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Feed-through terminal block, Connection method: Screw connection, Cross section: 0.14 mm² - 4 mm², AWG: 26 - 12, Width: 5.2 mm, Color: gray, Mounting type: NS 35/7,5, NS 35/15

Why buy this product

- The large wiring space enables the connection of solid and stranded conductors without ferrules, even above the nominal cross section
- As well as saving space, the compact design enables user-friendly wiring in a small amount of space
- Optimum screwdriver guidance through closed screw shafts
- The multi-conductor connection offers maximum flexibility and wiring density
- Tested for railway applications
- The cable entry funnel enables the use of conductors with ferrules and plastic collars within the nominal cross section



Key Commercial Data

Packing unit	1 pc
Country of origin	Germany

Technical data

General

Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	2.5 mm ²
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Area of application	Railway industry
	Machine building
	Plant engineering
	Process industry
Rated surge voltage	8 kV



Technical data

General

Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum load current	32 A (with 4 mm² conductor cross section)
Nominal current I _N	24 A
Nominal voltage U _N	1000 V
Open side panel	Yes
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
Finger protection	guaranteed
Result of surge voltage test	Test passed
Surge voltage test setpoint	9.8 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	2.2 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Result of bending test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	0.14 mm² / 0.2 kg
	2.5 mm² / 0.7 kg
	4 mm² / 0.9 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.14 mm²
Tractive force setpoint	10 N
Conductor cross section tensile test	2.5 mm²
Tractive force setpoint	50 N
Conductor cross section tensile test	4 mm²
Tractive force setpoint	60 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	1 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	≤ 3.2 mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	2.5 mm²
Short-time current	0.3 kA
Conductor cross section short circuit testing	4 mm²
Short-time current	0.48 kA
Result of thermal test	Test passed
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Technical data

General

Proof of thermal characteristics (needle flame) effective duration	30 s
Oscillation, broadband noise test result	Test passed
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 1, class B, body mounted
Test frequency	$f_1 = 5 \text{ Hz to } f_2 = 150 \text{ Hz}$
ASD level	1.857 (m/s²)²/Hz
Acceleration	0,8 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
Acceleration	5 g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °C
Static insulating material application in cold	-60 °C

Dimensions

Width	5.2 mm
End cover width	2.2 mm
Length	47.7 mm
Height NS 35/7,5	47.5 mm
Height NS 35/15	55 mm

Connection data

Connection method	Screw connection
Connection in acc. with standard	IEC 60947-7-1
Note	Note: Product releases, connection cross sections and notes on connecting aluminum cables can be found in the download area.
Conductor cross section solid min.	0.14 mm²
Conductor cross section solid max.	4 mm²
Conductor cross section AWG min.	26
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.14 mm²
Conductor cross section flexible max.	4 mm²
Min. AWG conductor cross section, flexible	26
Max. AWG conductor cross section, flexible	12
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.14 mm²



Technical data

Connection data

Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm²
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm²
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm²
2 conductors with same cross section, solid min.	0.14 mm²
2 conductors with same cross section, solid max.	1.5 mm²
2 conductors with same cross section, stranded min.	0.14 mm²
2 conductors with same cross section, stranded max.	1.5 mm²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	1.5 mm²
2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	0.14 mm²
2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	1.5 mm²
Connection in acc. with standard	IEC/EN 60079-7
Conductor cross section solid min.	0.14 mm²
Conductor cross section solid max.	4 mm²
Conductor cross section AWG min.	26
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.14 mm²
Conductor cross section flexible max.	2.5 mm²
Stripping length	9 mm
Internal cylindrical gage	A3
Screw thread	M3
Tightening torque, min	0.5 Nm
Tightening torque max	0.6 Nm

Standards and Regulations

Connection in acc. with standard	CSA
	IEC 60947-7-1
Flammability rating according to UL 94	V0

Classifications

eCl@ss

eCl@ss 4.0	27141120
eCl@ss 4.1	27141120
eCl@ss 5.0	27141120
eCl@ss 5.1	27141120
eCl@ss 6.0	27141120
eCl@ss 7.0	27141120



Classifications

eCl@ss

eCl@ss 8.0	27141120
eCl@ss 9.0	27141120

ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 5.0	EC000897

UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410

Approvals

Approvals

Approvals

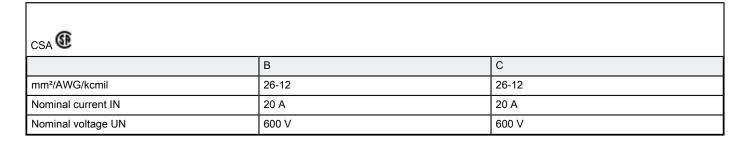
CSA / UL Recognized / VDE Gutachten mit Fertigungsüberwachung / cUL Recognized / LR / GL / DNV / RS / IECEE CB Scheme / EAC / EAC / cULus Recognized

Ex Approvals

IECEx / ATEX / UL Recognized / cUL Recognized / EAC Ex

Approvals submitted

Approval details





Approvals

UL Recognized \$1			
	В	С	
mm²/AWG/kcmil	26-12	26-12	
Nominal current IN	20 A	20 A	
Nominal voltage UN	600 V	600 V	

VDE Gutachten mit Fertigungsüberwachung	
mm²/AWG/kcmil	0.2-2.5
Nominal voltage UN	800 V

cUL Recognized			
	В	С	
mm²/AWG/kcmil	26-12	26-12	
Nominal current IN	20 A	20 A	
Nominal voltage UN	600 V	600 V	

1.0		
IIR		

GL

DNV

RS

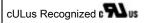
IECEE CB Scheme CB	
mm²/AWG/kcmil	0.2-2.5
Nominal voltage UN	800 V

TEAC		

EAC



Approvals



Accessories

Accessories

DIN rail

DIN rail perforated - NS 35/7,5 PERF 2000MM - 0801733



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 7.5 mm, width 35 mm, length: 2000 mm

DIN rail, unperforated - NS 35/7,5 UNPERF 2000MM - 0801681



DIN rail, material: Steel, unperforated, height 7.5 mm, width 35 mm, length: 2 m $\,$

DIN rail perforated - NS 35/7,5 WH PERF 2000MM - 1204119



DIN rail 35 mm (NS 35)

DIN rail - NS 35/7,5 WH UNPERF 2000MM - 1204122



DIN rail 35 mm (NS 35)



Accessories

DIN rail, unperforated - NS 35/7,5 AL UNPERF 2000MM - 0801704



DIN rail, unperforated, Width: 35 mm, Height: 7.5 mm, Length: 2000 mm, Color: silver

DIN rail perforated - NS 35/7,5 ZN PERF 2000MM - 1206421



DIN rail, material: Galvanized, perforated, height 7.5 mm, width 35 mm, length: 2 m

DIN rail, unperforated - NS 35/7,5 ZN UNPERF 2000MM - 1206434



DIN rail, material: Galvanized, unperforated, height 7.5 mm, width 35 mm, length: 2 m

DIN rail, unperforated - NS 35/7,5 CU UNPERF 2000MM - 0801762



DIN rail, material: Copper, unperforated, height 7.5 mm, width 35 mm, length: 2 m

End cap - NS 35/7,5 CAP - 1206560

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





Accessories

DIN rail perforated - NS 35/15 PERF 2000MM - 1201730



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 15 mm, width 35 mm, length: 2000 mm

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714



DIN rail, material: Steel, unperforated, height 15 mm, width 35 mm, length: 2 m

DIN rail perforated - NS 35/15 WH PERF 2000MM - 0806602



DIN rail 35 mm (NS 35)

DIN rail - NS 35/15 WH UNPERF 2000MM - 1204135



DIN rail 35 mm (NS 35)

DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, deep drawn, high profile, unperforated, 1.5 mm thick, material: aluminum, height 15 mm, width 35 mm, length 2000 mm



Accessories

DIN rail perforated - NS 35/15 ZN PERF 2000MM - 1206599



DIN rail, material: Galvanized, perforated, height 15 mm, width 35 mm, length: 2 m

DIN rail, unperforated - NS 35/15 ZN UNPERF 2000MM - 1206586



DIN rail, material: Galvanized, unperforated, height 15 mm, width 35 mm, length: 2 m

DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, material: Copper, unperforated, 1.5 mm thick, height 15 mm, width 35 mm, length: 2 m

End cap - NS 35/15 CAP - 1206573



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

DIN rail, unperforated - NS 35/15-2,3 UNPERF 2000MM - 1201798



DIN rail, material: Steel, unperforated, 2.3 mm thick, height 15 mm, width 35 mm, length: 2 m

End block



Accessories

End clamp - CLIPFIX 35 - 3022218



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, width: 9.5 mm, color: gray

End clamp - CLIPFIX 35-5 - 3022276



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, with parking option for FBS...5, FBS...6, KSS 5, KSS 6, width: 5.15 mm, color: gray

End clamp - E/NS 35 N - 0800886



End clamp, width: 9.5 mm, color: gray

End cover

End cover - D-UT 2,5/10 - 3047028



End cover, Length: 47.7 mm, Width: 2.2 mm, Height: 48.4 mm, Color: gray

Front adapter

Front adapters - VIP-PA-PWR/20XOE/ 1,0M/S7 - 2904724



VIP power cabling, universal front adapter for connection to all popular 20-pos. SIMATIC S7-300 I/O modules, via 20 individual wires in rope structure, not assembled (field connection, e.g., via 20 modular terminal blocks), cable length: 1 m



Accessories

Front adapters - VIP-PA-PWR/20XOE/ 2,0M/S7 - 2904725



VIP power cabling, universal front adapter for connection to all popular 20-pos. SIMATIC S7-300 I/O modules, via 20 individual wires in rope structure, not assembled (field connection, e.g., via 20 modular terminal blocks), cable length: 2 m

Front adapters - VIP-PA-PWR/20XOE/ 3,0M/S7 - 2904726



VIP power cabling, universal front adapter for connection to all popular 20-pos. SIMATIC S7-300 I/O modules, via 20 individual wires in rope structure, not assembled (field connection, e.g., via 20 modular terminal blocks), cable length: 3 m

Front adapters - VIP-PA-PWR/20XOE/10,0M/S7 - 2904730



VIP power cabling, universal front adapter for connection to all popular 20-pos. SIMATIC S7-300 I/O modules, via 20 individual wires in rope structure, not assembled (field connection, e.g., via 20 modular terminal blocks), cable length: 10 m

Front adapters - VIP-PA-PWR/40XOE/ 1,0M/S7 - 2904731



VIP power cabling, universal front adapter for connection to all popular 40-pos. SIMATIC S7-300 I/O modules, via 40 individual wires in rope structure, not assembled (field connection, e.g., via 40 modular terminal blocks), cable length:

Front adapters - VIP-PA-PWR/40XOE/ 2,0M/S7 - 2904732



VIP power cabling, universal front adapter for connection to all popular 40-pos. SIMATIC S7-300 I/O modules, via 40 individual wires in rope structure, not assembled (field connection, e.g., via 40 modular terminal blocks), cable length: 2 m



Accessories

Front adapters - VIP-PA-PWR/40XOE/ 3,0M/S7 - 2904733



VIP power cabling, universal front adapter for connection to all popular 40-pos. SIMATIC S7-300 I/O modules, via 40 individual wires in rope structure, not assembled (field connection, e.g., via 40 modular terminal blocks), cable length: 3 m

Front adapters - VIP-PA-PWR/40XOE/10,0M/S7 - 2904737



VIP power cabling, universal front adapter for connection to all popular 40-pos. SIMATIC S7-300 I/O modules, via 40 individual wires in rope structure, not assembled (field connection, e.g., via 40 modular terminal blocks), cable length: 10 m

Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663



Insulating sleeve, Color: white

Insulating sleeve - MPS-IH RD - 0201676



Insulating sleeve, Color: red

Insulating sleeve - MPS-IH BU - 0201689



Insulating sleeve, Color: blue



Accessories

Insulating sleeve - MPS-IH YE - 0201692



Insulating sleeve, Color: yellow

Insulating sleeve - MPS-IH GN - 0201702



Insulating sleeve, Color: green

Insulating sleeve - MPS-IH GY - 0201728



Insulating sleeve, Color: gray

Insulating sleeve - MPS-IH BK - 0201731



Insulating sleeve, Color: black

Jumper

Plug-in bridge - FBS 2-5 - 3030161



Plug-in bridge, Pitch: 5.2 mm, Length: 22.7 mm, Width: 9 mm, Number of positions: 2, Color: red



Accessories

Plug-in bridge - FBS 3-5 - 3030174



Plug-in bridge, Pitch: 5.2 mm, Length: 22.7 mm, Width: 14.2 mm, Number of positions: 3, Color: red

Plug-in bridge - FBS 4-5 - 3030187



Plug-in bridge, Pitch: 5.2 mm, Length: 22.7 mm, Width: 19.4 mm, Number of positions: 4, Color: red

Plug-in bridge - FBS 5-5 - 3030190



Plug-in bridge, Pitch: 5.2 mm, Length: 22.7 mm, Width: 24.6 mm, Number of positions: 5, Color: red

Plug-in bridge - FBS 10-5 - 3030213



Plug-in bridge, Pitch: 5.2 mm, Length: 22.7 mm, Width: 50.6 mm, Number of positions: 10, Color: red

Plug-in bridge - FBS 20-5 - 3030226



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 20, Color: red



Accessories

Plug-in bridge - FBS 50-5 - 3038930



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 50, Color: red

Plug-in bridge - FBSR 2-5 - 3033702



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 2, Color: red

Plug-in bridge - FBSR 3-5 - 3001591



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 3, Color: red

Plug-in bridge - FBSR 4-5 - 3001592



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 4, Color: red

Plug-in bridge - FBSR 5-5 - 3001593



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 5, Color: red



Accessories

Plug-in bridge - FBSR 10-5 - 3033710



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 10, Color: red

Labeled terminal marker

Zack marker strip - ZB 5 CUS - 0824962



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 5.15 x 10.5 mm

Zack marker strip - ZB 5,LGS:FORTL.ZAHLEN - 1050017



Zack marker strip, Strip, white, labeled, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 5.15 x 10.5 mm

Zack marker strip - ZB 5,QR:FORTL.ZAHLEN - 1050020



Zack marker strip, Strip, white, labeled, can be labeled with: Plotter, Printed vertically: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 5.15 x 10.5 mm

Zack marker strip - ZB 5,LGS:GLEICHE ZAHLEN - 1050033



Zack marker strip, Strip, white, labeled, can be labeled with: Plotter, Printed horizontally: Identical numbers 1 or 2, etc. up to 100, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 5.15 x 10.5 mm



Accessories

Marker for terminal blocks - ZB 5,LGS:L1-N,PE - 1050415



Marker for terminal blocks, Strip, white, labeled, Horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 5.15 x 10.5 mm

Marker for terminal blocks - UC-TM 5 CUS - 0824581



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: 5.2 mm, Lettering field: $10.5 \times 4.6 \text{ mm}$

Marker for terminal blocks - UCT-TM 5 CUS - 0829595



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into tall marker groove, Lettering field: 4.6 x 10.5 mm

Marker pen

Marker pen - X-PEN 0,35 - 0811228



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

Partition plate

Partition plate - ATP-UT - 3047167



Partition plate, Length: 50 mm, Width: 2.2 mm, Height: 48 mm, Color: gray



Accessories

Spacer plate - DP PS-5 - 3036725



Spacer plate, Length: 22.4 mm, Width: 5.2 mm, Height: 29 mm, Number of positions: 1, Color: red

Planning and marking software

Software - CLIP-PROJECT ADVANCED - 5146040



Multilingual software for convenient configuration of Phoenix Contact products on standard DIN rails.

Software - CLIP-PROJECT PROFESSIONAL - 5146053



Multilingual software for terminal strip configuration. A marking module enables the professional marking of markers and labels for identifying terminal blocks, conductors and cables, and devices.

Screwdriver tools

Screwdriver - SZS 0,6X3,5 - 1205053



Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

Terminal marking

Zack marker strip - ZB 5 :UNBEDRUCKT - 1050004



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 5.1 x 10.5 mm



Accessories

Marker for terminal blocks - UC-TM 5 - 0818108



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 10.5 x 4.6 mm

Marker for terminal blocks - UCT-TM 5 - 0828734



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 4.6 x 10.5 mm

Test plug terminal block

Test plugs - MPS-MT - 0201744



Test plugs, Color: silver

Test plugs - PS-5 - 3030983



Test plugs, Color: red

Test plugs - PS-5/2,3MM RD - 3038723



Test plugs, Color: red

Test socket



Accessories

Test adapter - PAI-4-FIX-5/6 BU - 3035975



4 mm test adapter, for terminal blocks with 5.2 mm and 6.2 mm pitch

Test adapter - PAI-4-FIX-5/6 OG - 3035974



4 mm test adapter, for terminal blocks with 5.2 mm and 6.2 mm pitch

Test adapter - PAI-4-FIX-5/6 YE - 3035977



4 mm test adapter, for terminal blocks with 5.2 mm and 6.2 mm pitch

Test adapter - PAI-4-FIX-5/6 RD - 3035976



4 mm test adapter, for terminal blocks with 5.2 mm and 6.2 mm pitch

Test adapter - PAI-4-FIX-5/6 GN - 3035978



4 mm test adapter, for terminal blocks with 5.2 mm and 6.2 mm pitch



Accessories

Test adapter - PAI-4-FIX-5/6 BK - 3035980



4 mm test adapter, for terminal blocks with 5.2 mm and 6.2 mm pitch

Test adapter - PAI-4-FIX-5/6 GY - 3035982



4 mm test adapter, for terminal blocks with 5.2 mm and 6.2 mm pitch

Test adapter - PAI-4-FIX-5/6 VT - 3035979



4 mm test adapter, for terminal blocks with 5.2 mm and 6.2 mm pitch

Test adapter - PAI-4-FIX-5/6 BN - 3035981



4 mm test adapter, for terminal blocks with 5.2 mm and 6.2 mm pitch

Test adapter - PAI-4-FIX-5/6 WH - 3035983



4 mm test adapter, for terminal blocks with 5.2 mm and 6.2 mm pitch



Accessories

Test adapter - PAI-4-N GY - 3032871



4 mm test adapter, for terminal blocks with 5.2 mm, 6.2 mm and 8.2 mm pitch

Warning label printed

Warning label - WS UT 2,5 - 3047923



Warning sign for UT terminal blocks

Warning label - WS UT 2,5 - 3047923



Warning sign for UT terminal blocks

Drawings

Circuit diagram

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