustable)

MCR-PSP-DC - Limit value switch



2811925

<https://www.phoenixcontact.com/us/products/2811925>

Temperature measuring range: Pt 120	-200 °C ... 850 °C (freely adjustable)
Temperature measuring range: Pt 500	-200 °C ... 850 °C (freely adjustable)
Temperature measuring range: Pt 1000	-200 °C ... 850 °C (freely adjustable)
Temperature measuring range: Ni 10	-60 °C ... 180 °C (freely adjustable)
Temperature measuring range: Ni 100	-60 °C ... 180 °C (freely adjustable)
Temperature measuring range: Ni 120	-60 °C ... 180 °C (freely adjustable)
Temperature measuring range: Ni 500	-60 °C ... 180 °C (freely adjustable)
Temperature measuring range: Ni 1000	-60 °C ... 180 °C (freely adjustable)
Temperature measuring range: Ni 1000 (Landris & Gyr)	-50 °C ... 160 °C (freely adjustable)
Temperature measuring range: Cu 10 (SAMA)	-70 °C ... 500 °C (freely adjustable)
Temperature measuring range: Thermoelement Typ U	-200 °C ... 600 °C (freely adjustable)
Temperature measuring range: Thermoelement Typ T	-200 °C ... 400 °C (freely adjustable)
Temperature measuring range: Thermoelement Typ L	-200 °C ... 900 °C (freely adjustable)
Temperature measuring range: Thermoelement Typ J	-210 °C ... 1200 °C (freely adjustable)
Temperature measuring range: Thermoelement Typ E	-226 °C ... 1000 °C (freely adjustable)
Temperature measuring range: Thermoelement Typ K	-200 °C ... 1372 °C (freely adjustable)
Temperature measuring range: Thermoelement Typ N	-200 °C ... 1300 °C (freely adjustable)
Temperature measuring range: Thermoelement Typ S	-50 °C ... 1768 °C (freely adjustable)
Temperature measuring range: Thermoelement Typ R	-50 °C ... 1768 °C (freely adjustable)
Temperature measuring range: Thermoelement Typ B	500 °C ... 1820 °C (freely adjustable)
Linear resistance measuring range	0 Ω ... 8000 Ω

Output data

Switching: Relay

Contact switching type	2 x changeover contacts / 2 switching points each, de-energized/energized (switchable)
Contact material	AgNi 0,15 + HTV (hard gold-plated)
Maximum switching voltage	250 V AC
Max. switching current	2 A AC
Mechanical service life	2x 10 ⁷ cycles
Setting range of the response delay	0 s ... 2 s (adjustable)
Status display	LED display

Connection data

Connection method	Pluggable screw connection
Stripping length	8 mm
Screw thread	M3
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 ... 14

Signaling

Status display	5-position 7-segment display and LEDs
----------------	---------------------------------------

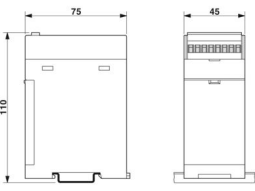
MCR-PSP-DC - Limit value switch



2811925

<https://www.phoenixcontact.com/us/products/2811925>

Dimensions

Dimensional drawing	
Width	45 mm
Height	75 mm
Depth	110 mm

Material specifications

Color	green (RAL 6021)
Housing material	ABS

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-20 °C ... 65 °C
---------------------------------	------------------

Approvals

CE

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

UL, USA/Canada

Identification	cULus
----------------	-------

EMC data

Noise immunity	EN 61000-6-2:2005
----------------	-------------------

Noise emission

Standards/regulations	EN 61000-6-4
-----------------------	--------------

Mounting

Mounting type	DIN rail mounting
Mounting position	any

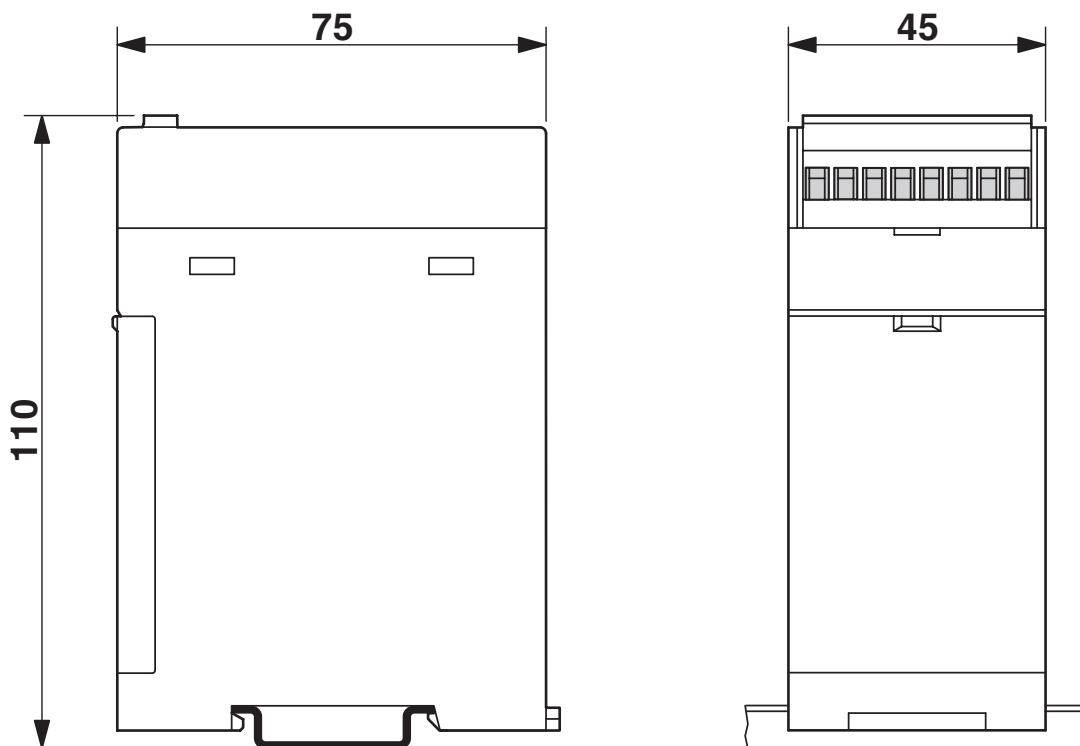
MCR-PSP-DC - Limit value switch

2811925

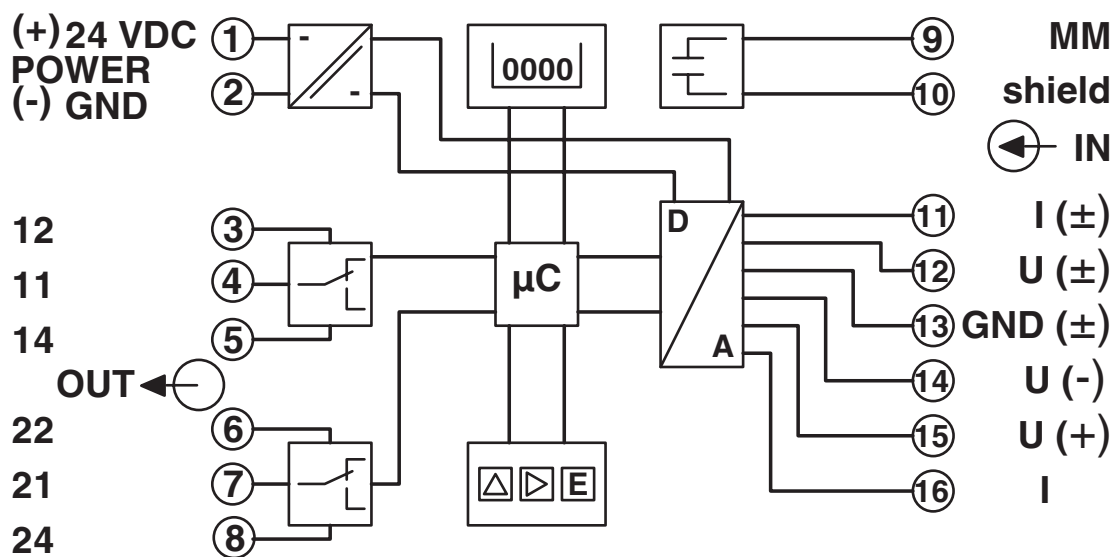
<https://www.phoenixcontact.com/us/products/2811925>

Drawings

Dimensional drawing



Circuit diagram



MCR-PSP-DC - Limit value switch



2811925

<https://www.phoenixcontact.com/us/products/2811925>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com