

PLC-RSC- 24DC/21-21/EX - Relay Module



2909509

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PLC-INTERFACE, consisting of DIN-rail-mountable basic terminal block in 14 mm with screw connection and plug-in relay with power contact, 2 changeover contacts, 24 V DC input voltage. Approved according to ATEX/IECEx (Zone 2) and Ex Zone Class I, Div. 2.

Commercial Data

Item number	2909509
Packing unit	10 pc
Minimum order quantity	10 pc
Sales Key	CK6
Product Key	CK6212
Catalog Page	Page 386 (C-5-2019)
GTIN	4055626363134
Weight per Piece (including packing)	78.6 g
Weight per Piece (excluding packing)	70.63 g
Customs tariff number	85364190
Country of origin	DE

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	Relay Module
Product family	PLC-INTERFACE
Application	Class I, Division 2 potentially explosive areas
Operating mode	100% operating factor
Mechanical service life	3x 10 ⁷ cycles

Insulation characteristics

Insulation	Safe isolation, reinforced insulation
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Insulation characteristics: Standards/regulations

Insulation	Safe isolation, reinforced insulation
Overvoltage category	III
Pollution degree	3

Electrical properties

Maximum power dissipation for nominal condition	0.43 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)
Test voltage (Changeover contact/changeover contact)	2.5 kV AC (50 Hz, 1 min., changeover contact/changeover contact)

Standards/regulations

Rated insulation voltage	250 V AC
Rated surge voltage	6 kV

Input data

Coil side

Nominal input voltage U_N	24 V DC
Input voltage range	20.2 V DC ... 33.6 V DC (20 °C)
Typical input current at U_N	18 mA
Typical response time	8 ms
Typical release time	10 ms
Protective circuit	Reverse polarity protection; Polarity protection diode Freewheeling diode; Freewheeling diode
Operating voltage display	Yellow LED

Output data

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Switching

Contact type	2 changeover contacts
Type of switch contact	Single contact
Drive and function	monostable
Drive (polarity)	polarized
Contact material	AgNi
Maximum switching voltage	250 V AC/DC (The separating plate PLC-ATP should be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...)
Minimum switching voltage	5 V AC/DC (10 mA)
Limiting continuous current	6 A
Maximum inrush current	15 A (300 ms)
Min. switching current	10 mA (5 V)
Interrupting rating (ohmic load) max.	140 W (at 24 V DC) 85 W (at 48 V DC) 60 W (at 60 V DC) 44 W (at 110 V DC) 60 W (at 220 V DC) 1500 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13) 0.2 A (at 250 V, DC13) 3 A (at 24 V, AC15) 3 A (at 120 V, AC15) 3 A (at 250 V, AC15)

Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section rigid	0.14 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 2.5 mm ² 0.2 mm ² ... 2.5 mm ² (Single ferrule) 2x 0.5 mm ² ... 1.5 mm ² (TWIN ferrule)
Conductor cross section AWG	26 ... 14
Tightening torque	0.6 Nm ... 0.8 Nm

Dimensions

Width	14 mm
Height	80 mm
Depth	94 mm

Material specifications

Flammability rating according to UL 94	V0 (Housing)
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Environmental and real-life conditions

Ambient conditions

Degree of protection (Relay)	RT III (Relay)
Degree of protection (Relay base)	IP20 (Relay base)
Ambient temperature (operation)	-40 °C ... 70 °C (UL) -40 °C ... 70 °C (ATEX / IECEx)
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Approvals

CE

Certificate	CE-compliant
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ATEX

Identification	<input type="checkbox"/> II 3G Ex ec nC IIC T4 Gc
Certificate	IBExU16ATEXB015 X

IECEX

Identification	Ex ec nC IIC T4 Gc
Certificate	IECEX IBE 16.0029X

UKCA Ex (UKEX)

Identification	<input type="checkbox"/> II 3 G Ex ec nC IIC T4 Gc
Certificate	PxCIF21UKEX2909514X

UL, USA

Identification	Class I, Zone 2, AEx nA nC IIC T6
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UL, USA/Canada

Identification	Class I, Div. 2, Groups A, B, C, D
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UL, Canada

Identification	Class I, Zone 2, Ex nA nC IIC Gc T6 X
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Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group EN 60068-2-60
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Standards and regulations

Standards/regulations

Standards/regulations	IEC 60947-5-1
	EN 60079-0
	EN 60079-7
	EN 60079-15

Mounting

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Mounting type	DIN rail mounting
Assembly instructions	in rows with zero spacing
Mounting position	any

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