Relay Module - PLC-RPT-110UC/21-21AU/RW - 2900351

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's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)

The figure shows a version with a screw connection

PLC-INTERFACE for railway applications, consisting of basic terminal block with push-in connection and plug-in miniature relay with multi-layer gold contact, range: 0.7 x U_N to 1.25 x U_N, temperature class TX: -40°C to +70°C, 2 PDTs, input voltage 110 V DC

Product Features

- Optimum relay operation thanks to wide-range electronics
- Vibration and shock resistance according to EN 50155
- Safe isolation according to DIN EN 50178 between coil and contact
- Certified according to EN 50155
- Spring-cage and Push-in connection technology
- Temperature range from -40°C to +70°C (+85°C briefly)
- Input voltage range of 0.7 to 1.25 x UN (1.4 x UN briefly)

Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	99.99 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

Relay Module - PLC-RPT-110UC/21-21AU/RW - 2900351

Technical data

Dimensions

Depth	94 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C (Temperature class TX)
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Coil side

Nominal input voltage U_N	110 V DC
Input voltage range in reference to U_N	0.7 ... 1.25
Typical input current at U_N	4.5 mA
Typical response time	5 ms
Typical release time	11 ms
Operating voltage display	Yellow LED
Protective circuit	Bridge rectifier Bridge rectifier
	Free-wheeling diode Damping diode
	Surge protection
	RCZ filter
	Wide-range electronics

Contact side

Contact type	2 PDT
Contact material	AgNi, hard gold-plated
Maximum switching voltage	30 V AC
	36 V DC
Minimum switching voltage	100 mV (at 10 mA)
Maximum inrush current	50 mA
Min. switching current	1 mA (at 24 V)
Limiting continuous current	50 mA
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)
Note	the following values are applicable if a gold layer is destroyed
Maximum switching voltage	250 V AC/DC (Separating plate PLC-ATP must be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules.)
Minimum switching voltage	12 V AC/DC
Limiting continuous current	2x 6 A (see derating curve)
Maximum inrush current	15 A (300 ms)
Min. switching current	10 mA
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	100 W (at 48 V DC)

Relay Module - PLC-RPT-110UC/21-21AU/RW - 2900351

Technical data

Contact side

	60 W (at 60 V DC)
	44 W (at 110 V DC)
	60 W (at 220 V DC)
	1500 VA (for 250 V AC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.2 A (at 250 V, DC13)
	2 A (at 24 V, AC15)
	2 A (at 120 V, AC15)
	2 A (at 250 V, AC15)

General

Test voltage relay winding/relay contact	5 kV_{rms} (50 Hz, 1 min.)
Test voltage PDT/PDT	2.5 kV_{rms} (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	Relay socket
	RT III (Relay)
Mechanical service life	Approx. 3 x 10^7 cycles
Inflammability class according to UL 94	V0
Standards/regulations	EN 50155 (VDE 0115 part 200)
	EN 50178
	IEC 62103
	EN 61373
	EN 50121
Rated surge voltage / insulation	6 kV / Basic isolation
Rated insulation voltage	250 V AC
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 stranded min.	0.14 mm²
Conductor cross section stranded max.	2.5 mm²
Conductor cross section solid min.	0.14 mm²
Conductor cross section solid max.	2.5 mm²

Relay Module - PLC-RPT-110UC/21-21AU/RW - 2900351

Technical data

Connection data

Conductor cross section AWG/kcmil max	14
Conductor cross section AWG/kcmil min.	26

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	27371001

ETIM

ETIM 4.0	EC000196
ETIM 5.0	EC000196

UNSPSC

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

Approvals

Approvals

Approvals

UL Listed / cUL Listed / UL Recognized / cUL Recognized / GL / cULus Recognized / cULus Listed

Ex Approvals

Approvals submitted

Relay Module - PLC-RPT-110UC/21-21AU/RW - 2900351

Approvals

Approval details

UL Listed

cUL Listed

UL Recognized

cUL Recognized

GL

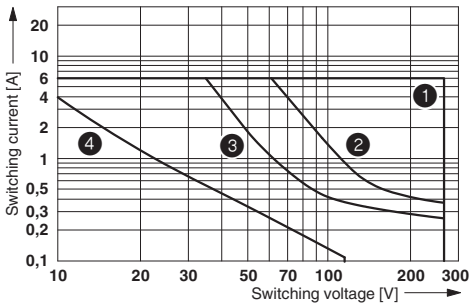
cULus Recognized

cULus Listed

Drawings

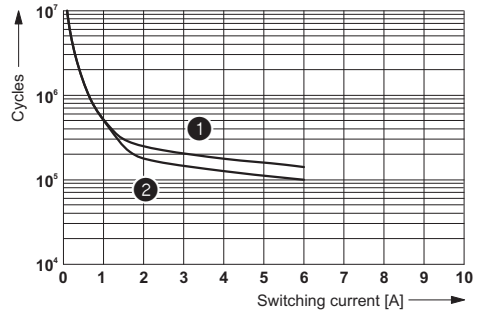
Relay Module - PLC-RPT-110UC/21-21AU/RW - 2900351

Diagram



1 AC, ohmic load
2 DC, ohmic load, contacts in series
3 DC, ohmic load
4 DC, L/R = 40 ms

Diagram



1 250 V AC, ohmic load (DC coils)
2 250 V AC, ohmic load (AC coils)

Electrical service life

Interrupting rating

Circuit diagram