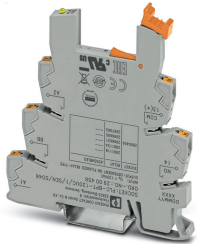


Relay base - PLC-BPT-120UC/ 1/SEN/SO46 - 2900456

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6.2 mm PLC basic terminal block with interference current and interference voltage protection on the control side, with push-in connection, without relay or solid-state relay, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 120 V AC

Your advantages

- ✓ High relay release voltage
- ✓ Resistant to interference currents



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 507769
GTIN	4046356507769
Weight per Piece (excluding packing)	35.000 g
Custom tariff number	85366990
Country of origin	Germany

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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Dimensions

Width	6.2 mm
Height	80 mm
Depth	94 mm

Ambient conditions

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Technical data

Ambient conditions

Ambient temperature (operation)	-40 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Input data

Input voltage range in reference to U_N	0.8 ... 1.4
Typical release voltage	50 V AC
Nominal input voltage U_N	120 V AC
Input voltage range in reference to U_N	0.85 ... 1.1
Status display	LED
Protective circuit	Bridge rectifier Bridge rectifier
	RCZ filter RCZ filter

Output data

Compatible components	Miniature relay, REL-MR-60DC/21AU, REL-MR-60DC/21; miniature optocoupler, OPT-60DC/48DC/100, OPT-60DC/24DC/2, OPT-60DC/230AC/1
Fitting of components	REL-MR-60DC/21
Contact type	Single contact, 1 N/O contact
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC (Partition plate PLC-ATP must be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal points in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...)
Minimum switching voltage	5 V (at 100 mA)
Limiting continuous current	6 A
Maximum inrush current	on request
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)
	23 W (at 110 V DC)
	40 W (at 220 V DC)
	1500 VA (for 250 V AC)
Switching capacity min.	120 mW
Fitting of components	REL-MR-60DC/21AU
Contact type	Single contact, 1 N/O contact
Contact material	AgSnO, hard gold-plated
Note	If the specified maximum values are exceeded, the gold plating is destroyed. The maximum values of the power contact relay are then valid. This can result in a shorter service life than with a pure power contact.
Maximum switching voltage	30 V AC

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Technical data

Output data

	36 V DC
Minimum switching voltage	100 mV (at 10 mA)
Limiting continuous current	50 mA
Maximum inrush current	50 mA
Min. switching current	1 mA (at 24 V)
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)
Switching capacity min.	100 μ W
Fitting of components	OPT-60DC/48DC/100
Maximum switching voltage	48 V DC
Minimum switching voltage	3 V DC
Limiting continuous current	100 mA
Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection
	Surge protection
Voltage drop at max. limiting continuous current	< 1 V
Fitting of components	OPT-60DC/24DC/2
Maximum switching voltage	30 V DC
Minimum switching voltage	3 V DC
Limiting continuous current	3 A
Maximum inrush current	15 A (10 ms)
Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection
	Surge protection
Voltage drop at max. limiting continuous current	< 200 mV
Fitting of components	OPT-60DC/230AC/1
Maximum switching voltage	253 V AC (Partition plate PLC-ATP must be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal points in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...)
Minimum switching voltage	24 V AC
Limiting continuous current	0.75 A
Maximum inrush current	30 A (10 ms)
Output circuit	2-conductor, floating
Protective circuit	RCV circuit
Voltage drop at max. limiting continuous current	< 1 V
Leakage current	< 1 mA
Phase angle cos phi min	0.5
Max. load value	4.5 A ² s

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Technical data

General

Protective circuit	Bridge rectifier Bridge rectifier
	RCZ filter RCZ filter
Operating mode	100% operating factor
Color	gray
Flammability rating according to UL 94	V0 (Housing)
Mounting position	any
Assembly instructions	In rows with zero spacing

Connection data

Connection name	Input side
Connection method	Push-in connection
Stripping length	10 mm
Conductor cross section solid	0.14 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 2.5 mm ²
	0.2 mm ² ... 2.5 mm ² (Single ferrule)
	2x 0.5 mm ² ... 1 mm ² (TWIN ferrule)
Conductor cross section AWG	26 ... 14

Connection data 2

Connection name	Output side
Connection method	Push-in connection
Stripping length	10 mm
Conductor cross section solid	0.14 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 2.5 mm ²
	0.2 mm ² ... 2.5 mm ² (Single ferrule)
	2x 0.5 mm ² ... 1 mm ² (TWIN ferrule)
Conductor cross section AWG	26 ... 14

Standards and Regulations

Connection in acc. with standard	CUL
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Conformance/approvals

Designation	Corrosive gas test
Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years

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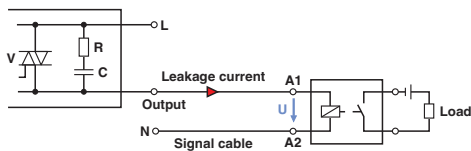
Technical data

Environmental Product Compliance

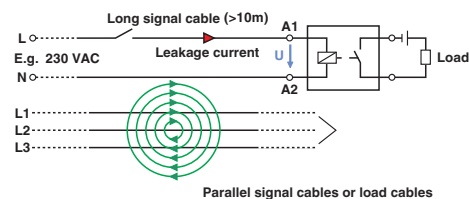
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"
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Drawings

Application drawing



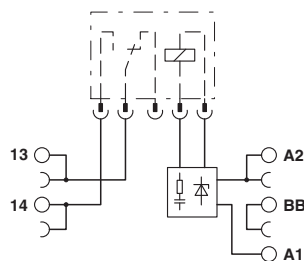
Application drawing



Occurrence of interference signals
Scenario 1: controller - AC output card

Occurrence of interference signals
Scenario 2: long signal cables

Circuit diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27371603
eCl@ss 11.0	27371603
eCl@ss 4.0	27371000
eCl@ss 4.1	27371000
eCl@ss 5.0	27371600
eCl@ss 5.1	27371600
eCl@ss 6.0	27371600
eCl@ss 7.0	27371603
eCl@ss 9.0	27371603

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Classifications

ETIM

ETIM 2.0	EC001456
ETIM 3.0	EC001456
ETIM 4.0	EC001456
ETIM 6.0	EC001456
ETIM 7.0	EC001456

UNSPSC

UNSPSC 6.01	30211917
UNSPSC 7.0901	39121516
UNSPSC 11	39121516
UNSPSC 12.01	39121516
UNSPSC 13.2	39122326
UNSPSC 18.0	39122335
UNSPSC 19.0	39122335
UNSPSC 20.0	39122335
UNSPSC 21.0	39122335

Approvals

Approvals

Approvals

DNV GL / UL Recognized / cUL Recognized / EAC / cULus Recognized

Ex Approvals


Approval details

DNV GL		https://approvalfinder.dnvgl.com/	TAE0000196-03
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UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
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Approvals

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
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