

Relay Module - PLC-RPT- 24UC/2X21/FG - 2910539

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 a relay base and plug-in safety relay with force-guided contacts in accordance with DIN EN 61810-3, Push-in connection, 2 changeover contacts, forcibly actuated, Input voltage: 24 V AC/DC

Product Description

The force-guided coupling relay module is approved for industrial control equipment in accordance with UL 508 (cULus listed). The requirements for type A in accordance with DIN EN 61810-3 are satisfied if the circuit is designed as 1 N/O contact / 1 N/C contact.

RoHS

COMPLETE RoHS

Key Commercial Data

Packing unit	10 pc
GTIN	 4 055626 486062
GTIN	4055626486062
Weight per Piece (excluding packing)	64.000 g
Custom tariff number	85364190
Country of origin	Germany

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	104 mm

Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-20 °C ... 85 °C
Maximum altitude	≤ 2000 m
Degree of protection	RT II (Relay)

Relay Module - PLC-RPT- 24UC/2X21/FG - 2910539

Technical data

Ambient conditions

	IP20 (Relay base)
	≥ IP54 (Installation location)

Coil side

Nominal input voltage U_N	24 V AC/DC
Input voltage range in reference to U_N	see diagram
Typical input current at U_N	30 mA
Typical response time	3 ms ... 15 ms
Typical release time range	3 ms ... 15 ms
Coil voltage	24 V DC
Protective circuit	Bridge rectifier
Operating voltage display	Yellow LED

Contact side

Contact type	2 changeover contacts, forcibly actuated
Type of switch contact	Single contact
Contact material	AgNi
Force-guided contacts in accordance with EN 50205	Type B
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (10 mA)
Min. switching current	10 mA (5 V)
Maximum inrush current	6 A
Limiting continuous current	6 A
Interrupting rating (ohmic load) max.	144 W (24 V DC)
	288 W (48 V DC)
	88 W (110 V DC)
	110 W (220 V DC)
	1500 VA (250 V AC)
Switching capacity min.	150 mW
Switching capacity	3 A (24 V, DC13)
	3 A (230 V, AC15)

General

Test voltage relay winding/relay contact	4 kV _{rms} (50 Hz, 1 min.)
Test voltage PDT/PDT	2.5 kV _{rms} (50 Hz, 1 min.)
Operating mode	100% operating factor
Mechanical service life	approx. 10 ⁷ cycles
Mounting position	any
Assembly instructions	In rows with zero spacing
B _{10d}	600000 Cycles (AC1; 250 V / 6 A; 1 NO)
	900000 Cycles (AC1; 250 V / 3 A; 1 NO)
	1800000 Cycles (AC1; 250 V / 1,5 A; 1 NO)

Relay Module - PLC-RPT- 24UC/2X21/FG - 2910539

Technical data

General

	180000 Cycles (AC15; 250 V / 3 A; 1 NO)
	560000 Cycles (AC15; 250 V / 2 A; 1 NO)
	4600000 Cycles (AC15; 250 V / 0,75 A; 1 NO)
	360000 Cycles (DC13; 24 V / 3 A; 1 NO)
	740000 Cycles (DC13; 24 V / 1,5 A; 1 NO)
	4200000 Cycles (DC13; 24 V / 0,75 A; 1 NO)

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	EN 50178
	DIN EN 61810-3
Rated insulation voltage	250 V AC
Rated surge voltage	6 kV
Insulation	Safe isolation, reinforced insulation
Pollution degree	2
Overvoltage category	III
UL, USA	UL 508
	UL 508 Recognized
UL, USA/Canada	cUL 508
	cUL 508 Recognized

Conformance/approvals

Designation	UL, USA
-------------	---------

Relay Module - PLC-RPT- 24UC/2X21/FG - 2910539

Technical data

Conformance/approvals

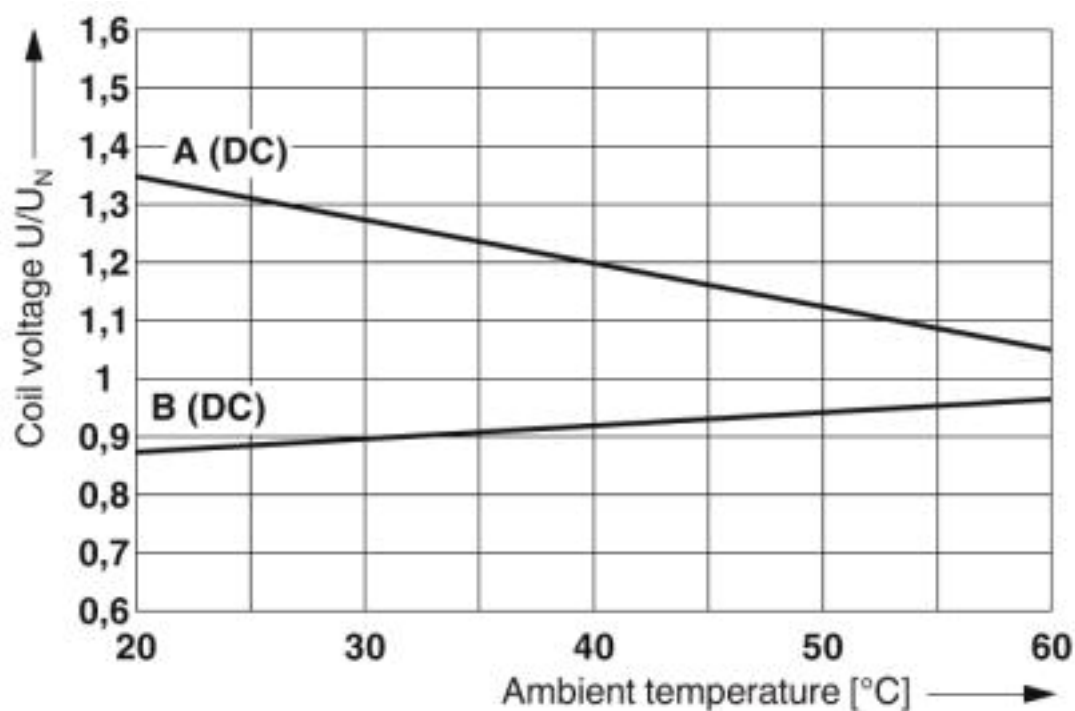
Identification	UL 508
	UL 508 Recognized
Designation	UL, USA/Canada
Identification	UL 508
	UL 508 Recognized

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

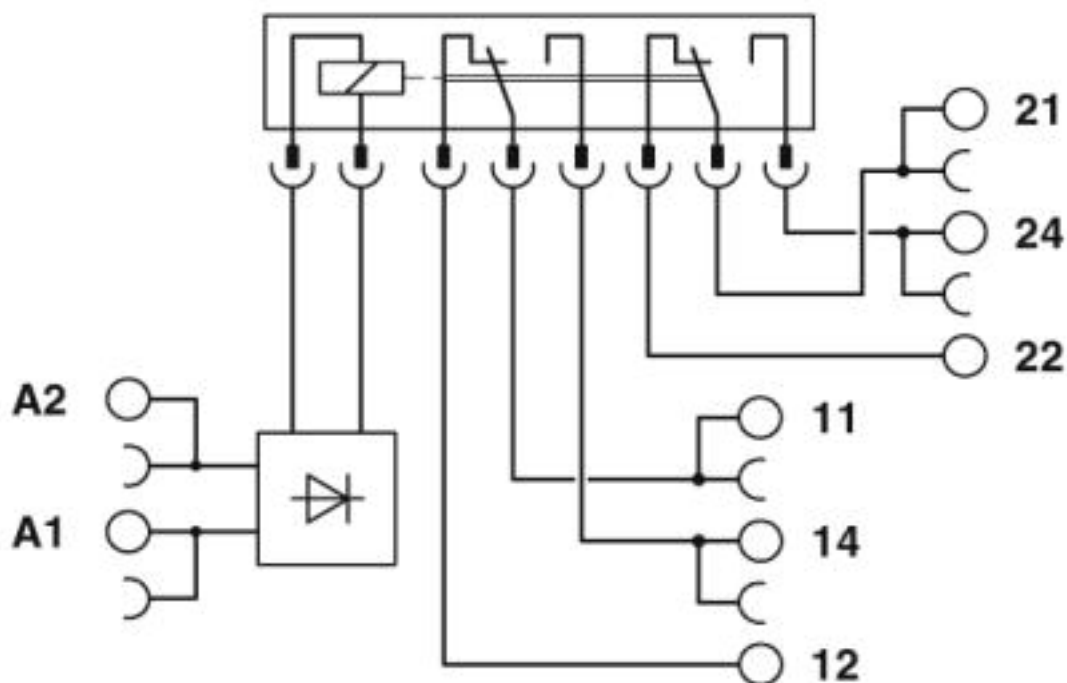


Curve A: maximum continuous voltage at limiting continuous current

Curve B: minimum pick-up voltage for pre-excitation with U_N and limiting continuous current

Relay Module - PLC-RPT- 24UC/2X21/FG - 2910539

Circuit diagram



Articles in set

Safety relays - REL-SR- 24DC/2X21/FG - 2908777



Safety relay with force-guided contacts in accordance with DIN EN 61810-3, contact type: 2 changeover contacts. The requirements for type A in accordance with DIN EN 61810-3 are satisfied if the circuit is designed as 1 N/O contact / 1 N/C contact.

Classifications

eCl@ss

eCl@ss 5.0	27371600
eCl@ss 5.1	27371600
eCl@ss 6.0	27371600
eCl@ss 7.0	27371601
eCl@ss 8.0	27371601
eCl@ss 9.0	27371601

ETIM

ETIM 2.0	EC001437
ETIM 3.0	EC001437
ETIM 4.0	EC001437

Relay Module - PLC-RPT- 24UC/2X21/FG - 2910539

Classifications

ETIM

ETIM 5.0	EC001437
ETIM 6.0	EC001437
ETIM 7.0	EC001437

UNSPSC

UNSPSC 13.2	39122334
UNSPSC 18.0	39122334
UNSPSC 19.0	39122334
UNSPSC 20.0	39122334
UNSPSC 21.0	39122334

Approvals

Approvals

Approvals

UL Listed / cUL Listed / DNV GL / EAC / EAC / cULus Listed

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
-----------	---	---	---------------

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
------------	---	---	---------------

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

EAC			TR_TS_D_00573_c
-----	---	--	-----------------

Relay Module - PLC-RPT- 24UC/2X21/FG - 2910539

Approvals

EAC



TR_TS_S_00010_c

cULus Listed



Accessories

Accessories

Bridge

Continuous plug-in bridge - FBST 500-PLC RD - 2966786



Continuous plug-in bridge, length: 500 mm, color: red

Continuous plug-in bridge - FBST 500-PLC BU - 2966692



Continuous plug-in bridge, length: 500 mm, color: blue

Continuous plug-in bridge - FBST 500-PLC GY - 2966838



Continuous plug-in bridge, length: 500 mm, color: gray

Single plug-in bridge - FBST 6-PLC RD - 2966236



Single plug-in bridge, length: 6 mm, number of positions: 2, color: red

Relay Module - PLC-RPT- 24UC/2X21/FG - 2910539

Accessories

Single plug-in bridge - FBST 6-PLC BU - 2966812



Single plug-in bridge, length: 6 mm, number of positions: 2, color: blue

Single plug-in bridge - FBST 6-PLC GY - 2966825



Single plug-in bridge, length: 6 mm, number of positions: 2, color: gray

Single plug-in bridge - FBST 8-PLC GY - 2967688



Single plug-in bridge, length: 8 mm, number of positions: 2, color: gray

Single plug-in bridge - FBST 14-PLC BK - 2967691



Single plug-in bridge, length: 14 mm, number of positions: 2, color: black

DIN rail

DIN rail, unperforated - NS 35/ 7,5 V2A UNPERF 2000MM - 0801377



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Stainless steel V2A, uncoated, length: 2000 mm, color: silver

Relay Module - PLC-RPT- 24UC/2X21/FG - 2910539

Accessories

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

DIN rail, unperforated - NS 35/15-2,3 UNPERF 2000MM - 1201798



DIN rail, unperforated, Standard profile 2.3 mm, width: 35 mm, height: 15 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

Relay Module - PLC-RPT- 24UC/2X21/FG - 2910539

Accessories

DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

DIN rail perforated - NS 35/15 PERF 2000MM - 1201730



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

Labeled terminal marker

Zack marker strip - ZB10,LGS:FORTL.ZAHLEN - 1053014



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm, Number of individual labels: 10

Partition plate

Separating plate - PLC-ATP BK - 2966841



Separating plate, 2 mm thick, required at the start and end of a PLC terminal strip. Furthermore, it is used for: visual separation of groups, safe isolation of different voltages of neighboring PLC relays in acc. with DIN VDE 0106-101, isolation

Power module

Relay Module - PLC-RPT- 24UC/2X21/FG - 2910539

Accessories

Power terminal block - PLC-ESK GY - 2966508



Power terminal block, for the input of up to four potentials, for mounting on NS 35/7.5

Screwdriver tools

Screwdriver - SZF 1-0,6X3,5 - 1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

Terminal marking

Zack marker strip - ZB10/WH-100:UNBEDRUCKT - 5060883



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm, Number of individual labels: 1000

Zack marker strip - ZB 10:UNBEDRUCKT - 1053001



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.5 x 10.15 mm, Number of individual labels: 10

Spare parts

Safety relays - REL-SR- 24DC/2X21/FG - 2908777



Safety relay with force-guided contacts in accordance with DIN EN 61810-3, contact type: 2 changeover contacts. The requirements for type A in accordance with DIN EN 61810-3 are satisfied if the circuit is designed as 1 N/O contact / 1 N/C contact.

