Relay Module - PLC-RPT- 12DC/21HC - 2900290

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The figure shows a version with a screw connection

PLC-INTERFACE for high continuous currents, consisting of PLC-BPT.../21 HC basic terminal block with push-in connection and plug-in miniature relay, for mounting on DIN rail NS 35/7,5, limiting continuous current up to 10 A, 1 PDT, input voltage 12 V DC

Product Features

- Efficient connection to system cabling using V8 adapter
- All common input voltages of 12 V DC to 230 V AC
- Long electrical service life thanks to 16 A relay
- Safe isolation according to DIN EN 50178 between coil and contact
- Max. continuous current of 10 A
- Functional plug-in bridges

Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	64.0 GRM
Custom tariff number	85364900
Country of origin	Germany

Technical data

Note

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

Dimensions

Width	14 mm
Height	80 mm

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Technical data

Dimensions

Depth	94 mm

Ambient conditions

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

Coil side

Nominal input voltage U_N	12 V DC
Typical input current at U_N	33 mA
Power dissipation for nominal condition	0.4 W
Typical response time	8 ms
Typical release time	10 ms
Operating voltage display	Yellow LED
Protective circuit	Protection against polarity reversal Polarity protection diode
	Free-wheeling diode Damping diode

Contact side

Contact type	1 PDT
Contact material	AgNi
Maximum switching voltage	250 V AC/DC (The separating plate PLC-ATP should be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...)
Minimum switching voltage	12 V AC/DC
Maximum inrush current	30 A (300 ms)
Min. switching current	100 mA
Limiting continuous current	10 A
	6 A (value applies to connections 12. If connections 12 are bridged, the normal value applies.)
Interrupting rating (ohmic load) max.	240 W (at 24 V DC)
	58 W (at 48 V DC)
	48 W (at 60 V DC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
	2500 VA (for 250 V AC)
Interrupting rating (ohmic load) max. bridged	144 W (for 24 V DC. Value applies to connections 12. If connections 12 are bridged, the normal value applies.)
	1500 VA (for 250 V AC. Value applies to connections 12. If connections 12 are bridged, the normal value applies.)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)

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Contact side

	0.2 A (at 250 V, DC13)
	6 A (at 24 V, AC15)
	6 A (at 120 V, AC15)
	6 A (at 250 V, AC15)

General

Operating mode	100% operating factor
Degree of protection	RT II (Relay)
Mechanical service life	3 x 10^7 cycles
Inflammability class according to UL 94	V0
Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Rated surge voltage/insulation	6 kV / Safe isolation, increased insulation
Pollution degree	2
Surge voltage category	III
Mounting position	any
Assembly instructions	In rows with zero spacing

Connection data

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section flexible min.	0.14 mm²
Conductor cross section flexible max.	2.5 mm²
Conductor cross section solid min.	0.14 mm²
Conductor cross section solid max.	2.5 mm²
Conductor cross section AWG max.	14
Conductor cross section AWG min.	26

Articles in set

Relay socket - PLC-BPT- 12DC/21HC - 2900253

14 mm PLC basic terminal block for high continuous currents with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 12 V DC

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Articles in set

Single relay - REL-MR- 12DC/21HC - 2961309

Plug-in miniature power relay, with power contact for high continuous currents, 1 PDT, input voltage 12 V DC

Classifications

eCl@ss

eCl@ss 4.0	27371001
eCl@ss 4.1	27371001
eCl@ss 5.0	27371001
eCl@ss 5.1	27371001
eCl@ss 6.0	27371001
eCl@ss 7.0	27371001
eCl@ss 8.0	27371601

ETIM

ETIM 4.0	EC000196
ETIM 5.0	EC001437

UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515
UNSPSC 13.2	39121515

Approvals

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GL / UL Listed / cUL Listed / UL Recognized / cUL Recognized / EAC / RC FRT / EAC / cULus Recognized / cULus Listed

Ex Approvals

Relay Module - PLC-RPT- 12DC/21HC - 2900290

Approvals

Approvals submitted

Approval details

GL

UL Listed

cUL Listed

UL Recognized

cUL Recognized

EAC

RC FRT

EAC

cULus Recognized

cULus Listed

Drawings

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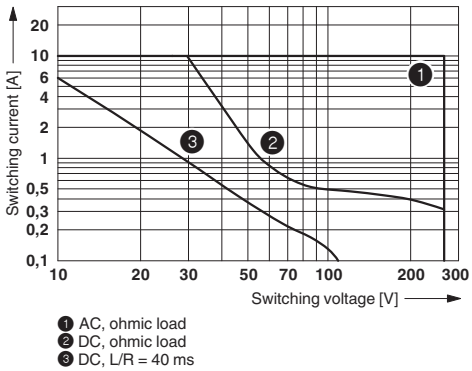
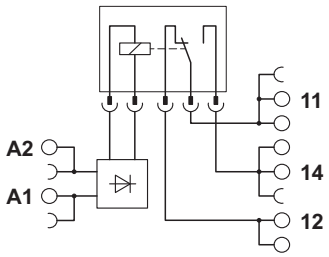
Diagram



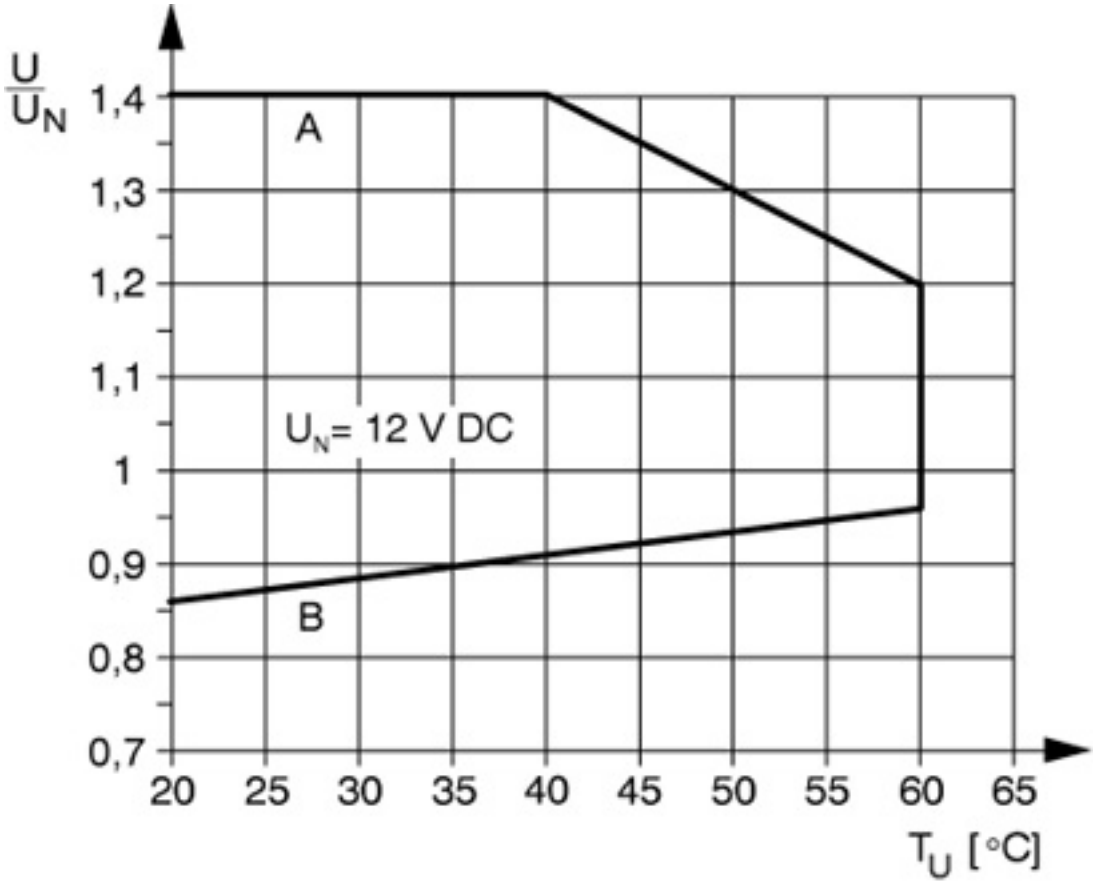
❶ AC, ohmic load
❷ DC, ohmic load
❸ DC, L/R = 40 ms

Circuit diagram



Interrupting rating

Diagram



Curve A
Maximum permissible continuous voltage U_{max} with limiting continuous current on the contact side (see relevant technical data)

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Curve B
Minimum permissible operate voltage U_{op} after pre-excitation (see relevant technical data)