

2902955

https://www.phoenixcontact.com/us/products/2902955

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PLC-INTERFACE, consisting of DIN rail-mountable basic terminal block with screw connection and plug-in miniature relay with power contact, 1 changeover contact, input voltage: 24 V DC, UL/cUL: approved for use in Ex Zone Class I, Div. 2 and ATEX (Zone 2)

Commercial data

Item number	2902955
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C461
Product key	CK61B2
Catalog page	Page 412 (C-7-2015)
GTIN	4046356957588
Weight per piece (including packing)	42.92 g
Weight per piece (excluding packing)	31.06 g
Customs tariff number	85364190
Country of origin	DE



2902955

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Technical data

Product properties

Product type	Relay Module
Application	Class I, Division 2
Operating mode	100% operating factor
Mechanical service life	2x 10 ⁷ cycles
Insulation characteristics: Standards/regulations	
Overvoltage category	III
Pollution degree	3

Electrical properties

Maximum power dissipation for nominal condition	0.22 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)

Input data

Coil side

Nominal input voltage U _N	24 V DC
Input voltage range	18.5 V DC 33.6 V DC
Typical input current at U _N	9 mA
Typical response time	5 ms
Typical release time	8 ms
Protective circuit	Reverse polarity protection; Polarity protection diode
	Freewheeling diode; Freewheeling diode
Operating voltage display	Yellow LED

Output data

Switching

•	
Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact connection type	Power contact
Contact material	AgSnO
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 orFBST 500)
Minimum switching voltage	5 V (at 100 mA)
Limiting continuous current	6 A
Maximum inrush current	10 A (4 s)
Min. switching current	10 mA (at 12 V)
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	20 W (at 48 V DC)
	18 W (at 60 V DC)



2902955

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23 W (at 110 V DC)
40 W (at 220 V DC)
1500 VA (for 250 V AC)
2 A (at 24 V, DC13)
0.2 A (at 110 V, DC13)
0.1 A (at 220 V, DC13)
3 A (at 24 V, AC15)
3 A (at 120 V, AC15)
3 A (at 230 V, AC15)

Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section rigid	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 mm ² 1.5 mm ² (TWIN ferrule)
Conductor cross section AWG	26 14
Tightening torque	0.6 Nm 0.8 Nm

Dimensions

Width	6.2 mm
Height	80 mm
Depth	94 mm

Material specifications

<u>'</u>	
Flammability rating according to UL 94	V0 (Housing)

Environmental and real-life conditions

Ambient conditions

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

Approvals

CE

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Identification	CE-compliant
ATEX	
Identification	
Certificate	IBExU16ATEXB015 X



2902955

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IECEx	
Identification	Ex ec nC IIC T4 Gc
Certificate	IECEx IBE 16.0029X
UL, USA	
Identification	Class I, Zone 2, AEx nA nC IIC T6
UL, USA/Canada	
Identification	Class I, Div. 2, Groups A, B, C, D
UL, Canada	
Identification	Class I, Zone 2, Ex nA nC IIC Gc T6 X
identification	Class I, Zone Z, Extiltino no de 10 X
Standards and regulations	Glass I, Zone Z, EX III/ He He do Te X
Standards and regulations Standards/regulations	· ·
Standards and regulations	IEC 60664 EN 50178
Standards and regulations Standards/regulations	IEC 60664
Standards and regulations Standards/regulations	IEC 60664 EN 50178
Standards and regulations Standards/regulations Standards/regulations	IEC 60664 EN 50178
Standards and regulations Standards/regulations Standards/regulations Mounting	IEC 60664 EN 50178 EN 60079-0, -7, -15
Standards and regulations Standards/regulations Standards/regulations Mounting Mounting type	IEC 60664 EN 50178 EN 60079-0, -7, -15 DIN rail mounting

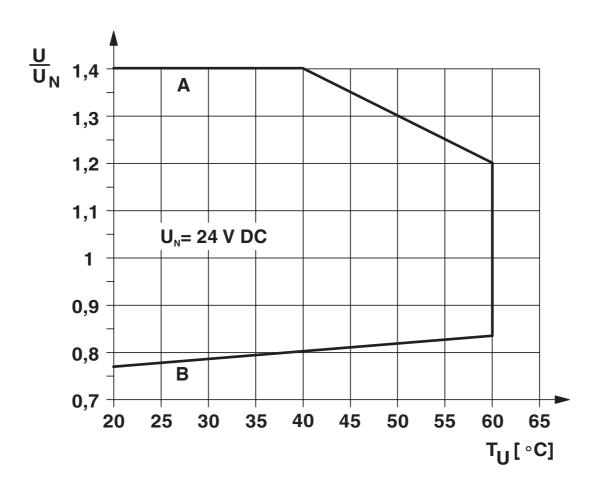


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Drawings

Diagram



Curve A

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

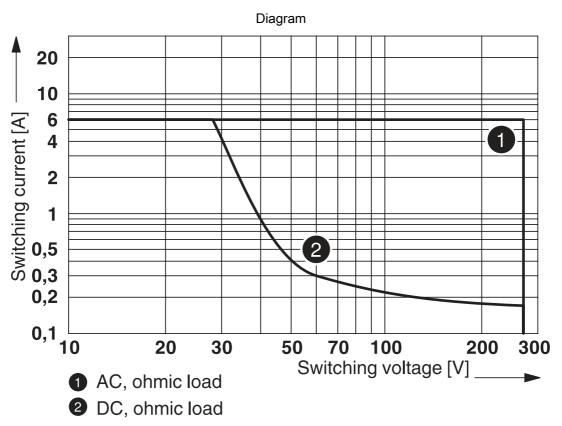
Curve B

Minimum permissible operate voltage \mathbf{U}_{op} after pre-excitation (see relevant technical data)

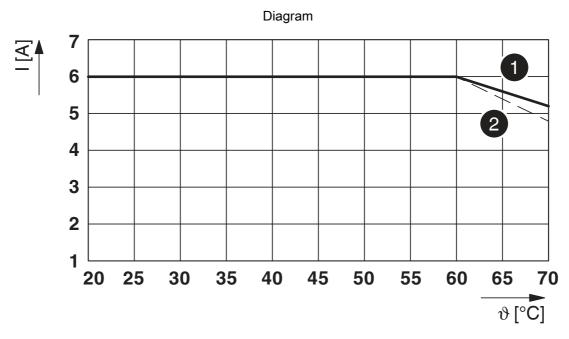


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Interrupting rating



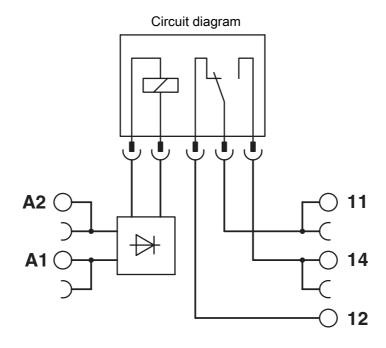
Limiting continuous current per contact for 0.85 ... 1.1 U_N (contact-side)

- (1) Limiting continuous current for horizontal installation position without clearance
- (2) Limiting continuous current for vertical installation position without clearance



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Classifications

ETIM 7.0

ECLASS

	ECLASS-11.0	27371601
ETIM		

EC001437



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Environmental product compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"



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Accessories



Note: Applying some accessories below might limit this product.

FBST 500-PLC RD - Continuous plug-in bridge

2966786

https://www.phoenixcontact.com/us/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/us/products/2966692



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

1 Max. current carrying capacity: 32 A



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FBST 500-PLC GY - Continuous plug-in bridge

2966838

https://www.phoenixcontact.com/us/products/2966838



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

1 Max. current carrying capacity: 32 A

FBST 6-PLC RD - Single plug-in bridge

2966236

https://www.phoenixcontact.com/us/products/2966236

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



Max. current carrying capacity: 6 A



2902955

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FBST 6-PLC BU - Single plug-in bridge

2966812

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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

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



Max. current carrying capacity: 6 A



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FBST 8-PLC GY - Single plug-in bridge

2967688

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



Max. current carrying capacity: 6 A

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

0801377

https://www.phoenixcontact.com/us/products/0801377



DIN rail, unperforated, acc. to EN 60715, material: Stainless steel V2A, uncoated, Standard profile, color: silver, Pack of 25 (50 m) $\,$



2902955

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

0801733

https://www.phoenixcontact.com/us/products/0801733



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

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

0801762

https://www.phoenixcontact.com/us/products/0801762



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



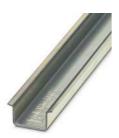
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NS 35/15 UNPERF 2000MM - DIN rail, unperforated

1201714

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

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

1201895

https://www.phoenixcontact.com/us/products/1201895



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



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

1201798

https://www.phoenixcontact.com/us/products/1201798



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

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

1201756

https://www.phoenixcontact.com/us/products/1201756



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



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NS 35/15 PERF 2000MM - DIN rail perforated

1201730

https://www.phoenixcontact.com/us/products/1201730



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

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

0801681

https://www.phoenixcontact.com/us/products/0801681



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



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PLC-ESK GY - Power terminal block

2966508

https://www.phoenixcontact.com/us/products/2966508



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

PLC-ATP BK - Separating plate

2966841

https://www.phoenixcontact.com/us/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



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SZF 1-0,6X3,5 - Screwdriver

1204517

https://www.phoenixcontact.com/us/products/1204517



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

PLC-V8/FLK14/OUT - System connection

2295554

https://www.phoenixcontact.com/us/products/2295554



V8 adapter for 8 x PLC-INTERFACE (6.2 mm), controller: PLC system cabling of output cards, connection 1: IDC/FLK pin strip 1x 14-position, connection 2: Plugin connection (Can be snapped onto 8x PLC-INTERFACE terminals), connection 3: Screw connection 1x 2-position, number of channels: 8, control logic: plusschaltend



2902955

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PLC-V8/FLK14/OUT/M - System connection

2304102

https://www.phoenixcontact.com/us/products/2304102



V8 adapter for 8 x PLC-INTERFACE (6.2 mm), controller: PLC system cabling of output cards, connection 1: IDC/FLK pin strip 1x 14-position, connection 2: Plugin connection (Can be snapped onto 8x PLC-INTERFACE terminals), connection 3: Screw connection 1x 2-position, number of channels: 8, control logic: minusschaltend

PLC-V8/D15S/OUT - System connection

2296058

https://www.phoenixcontact.com/us/products/2296058



V8 adapter for 8 x PLC-INTERFACE (6.2 mm), controller: PLC system cabling of output cards, connection 1: D-SUB pin strip 1x 15-position, connection 2: Plug-in connection (Can be snapped onto 8x PLC-INTERFACE terminals), connection 3: Screw connection 1x 2-position, number of channels: 8, control logic: plusschaltend



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PLC-V8/D15B/OUT - System connection

2296061

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V8 adapter for 8 x PLC-INTERFACE (6.2 mm), controller: PLC system cabling of output cards, connection 1: D-SUB socket strip 1x 15-position, connection 2: Plug-in connection (Can be snapped onto 8x PLC-INTERFACE terminals), connection 3: Screw connection 1x 2-position, number of channels: 8, control logic: plusschaltend

ZB 6:UNBEDRUCKT - Zack marker strip

1051003

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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



2902955

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

1051016

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Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: consecutive numbers 1 \dots 10, 11 \dots 20, etc. up to 491 \dots 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/WH-100:UNBEDRUCKT - Zack marker strip

5060935

https://www.phoenixcontact.com/us/products/5060935



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: 1000



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UC-TM 6 - Marker for terminal blocks

0818085

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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

UCT-TM 6 - Marker for terminal blocks

0828736

https://www.phoenixcontact.com/us/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



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REL-MR- 24DC/21 - Single relay

2961105

https://www.phoenixcontact.com/us/products/2961105



Plug-in miniature power relay, with power contact, 1 changeover contact, input voltage 24 V DC

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