

# PLC-BPT-TTL/1 - Relay base

2900458

<https://www.phoenixcontact.com/us/products/2900458>



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6.2 mm PLC basic terminal block for TTL signal with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input voltage TTL (5 V DC)

## Your advantages

- 6.2 mm narrow design width
- Screw and spring-cage connection
- RT III protection
- Safe isolation in accordance with EN 50178 (VDE 0160)
- Status indicator
- 4 kV<sub>rms</sub> electrical isolation between coil and contact
- Bridging options

## Commercial data

Item number	2900458
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C461
Product key	DK62A1
GTIN	4046356507783
Weight per piece (including packing)	27.19 g
Weight per piece (excluding packing)	27.19 g
Customs tariff number	85366990
Country of origin	DE

## 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	TTL signal at input
Operating mode	100% operating factor

### Input data

Nominal input voltage $U_N$	5 V DC (TTL)
	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
	5 V DC (TTL)
	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 $U_S$	5 V DC
Voltage range with reference to $U_S$	0.9 ... 1.2
Rated control supply current $I_S$	41 mA
Rated actuating voltage $U_C$	5 V DC (TTL)
Voltage range with reference to $U_C$	0.9 ... 1.2
Rated actuating current $I_C$	2.5 mA
Typical response time	4.5 ms
Typical release time	3.5 ms
Operating voltage display	Yellow LED
Protective circuit	Reverse polarity protection
	Surge protection
Surge voltage protection	> 6.5 V

### Optocoupler assembly

Rated control circuit supply voltage $U_S$	5 V DC
Voltage range with reference to $U_S$	0.9 ... 1.2
Rated control supply current $I_S$	11.5 mA
Rated actuating voltage $U_C$	5 V DC (TTL)
Rated actuating current $I_C$	2.5 mA
Switching level 1 signal ("H") (TTL signal)	> 2 V DC
Switching level 0 signal ("L") (TTL signal)	< 0.8 V DC

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Typical response time	35 µs
Typical release time	320 µs
Operating voltage display	Yellow LED
Protective circuit	Reverse polarity protection
	Surge protection
Transmission frequency	1000 Hz
Surge voltage protection	> 6.5 V

## Output data

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
	Surge protection
Maximum switching voltage	33 V DC
Minimum switching voltage	3 V DC
Limiting continuous current	3 A
Voltage drop at max. limiting continuous current	< 200 mV
Maximum inrush current	15 A (10 ms)
Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection
	Surge protection

## 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

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

### Corrosive gas test

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

## Standards and regulations

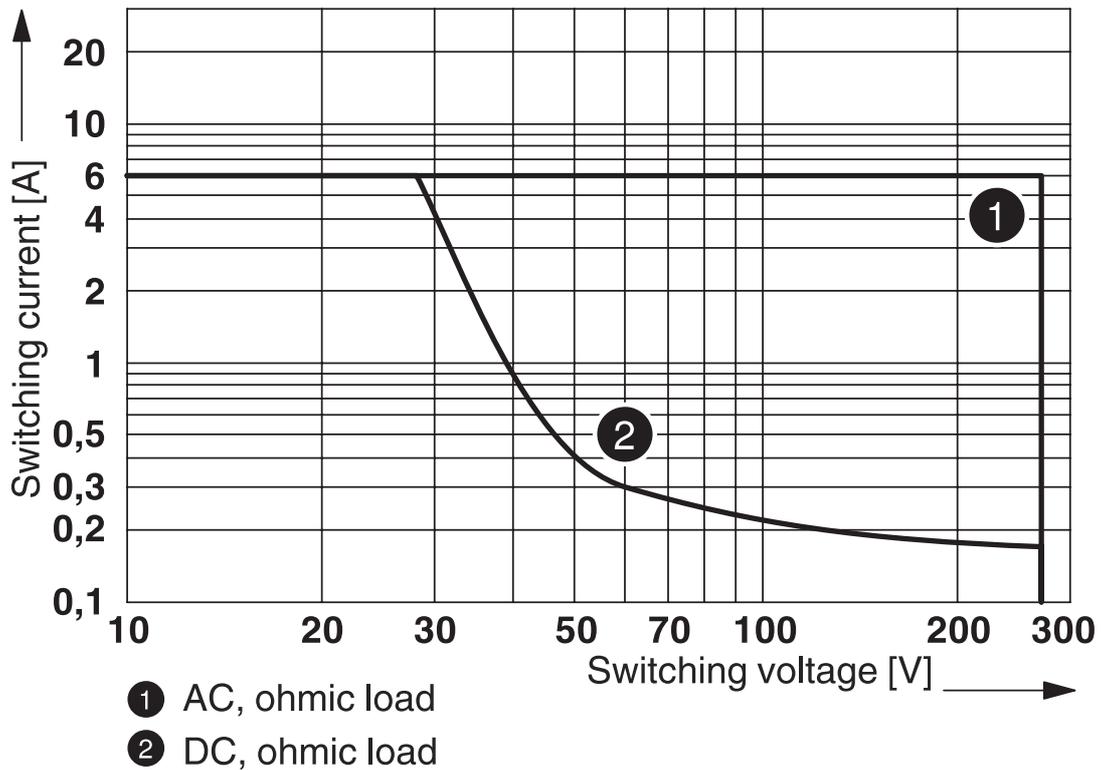
Standards/regulations	IEC/EN 60664-1
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## Mounting

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

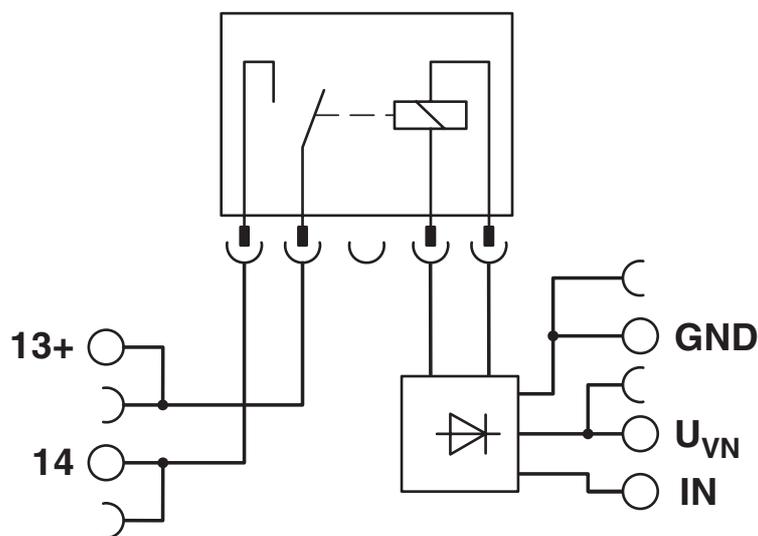
## Drawings

Diagram



Max. interrupting rating

Circuit diagram



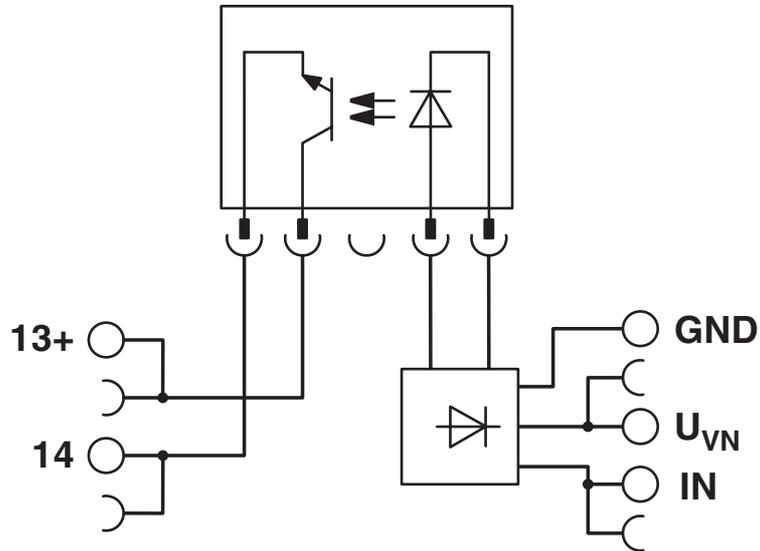
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Circuit diagram



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2900458>



**cUL Recognized**  
Approval ID: E238705



**UL Recognized**  
Approval ID: E238705



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

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## Classifications

### ECLASS

ECLASS-13.0	27371603
ECLASS-15.0	27371603

### ETIM

ETIM 9.0	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	8ef2651d-ef2d-437b-a31b-7f216f6840fa

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