

MCR-PSP - Limit value switch



2811912

<https://www.phoenixcontact.com/us/products/2811912>

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MCR threshold value switch, programmable, with 2 relay contacts



Your advantages

- This product is no longer available, please see the recoding list in the download area under "Miscellaneous"

Commercial data

Item number	2811912
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C401
Product key	DK1XXX
GTIN	4017918107888
Weight per piece (including packing)	297.9 g
Weight per piece (excluding packing)	297.9 g
Customs tariff number	85437090
Country of origin	DE

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Technical data

Notes

Utilization restriction

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

Measuring rate	2 Hz
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

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)
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)

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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:

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

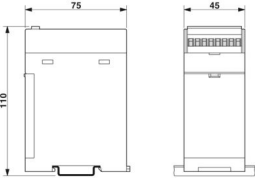
Status display	5-position 7-segment display and LEDs
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Dimensions

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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
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Approvals

CE

Certificate	CE-compliant
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UL, USA/Canada

Identification	cULus
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EMC data

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

Standards/regulations	EN 61000-6-4
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Mounting

Mounting type	DIN rail mounting
Mounting position	any

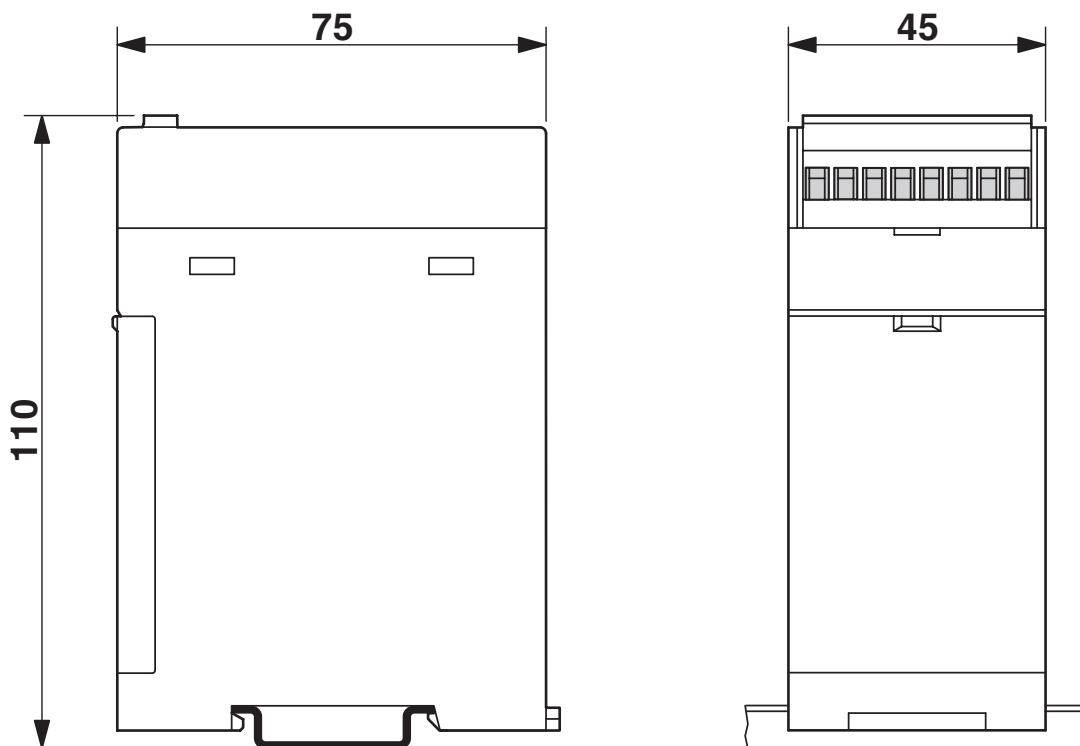
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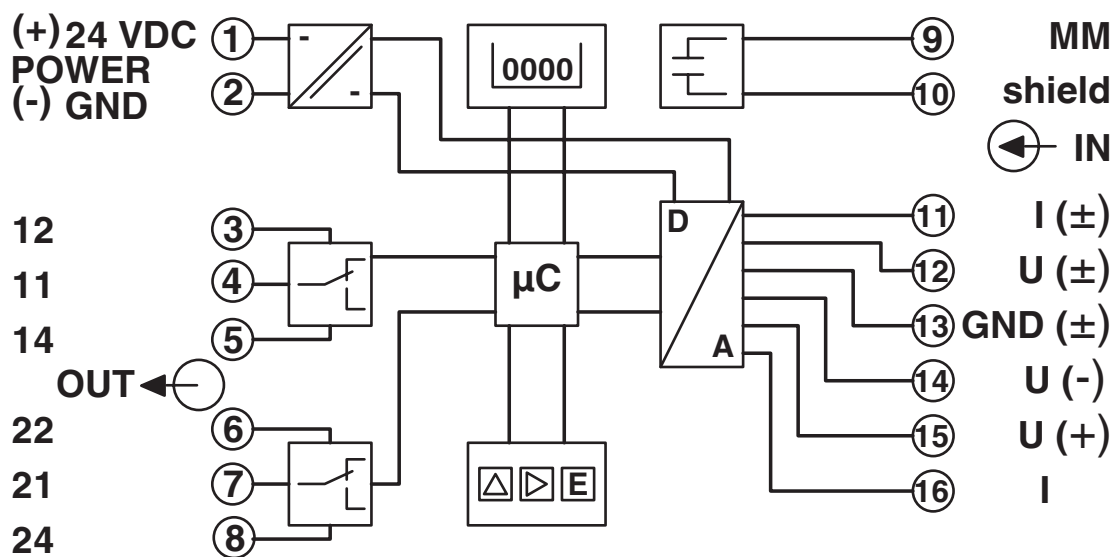
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Drawings

Dimensional drawing



Circuit diagram



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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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EU REACH SVHC

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