

# PLC-BSC-TTL/1 - Relay base

2982689

<https://www.phoenixcontact.com/us/products/2982689>

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 TTL signal with screw 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)
- 4 kV<sub>rms</sub> electrical isolation between coil and contact
- Status indicator
- Bridging options

## Commercial data

Item number	2982689
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C461
Product key	DK6221
GTIN	4046356155212
Weight per piece (including packing)	30.94 g
Weight per piece (excluding packing)	30 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
----------	---

### 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

# PLC-BSC-TTL/1 - Relay base



2982689

<https://www.phoenixcontact.com/us/products/2982689>

Typical response time	35 $\mu$ s
Typical release time	320 $\mu$ s
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	Screw connection
Stripping length	8 mm
Screw thread	M3
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> ... 1.5 mm <sup>2</sup> (TWIN ferrule)
Conductor cross-section AWG	26 ... 14
Tightening torque	0.45 Nm ... 0.55 Nm (Usually these terminal blocks must be supported during conductor connection (held by one hand, supported on the housing))

## Dimensions

Item dimensions	
Width	6.2 mm
Height	80 mm
Depth	94 mm

## Material specifications

# PLC-BSC-TTL/1 - Relay base



2982689

<https://www.phoenixcontact.com/us/products/2982689>

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

## Environmental and real-life conditions

### 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

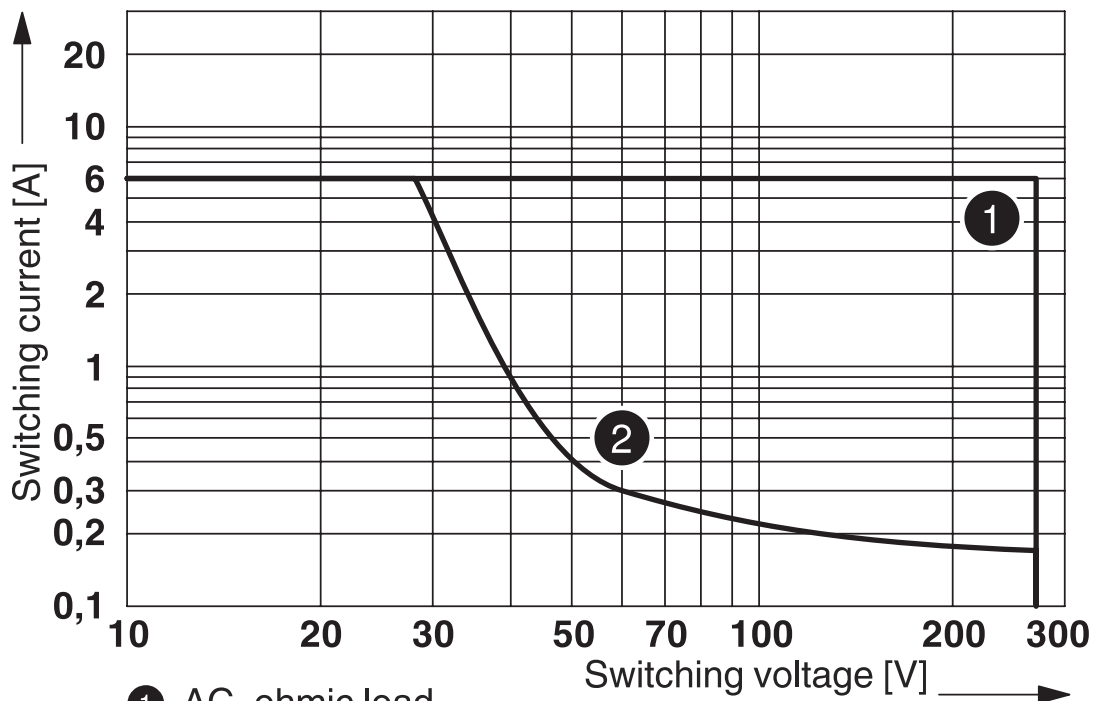
Standards/regulations	IEC/EN 60664-1
-----------------------	----------------

## Mounting

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

## Drawings

Diagram

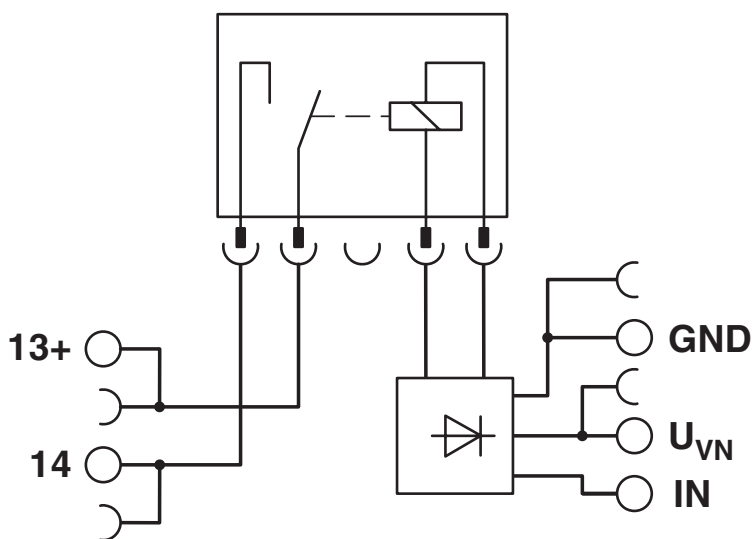


① AC, ohmic load

② DC, ohmic load

Max. interrupting rating

Circuit diagram



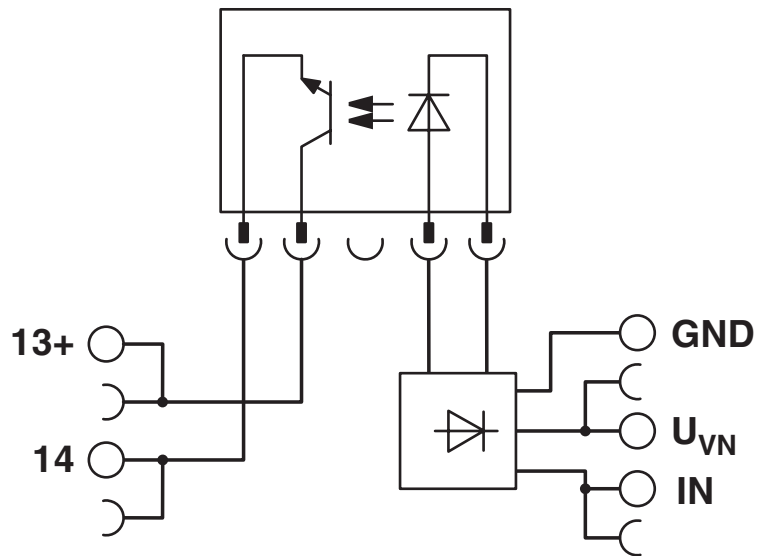
# PLC-BSC-TTL/1 - Relay base

2982689

<https://www.phoenixcontact.com/us/products/2982689>



Circuit diagram



# PLC-BSC-TTL/1 - Relay base



2982689

<https://www.phoenixcontact.com/us/products/2982689>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2982689>



**cUL Recognized**  
Approval ID: E238705



**UL Recognized**  
Approval ID: E238705



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



**UL Listed**  
Approval ID: FILE E 172140



**cUL Listed**  
Approval ID: FILE E 172140

# PLC-BSC-TTL/1 - Relay base

2982689

<https://www.phoenixcontact.com/us/products/2982689>



## Classifications

### ECLASS

ECLASS-13.0	27371603
ECLASS-15.0	27371603

### ETIM

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

### UNSPSC

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

2982689

<https://www.phoenixcontact.com/us/products/2982689>

## 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	9389f072-1be7-4b04-963d-0e3b01028b42

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)