

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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

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 documentation. Our general terms of use for downloads are valid.



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	CK6213
GTIN	4046356957120
Weight per piece (including packing)	82 g
Weight per piece (excluding packing)	80 g
Customs tariff number	85364190
Country of origin	DE

Technical data

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
----------	---

Product properties

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

Insulation characteristics

Insulation	safe isolation
------------	----------------

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

Insulation	safe isolation
Overvoltage category	III
Pollution degree	2

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
"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	Yellow LED
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; $T_{amb} = 60^{\circ}\text{C}$)
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 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 2.5 mm ²
	0.2 mm ² ... 2.5 mm ² (Single ferrule)
	2x 0.5 mm ² ... 1.5 mm ² (TWIN ferrule)
Conductor cross section AWG	26 ... 14
Tightening torque	0.6 Nm ... 0.8 Nm

Dimensions

Width	14 mm
Height	80 mm
Depth	94 mm

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
-----------------------	---------------

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



2905495

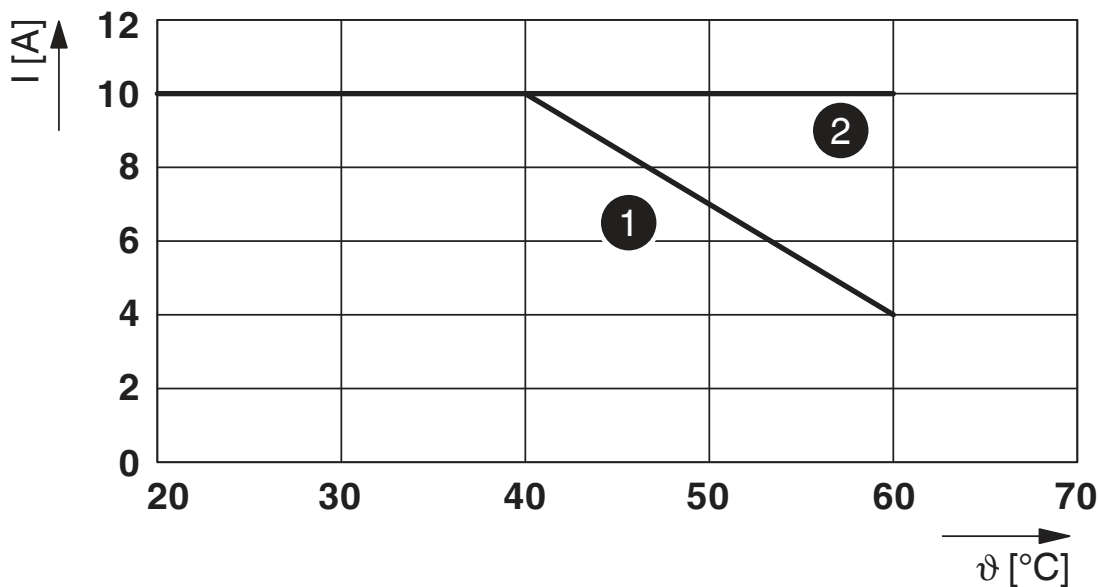
<https://www.phoenixcontact.com/us/products/2905495>

Mounting

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

Drawings

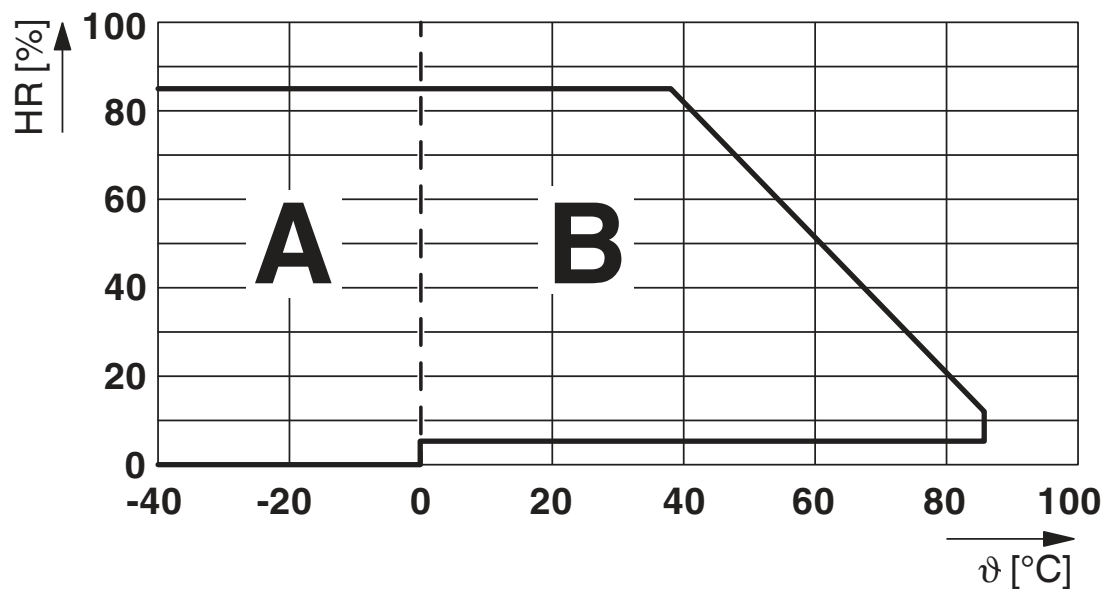
Diagram



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 $\leq 0^\circ\text{C}$ must be prevented

Area B: Condensation at ambient temperatures $> 0^\circ\text{C}$ must be prevented

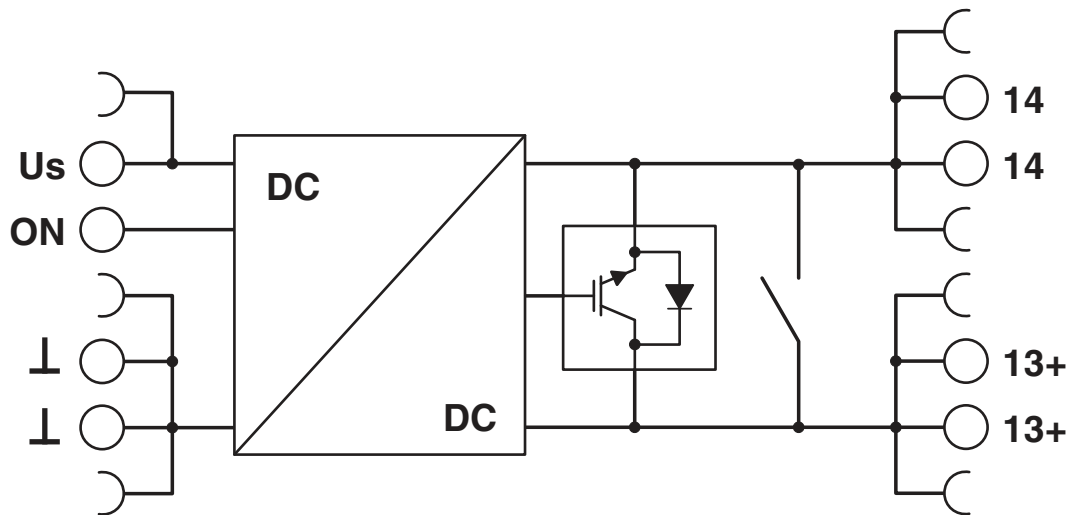
On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature $\leq 25^\circ\text{C}$.

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

2905495

<https://www.phoenixcontact.com/us/products/2905495>

Circuit diagram



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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

Classifications

ECLASS

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

ETIM

ETIM 8.0	EC001504
----------	----------

UNSPSC

UNSPSC 21.0	39122300
-------------	----------

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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

Environmental product compliance

REACH SVHC	Lead 7439-92-1
	Octamethylcyclotetrasiloxane (D4) 556-67-2
	Decamethylcyclopentasiloxane (D5) 541-02-6
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

2905495

<https://www.phoenixcontact.com/us/products/2905495>

Accessories

ZB 10:UNBEDRUCKT - Zack marker strip

1053001

<https://www.phoenixcontact.com/us/products/1053001>



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 10.5 x 10.15 mm, Number of individual labels: 10

ZB 10 CUS - Zack marker strip

0824941

<https://www.phoenixcontact.com/us/products/0824941>



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10,15 x 10,5 mm, Number of individual labels: 10

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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

ZB10,LGS:FORTL.ZAHLEN - Zack marker strip

1053014

<https://www.phoenixcontact.com/us/products/1053014>



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 10,15 x 10,5 mm, Number of individual labels: 10

ZB10,QR:FORTL.ZAHLEN - Zack marker strip

1053027

<https://www.phoenixcontact.com/us/products/1053027>



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 10,15 x 10,5 mm, Number of individual labels: 10

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

2905495

<https://www.phoenixcontact.com/us/products/2905495>

ZB10,LGS:L1-N,PE - Marker for terminal blocks

1053412

<https://www.phoenixcontact.com/us/products/1053412>



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 10,15 x 10,5 mm, Number of individual labels: 10

ZB10,LGS:U-N - Marker for terminal blocks

1053438

<https://www.phoenixcontact.com/us/products/1053438>



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, horizontal: U, V, W, N, GND, U, V, W, N, GND, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 10,15 x 10,5 mm, Number of individual labels: 10

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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

UC-TM 10 - Marker for terminal blocks

0818069

<https://www.phoenixcontact.com/us/products/0818069>



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 9.6 x 10.5 mm, Number of individual labels: 48

UC-TM 10 CUS - Marker for terminal blocks

0824605

<https://www.phoenixcontact.com/us/products/0824605>



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 9.6 x 10.5 mm, Number of individual labels: 48

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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

UCT-TM 10 - Marker for terminal blocks

0829142

<https://www.phoenixcontact.com/us/products/0829142>



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped, for terminal block width: 10.2 mm, lettering field size: 8.9 x 9.6 mm, Number of individual labels: 36

UCT-TM 10 CUS - Marker for terminal blocks

0829623

<https://www.phoenixcontact.com/us/products/0829623>



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 8.9 x 9.6 mm, Number of individual labels: 36

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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

ZB 12:UNPRINTED - Zack marker strip

0812120

<https://www.phoenixcontact.com/us/products/0812120>



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 12.2 mm, lettering field size: 12 x 10.5 mm, Number of individual labels: 5

ZB 12 CUS - Zack marker strip

0824942

<https://www.phoenixcontact.com/us/products/0824942>



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 12.2 mm, lettering field size: 10.5 x 12.15 mm, Number of individual labels: 5

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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

ZB 12,LGS:L1-N,PE - Zack marker strip

0812146

<https://www.phoenixcontact.com/us/products/0812146>



Zack marker strip, Strip, white, labeled, printed horizontally: L1, L2, L3, N, PE, mounting type: snapped, for terminal block width: 12.2 mm, lettering field size: 10.5 x 12.15 mm, Number of individual labels: 5

UC-TM 12 - Marker for terminal blocks

0819194

<https://www.phoenixcontact.com/us/products/0819194>



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 12 mm, lettering field size: 11.45 x 10.5 mm, Number of individual labels: 40

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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

UC-TM 12 CUS - Marker for terminal blocks

0824613

<https://www.phoenixcontact.com/us/products/0824613>



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 12 mm, lettering field size: 11.45 x 10.5 mm, Number of individual labels: 40

UCT-TM 12 - Marker for terminal blocks

0829144

<https://www.phoenixcontact.com/us/products/0829144>



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped, for terminal block width: 12 mm, lettering field size: 10.8 x 9.6 mm, Number of individual labels: 30

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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

UCT-TM 12 CUS - Marker for terminal blocks

0829630

<https://www.phoenixcontact.com/us/products/0829630>



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 12 mm, lettering field size: 10.8 x 9.6 mm, Number of individual labels: 30

NS 35/ 7,5 PERF 2000MM - DIN rail perforated

0801733

<https://www.phoenixcontact.com/us/products/0801733>



DIN rail perforated, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver, Pack of 25 (50 m)

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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

NS 35/ 7,5 UNPERF 2000MM - DIN rail, unperforated

0801681

<https://www.phoenixcontact.com/us/products/0801681>



DIN rail, unperforated, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver, Pack of 25 (50 m)

NS 35/ 7,5 WH PERF 2000MM - DIN rail perforated

1204119

<https://www.phoenixcontact.com/us/products/1204119>



DIN rail perforated, acc. to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver, Pack of 25 (50 m)

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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

NS 35/ 7,5 WH UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1204122

<https://www.phoenixcontact.com/us/products/1204122>



DIN rail, unperforated, acc. to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver, Pack of 10 (20 m)

NS 35/ 7,5 AL UNPERF 2000MM - DIN rail, unperforated

0801704

<https://www.phoenixcontact.com/us/products/0801704>



DIN rail, unperforated, acc. to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver, Pack of 25 (50 m)

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

2905495

<https://www.phoenixcontact.com/us/products/2905495>

NS 35/ 7,5 ZN PERF 2000MM - DIN rail perforated

1206421

<https://www.phoenixcontact.com/us/products/1206421>



DIN rail perforated, acc. to EN 60715, material: Steel, galvanized, Standard profile, color: silver, Pack of 25 (50 m)

NS 35/ 7,5 ZN UNPERF 2000MM - DIN rail, unperforated

1206434

<https://www.phoenixcontact.com/us/products/1206434>



DIN rail, unperforated, acc. to EN 60715, material: Steel, galvanized, Standard profile, color: silver, Pack of 25 (50 m)

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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

NS 35/ 7,5 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

0801762

<https://www.phoenixcontact.com/us/products/0801762>



DIN rail, unperforated, acc. to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored, Pack of 10 (20 m)

NS 35/ 7,5 CAP - End cap

1206560

<https://www.phoenixcontact.com/us/products/1206560>

DIN rail end piece, for DIN rail NS 35/7.5



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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

NS 35/15 PERF 2000MM - DIN rail perforated

1201730

<https://www.phoenixcontact.com/us/products/1201730>



DIN rail perforated, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver, Pack of 25 (50 m)

NS 35/15 UNPERF 2000MM - DIN rail, unperforated

1201714

<https://www.phoenixcontact.com/us/products/1201714>



DIN rail, unperforated, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver, Pack of 25 (50 m)

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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

NS 35/15 WH PERF 2000MM - DIN rail perforated

0806602

<https://www.phoenixcontact.com/us/products/0806602>



DIN rail perforated, similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: white, Pack of 25 (50 m)

NS 35/15 WH UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1204135

<https://www.phoenixcontact.com/us/products/1204135>



DIN rail, unperforated, similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver, Pack of 10 (20 m)

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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

NS 35/15 AL UNPERF 2000MM - DIN rail, unperforated

1201756

<https://www.phoenixcontact.com/us/products/1201756>



DIN rail, unperforated, similar to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver

NS 35/15 ZN PERF 2000MM - DIN rail perforated

1206599

<https://www.phoenixcontact.com/us/products/1206599>



DIN rail perforated, similar to EN 60715, material: Steel, galvanized, Standard profile, color: silver, Pack of 25 (50 m)

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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

NS 35/15 ZN UNPERF 2000MM - DIN rail, unperforated

1206586

<https://www.phoenixcontact.com/us/products/1206586>



DIN rail, unperforated, similar to EN 60715, material: Steel, galvanized, Standard profile, color: silver, Pack of 25 (50 m)

NS 35/15 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201895

<https://www.phoenixcontact.com/us/products/1201895>



DIN rail, unperforated, similar to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored, Pack of 10 (20 m)

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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

NS 35/15 CAP - End cap

1206573

<https://www.phoenixcontact.com/us/products/1206573>

DIN rail end piece, for DIN rail NS 35/15



NS 35/15-2,3 UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201798

<https://www.phoenixcontact.com/us/products/1201798>

DIN rail, unperforated, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile 2.3 mm, color: silver, Pack of 10 (20 m)



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



2905495

<https://www.phoenixcontact.com/us/products/2905495>

REL-MR- 24DC/1IC - Single relay

2961341

<https://www.phoenixcontact.com/us/products/2961341>



Pluggable miniature power relay, with power contact for high switch-on currents up to 130 A peaks, 1 N/O contact, input voltage: 24 V DC

Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com