

PLC-RPT-230UC/21-21/EX - Relay Module



2909516

<https://www.phoenixcontact.com/us/products/2909516>

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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 power contact, 2 changeover contacts, 230 V AC/220 V DC input voltage. Approved according to ATEX/IECEx (Zone 2) and Ex Zone Class I, Div. 2.

Commercial data

Item number	2909516
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C461
Product key	CK6212
Catalog page	Page 386 (C-5-2019)
GTIN	4055626363196
Weight per piece (including packing)	64.76 g
Weight per piece (excluding packing)	64.76 g
Customs tariff number	85364900
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
Overtoltage category	III
Pollution degree	3

Electrical properties

Maximum power dissipation for nominal condition	1.04 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	230 V AC
	220 V DC
Input voltage range	179.4 V AC/DC ... 264.5 V AC/DC (20 °C)
	171.6 V DC ... 264 V DC (20 °C)
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U_N	4.5 mA ($U_N = 230$ V AC)
	4.3 mA ($U_N = 220$ V DC)
Typical response time	7 ms

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Typical release time	10 ms
Protective circuit	Bridge rectifier; Bridge rectifier
Operating voltage display	Yellow LED

Output data

Switching

Contact switching type	2 changeover contacts
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	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	Push-in connection
Stripping length	10 mm
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 mm ² (TWIN ferrule)
Conductor cross section AWG	26 ... 14

Dimensions

Width	14 mm
Height	80 mm
Depth	94 mm

Material specifications

Color	gray (RAL 7042)
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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)	-20 °C ... 60 °C (UL) -40 °C ... 55 °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
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DNV GL data

Temperature	D
Humidity	A
Vibration	B/C
EMC	B

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Enclosure	Required protection according to the Rules shall be provided upon installation on board
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EMC data

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

Standards and regulations

Standards/regulations

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

Mounting

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

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Classifications

ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

ETIM

ETIM 9.0	EC001437
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UNSPSC

UNSPSC 21.0	39122300
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Environmental product compliance

REACH SVHC	Lead 7439-92-1
	Hexahydromethylphthalic anhydride
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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