

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

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 protection against interference currents/voltages on the control side. Consisting of PLC-BSC-230UC/ 1/SEN/SO46 basic terminal block with screw connection and plug-in miniature relay with multi-layer gold contact, 1 N/O contact, 230 V AC input voltage

Commercial data

Item number	1125984
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	CK621A
Product key	CK621A
GTIN	4063151052980
Weight per piece (including packing)	36.48 g
Weight per piece (excluding packing)	30.04 g
Customs tariff number	85364900
Country of origin	DE

Technical data

Notes

General	The PLC-ATP partition plate must be installed for voltages greater than 250 V (L1, L2, L3) between identical terminal blocks on adjacent modules.
General	The PLC-ATP separating plate should be installed for safe isolation between adjacent modules
General	The PLC-ATP separating plate is required at the start and end of every PLC terminal strip.
General	The system installer must ensure the touch protection of the product (at voltages > 25 V AC/60 V DC). The product is a built-in device without protection against direct contact.
General	If the specified maximum values for multi-layer contact relays are exceeded, the gold plating is destroyed. The maximum values of the power contact relay are then valid. This can result in a shorter service life than with a pure power contact.

Product properties

Product type	Relay Module
Product family	PLC-INTERFACE
Application	Input function
Operating mode	100% operating factor
Mechanical service life	2x 10 ⁷ cycles

Insulation characteristics

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

Insulation characteristics: Air clearances and creepage distances

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

Electrical properties

Maximum power dissipation for nominal condition	2.3 W
Test voltage (Winding/contact)	4 kV _{rms} (50 Hz, 1 min., winding/contact)

Air clearances and creepage distances

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 ... 264.5 V AC (20 °C)
	171.6 V DC ... 253 V DC (20 °C)

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

Mains frequency	50/60 Hz
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U_N	8.8 mA (50 Hz) 10 mA (60 Hz)
Typical response time	7 ms
Typical release time	20 ms
Typical release voltage	80 V AC
Coil voltage	60 V DC
Protective circuit	Bridge rectifier RC element
Status display	Yellow LED

Output data

Switching

Contact switching type	1 N/O contact
Type of switch contact	Single contact
Contact material	AgSnO ₂ , hard gold-plated
Maximum switching voltage	30 V AC 36 V DC
Minimum switching voltage	100 mV (at 10 mA)
Limiting continuous current	50 mA
Maximum inrush current	50 mA
Min. switching current	1 mA (24 V)
Short-circuit current	200 A (conditional short-circuit current)
Interrupting rating (ohmic load) max.	1.2 W (24 V DC)
Switching capacity min.	0.12 W
Output fuse	4 A gL/gG NEOZED

Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
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 ... 1.5 mm ² (TWIN ferrule)
Conductor cross section AWG	26 ... 14
Tightening torque	0.45 Nm ... 0.55 Nm (Usually these terminal blocks must be supported during conductor connection (held by one hand, supported on the housing))

Dimensions

Width	6.2 mm
-------	--------

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

Height	80 mm
Depth	94 mm

Material specifications

Color	gray (RAL 7042)
-------	-----------------

Environmental and real-life conditions

Ambient conditions

Degree of protection (Relay base)	IP20 (Relay base)
Degree of protection (Relay)	RT III (Relay)
Degree of protection (Installation location)	≥ IP54 (Installation location)
Ambient temperature (operation)	-40 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 m

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

Air clearances and creepage distances

Standards/regulations	EN 61810
	IEC 60947-5-1

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



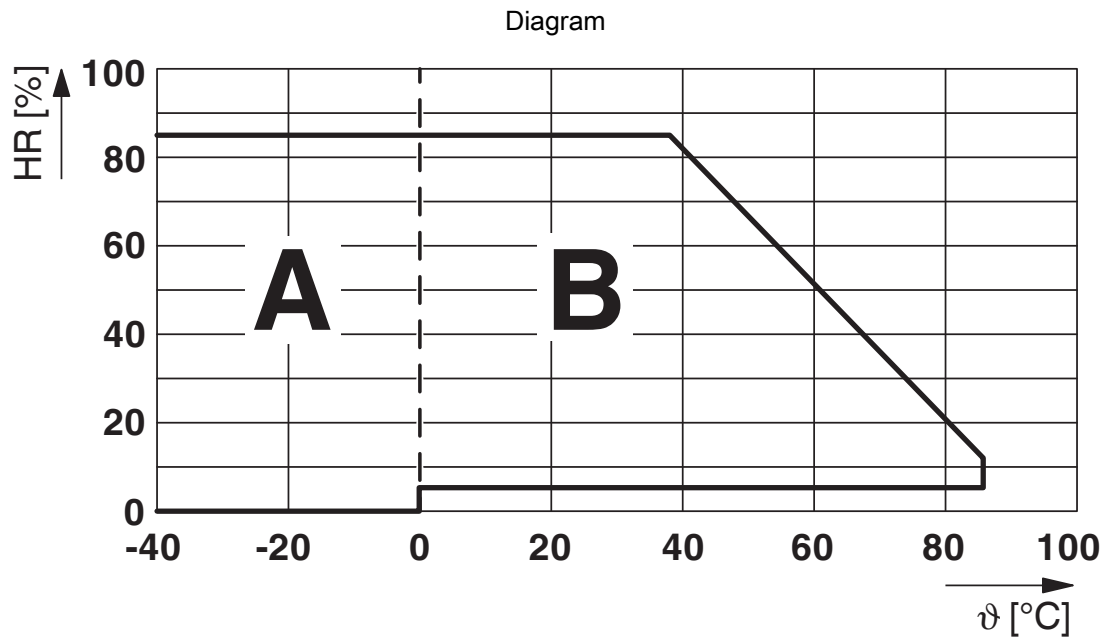
1125984

<https://www.phoenixcontact.com/gb/products/1125984>

Mounting

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

Drawings



Permissible humidity for operation and storage.

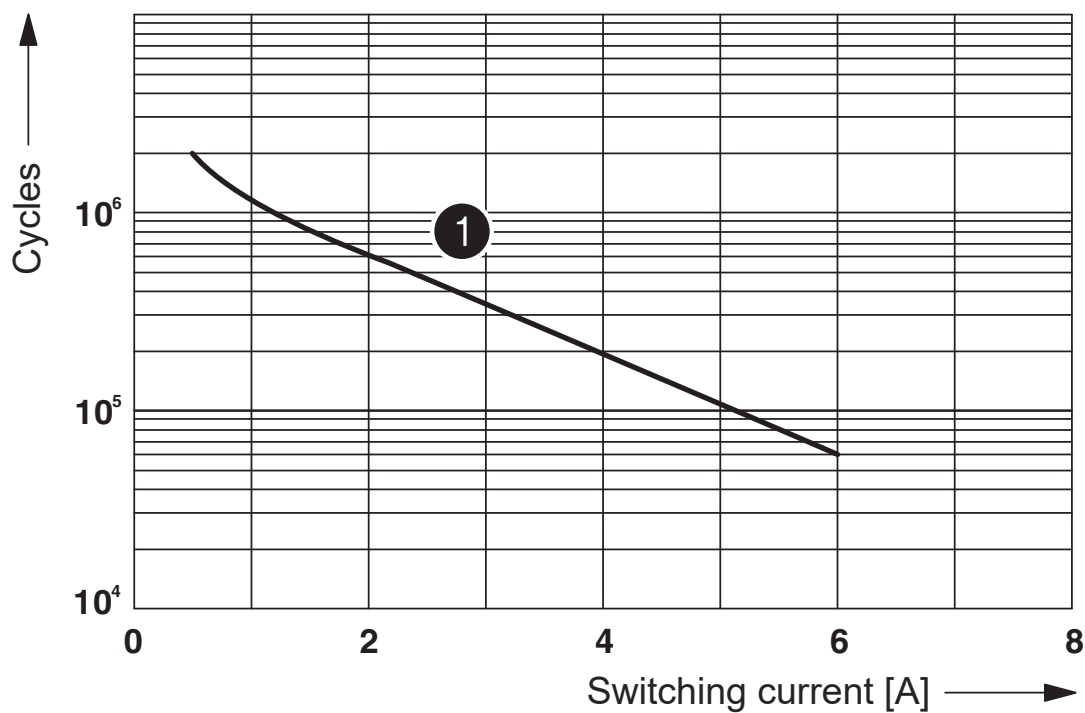
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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 $\leq 25^\circ\text{C}$.

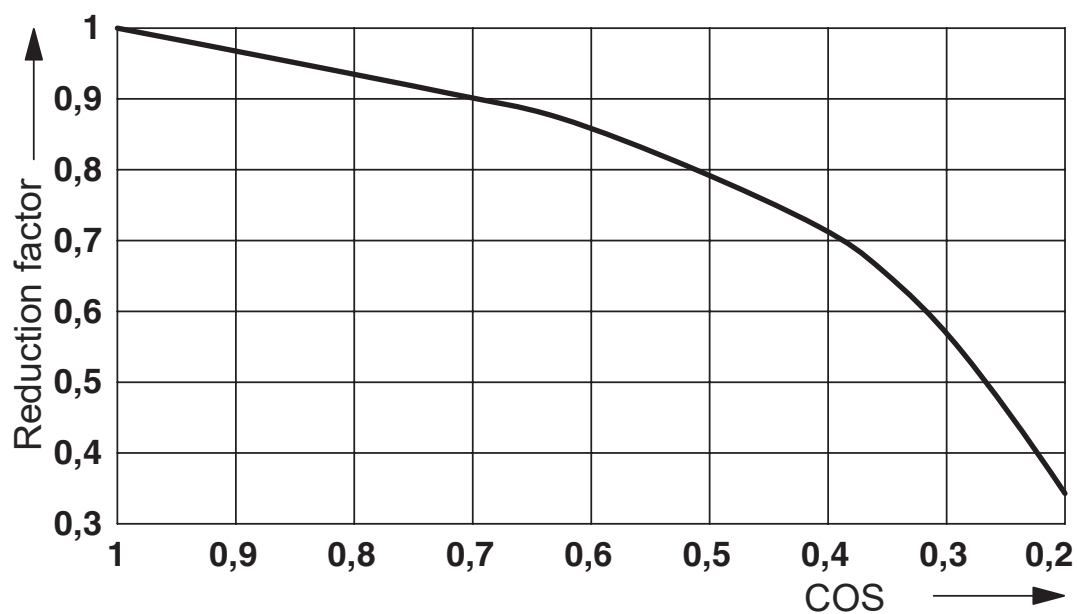
Diagram



① 250 V AC, ohmic load

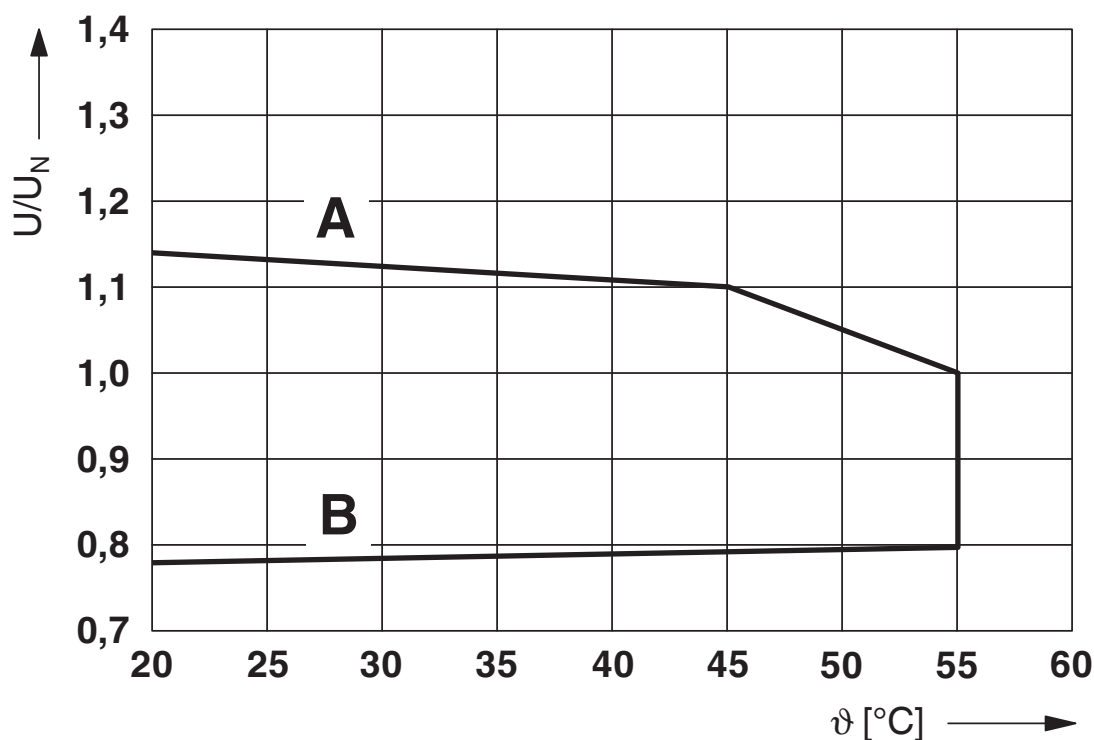
Electrical service life

Diagram



Service life reduction factor

Diagram



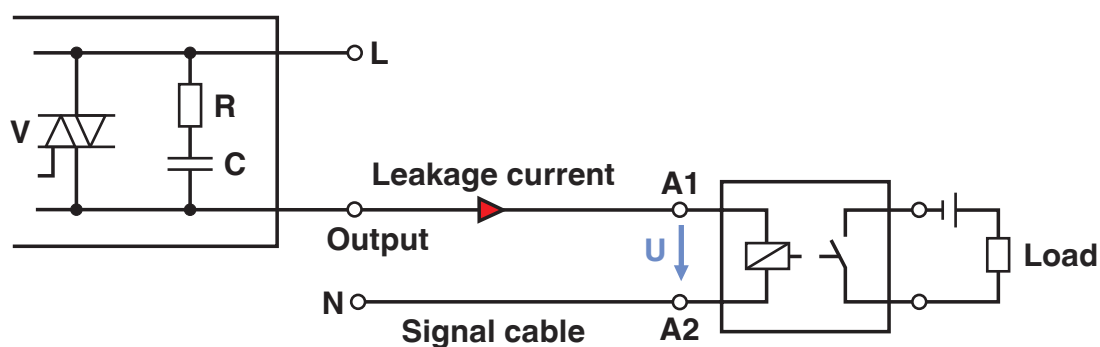
Curve A

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)

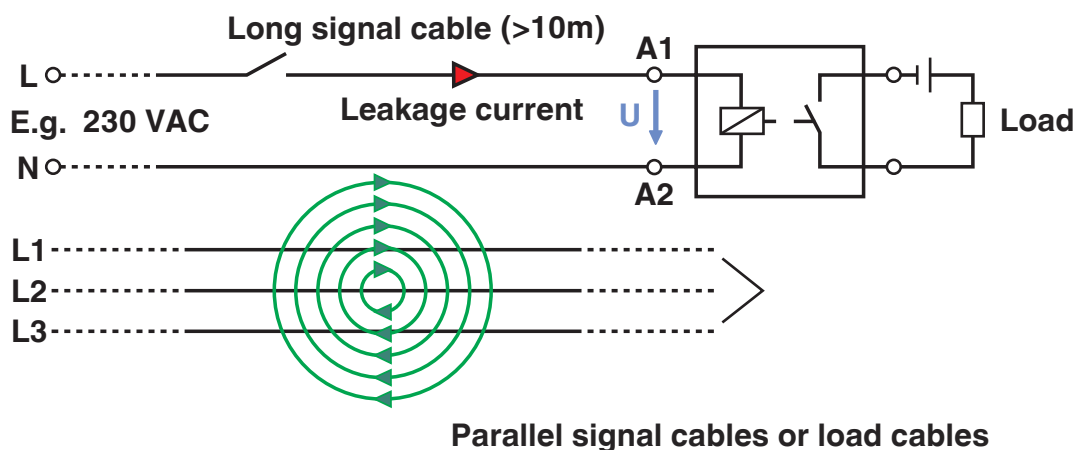
Application drawing



Occurrence of interference signals

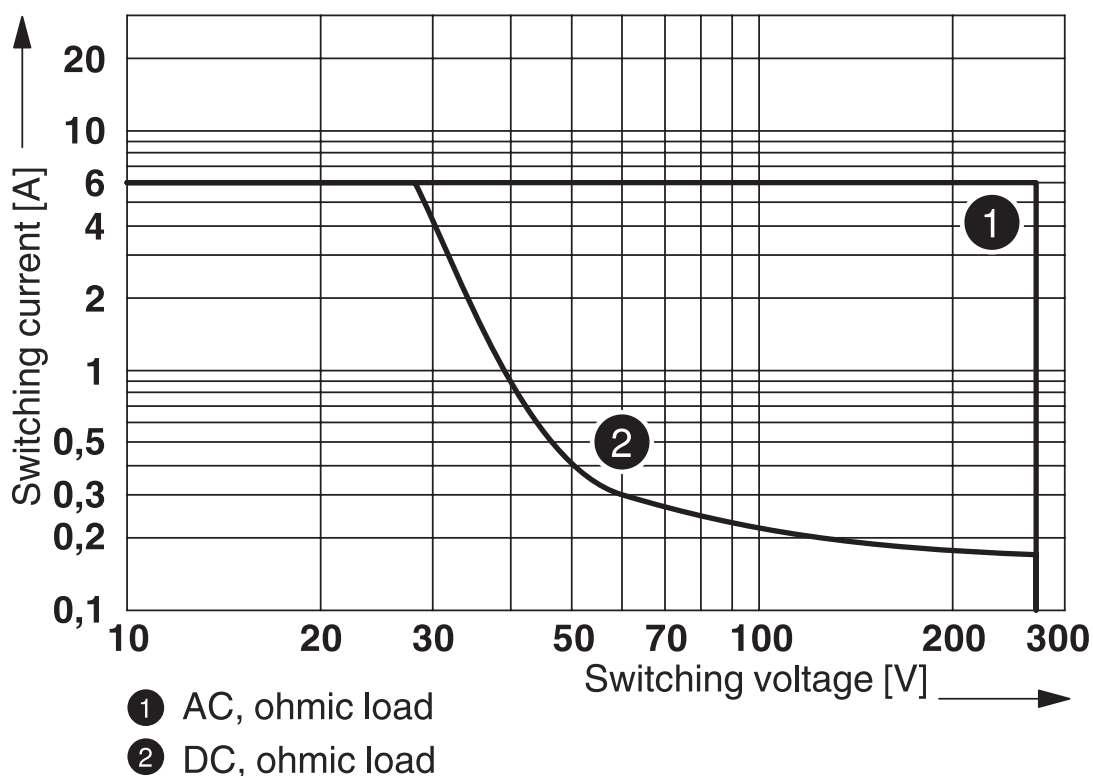
Scenario 1: controller - AC output card

Application drawing



Occurrence of interference signals
Scenario 2: long signal cables

Diagram



Interrupting rating

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/1125984>



cUL Recognized
Approval ID: FILE E 238705



UL Recognized
Approval ID: FILE E 238705



EAC
Approval ID: RU*C-DE.*08.B.00010



DNV GL
Approval ID: TAE0000196



EAC
Approval ID: RU D-DE.B*00573/18



UL Listed
Approval ID: FILE E 172140



cUL Listed
Approval ID: FILE E 172140



cULus Listed
Approval ID: E140324

cULus Recognized

cULus Listed

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

Classifications

ECLASS

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

ETIM

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

UNSPSC

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

Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

1125984

<https://www.phoenixcontact.com/gb/products/1125984>

Accessories

 Note: Applying some accessories below might limit this product.

FBST 500-PLC RD - Continuous plug-in bridge

2966786

<https://www.phoenixcontact.com/gb/products/2966786>



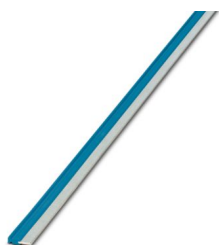
Continuous plug-in bridge, length: 500 mm, color: red

 Max. current carrying capacity: 32 A

FBST 500-PLC BU - Continuous plug-in bridge

2966692

<https://www.phoenixcontact.com/gb/products/2966692>



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

 Max. current carrying capacity: 32 A

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

FBST 500-PLC GY - Continuous plug-in bridge

2966838

<https://www.phoenixcontact.com/gb/products/2966838>



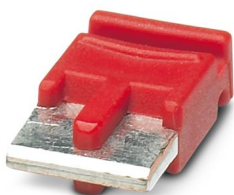
Continuous plug-in bridge, length: 500 mm, color: gray

 Max. current carrying capacity: 32 A

FBST 6-PLC RD - Single plug-in bridge

2966236

<https://www.phoenixcontact.com/gb/products/2966236>



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

 Max. current carrying capacity: 6 A

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

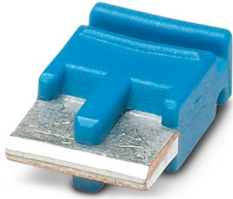
<https://www.phoenixcontact.com/gb/products/1125984>

FBST 6-PLC BU - Single plug-in bridge

2966812

<https://www.phoenixcontact.com/gb/products/2966812>

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



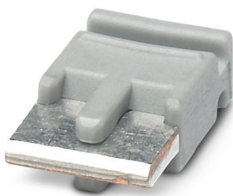
 Max. current carrying capacity: 6 A

FBST 6-PLC GY - Single plug-in bridge

2966825

<https://www.phoenixcontact.com/gb/products/2966825>

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



 Max. current carrying capacity: 6 A

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

FBST 8-PLC GY - Single plug-in bridge

2967688

<https://www.phoenixcontact.com/gb/products/2967688>

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



 Max. current carrying capacity: 6 A

ZB 6:UNBEDRUCKT - Zack marker strip

1051003

<https://www.phoenixcontact.com/gb/products/1051003>



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

ZB 6 CUS - Zack marker strip

0824992

<https://www.phoenixcontact.com/gb/products/0824992>



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

ZB 6,LGS:FORTL.ZAHLEN - Zack marker strip

1051016

<https://www.phoenixcontact.com/gb/products/1051016>



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

1125984

<https://www.phoenixcontact.com/gb/products/1125984>

ZB 6,QR:FORTL.ZAHLEN - Zack marker strip

1051029

<https://www.phoenixcontact.com/gb/products/1051029>



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

ZB 6,LGS:GLEICHE ZAHLEN - Zack marker strip

1051032

<https://www.phoenixcontact.com/gb/products/1051032>



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: Identical numbers 1 or 2, etc. up to 100, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

ZB 6,LGS:L1-N,PE - Marker for terminal blocks

1051414

<https://www.phoenixcontact.com/gb/products/1051414>



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

ZB 6,LGS:U-N - Marker for terminal blocks

1051430

<https://www.phoenixcontact.com/gb/products/1051430>



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: U, V, W, N, GND, U, V, W, N, GND, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

UC-TM 6 - Marker for terminal blocks

0818085

<https://www.phoenixcontact.com/gb/products/0818085>



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 80

UC-TM 6 CUS - Marker for terminal blocks

0824589

<https://www.phoenixcontact.com/gb/products/0824589>



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 80

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

UCT-TM 6 - Marker for terminal blocks

0828736

<https://www.phoenixcontact.com/gb/products/0828736>



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 60

UCT-TM 6 CUS - Marker for terminal blocks

0829602

<https://www.phoenixcontact.com/gb/products/0829602>



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 60

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

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

0801733

<https://www.phoenixcontact.com/gb/products/0801733>



DIN rail perforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

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

0801681

<https://www.phoenixcontact.com/gb/products/0801681>



DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

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

1204119

<https://www.phoenixcontact.com/gb/products/1204119>



DIN rail perforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver

NS 35/ 7,5 WH UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1204122

<https://www.phoenixcontact.com/gb/products/1204122>



DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

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

0801704

<https://www.phoenixcontact.com/gb/products/0801704>



DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver

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

1206421

<https://www.phoenixcontact.com/gb/products/1206421>



DIN rail perforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, Standard profile, color: silver

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

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

1206434

<https://www.phoenixcontact.com/gb/products/1206434>



DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, Standard profile, color: silver

NS 35/ 7,5 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

0801762

<https://www.phoenixcontact.com/gb/products/0801762>



DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

NS 35/ 7,5 CAP - End cap

1206560

<https://www.phoenixcontact.com/gb/products/1206560>

DIN rail end piece, for DIN rail NS 35/7.5



NS 35/15 PERF 2000MM - DIN rail perforated

1201730

<https://www.phoenixcontact.com/gb/products/1201730>



DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

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

1201714

<https://www.phoenixcontact.com/gb/products/1201714>



DIN rail, unperforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

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

0806602

<https://www.phoenixcontact.com/gb/products/0806602>



DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: white

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

NS 35/15 WH UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1204135

<https://www.phoenixcontact.com/gb/products/1204135>



DIN rail, unperforated, Pack of 10 (20 m), similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver

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

1201756

<https://www.phoenixcontact.com/gb/products/1201756>



DIN rail, unperforated, similar to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

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

1206599

<https://www.phoenixcontact.com/gb/products/1206599>



DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, Standard profile, color: silver

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

1206586

<https://www.phoenixcontact.com/gb/products/1206586>



DIN rail, unperforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, Standard profile, color: silver

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

NS 35/15 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201895

<https://www.phoenixcontact.com/gb/products/1201895>



DIN rail, unperforated, Pack of 10 (20 m), similar to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored

NS 35/15 CAP - End cap

1206573

<https://www.phoenixcontact.com/gb/products/1206573>

DIN rail end piece, for DIN rail NS 35/15



PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module



1125984

<https://www.phoenixcontact.com/gb/products/1125984>

NS 35/15-2,3 UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201798

<https://www.phoenixcontact.com/gb/products/1201798>



DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile 2.3 mm, color: silver

PLC-ATP BK - Separating plate

2966841

<https://www.phoenixcontact.com/gb/products/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

PLC-RSC-230UC/ 1AU/SEN/SO46 - Relay Module

1125984

<https://www.phoenixcontact.com/gb/products/1125984>



PLC-ESK GY - Power terminal block

2966508

<https://www.phoenixcontact.com/gb/products/2966508>



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

SZF 1-0,6X3,5 - Screwdriver

1204517

<https://www.phoenixcontact.com/gb/products/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

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

PHOENIX CONTACT Ltd
Halesfield 13, Telford
Shropshire, TF7 4PG
01952 681700
info@phoenixcontact.co.uk