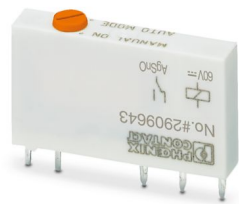


2909643

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Plug-in miniature power relay, with power contact, 1 changeover contact, manual operation, 60 V DC input voltage

Commercial data

Item number	2909643
Packing unit	10 pc
Minimum order quantity	10 pc
Note	Made to order (non-returnable)
Sales key	CK6195
Product key	CK6195
Catalog page	Page 394 (C-5-2019)
GTIN	4055626377681
Weight per piece (including packing)	6.62 g
Weight per piece (excluding packing)	4.7 g
Customs tariff number	85364190
Country of origin	CZ

REL-MR- 60DC/21/MS - Single relay

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Technical data

Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	1x 10 ⁷ cycles

Insulation characteristics

Overvoltage category	III
Pollution degree	3

Electrical properties

Maximum power dissipation for nominal condition	0.18 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)

Input data

Coil side

Nominal input voltage U _N	60 V DC
Input voltage range	36 V DC ... 165 V DC
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U _N	3 mA
Typical response time	5 ms
Typical release time	2.5 ms
Coil resistance	20500 Ω ±15 % (at 20 °C)

Output data

Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 100 mA)
Limiting continuous current	6 A
Maximum inrush current	10 A (4 s)
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)
	2 A (at 24 V, DC13)

REL-MR- 60DC/21/MS - Single relay



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Switching capacity	0.2 A (at 110 V, DC13)
	0.1 A (at 220 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)

Connection data

Connection method	Plug / solder connection
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Dimensions

Width	5 mm
Height	28 mm
Depth	16 mm

Material specifications

Color	white (RAL 9010)
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Environmental and real-life conditions

Ambient conditions

Degree of protection	RT II
Ambient temperature (operation)	-40 °C ... 85 °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

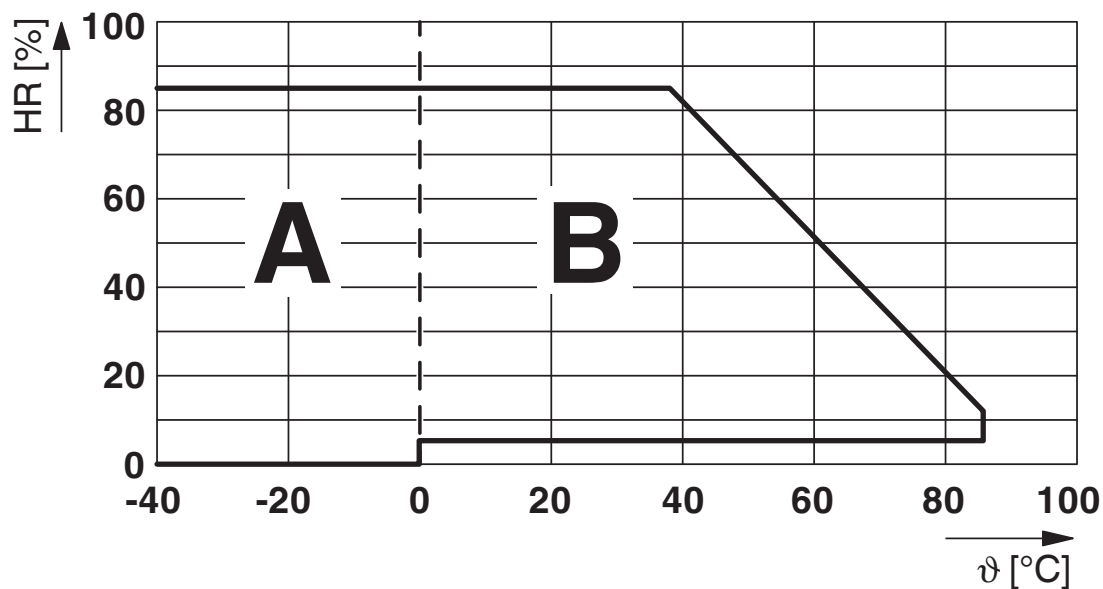
Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1

Mounting

Assembly instructions	in rows with zero spacing
Mounting position	any

Drawings

Diagram



Permissible humidity for operation and storage.

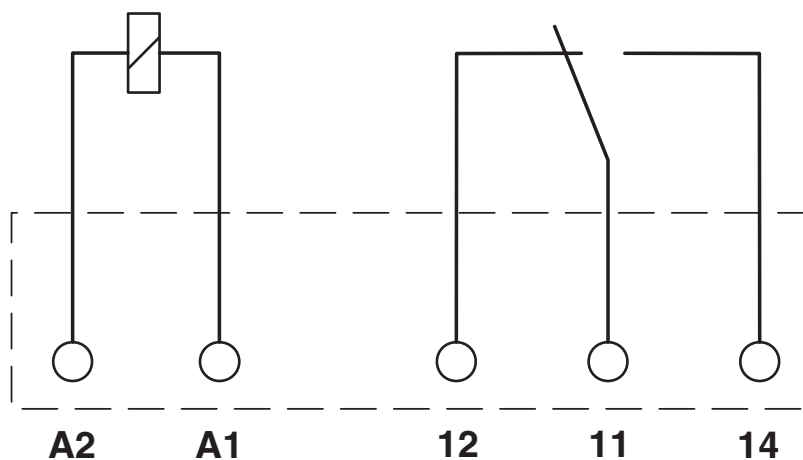
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures $\leq 0^\circ\text{C}$ must be prevented

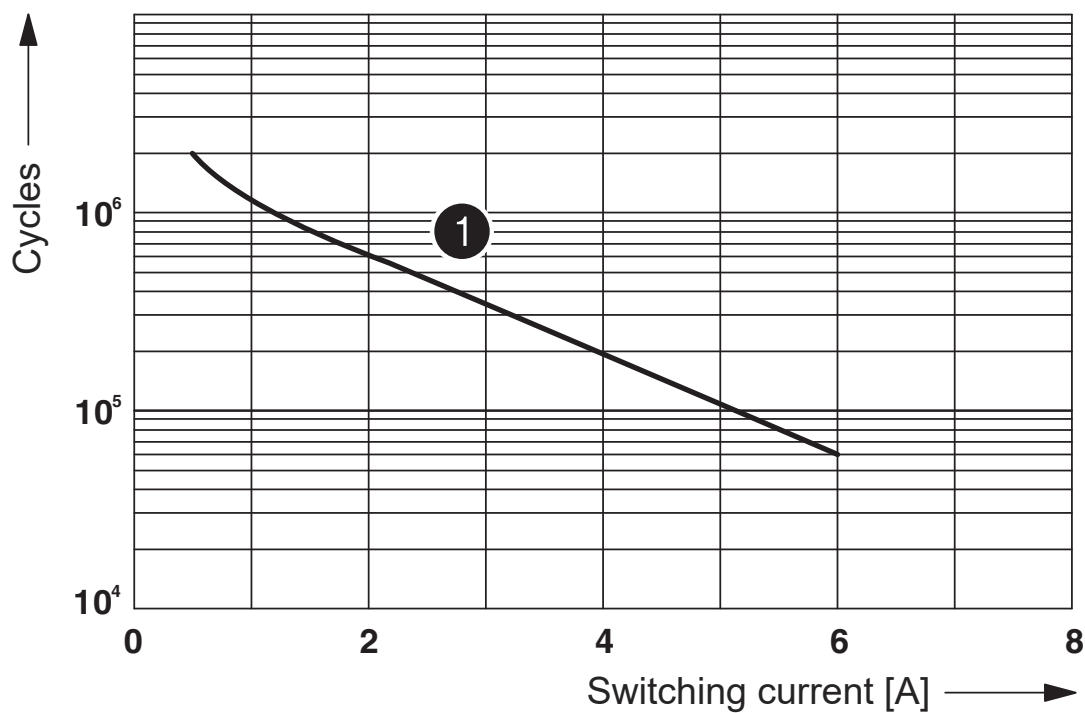
Area B: Condensation at ambient temperatures $> 0^\circ\text{C}$ must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature $\leq 25^\circ\text{C}$.

Circuit diagram



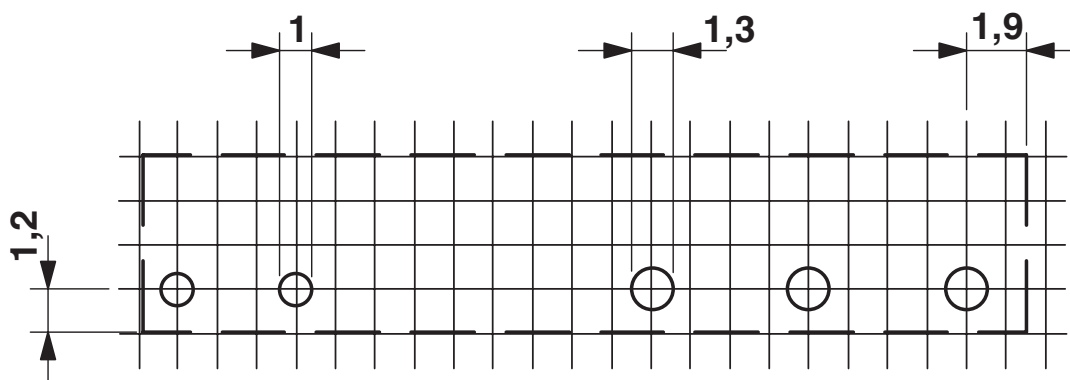
Diagram



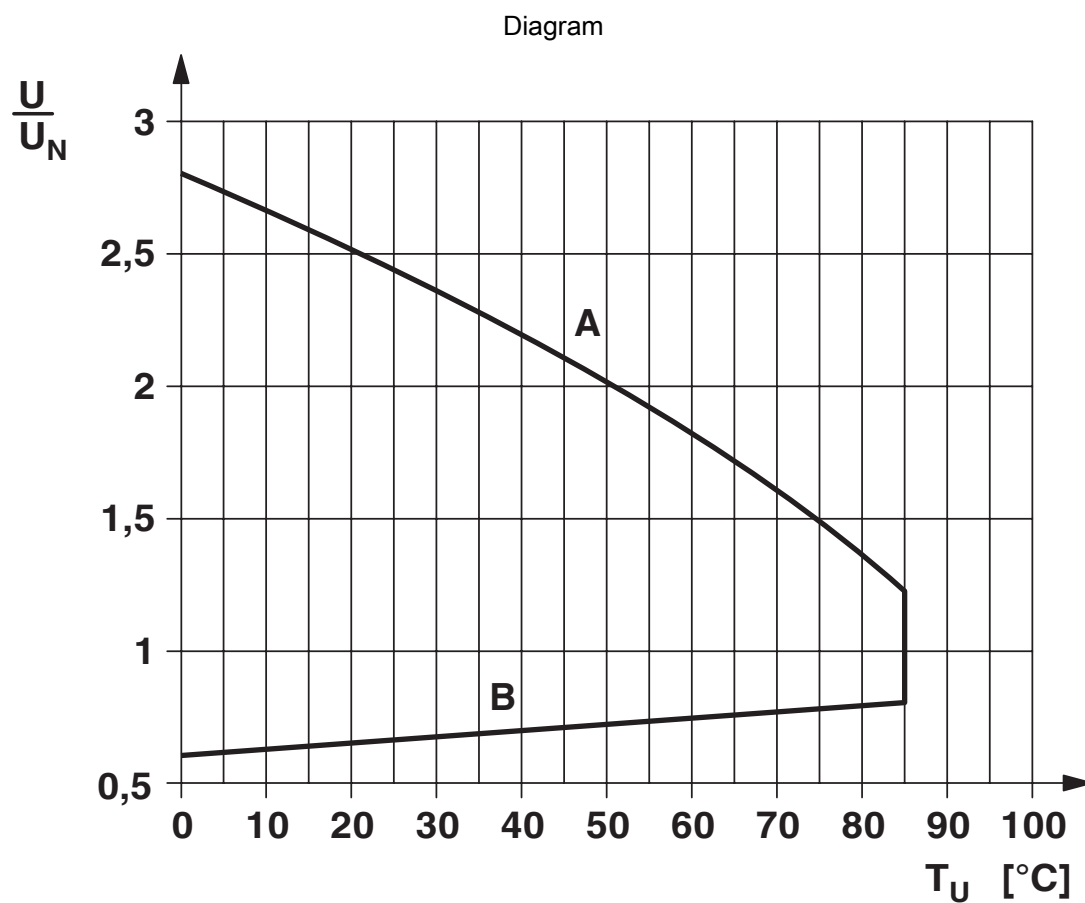
① 250 V AC, ohmic load

Electrical service life

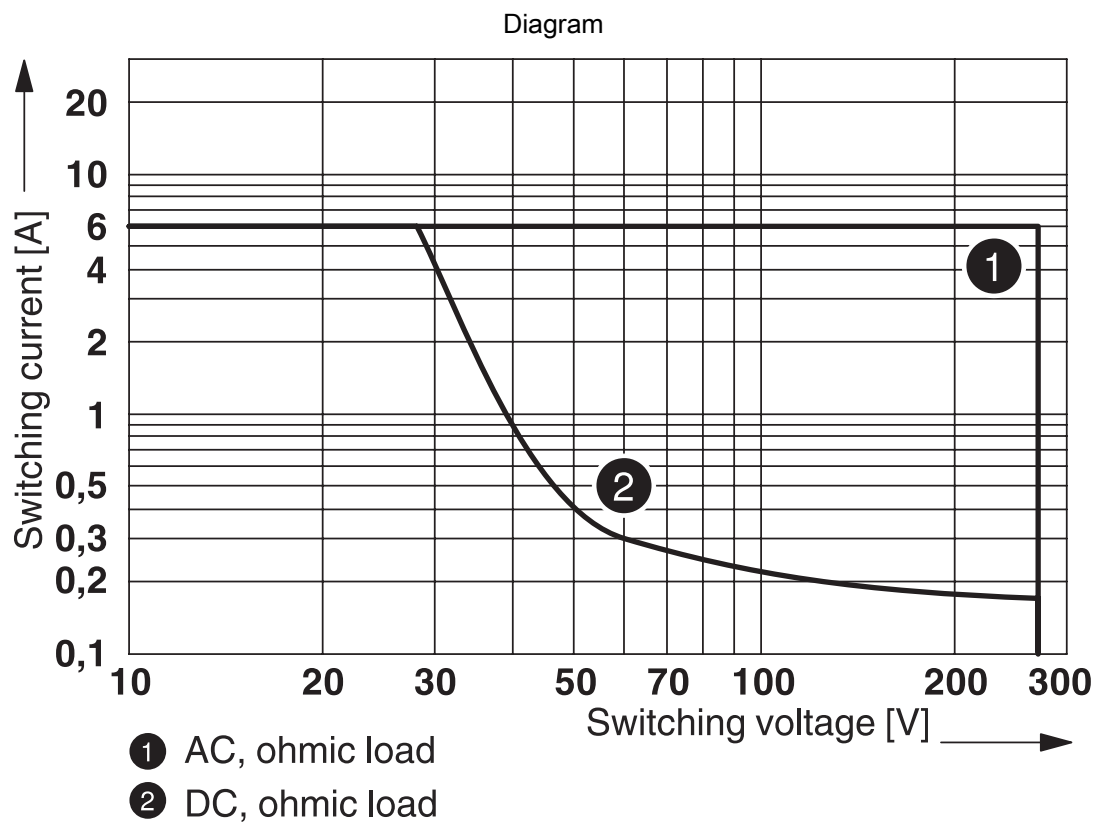
Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm



Operating voltage range



Interrupting rating

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/2909643>



cUL Recognized
Approval ID: FILE E 228652



UL Recognized
Approval ID: FILE E 228652



EAC
Approval ID: TR_TS_D_00573_c



EAC
Approval ID: RU*C-DE.*08.B.00010



VDE Zeichengenehmigung
Approval ID: 40010212

cULus Recognized

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Classifications

ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

ETIM

ETIM 9.0	EC001437
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UNSPSC

UNSPSC 21.0	39122300
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REL-MR- 60DC/21/MS - Single relay



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Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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Mandatory accessories

PLC-BPT-120UC/21 - Relay base

2900280

<https://www.phoenixcontact.com/gb/products/2900280>



6.2 mm PLC basic terminal block with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 120 V AC/DC

PLC-BSC-120UC/21 - Relay base

2966032

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6.2 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 120 V AC/DC

REL-MR- 60DC/21/MS - Single relay

2909643

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PLC-BPT-230UC/21 - Relay base

2900281

<https://www.phoenixcontact.com/gb/products/2900281>



6.2 mm PLC basic terminal block with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 230 V AC/DC

PLC-BSC-230UC/21 - Relay base

2966045

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6.2 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 230 V AC/DC

REL-MR- 60DC/21/MS - Single relay

2909643

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

2900451

<https://www.phoenixcontact.com/gb/products/2900451>



6.2 mm PLC basic terminal block for input functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 120 V AC/DC

PLC-BSC-120UC/ 1/SEN - Relay base

2966074

<https://www.phoenixcontact.com/gb/products/2966074>



6.2 mm PLC basic terminal block for input functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 120 V AC/DC

REL-MR- 60DC/21/MS - Single relay

2909643

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PLC-BPT-230UC/ 1/SEN - Relay base

2900452

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6.2 mm PLC basic terminal block for input functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 230 V AC/DC

PLC-BSC-230UC/ 1/SEN - Relay base

2966087

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6.2 mm PLC basic terminal block for input functions with screw connection, without relay or solid-state relay, for mounting on NS 35/7,5 DIN rail, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage: 230 V AC/DC

REL-MR- 60DC/21/MS - Single relay

2909643

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PLC-BPT-120UC/21/SO46 - Relay base

2900453

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6.2 mm PLC basic terminal block against interference currents/voltages on the control side with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 changeover contact, input voltage 120 V AC

PLC-BSC-120UC/21/SO46 - Relay base

2980319

<https://www.phoenixcontact.com/gb/products/2980319>



6.2 mm PLC basic terminal block with protection against interference currents/voltages on the control side, with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 changeover contact, input voltage 120 V AC

REL-MR- 60DC/21/MS - Single relay

2909643

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PLC-BPT-230UC/21/SO46 - Relay base

2900455

<https://www.phoenixcontact.com/gb/products/2900455>



6.2 mm PLC basic terminal block against interference currents/voltages on the control side with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 changeover contact, input voltage 230 V AC

PLC-BSC-230UC/21/SO46 - Relay base

2980335

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6.2 mm PLC basic terminal block with protection against interference currents/voltages on the control side, with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 changeover contact, input voltage 230 V AC

REL-MR- 60DC/21/MS - Single relay

2909643

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PLC-BSC-120UC/ 1/SEN/SO46 - Relay base

2980322

<https://www.phoenixcontact.com/gb/products/2980322>



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

PLC-BPT-230UC/ 1/SEN/SO46 - Relay base

2900457

<https://www.phoenixcontact.com/gb/products/2900457>



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 230 V AC

REL-MR- 60DC/21/MS - Single relay

2909643

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PLC-BSC-230UC/ 1/SEN/SO46 - Relay base

2980348

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6.2 mm PLC basic terminal block with interference current and interference voltage protection on the control side, with screw connection, without relay or solid-state relay, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 230 V AC

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PHOENIX CONTACT Ltd

Halesfield 13, Telford

Shropshire, TF7 4PG

01952 681700

info@phoenixcontact.co.uk