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PLC-HPT-24DC/220DC/10 - Solid-state relay

2905494

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PLC-INTERFACE, hybrid solid-state relay incl. bypass relay with push-in connection, for mounting on NS 35/7,5 DIN rail, input: 24 V DC, output: 12 V DC - 250 V DC/10 A

Commercial data

Item number	2905494
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	DK62B5
GTIN	4046356957113
Weight per piece (including packing)	74.4 g
Weight per piece (excluding packing)	89.2 g
Customs tariff number	85364190
Country of origin	DE

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Technical data

Product properties

Product type	Solid-state relay module
Product family	PLC-INTERFACE
Application	Output function
Operating mode	100% operating factor

Insulation characteristics: Air clearances and creepage distances between the power circuits

Insulation	safe isolation
Overvoltage category	III
Pollution degree	2

Data management status

Date of last data management	08.07.2024

Electrical properties

Test voltage	4 kV_{rms} (50 Hz, 1 min., winding/contact)

Air clearances and creepage distances between the power circuits

Rated insulation voltage	260 V AC
Rated surge voltage	6 kV

Input data

Rated control circuit supply voltage U_S	24 V DC
Voltage range with reference to U_S	0.8 ... 1.2
Rated control supply current I_S	≤ 19 mA
Rated actuating voltage U_C	24 V DC
Voltage range with reference to U_C	0.8 ... 1.2
Rated actuating current I_C	6.8 mA
Nominal voltage (plugged-in solid-state relay)	24 V DC
"0" signal switching threshold in reference to U_C	< 0.4
"1" signal switching threshold in reference to U_C	> 0.8
Typical response time	20 ms
Typical turn-off time	40 ms
Status display	LED (yellow)
Protective circuit	Reverse polarity protection
	Surge protection
Surge voltage protection	> 33 V DC
Transmission frequency	1 Hz

Output data

Designation	DC hybrid output
Contact switching type	1 N/O contact
Design of digital output	electronic

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Output voltage range	12 V DC ... 250 V DC
Limiting continuous current	10 A (see derating curve)
Maximum inrush current	60 A (5 ms; T_{amb} = 60°C)
Min. load current	100 mA
Surge voltage protection	> 275 V
Output circuit	2-conductor / N/O contact in parallel operation (no electrical disconnection)
Protective circuit	Inverse diode (No continuous protection against polarity reversal)
	Varistor

Connection data

Connection method	Push-in connection
Stripping length	10 mm
Conductor cross section rigid	0.14 mm² ... 2.5 mm²
Conductor cross section flexible	0.14 mm² ... 2.5 mm²
	0.2 mm² ... 2.5 mm² (Single ferrule)
	2x 0.5 mm² ... 1 mm² (TWIN ferrule)
Conductor cross section AWG	26 ... 14

Dimensions

Width	14 mm
Height	80 mm
Depth	94 mm

Material specifications

Color	gray (RAL 7042)

Environmental and real-life conditions

Ambient conditions

Degree of protection (Relay base)	IP20 (Relay base)
Degree of protection (Relay)	RT II (Relay)
Degree of protection (Installation location)	IP54 (Installation location)
Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 m

Standards and regulations

Air clearances and creepage distances between the power circuits

Standards/regulations	IEC 60947-5-1

Mounting

Mounting type	DIN rail mounting
Assembly note	See derating curve
Mounting position	any

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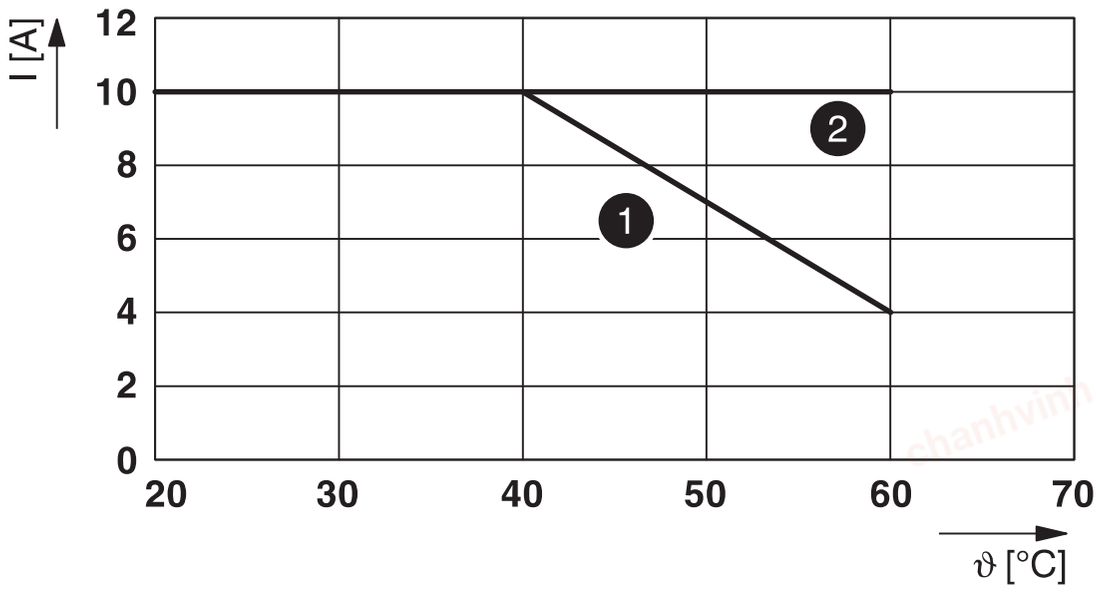
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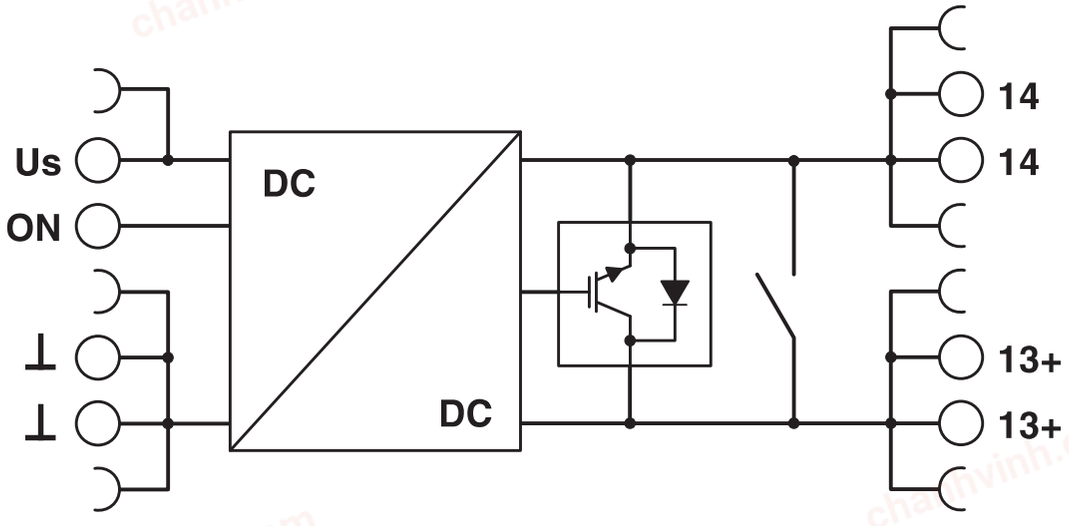
Drawings

Diagram



Limiting continuous current
1) Aligned without spacing
2) Aligned with >14 mm spacing

Circuit diagram



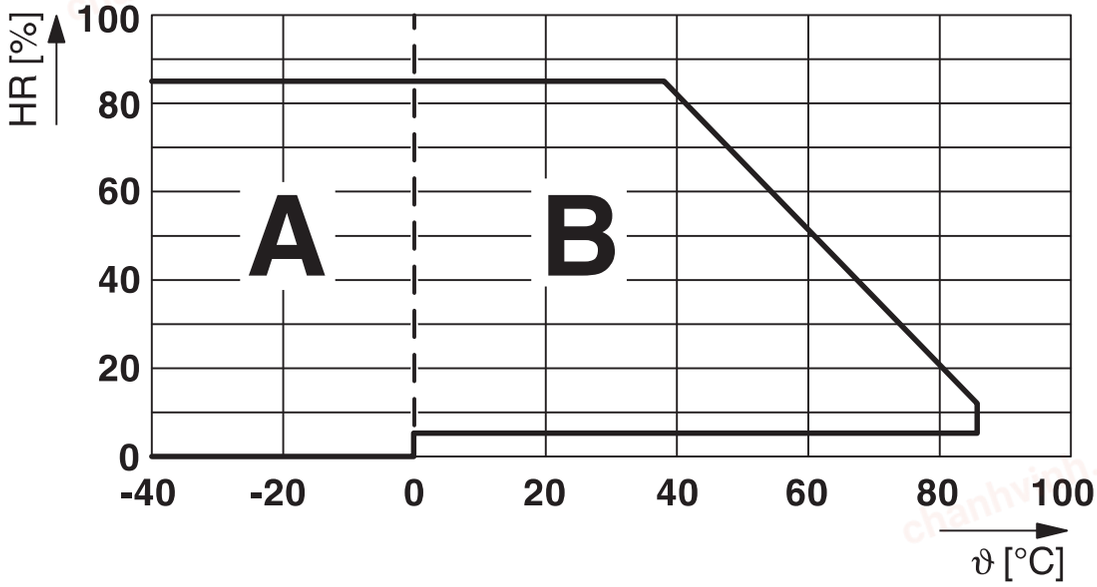
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Diagram



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 ≤ 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 ≤ 25°C.

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Approvals

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cULus Listed
Approval ID: E140324

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Classifications

ECLASS

ECLASS-11.0	27371604
ECLASS-12.0	27371604
ECLASS-13.0	27371604

ETIM

ETIM 9.0	EC001504

UNSPSC

UNSPSC 21.0	39122300

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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	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.

EU REACH SVHC

REACH candidate substance (CAS No.)	Octamethylcyclotetrasiloxane(CAS: 556-67-2)
	Decamethylcyclopentasiloxane(CAS: 541-02-6)
	Lead(CAS: 7439-92-1)
SCIP	3977d76b-133b-484d-8663-c3a4cfe5e2ea

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