Relay Module - PLC-RPT-12DC/21HC/EX - 2909531

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)

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

RoHS

Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	4 055626 363684
GTIN	4055626363684

Technical data

Note

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

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 II (Relay)
	IP20 (Relay base)

Coil side

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

Relay Module - PLC-RPT-12DC/21HC/EX - 2909531

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	1 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	12 V AC/DC
Min. switching current	100 mA
Maximum inrush current	30 A (300 ms)
Limiting continuous current	10 A
	6 A (value applies to connections 12. If connections 12 are bridged, the normal value applies.)
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)

General

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

Relay Module - PLC-RPT-12DC/21HC/EX - 2909531

Technical data

Connection data

Connection name	Coil side
Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section solid	0.14 mm² ... 2.5 mm²
Conductor cross section flexible	0.14 mm² ... 2.5 mm²
	0.2 mm² ... 2.5 mm² (Single ferrule)
	2x 0.5 mm² ... 1 mm² (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 mm² ... 2.5 mm²
Conductor cross section flexible	0.14 mm² ... 2.5 mm²
	0.2 mm² ... 2.5 mm² (Single ferrule)
	2x 0.5 mm² ... 1 mm² (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

Relay Module - PLC-RPT-12DC/21HC/EX - 2909531

Technical data

Conformance/approvals

Designation	IECEx
Identification	Ex ec nC IIC T4 Gc
Certificate	IECEx IBE 16.0029X
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

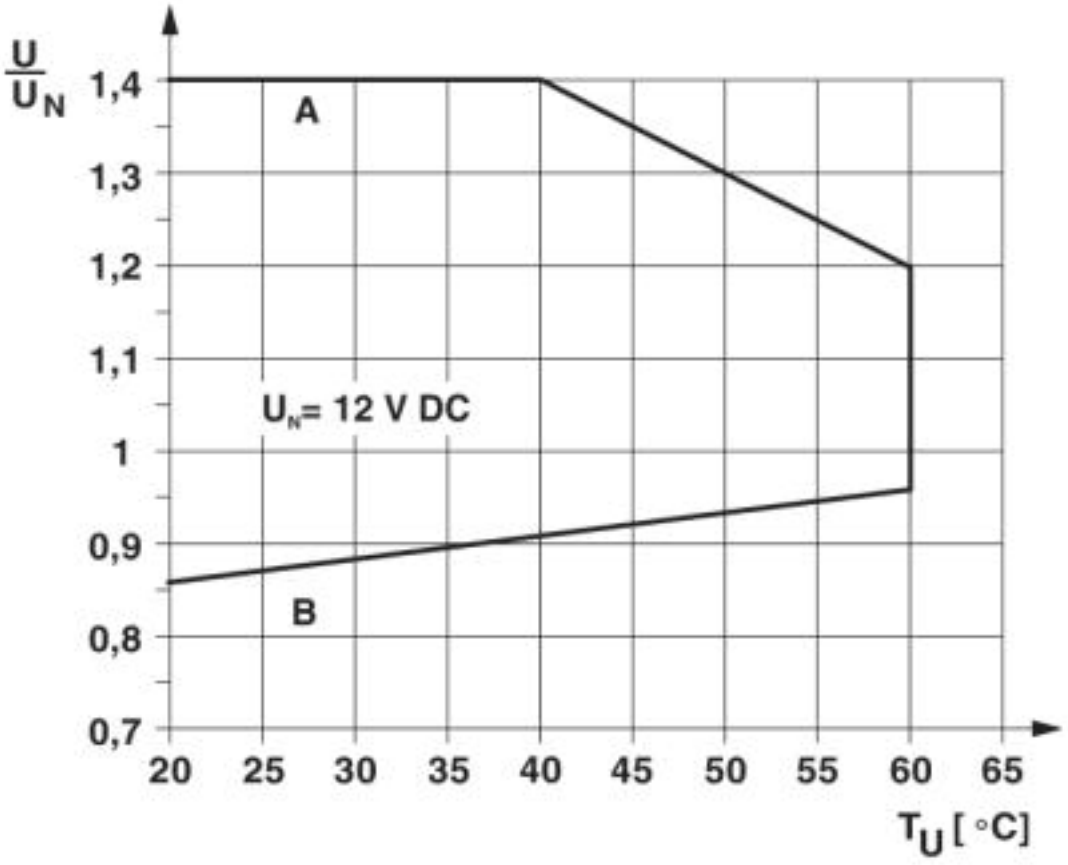
Environmental Product Compliance

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

Drawings

Relay Module - PLC-RPT-12DC/21HC/EX - 2909531

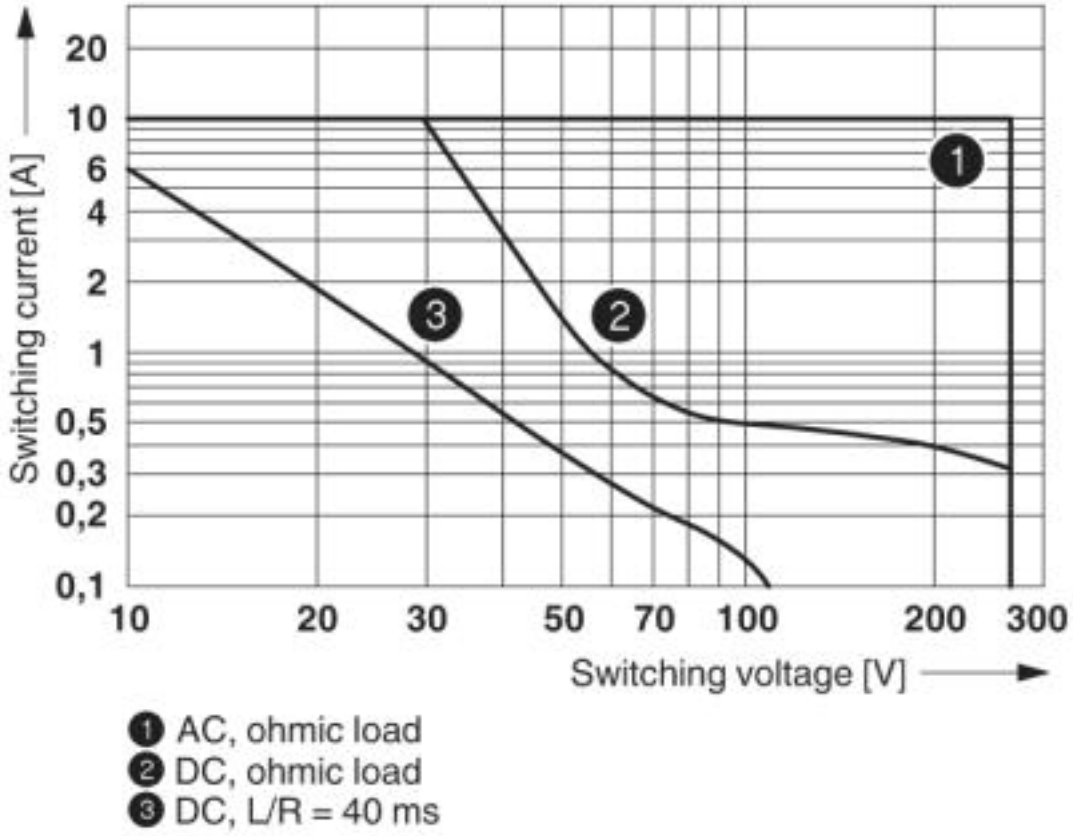
Diagram



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/21HC/EX - 2909531

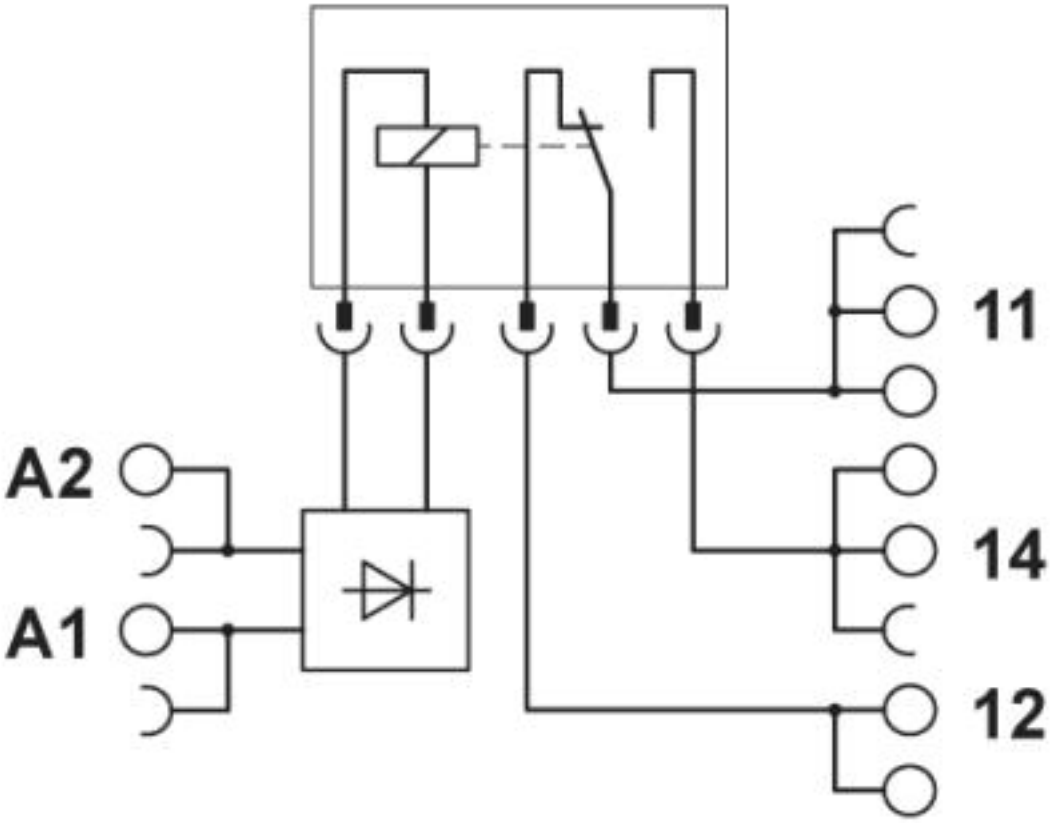
Diagram



Interrupting rating

Relay Module - PLC-RPT-12DC/21HC/EX - 2909531

Circuit diagram



Approvals

Approvals

Approvals

EAC / DNV GL

Ex Approvals

IECEx / ATEX / UL Listed / cUL Listed / cULus Listed

Approval details

EAC	EAC	RU C-DE.A*30.B.01082

Relay Module - PLC-RPT-12DC/21HC/EX - 2909531

Approvals

DNV GL		https://approvalfinder.dnvgl.com/	TAE0000196-02

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
http://www.phoenixcontact.com