

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



2900450

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

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.



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

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



2900450

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

## Technical data

### Notes

#### Utilization restriction

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

### 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

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



2900450

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

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

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



2900450

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

## Ambient conditions

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

## 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

### 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
-----------------------	----------------

## Mounting

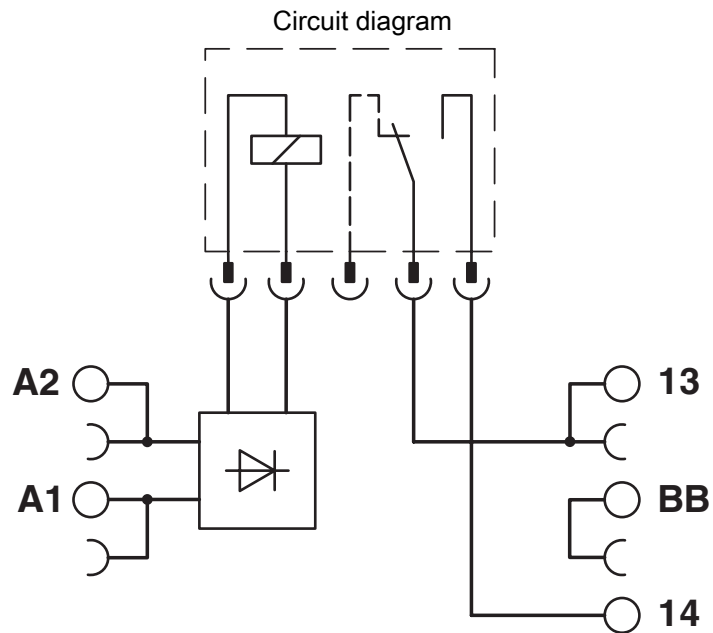
Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

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

2900450

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

## Drawings



Circuit diagram



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



2900450

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

## 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 GL**  
Approval ID: TAE0000196

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



2900450

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

## Classifications

### ECLASS

ECLASS-13.0	27371603
ECLASS-15.0	27371603

### ETIM

ETIM 10.0	EC001456
-----------	----------

### UNSPSC

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

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



2900450

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

## 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
---------	---------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

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