

2966281

https://www.phoenixcontact.com/us/products/2966281

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PLC-INTERFACE, consisting of PLC-BSC.../21 basic terminal block with screw connection and plug-in miniature relay with multi-layer gold contact, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 120 V AC/110 V DC

### Your advantages

- · Slim design
- · Efficient connection to system cabling using V8 adapter
- · Safe isolation between coil and contact side
- · RT III sealed relay
- · Integrated input circuit and interference suppression circuit
- Functional plug-in bridges

### Commercial data

Item number	2966281
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C462
Product key	DK6227
GTIN	4017918131012
Weight per piece (including packing)	39.87 g
Weight per piece (excluding packing)	33.42 g
Customs tariff number	85364900
Country of origin	DE



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### Technical data

### Product properties

Product type	Relay Module
Product family	PLC-INTERFACE
Application	Universal
Operating mode	100% operating factor
Mechanical service life	2x 10 <sup>7</sup> cycles
Data management status	
Date of last data management	12.09.2025

## Electrical properties

Maximum power dissipation for nominal condition	0.42 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)
Insulation characteristics: Coil/contact	
Rated insulation voltage	250 V
Rated impulse withstand voltage	6 kV
Overvoltage category	III
Degree of pollution	3

### Input data

#### Coil side

Nominal input voltage $U_N$	120 V AC
	110 V DC
Input voltage range	93.6 V AC 168 V AC (20 °C)
	85.8 V DC 154 V DC (20 °C)
Nominal voltage (plugged-in electromechanical relay)	60 V DC
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U <sub>N</sub>	3.5 mA (at U <sub>N</sub> = 120 V AC)
	3 mA (at U <sub>N</sub> = 120 V AC)
Typical response time	6 ms
Typical release time	15 ms
Protective circuit	Bridge rectifier; Bridge rectifier
Operating voltage display	Yellow LED

### Output data

### Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgSnO, hard gold-plated



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Maximum switching voltage	30 V AC
	36 V DC
Minimum switching voltage	100 mV (10 mA)
Limiting continuous current	50 mA
Maximum inrush current	50 mA
Min. switching current	1 mA (24 V)
Short-circuit current	200 A (conditional short-circuit current)
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)
Output fuse	4 A gL/gG NEOZED

### Switching: when the gold layer is destroyed

Note	the following values are applicable if a gold layer is destroyed
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 100 mA)
Limiting continuous current	6 A
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	2 A (at 24 V, DC13)
	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	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.14 mm² 2.5 mm²
Conductor cross-section flexible	0.14 mm² 2.5 mm²
	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	0.6 Nm 0.8 Nm

#### **Dimensions**

Width	6.2 mm
Height	80 mm



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Depth	94 mm
terial specifications	
Color	gray (RAL 7042)
Flammability rating according to UL 94 (Housing)	V0 (Housing)
vironmental and real-life conditions	
Ambient conditions	
Degree of protection (Relay base)	IP20 (Relay base)
Ambient temperature (operation)	-40 °C 55 °C
Ambient temperature (storage/transport)	-40 °C 85 °C
pprovals	
CE	
Certificate	CE-compliant
UKCA	
Certificate	UKCA-compliant
Shipbuilding approval	
Certificate	TAE0000196
Corrosive gas test	
Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60
Shipbuilding data	
Temperature	D
Humidity	A
Vibration	B/C
EMC	В
Enclosure	Required protection according to the Rules shall be provided upon installation on board
лС data	
Electromagnetic compatibility	Conformance with EMC directive
Low Voltage Directive	Conformance with Low Voltage Directive
andards and regulations	
Standards/regulations	IEC 60947-5-1
punting	
Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

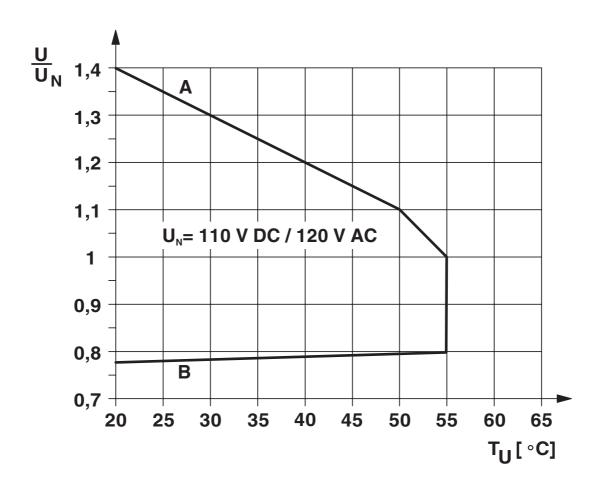


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## Drawings

Diagram



### Curve A

Maximum permissible continuous voltage U<sub>max</sub> with limiting continuous current on the contact side (see relevant technical data)

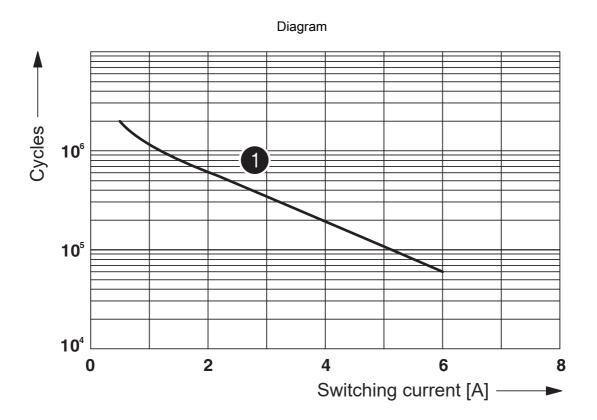
#### Curve B

Minimum permissible operate voltage  $\mathbf{U}_{\mathrm{op}}$  after pre-excitation (see relevant technical data)



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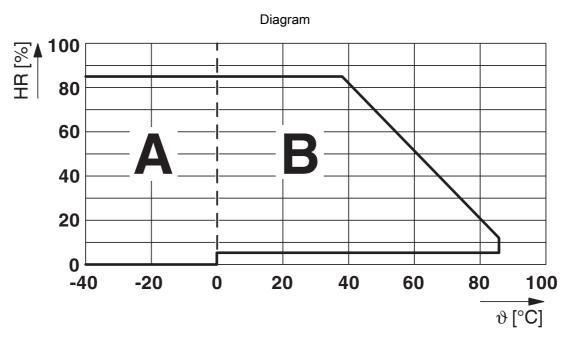
1 250 V AC, ohmic load

Electrical service life



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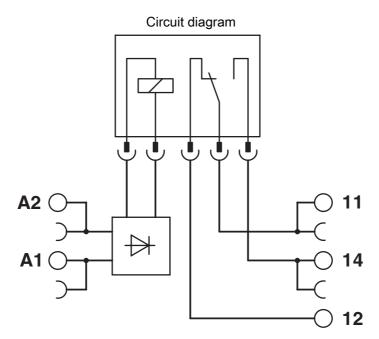
Permissible humidity for operation and storage.

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

Area A: Ice buildup at ambient temperatures ≤ 0°C must be prevented

Area B: Condensation at ambient temperatures > 0°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°C.





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### **Approvals**

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2966281



EAC

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



**DNV GL** 

Approval ID: TAE0000196



**cULus Listed** Approval ID: E140324



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## Classifications

UNSPSC 21.0

### **ECLASS**

	ECLASS-13.0	27371601
	ECLASS-15.0	27371601
ET	TIM	
	ETIM 9.0	EC001437
UN	ISPSC	

39122300



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## Environmental product compliance

#### EU RoHS

Yes
7(a), 7(c)-l
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.
Hexahydromethylphthalic anhydride(CAS: n/a)
Lead(CAS: 7439-92-1)
f5b8cb0f-dee5-4e79-a025-445989371a83

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