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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)

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Commercial Data

Item number	2902955
Packing unit	1 pc
Sales Key	C05
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

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Technical Data

Product properties

Product type	Relay Module
Application	Class I, Division 2
Operating mode	100% operating factor
	0.407
Mechanical service life	2x 10 ⁷ cycles
nsulation characteristics	
	III

Electrical properties

Maximum power dissipation for nominal condition	0.22 W
Test voltage	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
	Free-wheeling diode; Damping diode
Operating voltage display	Yellow LED

Output data

Switching

Contact type	1 changeover contact
Type of switch contact	Single contact
Type of contact	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)

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	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 solid	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
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

Environmental and real-life conditions

Degree of protection	RT III (Relay)
	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

Approval data

CE	
Identification	CE-compliant
CE	
Identification	□ II 3G Ex ec nC IIC T4 Gc
Certificate	IBExU16ATEXB015 X





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CE	
Identification	Ex ec nC IIC T4 Gc
Certificate	IECEx IBE 16.0029X
CE	
Identification	Class I, Zone 2, AEx nA nC IIC T6
CE	
Identification	Class I, Div. 2, Groups A, B, C, D
CE	
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 instructions	in rows with zero spacing
Mounting position	any

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Drawings



Interrupting rating

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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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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)



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Classifications

ECLASS

ECLASS-9.0	27371601
ECLASS-10.0.1	27371601
ECLASS-11.0	27371601

ETIM

ETIM 7.0	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

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Note: Applying some accessories below might limit this product.

Continuous plug-in bridge

Continuous plug-in bridge - FBST 500-PLC RD - 2966786 https://www.phoenixcontact.com/us/products/2966786



Continuous plug-in bridge, color: red

Max. current carrying capacity: 32 A

Continuous plug-in bridge

Continuous plug-in bridge - FBST 500-PLC BU - 2966692 https://www.phoenixcontact.com/us/products/2966692



Continuous plug-in bridge, color: blue

Max. current carrying capacity: 32 A

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Continuous plug-in bridge

Continuous plug-in bridge - FBST 500-PLC GY - 2966838 https://www.phoenixcontact.com/us/products/2966838



Continuous plug-in bridge, color: gray



Single plug-in bridge

Single plug-in bridge - FBST 6-PLC RD - 2966236 https://www.phoenixcontact.com/us/products/2966236

Single plug-in bridge, color: red



Max. current carrying capacity: 6 A

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Single plug-in bridge

Single plug-in bridge - FBST 6-PLC BU - 2966812 https://www.phoenixcontact.com/us/products/2966812

Single plug-in bridge, color: blue



6 Max. current carrying capacity: 6 A

Single plug-in bridge

Single plug-in bridge - FBST 6-PLC GY - 2966825 https://www.phoenixcontact.com/us/products/2966825

Single plug-in bridge, color: gray



Max. current carrying capacity: 6 A

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Single plug-in bridge

Single plug-in bridge - FBST 8-PLC GY - 2967688 https://www.phoenixcontact.com/us/products/2967688

Single plug-in bridge, color: gray



6 Max. current carrying capacity: 6 A

DIN rail, unperforated

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

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DIN rail perforated

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

DIN rail, unperforated

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

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714 https://www.phoenixcontact.com/us/products/1201714



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

DIN rail, unperforated

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

DIN rail, unperforated - NS 35/15-2,3 UNPERF 2000MM-VPE 10 - 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 mm, color: silver, Pack of 10 (20 m)

DIN rail, unperforated

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

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

DIN rail, unperforated

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

Power terminal block - PLC-ESK GY - 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

Separating plate

Separating plate - PLC-ATP BK - 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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Screwdriver

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

System connection

System connection - PLC-V8/FLK14/OUT - 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: Screw connection 1x, connection 2: IDC/FLK pin strip 1x 14-position, connection 3: Plug-in connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: plusschaltend

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



System connection

System connection - PLC-V8/FLK14/OUT/M - 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: Screw connection 1x, connection 2: IDC/FLK pin strip 1x 14-position, connection 3: Plug-in connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: minusschaltend

Adapter module

Adapter module - PLC-V8/D15S/OUT - 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: Screw connection 1x, connection 2: D-SUB pin strip 1x 15-position, connection 3: Plug-in connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: plusschaltend

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System connection

System connection - PLC-V8/D15B/OUT - 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: Screw connection 1x, connection 2: D-SUB socket strip 1x 15-position, connection 3: Plug-in connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: plusschaltend

Zack marker strip

Zack marker strip - ZB 6:UNBEDRUCKT - 1051003 https://www.phoenixcontact.com/us/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: $6.15 \times 10.5 \text{ mm}$, Number of individual labels: 10 mm

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Zack marker strip

Zack marker strip - ZB 6,LGS:FORTL.ZAHLEN - 1051016 https://www.phoenixcontact.com/us/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

Zack marker strip

Zack marker strip - ZB 6/WH-100:UNBEDRUCKT - 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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Marker for terminal blocks

Marker for terminal blocks - UC-TM 6 - 0818085 https://www.phoenixcontact.com/us/products/0818085

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

Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with:

Marker for terminal blocks

Marker for terminal blocks - UCT-TM 6 - 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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Single relay

Single relay - REL-MR- 24DC/21 - 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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