

# PLC-RPT-24DC/21HC/EX - Relay Module



2909532

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PLC-INTERFACE, consisting of DIN-rail-mountable basic terminal block in 14 mm with Push-in connection and plug-in relay with 10 A power contact, 1 changeover contact, 24 V DC input voltage. Approved according to ATEX/IECEx (Zone 2) and Ex Zone Class I, Div. 2.

## Commercial data

Item number	2909532
Packing unit	10 pc
Minimum order quantity	10 pc
Product key	CK623A
Catalog page	Page 387 (C-5-2019)
GTIN	4055626363691
Weight per piece (including packing)	75.05 g
Weight per piece (excluding packing)	66.03 g
Customs tariff number	85364190
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	Relay Module
Product family	PLC-INTERFACE
Application	High continuous currents potentially explosive areas
Operating mode	100% operating factor
Mechanical service life	3x 10 <sup>7</sup> 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)

#### Standards/regulations

Rated insulation voltage	250 V AC
Rated surge voltage	6 kV

### Input data

#### Coil side

Nominal input voltage U <sub>N</sub>	24 V DC
Input voltage range	20.2 V DC ... 33.6 V DC (20 °C)
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U <sub>N</sub>	18 mA
Typical response time	8 ms
Typical release time	10 ms
Protective circuit	Reverse polarity protection; Polarity protection diode Surge protection; Freewheeling diode
Operating voltage display	Yellow LED

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## Output data

### Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
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	12 V AC/DC (10 mA)
Limiting continuous current	10 A 6 A (value applies to connections 12. If connections 12 are bridged, the normal value applies.)
Maximum inrush current	30 A (300 ms)
Min. switching current	10 mA (12 V)
Interrupting rating (ohmic load) max.	240 W (at 24 V DC) 58 W (at 48 V DC) 48 W (at 60 V DC) 50 W (at 110 V DC) 80 W (at 220 V DC) 2500 VA (for 250 V AC)
Interrupting rating (ohmic load) max. bridged	144 W (for 24 V DC. Value applies to connections 12. If connections 12 are bridged, the normal value applies.) 1500 VA (for 250 V AC. Value applies to connections 12. If connections 12 are bridged, the normal value applies.)
Switching capacity	2 A (at 24 V, DC13) 0.2 A (at 110 V, DC13) 0.2 A (at 250 V, DC13) 6 A (at 24 V, AC15) 6 A (at 120 V, AC15) 6 A (at 250 V, AC15)

## Connection data

Connection method	Push-in connection
Stripping length	10 mm
Conductor cross section rigid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> 0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Single ferrule) 2x 0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup> (TWIN ferrule)
Conductor cross section AWG	26 ... 14

## Dimensions

Width	14 mm
Height	80 mm
Depth	94 mm

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## Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0 (Housing)

## 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	Ⓔ 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	Ⓔ 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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### Shipbuilding approval

Certificate	TAE0000196
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### Corrosive gas test

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

### DNV GL data

Temperature	D
Humidity	A

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Vibration	B/C
EMC	B
Enclosure	Required protection according to the Rules shall be provided upon installation on board

## EMC data

Low Voltage Directive	Conformance with Low Voltage Directive
Electromagnetic compatibility	Conformance with EMC directive

## Standards and regulations

Standards/regulations	
Standards/regulations	IEC 60664
	EN 50178
	EN 60079-0, -7, -15

## Mounting

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

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