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

2905495

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PLC-INTERFACE, hybrid solid-state relay incl. bypass relay with screw 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	2905495
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C461
Product key	DK6235
GTIN	4046356957120
Weight per piece (including packing)	82 g
Weight per piece (excluding packing)	89.2 g
Customs tariff number	85364190
Country of origin	DE

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	15.09.2025

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

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	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 mm² ... 2.5 mm² (Single ferrule)
	2x 0.5 mm² ... 1.5 mm² (TWIN ferrule)
Conductor cross-section AWG	26 ... 14
Tightening torque	0.45 Nm ... 0.55 Nm (Usually these terminal blocks must be supported during conductor connection (held by one hand, supported on the housing))

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

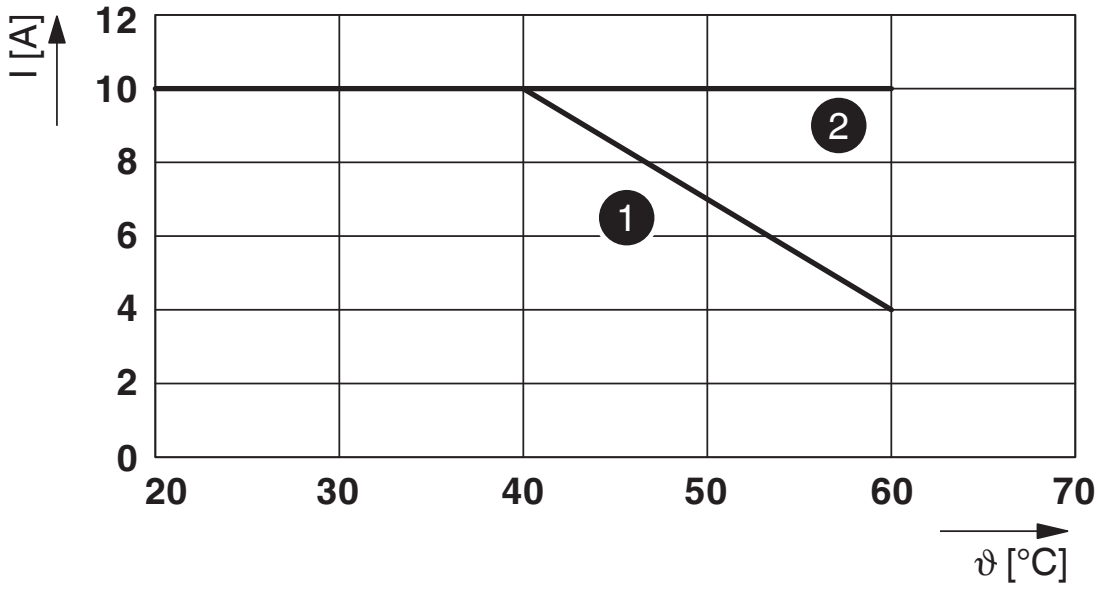
Standards/regulations	IEC 60947-5-1

Mounting

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

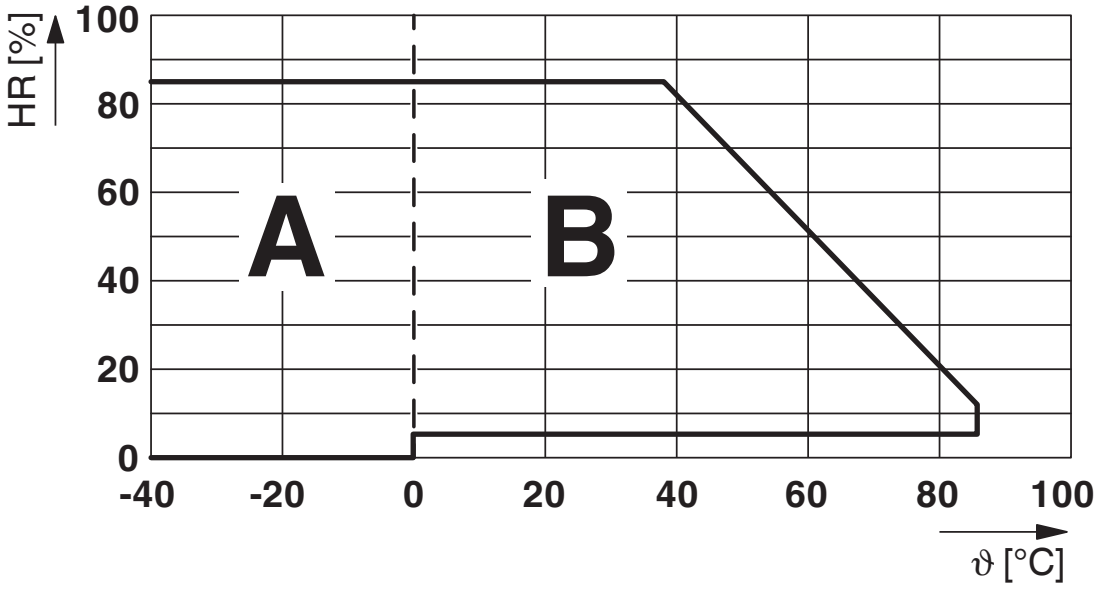
Drawings

Diagram



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

Diagram

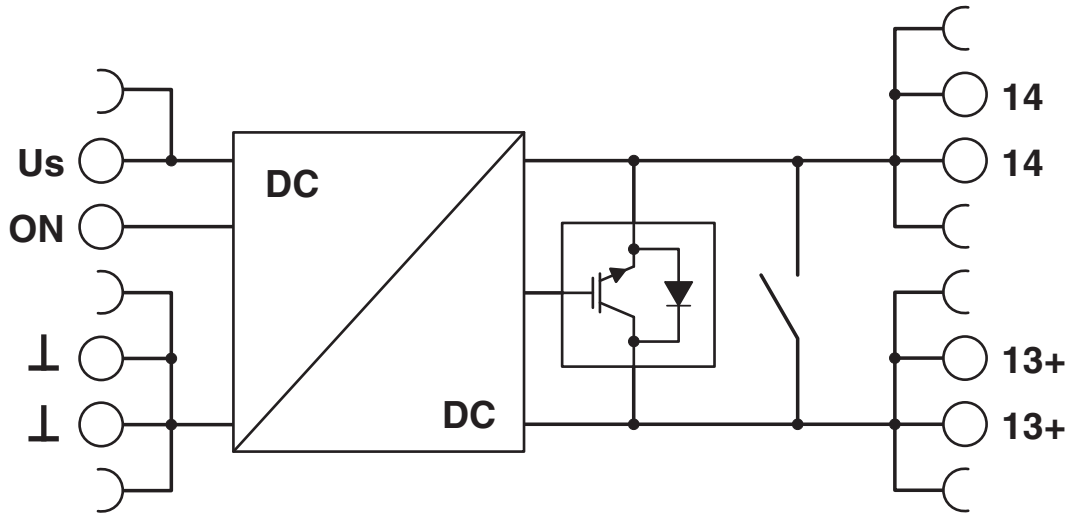


Permissible humidity for operation and storage.
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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.

Circuit diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2905495

cULus Listed
Approval ID: E140324

Classifications

ECLASS

ECLASS-13.0	27371604
ECLASS-15.0	27371604

ETIM

ETIM 9.0	EC001504

UNSPSC

UNSPSC 21.0	39122300

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	173bd11b-f17b-4e04-b830-05557a8cc6ce

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