

UT 16 BK - Feed-through terminal block



3044197

<https://www.phoenixcontact.com/us/products/3044197>

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Feed-through terminal block, nom. voltage: 1000 V, nominal current: 76 A, number of connections: 2, connection method: Screw connection, Rated cross section: 16 mm², cross section: 1.5 mm² - 25 mm², mounting type: NS 35/7,5, NS 35/15, color: black

Your advantages

- The reducing bridges can be used to connect terminal blocks with different connection technologies, e.g., UT 35 screw terminal block with Push-in technology 2,5 Push-in terminal blocks, to form power blocks
- The flexible options for reducing bridging in the CLIPLINE complete system can be found in "Accessories for the CLIPLINE complete modular terminal block system"
- Easy and time-saving potential supply and distribution of large currents and cross sections up to 35 mm² with reducing bridges
- Tested for railway applications

Commercial data

Item number	3044197
Packing unit	1 pc
Minimum order quantity	50 pc
Sales key	BE01
Product key	BE1111
GTIN	4055626055275
Weight per piece (including packing)	30.583 g
Weight per piece (excluding packing)	30.583 g
Customs tariff number	85369010
Country of origin	TR

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Technical data

Product properties

Product type	Feed-through terminal block
Area of application	Railway industry
	Machine building
	Plant engineering
	Process industry
Number of connections	2
Number of rows	1
Potentials	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	2.43 W

Connection data

Number of connections per level	2
Nominal cross section	16 mm ²

Level 1 above 1 below 1

Screw thread	M5
Tightening torque	2.5 ... 3 Nm
Stripping length	14 mm
Internal cylindrical gage	A7
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	1.5 mm ² ... 25 mm ²
Cross section AWG	16 ... 4 (converted acc. to IEC)
Conductor cross section flexible	1.5 mm ² ... 25 mm ²
Conductor cross section, flexible [AWG]	16 ... 4 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	1 mm ² ... 16 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	1 mm ² ... 16 mm ²
2 conductors with same cross section, solid	1 mm ² ... 6 mm ²
2 conductors with same cross section, flexible	1 mm ² ... 6 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	1 mm ² ... 6 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.75 mm ² ... 10 mm ²
Nominal current	76 A
Maximum load current	101 A (with 25 mm ² conductor cross section)
Nominal voltage	1000 V

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Note	Note: Product releases, connection cross sections and notes on connecting aluminum cables can be found in the download area.
Nominal cross section	16 mm ²

Ex data

Rated data (ATEX/IECEX)

Identification	Ⓔ II 2 GD Ex eb IIC Gb
Operating temperature range	-60 °C ... 110 °C
Ex-certified accessories	3047206 D-UT 16 1205066 SZS 1,0X4,0 VDE 3022276 CLIPFIX 35-5 3022218 CLIPFIX 35
List of bridges	Plug-in bridge / FBS 2-12 / 3005950
Bridge data	73.5 A / 16 mm ²
Ex temperature increase	40 K (80.5 A / 16 mm ²)
Rated voltage	690 V
for bridging with bridge	690 V
Rated insulation voltage	630 V
output	(Permanent)

Ex level General

Rated current	73.5 A
Maximum load current	89.5 A
Contact resistance	0.16 mΩ

Ex connection data General

Torque range	2.5 Nm ... 3 Nm
Nominal cross section	16 mm ²
Rated cross section AWG	6
Connection capacity rigid	1.5 mm ² ... 25 mm ²
Connection capacity AWG	16 ... 4
Connection capacity flexible	1.5 mm ² ... 16 mm ²
Connection capacity AWG	16 ... 6
2 conductors with same cross section, solid	1 mm ² ... 6 mm ²
2 conductors with the same cross-section AWG rigid	18 ... 10
2 conductors with same cross section, stranded	1 mm ² ... 4 mm ²
2 conductors with the same cross-section AWG flexible	18 ... 12

Dimensions

Width	12.2 mm
End cover width	2.2 mm
Height	55.5 mm
Depth	54.4 mm
Depth on NS 35/7,5	55 mm
Depth on NS 35/15	62.5 mm

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Material specifications

Color	black
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
Surface flammability NFPA 130 (ASTM E 162)	passed
Specific optical density of smoke NFPA 130 (ASTM E 662)	passed
Smoke gas toxicity NFPA 130 (SMP 800C)	passed

Electrical tests

Surge voltage test

Test voltage setpoint	9.8 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature \leq 45 K
Result	Test passed
Short-time withstand current 16 mm ²	1.92 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2.2 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	Yes
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Mechanical tests

Mechanical strength

Result	Test passed
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Attachment on the carrier

DIN rail/fixing support	NS 32/NS 35
Result	Test passed

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Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	1.5 mm ² / 0.4 kg
	16 mm ² / 2.9 kg
	25 mm ² / 4.5 kg
Result	Test passed

Environmental and real-life conditions

Needle-flame test

Time of exposure	30 s
Result	Test passed

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2018-05
Spectrum	Service life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s ²) ² /Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis

Shocks

Pulse shape	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)

Ambient conditions

Ambient temperature (operation)	-60 °C ... 105 °C (max. short-term operating temperature RTI Elec.)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (storage/transport)	30 % ... 70 %

Standards and regulations

Connection in acc. with standard	IEC 60947-7-1
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Mounting

Mounting type	NS 35/7,5
	NS 35/15

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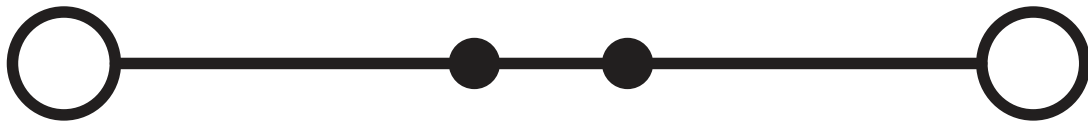
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Drawings

Circuit diagram



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3044197>

DNV

Approval ID: TAE00001S9



CSA

Approval ID: 13631

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	600 V	85 A	16 - 4	-
Use group C				
	600 V	85 A	16 - 4	-



IECEE CB Scheme

Approval ID: DE1-65779

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	1000 V	76 A	-	- 16



EAC

Approval ID: RU C-DE.AI30.B.01102



cULus Recognized

Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	600 V	85 A	16 - 4	-
Multi-conductor connection	600 V	85 A	- 14	-
Use group C				
	600 V	85 A	16 - 4	-
Multi-conductor connection	600 V	85 A	- 14	-



LR

Approval ID: LR2003762TA



RS

Approval ID: 22.44.01.00083.250

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VDE Zeichengenehmigung

Approval ID: 40020166

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	1000 V	76 A	-	1.5 - 16



ATEX

Approval ID: KEMA04ATEX2048U



cUL Recognized

Approval ID: E192998

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	600 V	85 A	16 - 4	-



EAC Ex

Approval ID: RU C-DE.HA91.B.00066



IECEX

Approval ID: IECEX KEM 06.0027U



UL Recognized

Approval ID: E192998

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	600 V	85 A	16 - 4	-



CCC

Approval ID: 2020322313000622



UKCA-EX

Approval ID: DEKRA 21UKEX0304U

cULus Recognized

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Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250101

ETIM

ETIM 8.0	EC000897
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance


China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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Accessories

 Note: Applying some accessories below might limit this product.


FBS 2-12 - Plug-in bridge

3005950

<https://www.phoenixcontact.com/us/products/3005950>



Plug-in bridge, pitch: 12 mm, number of positions: 2, color: red

 Max. current carrying capacity: 76 A

RB 35-16 - Reducing bridge

3032169

<https://www.phoenixcontact.com/us/products/3032169>



Reducing bridge, pitch: 14 mm, number of positions: 2, color: red

 Max. current carrying capacity: 90 A

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RB 16-6 - Reducing bridge

3047072

<https://www.phoenixcontact.com/us/products/3047072>



Reducing bridge, pitch: 12.2 mm, number of positions: 2, color: red

 Max. current carrying capacity: 37 A


RB UT 16-(2,5/4) - Reducing bridge

3047073

<https://www.phoenixcontact.com/us/products/3047073>



Reducing bridge, pitch: 11 mm, number of positions: 2, length: 31 mm, color: red

 Max. current carrying capacity: 40 A

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RB UT 16-ST(2,5/4) - Reducing bridge

3047099

<https://www.phoenixcontact.com/us/products/3047099>



Reducing bridge, pitch: 11 mm, number of positions: 2, length: 41 mm, color: red

 Max. current carrying capacity: 40 A

AGK 4-UT 16 - Pick-off terminal

3047125

<https://www.phoenixcontact.com/us/products/3047125>



Pick-off terminal, nom. voltage: 1000 V, nominal current: 32 A, number of connections: 1, connection method: Screw connection, cross section: 0.14 mm² - 6 mm², mounting type: on base element, color: gray

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D-UT 16 - End cover

3047206

<https://www.phoenixcontact.com/us/products/3047206>



End cover, length: 52.8 mm, width: 2.2 mm, height: 52.8 mm, color: gray

TPNS-UK - Partition plate

0706647

<https://www.phoenixcontact.com/us/products/0706647>



Partition plate, length: 80 mm, width: 2 mm, height: 80 mm, color: gray

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X-PEN 0,35 - Marker pen

0811228

<https://www.phoenixcontact.com/us/products/0811228>



Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

WS UT 16 - Warning label

3047374

<https://www.phoenixcontact.com/us/products/3047374>

Warning sign for UT terminal blocks



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SZS 1,0X6,5 VDE - Screwdriver

1205079

<https://www.phoenixcontact.com/us/products/1205079>



Screwdriver, slot-headed, VDE insulated, size: 1.0 x 6.5 x 150 mm, 2-component grip, with non-slip grip

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)

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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)

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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)

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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)

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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



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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)

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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)

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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)

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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)

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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)



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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

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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

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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

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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

PROJECT COMPLETE - Software

1050453

<https://www.phoenixcontact.com/us/products/1050453>



Intuitive planning and marking software for configuring terminal strips and for professional marking of marking materials for terminal blocks, conductors, cables, devices, and systems. The software is available for download

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E/AL-NS 35 - End clamp

1201662

<https://www.phoenixcontact.com/us/products/1201662>



End clamp, for end support of UKH 50 to UKH 240, is pushed onto DIN rail NS 35 and fixed with 2 screws, width: 10 mm, color: aluminum

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