

# PLC-BPT- 24UC/ 1/ACT - Relay base



2900450

<https://www.phoenixcontact.com/us/products/2900450>

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6.2 mm PLC basic terminal block for output functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 24 V AC/DC

## Your advantages

- PLC actuator series with solid-state power relays for coupling the controller and actuators, such as motors, contactors, valves, etc.

## Commercial data

Item number	2900450
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C461
Product key	DK62A1
GTIN	4046356512381
Weight per piece (including packing)	28.11 g
Weight per piece (excluding packing)	28.1 g
Customs tariff number	85366990
Country of origin	DE

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## Technical data

### Notes

#### Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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### Product properties

Product type	Relay socket
Product family	PLC-INTERFACE
Application	Output function
Operating mode	100% operating factor

### Input data

Nominal input voltage $U_N$	24 V AC/DC The nominal voltage of the plug-on electromechanical relay or solid-state relay (see necessary accessories) deviates from the nominal input voltage of the base with integrated upstream circuit
Protective circuit	Bridge rectifier
Nominal input voltage $U_N$	24 V AC/DC The nominal voltage of the plug-on electromechanical relay or solid-state relay (see necessary accessories) deviates from the nominal input voltage of the base with integrated upstream circuit

### Relay assembly

Rated control circuit supply voltage $U_S$	24 V AC/DC
Voltage range with reference to $U_S$	0.8 ... 1.2
Typical input current at $U_N$	15.6 mA (50 Hz) 8.5 mA (60 Hz)
Typical response time	5 ms
Typical release time	30 ms
Operating voltage display	Yellow LED
Protective circuit	Bridge rectifier; Bridge rectifier

### Optocoupler assembly

Rated control circuit supply voltage $U_S$	24 V AC/DC
Voltage range with reference to $U_S$	0.8 ... 1.2
Typical input current at $U_N$	15 mA (50 Hz) 8.3 mA (60 Hz)
Typical response time	10 ms
Typical release time	20 ms
Operating voltage display	Yellow LED
Protective circuit	Bridge rectifier; Bridge rectifier

### Output data

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Maximum switching voltage	33 V DC
Minimum switching voltage	3 V DC
Limiting continuous current	3 A (see derating curve)
Voltage drop at max. limiting continuous current	≤ 150 mV
Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection Parallel polarity protection diode Surge protection
Maximum switching voltage	48 V DC
Minimum switching voltage	3 V DC
Limiting continuous current	100 mA
Voltage drop at max. limiting continuous current	≤ 1 V
Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection Parallel polarity protection diode Surge protection
Maximum switching voltage	253 V AC
Minimum switching voltage	24 V AC
Limiting continuous current	0.75 A (see derating curve)
Voltage drop at max. limiting continuous current	≤ 1 V
Output circuit	2-conductor floating, zero voltage switch
Protective circuit	RCV circuit
Leakage current	≤ 1 mA
Max. load value	4.5 A <sup>2</sup> s (tp = 10 ms, at 25 °C)

## Connection data

Connection method	Push-in connection
Stripping length	10 mm
Conductor cross-section rigid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> 0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Single ferrule) 2x 0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup> (TWIN ferrule)
Conductor cross-section AWG	26 ... 14

## Dimensions

### Item dimensions

Width	6.2 mm
Height	80 mm
Depth	94 mm

## Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94 (Housing)	V0 (Housing)

## Environmental and real-life conditions

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## Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

## Approvals

### CE

Certificate	CE-compliant
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### UKCA

Certificate	UKCA-compliant
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### Shipbuilding approval

Certificate	TAE0000196
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### Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

### Shipbuilding 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

Electromagnetic compatibility	Conformance with EMC directive
Low Voltage Directive	Conformance with Low Voltage Directive

## Standards and regulations

Standards/regulations	IEC/EN 60664-1
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## Mounting

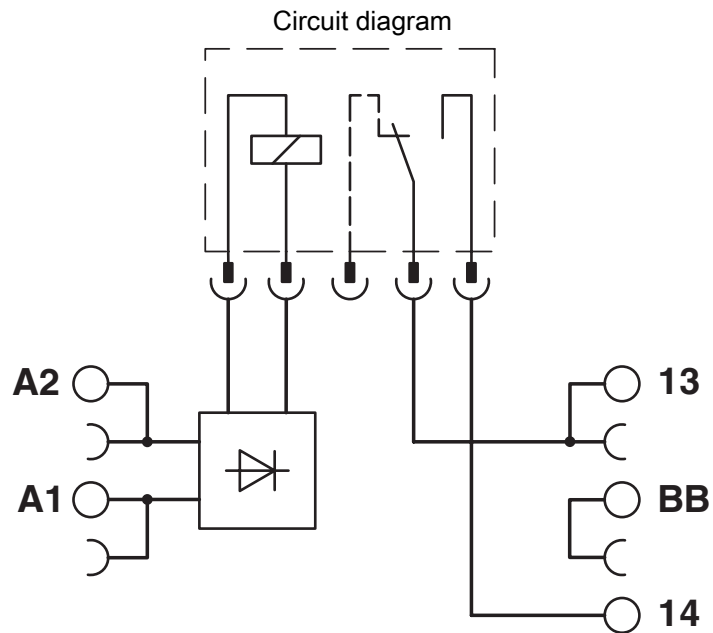
Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

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## Drawings



Circuit diagram



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2900450>



**cUL Recognized**

Approval ID: E238705



**UL Recognized**

Approval ID: E238705



**EAC**

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

**DNV**

Approval ID: TAE0000196

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## Classifications

### ECLASS

ECLASS-13.0	27371603
ECLASS-15.0	27371603

### ETIM

ETIM 10.0	EC001456
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### UNSPSC

UNSPSC 21.0	39122300
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

### 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.)	Lead(CAS: 7439-92-1)
SCIP	f2608036-99a3-436b-9cbd-b1abad5de81f

### EF3.1 Climate Change

CO2e kg	0.494 kg CO2e
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