

# Relay Module - PLC-RPT-12DC/21-21/EX - 2909513


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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, 12 V DC input voltage. Approved according to ATEX/IECEX (Zone 2) and Ex Zone Class I, Div. 2.



## Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	 4 055626 363165
GTIN	4055626363165

## Technical data

### Note

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

Width	14 mm
Height	80 mm
Depth	94 mm

### Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C (UL)
	-40 °C ... 60 °C (ATEX / IECEx)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Degree of protection	RT III (Relay)
	IP20 (Relay base)

### Coil side

Nominal input voltage $U_N$	12 V DC
Typical input current at $U_N$	33 mA

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## Technical data

### Coil side

Typical response time	8 ms
Typical release time	10 ms
Protective circuit	Reverse polarity protection Polarity protection diode
	Free-wheeling diode Damping diode
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.4 W

### Contact side

Contact type	2 PDT
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 (at 10 mA)
Min. switching current	10 mA (At 5 V)
Maximum inrush current	15 A (300 ms)
Limiting continuous current	6 A
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)

### General

Test voltage relay winding/relay contact	4 kV AC (50 Hz, 1 min.)
Test voltage PDT/PDT	2.5 kV AC (50 Hz, 1 min.)
Operating mode	100% operating factor
Mechanical service life	3x 10 <sup>7</sup> cycles
Mounting position	any
Assembly instructions	In rows with zero spacing

### Connection data

Connection name	Coil side
Connection method	Push-in connection
Stripping length	8 mm

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## Technical data

### Connection data

Conductor cross section solid	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

### Connection data 2

Connection name	Contact side
Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section solid	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

### Standards and Regulations

Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
	EN 60079-0, -7, -15
Rated insulation voltage	250 V AC
Rated surge voltage	6 kV
Insulation	Safe isolation, reinforced insulation
Pollution degree	2
Overvoltage category	III
Conformance	CE-compliant
ATEX	# II 3G Ex ec nC IIC T4 Gc
IECEX	Ex ec nC IIC T4 Gc
UL, USA	Class I, Zone 2, AEx nA nC IIC T6
UL, USA/Canada	Class I, Div. 2, Groups A, B, C, D
UL, Canada	Class I, Zone 2, Ex nA nC IIC Gc T6 X

### Conformance/approvals

Designation	CE
Identification	CE-compliant
Designation	ATEX
Identification	# II 3G Ex ec nC IIC T4 Gc
Certificate	IBExU16ATEXB015 X
Designation	IECEX
Identification	Ex ec nC IIC T4 Gc
Certificate	IECEX IBE 16.0029X

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## Technical data

### Conformance/approvals

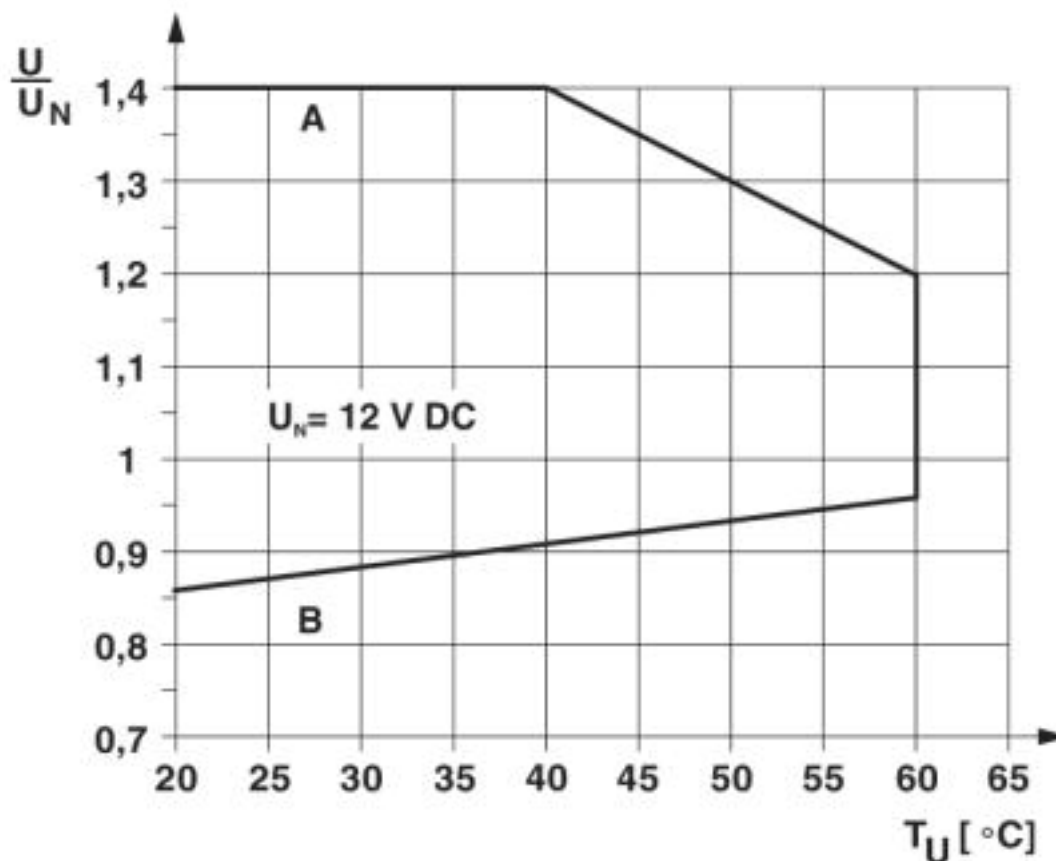
Designation	UL, USA
Identification	Class I, Zone 2, AEx nA nC IIC T6
Designation	UL, USA/Canada
Identification	Class I, Div. 2, Groups A, B, C, D
Designation	UL, Canada
Identification	Class I, Zone 2, Ex nA nC IIC Gc T6 X

### Environmental Product Compliance

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

## Drawings

Diagram



Curve A

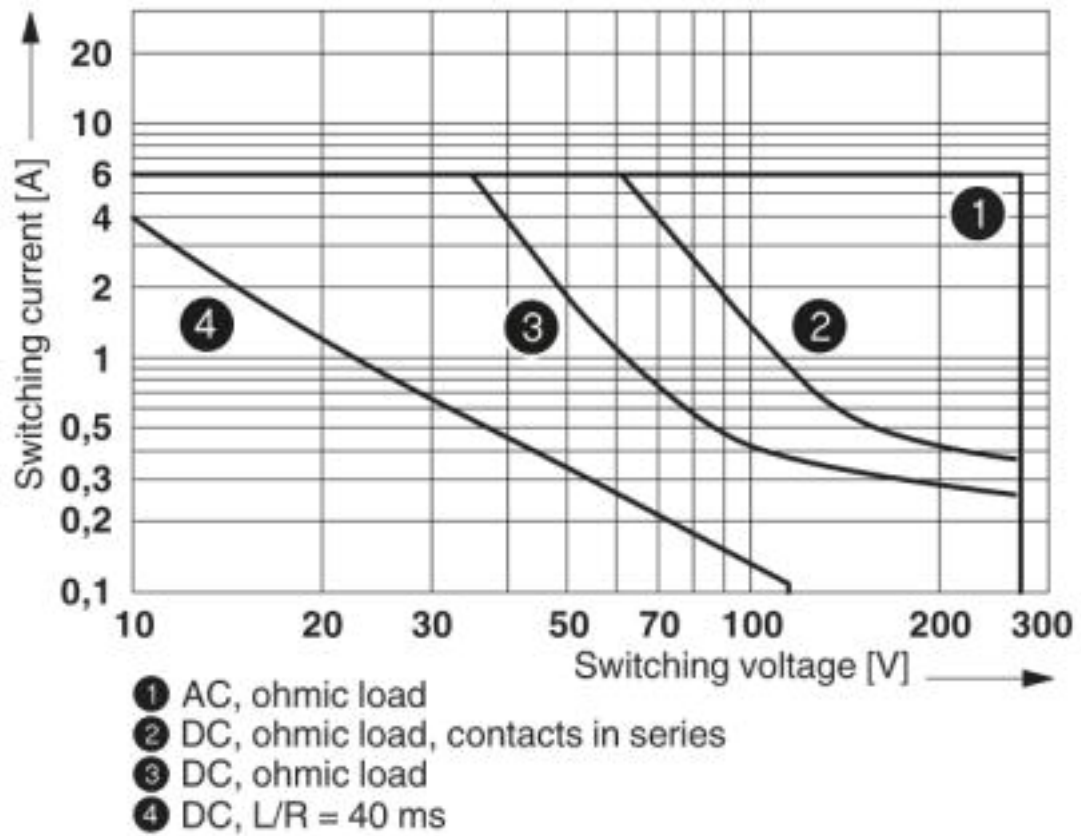
Maximum permissible continuous voltage  $U_{max}$  with limiting continuous current on the contact side (see relevant technical data)

Curve B

Minimum permissible operate voltage  $U_{op}$  after pre-excitation (see relevant technical data)

## Relay Module - PLC-RPT-12DC/21-21/EX - 2909513

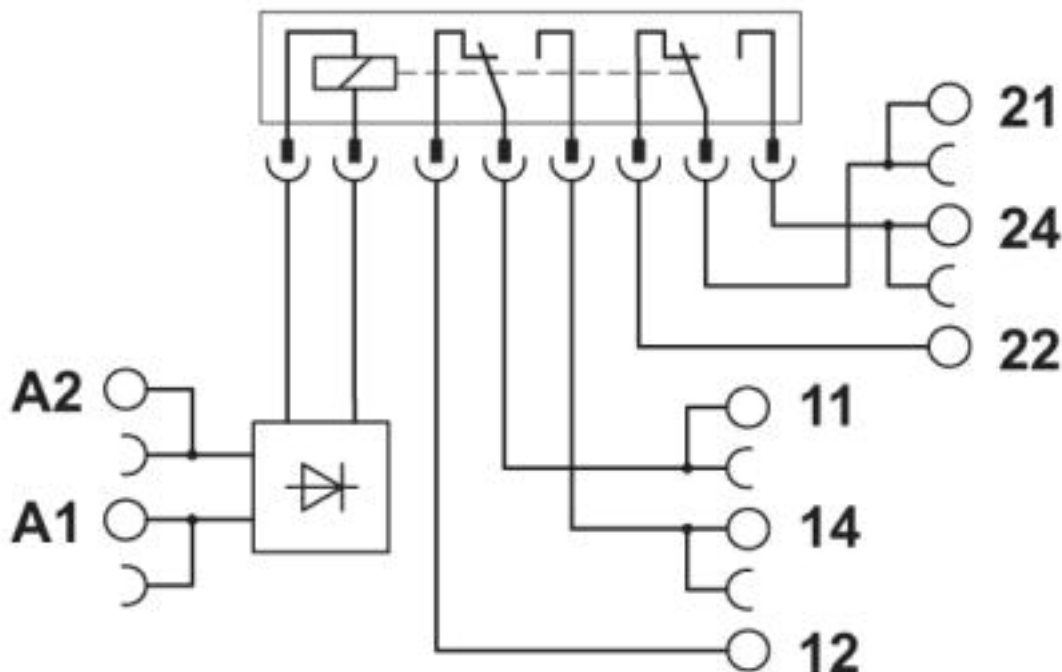
Diagram



Interrupting rating

# Relay Module - PLC-RPT-12DC/21-21/EX - 2909513

Circuit diagram



## Approvals

Approvals

Approvals

EAC / DNV GL

Ex Approvals

IECEX / ATEX / UL Listed / cUL Listed / cULus Listed

## Approval details

EAC		RU C- DE.A*30.B.01082
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DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAE0000196-02
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