Limit value switches - MINI MCR-SL-UI-REL-SP - 2864493

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MCR limit value switch, with adjustable hysteresis and delay time, with spring-cage connection

Why buy this product

- Power supply possible via the foot element (TBUS)
- Highly-compact threshold value switch for switching analog limit values
- Status and error indication via two diagnostic LEDs
- PDT relay at output
- 3-way isolation
- Limit value can be freely adjusted via potentiometer on the front
- Input signal, hysteresis, and delay time can be configured via DIP switches
- Operating current/closed circuit current switch-over

Key Commercial Data

Packing unit	1 STK
GTIN	4 017918 974886
GTIN	4017918974886

Technical data

Note

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

Dimensions

Width	6.2 mm
Height	93.1 mm
Depth	102.5 mm

Ambient conditions

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Ambient conditions

Ambient temperature (operation)	-20 °C ... 65 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Input data

Number of inputs	1
Voltage input signal	0 V ... 10 V
Current input signal	0 mA ... 20 mA
max. input voltage	30 V
Max. input current	100 mA
Input resistance of voltage input	> 100 kΩ
Input resistance current input	50 Ω

Output data

Number of outputs	1

Switching output

Output name	Relay output
Contact type	1 PDT
Contact material	$AgSnO_2$, hard gold-plated
Maximum switching voltage	250 V AC
	240 V AC (UL)
Limiting continuous current	2 A
Setting range of the response delay	0 s ... 10 s (0 s; 1 s; 2 s; 3 s; 4 s; 6 s; 8 s; 10 s)
Internal hysteresis	0.1 %; 1 %; 2.5 %; 5 %

Power supply

Nominal supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (The DIN rail bus connector (ME 6,2 TBUS-2 1,5/5-ST-3,81 GN, Order No. 2869728) can be used to bridge the supply voltage. It can be snapped onto a 35 mm DIN rail according to EN 60715))
Max. current consumption	< 14 mA (at 24 V DC)
Power consumption	< 330 mW (at 24 V DC)

Connection data

Connection method	Spring-cage connection
Conductor cross section solid min.	0.2 mm²
Conductor cross section solid max.	2.5 mm²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.2 mm²
Conductor cross section flexible max.	2.5 mm²
Stripping length	8 mm

General

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Technical data

General

No. of channels	1
Maximum temperature coefficient	< 0.02 %/K
Switching point accuracy	< 0.05 %
Electrical isolation	Basic insulation according to EN 61010
Overvoltage category	II
Degree of pollution	2
Rated insulation voltage	50 V AC/DC
Test voltage input/power supply	1.5 kV AC (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.
Color	green
Housing material	PBT
Mounting position	any
Assembly instructions	The T connector can be used to bridge the supply voltage. It can be snapped onto a 35 mm DIN rail according to EN 60715.
Conformance	CE-compliant
ATEX	# II 3 G Ex nA nC IIC T4 Gc X
UL, USA	Class I, Zone 2, AEx nA nC IIC T5
UL, USA/Canada	UL 508 Recognized
UL, Canada	Class I, Zone 2, Ex nA nC IIC T5 Gc
GL	GL EMC 2 D
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 2
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 2
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 2

EMC data

Designation	Electromagnetic RF field
Standards/regulations	EN 61000-4-3
Typical deviation from the measuring range final value	5 %
Designation	Fast transients (burst)
Standards/regulations	EN 61000-4-4
Typical deviation from the measuring range final value	5 %
Designation	Conducted interferences
Standards/regulations	EN 61000-4-6
Typical deviation from the measuring range final value	5 %

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Connection in acc. with standard	CUL

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Technical data

Standards and Regulations

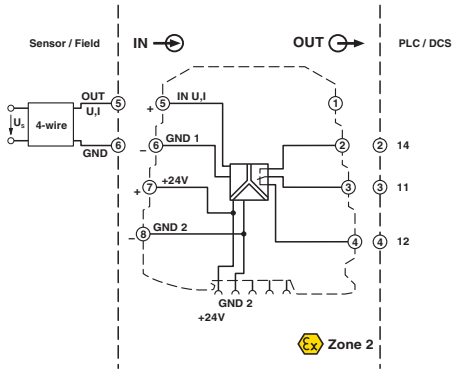
Standards/regulations	EN 61000-4-2
Designation	Electromagnetic RF field
Standards/regulations	EN 61000-4-3
	EN 61000-4-4
	EN 61000-4-5
Designation	Conducted interferences
Standards/regulations	EN 61000-4-6
Electrical isolation	Basic insulation according to EN 61010
Conformance	CE-compliant
ATEX	# II 3 G Ex nA nC IIC T4 Gc X
UL, USA	Class I, Zone 2, AEx nA nC IIC T5
UL, USA/Canada	UL 508 Recognized
UL, Canada	Class I, Zone 2, Ex nA nC IIC T5 Gc
GL	GL EMC 2 D
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 2 HL 1 - HL 2 HL 1 - HL 2
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 2 HL 1 - HL 2 HL 1 - HL 2
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 2 HL 1 - HL 2 HL 1 - HL 2
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 2 HL 1 - HL 2 HL 1 - HL 2

Environmental Product Compliance

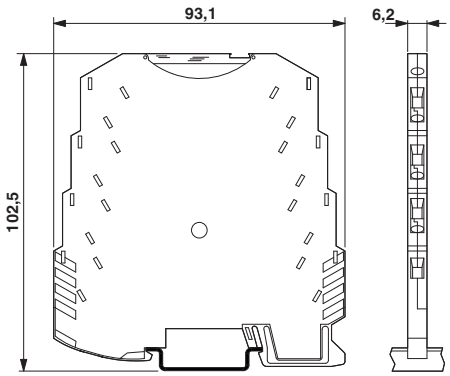
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Drawings

Block diagram



Dimensional drawing



Approvals

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Approvals

Approvals

UL Recognized / cUL Recognized / GL / cULus Recognized

Ex Approvals

UL Listed / cUL Listed / EAC Ex / ATEX / cULus Listed

Approval details

UL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
cUL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
GL	http://exchange.dnv.com/tari/	24917-05 HH
cULus Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	

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