

PLC-RPT- 48DC/21HC - Relay Module



2900294

<https://www.phoenixcontact.com/us/products/2900294>

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 documentation. Our general terms of use for downloads are valid.



PLC-INTERFACE for high continuous currents, consisting of PLC-BPT.../21 HC basic terminal block with Push-in connection and plug-in miniature relay, for mounting on DIN rail NS 35/7,5, limiting continuous current up to 10 A, 1 changeover contact, input voltage 48 V DC

Your advantages

- All common input voltages of 12 V DC ... 230 V AC
- Long electrical service life thanks to 16 A relay
- Efficient connection to system cabling using V8 adapter
- Safe isolation between coil and contact side
- Max. continuous current of 10 A
- Functional plug-in bridges

Commercial data

Item number	2900294
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C461
Product key	CK623A
Catalog page	Page 384 (C-5-2019)
GTIN	4046356509886
Weight per piece (including packing)	72.8 g
Weight per piece (excluding packing)	60.117 g
Customs tariff number	85364190
Country of origin	DE

PLC-RPT- 48DC/21HC - Relay Module



2900294

<https://www.phoenixcontact.com/us/products/2900294>

Technical data

Product properties

Product type	Relay Module
Product family	PLC-INTERFACE
Application	High continuous currents
Operating mode	100% operating factor
Mechanical service life	3x 10 ⁷ cycles

Insulation characteristics

Insulation	Safe isolation, reinforced insulation
------------	---------------------------------------

Insulation characteristics

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

Electrical properties

Maximum power dissipation for nominal condition	0.96 W
Rated surge voltage	6 kV

Input data

Coil side

Nominal input voltage U _N	48 V DC
Input voltage range	40.3 V DC ... 60 V DC (20 °C)
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U _N	20 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

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 (10 mA)

PLC-RPT- 48DC/21HC - Relay Module



2900294

<https://www.phoenixcontact.com/us/products/2900294>

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 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)
Flammability rating according to UL 94	V0 (Housing)

Environmental and real-life conditions

Ambient conditions

Degree of protection (Relay)	RT II (Relay)
Degree of protection (Relay base)	IP20 (Relay base)
Ambient temperature (operation)	-40 °C ... 60 °C

PLC-RPT- 48DC/21HC - Relay Module



2900294

<https://www.phoenixcontact.com/us/products/2900294>

Ambient temperature (storage/transport)	-40 °C ... 85 °C
---	------------------

Approvals

CE

Certificate	CE-compliant
-------------	--------------

UKCA

Certificate	UKCA-compliant
-------------	----------------

Shipbuilding approval

Certificate	TAE0000196
-------------	------------

Corrosive gas test

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

DNV GL data

Temperature	D
Humidity	A
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

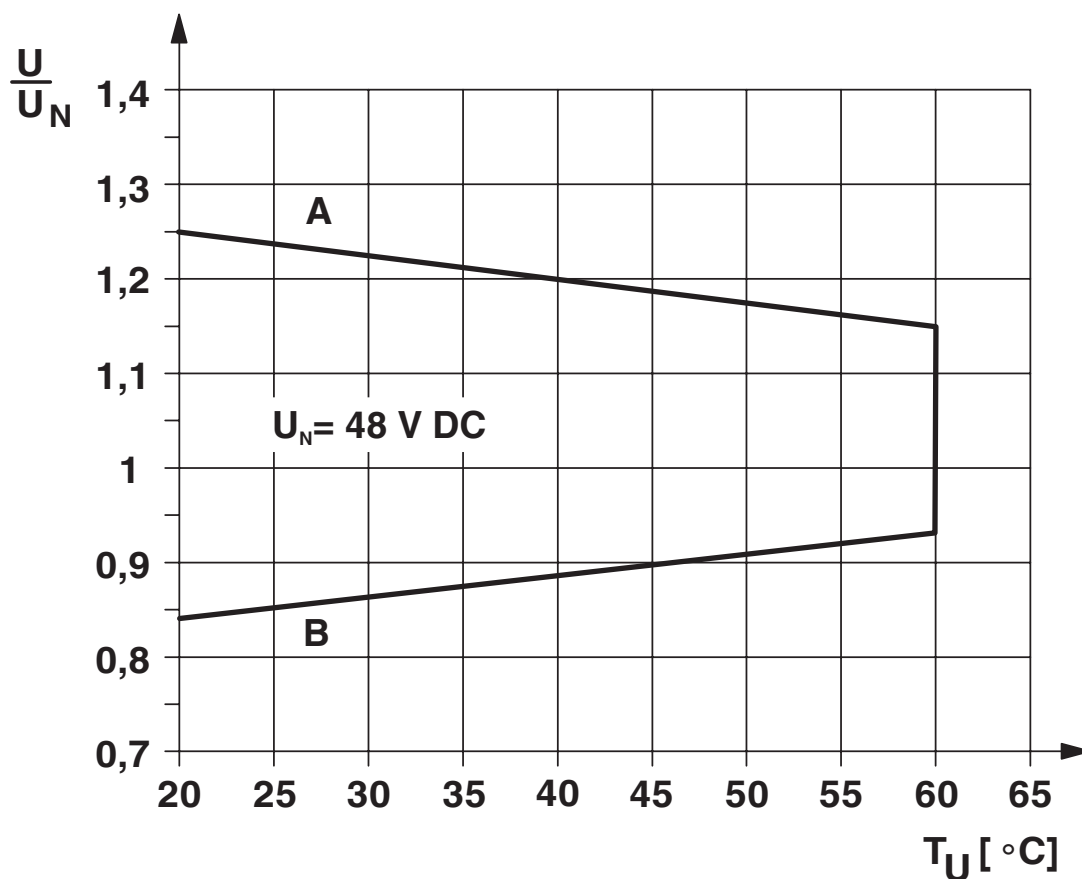
Standards/regulations	IEC 60947-5-1
-----------------------	---------------

Mounting

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

Drawings

Diagram



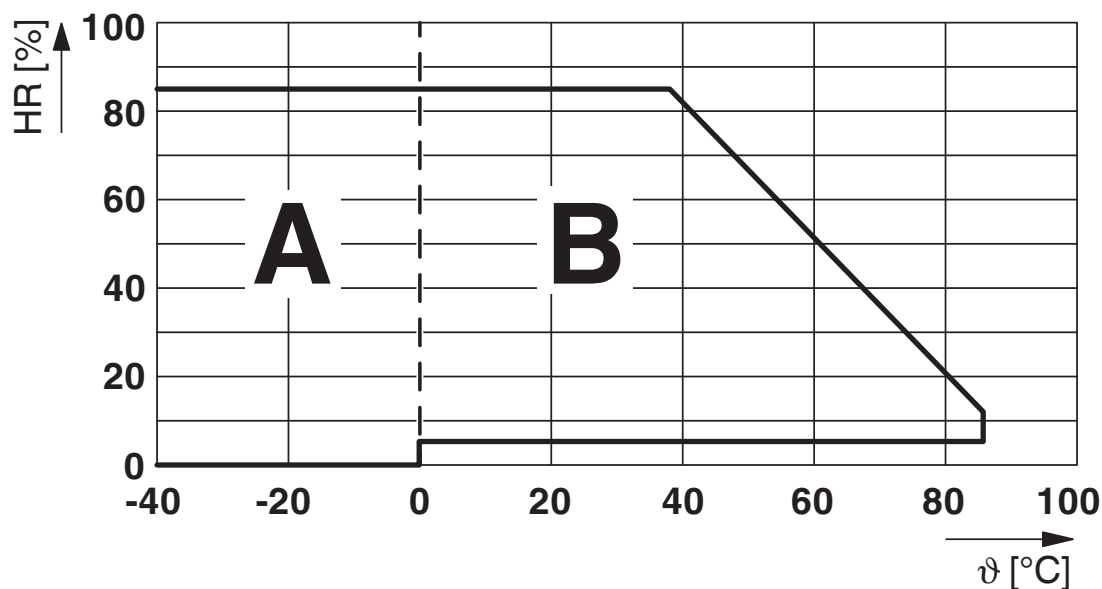
Curve A

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)

Diagram



Permissible humidity for operation and storage.

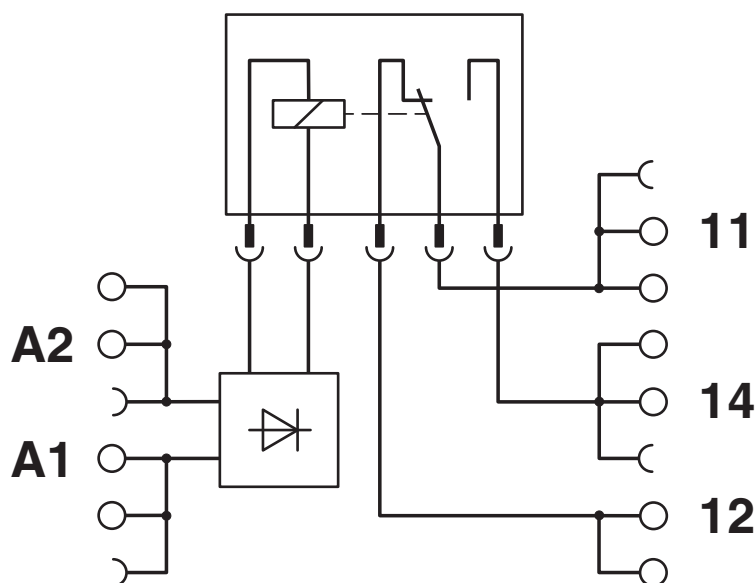
The maximum permissible ambient temperature as specified in the data sheet must be observed.

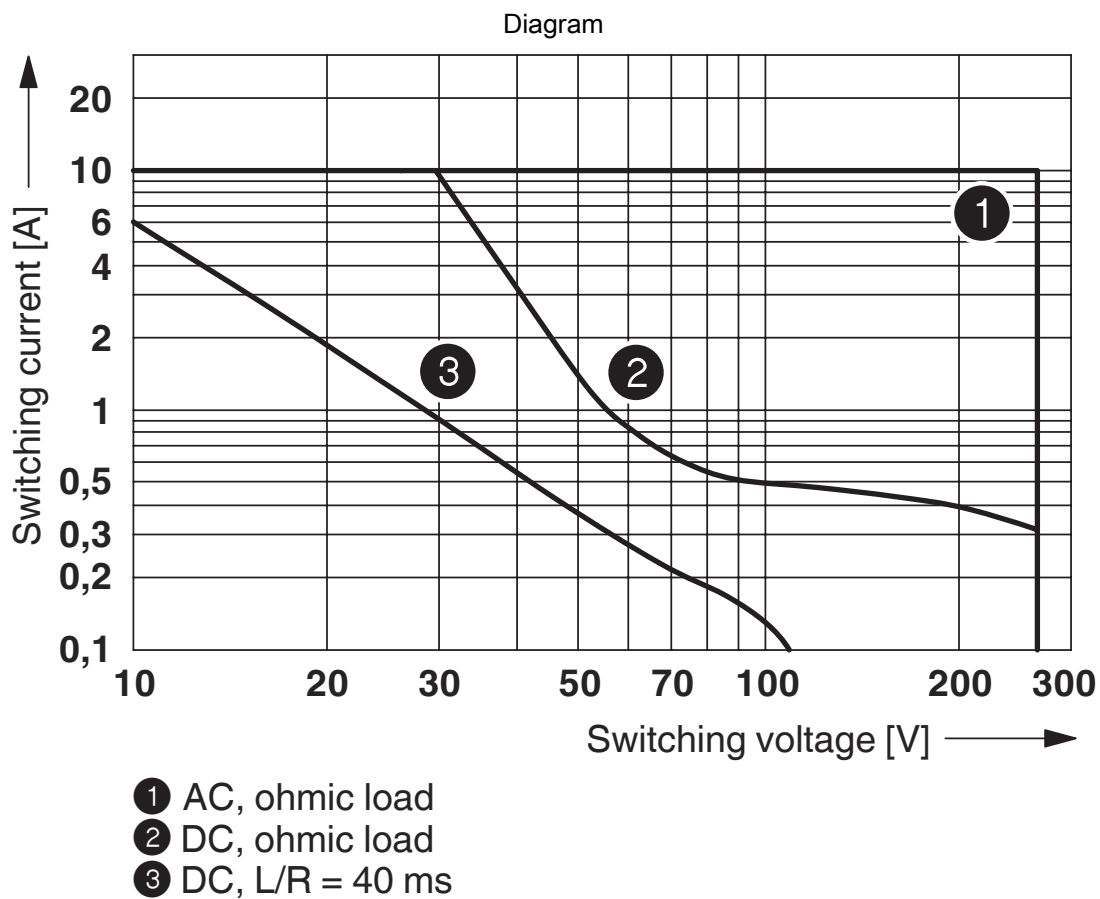
Area A: Ice buildup at ambient temperatures $\leq 0^{\circ}\text{C}$ must be prevented

Area B: Condensation at ambient temperatures $> 0^{\circ}\text{C}$ must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature $\leq 25^{\circ}\text{C}$.

Circuit diagram





Interrupting rating

PLC-RPT- 48DC/21HC - Relay Module



2900294


<https://www.phoenixcontact.com/us/products/2900294>

Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2900294>




cUL Recognized
Approval ID: FILE E 238705




UL Recognized
Approval ID: FILE E 238705



EAC
Approval ID: TR_TS_D_00573_c




DNV GL
Approval ID: TAE0000196



UL Listed
Approval ID: FILE E 172140



cUL Listed
Approval ID: FILE E 172140



cULus Listed
Approval ID: E140324

cULus Recognized

cULus Listed

PLC-RPT- 48DC/21HC - Relay Module



2900294

<https://www.phoenixcontact.com/us/products/2900294>

Classifications

ECLASS

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

ETIM

ETIM 9.0	EC001437
----------	----------

UNSPSC

UNSPSC 21.0	39122300
-------------	----------

PLC-RPT- 48DC/21HC - Relay Module



2900294
<https://www.phoenixcontact.com/us/products/2900294>

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"

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com