

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
Data management status	
Date of last data management	25.04.2023
Article revision	03
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)



2902955

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

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)
	23 W (at 110 V DC)
	40 W (at 220 V DC)
	1500 VA (for 250 V AC)
Switching capacity	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 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	0.6 Nm 0.8 Nm

Dimensions

Width	6.2 mm
Height	80 mm
Depth	94 mm

Material specifications

Flammability rating according to UL 94	V0 (Housing)
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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

UE .	
Identification	CE-compliant



2902955

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Identification	
Certificate	IBExU16ATEXB015 X
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

Standards and regulations

Standards/regulations

Standards/regulations	IEC 60664
	EN 50178
	EN 60079-0, -7, -15

Mounting

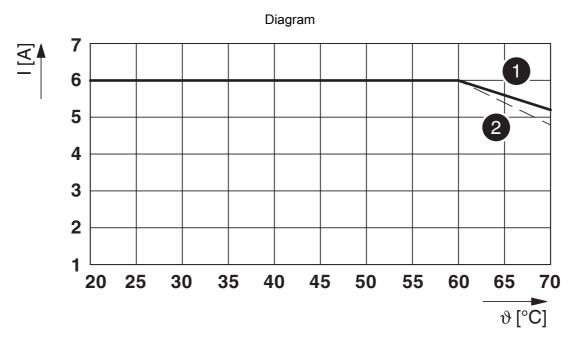
Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any



2902955

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Drawings



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

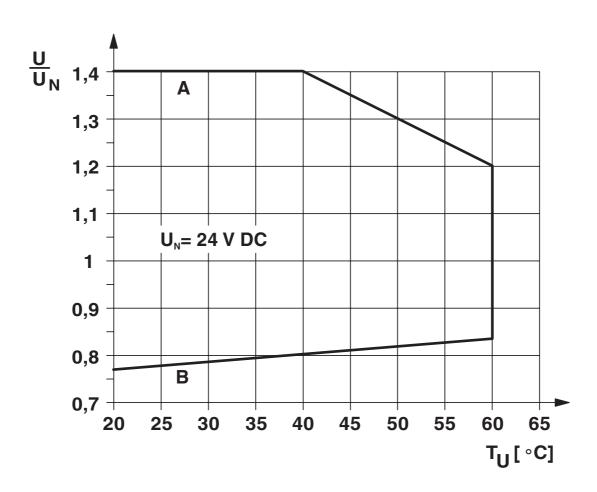
- (1) Limiting continuous current for horizontal installation position without clearance
- (2) Limiting continuous current for vertical installation position without clearance



2902955

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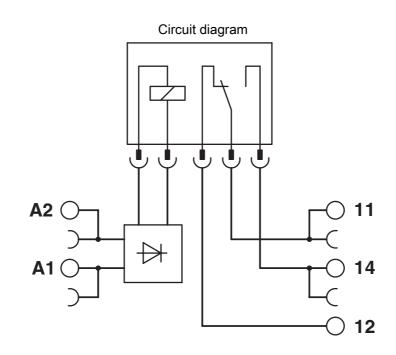
Curve A Maximum permissible continuous voltage U_{max} with limiting continuous current on the contact side (see relevant technical data) Curve B

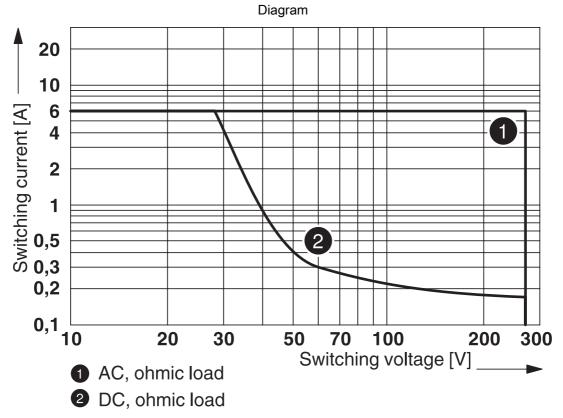
Minimum permissible operate voltage \mathbf{U}_{op} after pre-excitation (see relevant technical data)



2902955

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Interrupting rating



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Classifications

ECLASS

ECLASS-11.0 27371601



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Environmental product compliance

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%



2902955

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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



2902955

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FBST 500-PLC GY - Continuous plug-in bridge

2966838

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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



2902955

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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



1 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, Pack of 25 (50 m), acc. to EN 60715, material: Stainless steel V2A, uncoated, Standard profile, color: silver



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, 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 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

0801762

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



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



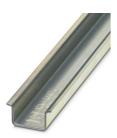
2902955

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

1201714

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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 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201895

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



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



2902955

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

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



2902955

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NS 35/15 PERF 2000MM - DIN rail perforated

1201730

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

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

0801681

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



2902955

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PLC-ESK GY - Power terminal block

2966508

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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: positive switching



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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: positive switching



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PLC-V8/D15B/OUT - System connection

2296061

https://www.phoenixcontact.com/us/products/2296061



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: positive switching

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: $6.15 \times 10.5 \text{ mm}$, Number of individual labels: $10 \times 10.5 \text{ mm}$, Number

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



2902955

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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



2902955

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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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