

2961121

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Plug-in miniature power relay, with multi-layer gold contact, 1 changeover contact, input voltage 24 V DC

### Your advantages

- · Safe isolation between coil and contact side
- High degree of protection up to RT III depending on type (wash-proof)
- · Power contacts up to 6 A

#### Commercial data

Item number	2961121
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	DK6922
GTIN	4017918130879
Weight per piece (including packing)	6.92 g
Weight per piece (excluding packing)	6.525 g
Customs tariff number	85364900
Country of origin	CZ



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### Technical data

### Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	2x 10 <sup>7</sup> cycles
Insulation characteristics	
Overvoltage category	III
Pollution degree	3
Data management status	
Date of last data management	19.03.2025

### Electrical properties

Maximum power dissipation for nominal condition	0.17 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)

### Input data

#### Coil side

Nominal input voltage U <sub>N</sub>	24 V DC
Input voltage range	14.4 V DC 66 V DC
Input voltage range in reference to $U_N$	see diagram
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U <sub>N</sub>	7 mA
Typical response time	5 ms
Typical release time	2.5 ms
Coil resistance	3390 Ω ±10 % (at 20 °C)

### Output data

#### Switching

Type of switch contact  Contact material  AgSnO, hard gold-plated  Maximum switching voltage  30 V AC  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)	Contact switching type	1 changeover contact
Maximum switching voltage  30 V AC  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)	Type of switch contact	Single contact
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)	Contact material	AgSnO, hard gold-plated
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)	Maximum switching voltage	30 V AC
Limiting continuous current 50 mA  Maximum inrush current 50 mA  Min. switching current 1 mA (at 24 V)		36 V DC
Maximum inrush current 50 mA  Min. switching current 1 mA (at 24 V)	Minimum switching voltage	100 mV (at 10 mA)
Min. switching current 1 mA (at 24 V)	Limiting continuous current	50 mA
	Maximum inrush current	50 mA
Interrupting rating (ohmic load) max. 1.2 W (at 24 V DC)	Min. switching current	1 mA (at 24 V)
	Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)

Switching: when the gold layer is destroyed



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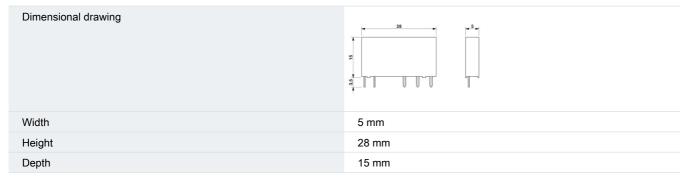


Note	the following values are applicable if a gold layer is destroyed
Contact material	AgSnO
Maximum switching voltage	250 V AC
Minimum switching voltage	5 V (at 100 mA)
Limiting continuous current	6 A
Min. switching current	10 mA (at 12 V)
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	20 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	Plug / solder connection
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### Dimensions



### Material specifications

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

#### Ambient conditions

Degree of protection	RT III
Ambient temperature (operation)	-40 °C 85 °C
Ambient temperature (storage/transport)	-40 °C 85 °C

### Approvals



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#### Corrosive gas test

Mounting position

	Corrosive gas test	
	Identification	ISA-S71.04. G3 Harsh Group
		EN 60068-2-60
St	andards and regulations	
	Standards/regulations	IEC 60664
		EN 50178
		EN 61810-1
Mo	ounting	
	Assembly note	in rows with zero spacing

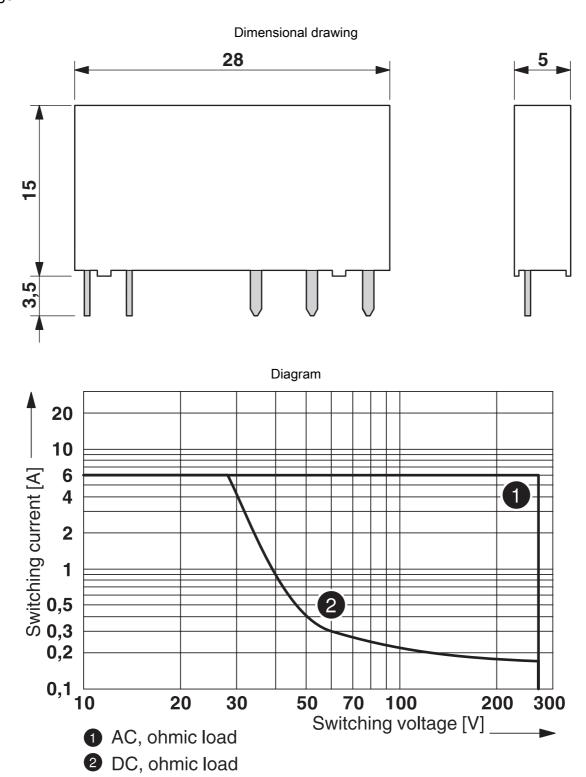
any



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## **Drawings**

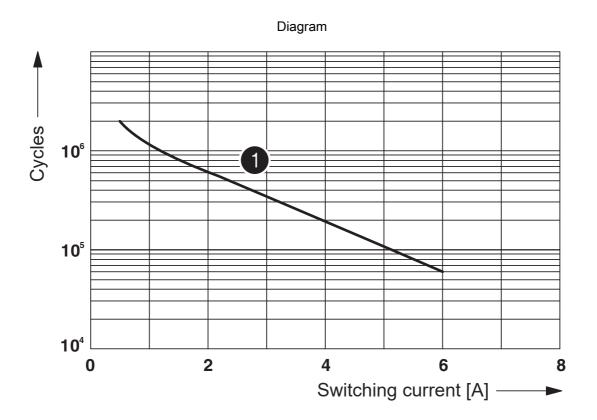


Interrupting rating



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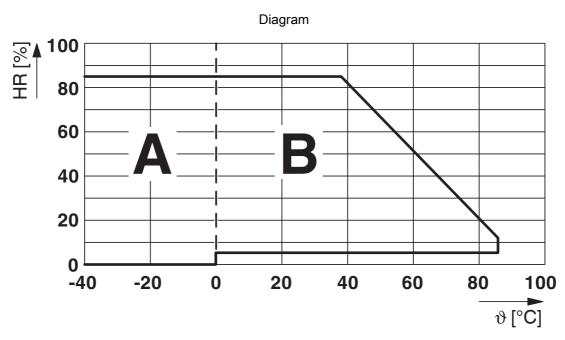
1 250 V AC, ohmic load

Electrical service life



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Permissible humidity for operation and storage.

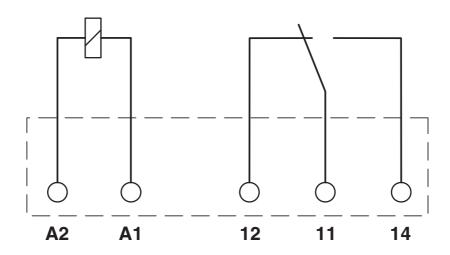
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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.

#### Circuit diagram

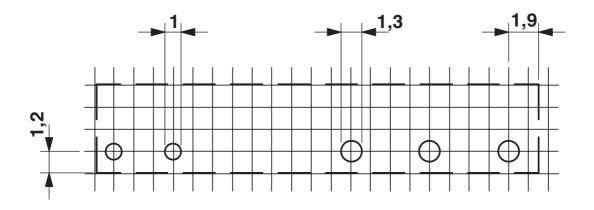




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### Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm



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### Approvals

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Approval ID: FILE E 172140



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Approval ID: FILE E 172140



**EAC** 

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



**UL Recognized** 

Approval ID: FILE E 172140



VDE approval of drawings

Approval ID: 40032864



**VDE approval of drawings** Approval ID: 40054426



cUL Recognized

Approval ID: FILE E 172140



VDE approval of drawings

Approval ID: 40010212



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## Classifications

UNSPSC 21.0

#### **ECLASS**

	ECLASS-13.0	27371601
	ECLASS-15.0	27371601
ET	ТМ	
	ETIM 9.0	EC001437
UN	NSPSC	

39122300



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## Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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