

Double-level spring-cage terminal block - STTB 2,5 - 3031270

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Double-level spring-cage terminal block, Cross section: 0.08 mm² - 4 mm², AWG: 28 - 12, Connection type: Spring-cage connection, Width: 5.2 mm, Color: gray, Mounting type: NS 35/7,5, NS 35/15

Why buy this product

- ✓ Compact design for maximum space savings
- ✓ Tested for railway applications
- ✓ Connect the levels using FBS ...-PV bridges



Key commercial data

Packing unit	50 pc
Minimum order quantity	50 pc
GTIN	 4 017918 186814
Weight per Piece (excluding packing)	10.4 g
Custom tariff number	85369010
Country of origin	Germany

Technical data

General

Number of levels	2
Number of connections	4
Color	gray
Insulating material	PA
Inflammability class according to UL 94	V0
Area of application	Railway industry
	Mechanical engineering
	Plant engineering
	Process industry
Rated surge voltage	6 kV

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Technical data

General

Pollution degree	3
Surge voltage category	III
Insulating material group	I
Connection in acc. with standard	IEC 60947-7-1
Current	26 A
Additional text	with 4 mm ² conductor cross section
Nominal current I _N	22 A
Nominal voltage U _N	500 V
Open side panel	ja
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
Finger protection	guaranteed
Surge voltage test setpoint	7.3 kV
Result of surge voltage test	Test passed
Power frequency withstand voltage setpoint	1.89 kV
Result of power-frequency withstand voltage test	Test passed
Checking the mechanical stability of terminal points (5 x conductor connection)	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	0.08 mm ² / 0.1 kg
	2.5 mm ² / 0.7 kg
	4 mm ² / 0.9 kg
Result of bending test	Test passed
Conductor cross section tensile test	0.08 mm ²
Tractive force setpoint	5 N
Conductor cross section tensile test	2.5 mm ²
Tractive force setpoint	50 N
Conductor cross section tensile test	4 mm ²
Tractive force setpoint	60 N
Tensile test result	Test passed
Tight fit on carrier	NS 35
Setpoint	1 N
Result of tight fit test	Test passed
Requirements, voltage drop	≤ 3.2 mV
Result of voltage drop test	Test passed
Temperature-rise test	Test passed
Conductor cross section short circuit testing	2.5 mm ²
Short-time current	0.3 kA
Conductor cross section short circuit testing	4 mm ²
Short-time current	0.48 kA

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Technical data

General

Short circuit stability result	Test passed
Ageing test for screwless modular terminal block temperature cycles	192
Result of aging test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Result of thermal test	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	$1.857 \text{ (m/s}^2\text{)}^2/\text{Hz}$
Acceleration	0.8g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Oscillation, broadband noise 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.)
Shock test result	Test passed
Temperature index, insulating material (DIN EN 60216-1 (VDE 0304-21))	125 °C
Static insulating material application in cold	-60 °C

Dimensions

Width	5.2 mm
Length	67.5 mm
Height NS 35/7,5	47.5 mm
Height NS 35/15	55 mm

Connection data

Connection method	Spring-cage connection
Conductor cross section solid min.	0.08 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section stranded min.	0.08 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	28
Conductor cross section AWG/kcmil max	12
Conductor cross section stranded, with ferrule without plastic sleeve min.	0.14 mm ²
Conductor cross section stranded, with ferrule without plastic sleeve max.	2.5 mm ²
Conductor cross section stranded, with ferrule with plastic sleeve min.	0.14 mm ²

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Technical data

Connection data

Conductor cross section stranded, with ferrule with plastic sleeve max.	2.5 mm ²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	0.5 mm ²
Minimum stripping length	8 mm
Maximum stripping length	10 mm
Internal cylindrical gage	A3

Classifications

eCl@ss

eCl@ss 4.0	27141121
eCl@ss 4.1	27141121
eCl@ss 5.0	27141120
eCl@ss 5.1	27141120
eCl@ss 6.0	27141120
eCl@ss 7.0	27141120
eCl@ss 8.0	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 / BV / DNV / RS / ABS / KR / NK / IECCE CB Scheme / EAC / cULus Recognized

Ex Approvals


IECEX / ATEX


Double-level spring-cage terminal block - STTB 2,5 - 3031270


Approvals


Approvals submitted

Approval details

CSA 		
	B	C
mm ² /AWG/kcmil	28-12	28-12
Nominal current I _N	20 A	20 A
Nominal voltage U _N	300 V	300 V

UL Recognized 			
	B	C	D
mm ² /AWG/kcmil	28-12	28-12	28-12
Nominal current I _N	20 A	20 A	5 A
Nominal voltage U _N	300 V	300 V	600 V

VDE Gutachten mit Fertigungsüberwachung 	
mm ² /AWG/kcmil	0.2-2.5
Nominal current I _N	24 A
Nominal voltage U _N	500 V

cUL Recognized 			
	B	C	D
mm ² /AWG/kcmil	28-12	28-12	28-12
Nominal current I _N	20 A	20 A	5 A
Nominal voltage U _N	300 V	300 V	600 V

LR

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Approvals

GL	
mm²/AWG/kcmil	2.5
Nominal current I _N	24 A
Nominal voltage U _N	500 V

BV


DNV

RS


ABS	
mm²/AWG/kcmil	26-12
Nominal current I _N	20 A
Nominal voltage U _N	600 V

KR

NK

IECEE CB Scheme 	
mm²/AWG/kcmil	0.2-2.5
Nominal current I _N	24 A
Nominal voltage U _N	500 V

EAC

cULus Recognized 	
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Accessories

Accessories

Documentation

Double-level spring-cage terminal block - STTB 2,5 - 3031270

Accessories

Mounting material - ST-IL - 3039900

Operating decal for the ST terminal block



End block

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 clamp - E/UK - 1201442



End clamp, for assembly on NS 32 or NS 35/7.5 DIN rail

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Accessories

End clamp - E/UK 1 - 1201413



End clamps, for supporting the ends of double-level and three-level terminal blocks, width: 10 mm, color: gray

End cover

End cover - D-STTB 2,5 - 3030459



End cover, Length: 67.5 mm, Width: 2.2 mm, Height: 47.5 mm, Color: gray

Spacer plate - DP PS-5 - 3036725



Spacer plate, Color: red

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

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

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Accessories

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: 1 m

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

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

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Accessories

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 - ISH 2,5/0,2 - 3002843



Insulating sleeve, Color: white

Insulating sleeve - ISH 2,5/0,5 - 3002856



Insulating sleeve, Color: gray

Insulating sleeve - ISH 2,5/1,0 - 3002869



Insulating sleeve, Color: black

Jumper

Plug-in bridge - FBS 2-5 - 3030161



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

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Accessories

Plug-in bridge - FBS 3-5 - 3030174



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

Plug-in bridge - FBS 4-5 - 3030187



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

Plug-in bridge - FBS 5-5 - 3030190



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

Plug-in bridge - FBS 10-5 - 3030213



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

Plug-in bridge - FBS 20-5 - 3030226



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

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Accessories

Plug-in bridge - FBS 50-5 - 3038930



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

Plug-in bridge - FBSR 2-5 - 3033702



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

Plug-in bridge - FBSR 3-5 - 3001591



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

Plug-in bridge - FBSR 4-5 - 3001592



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

Plug-in bridge - FBSR 5-5 - 3001593



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

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Accessories

Plug-in bridge - FBSR 10-5 - 3033710



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

Labeled terminal marker

Warning cover - WST 2,5 - 3030941



Warning cover, 5-pos., for terminal width: 5.2 mm

Zack Marker strip, flat - ZBF 5 CUS - 0825025



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

Zack Marker strip, flat - ZBF 5,LGS:FORTL.ZAHLEN - 0808671



Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

Zack Marker strip, flat - ZBF 5,QR:FORTL.ZAHLEN - 0808697



Zack Marker strip, flat, Strip, white, labeled, Printed vertically: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

Double-level spring-cage terminal block - STTB 2,5 - 3031270

Accessories

Zack Marker strip, flat - ZBF 5,LGS:GERADE ZAHLEN - 0810821



Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Consecutive numbers 2 - 20, 22 - 40, etc. up to 82 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

Zack Marker strip, flat - ZBF 5,LGS:UNGERADE ZAHLEN - 0810863



Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Odd numbers 1 - 19, 21 - 39, etc. up to 81 - 99, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

Marker for terminal blocks - UC-TMF 5 CUS - 0824638



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 5.2 mm, Lettering field: 4.6 x 5.1 mm

Marker for terminal blocks - UCT-TMF 5 CUS - 0829658



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 5.2 mm, Lettering field: 4.4 x 4.7 mm

Marker carriers

Marker carriers - STP 5-2 - 0800967



Double marker carrier, snaps onto the double-level spring-cage terminal block STTB 2,5, STTB 4, PTTB 2,5, PTTB 4 can be marked with UC-TM 5, ZB 5 or UC-TMF 5, ZBF 5

Mounting rail

Double-level spring-cage terminal block - STTB 2,5 - 3031270

Accessories

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)

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

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Accessories

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

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

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Accessories

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

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



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

Double-level spring-cage terminal block - STTB 2,5 - 3031270

Accessories

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

Partition plate

Partition plate - ATP-STTB 4 - 3030747



Partition plate, Length: 88.7 mm, Width: 2 mm, Height: 53 mm, Color: gray

Screwdriver tools

Double-level spring-cage terminal block - STTB 2,5 - 3031270

Accessories

Screwdriver - SZF 1-0,6X3,5 - 1204517



Actuation tool, for ST terminal blocks, 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, flat - ZBF 5:UNBEDRUCKT - 0808642



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.1 x 5.2 mm

Marker for terminal blocks - UC-TMF 5 - 0818153



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 5.2 mm, Lettering field: 4.6 x 5.1 mm

Marker for terminal blocks - UCT-TMF 5 - 0828744



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, Mounting type: Snap into flat marker groove, for terminal block width: 5.2 mm, Lettering field: 4.4 x 4.7 mm

Test plug terminal block

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



Test adapter, for 4 mm Ø safety test plugs, latches into the bridge shaft; color: Blue

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Accessories

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



Test adapter, for 4 mm Ø safety test plugs, latches into the bridge shaft; color: Orange

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



Test adapter, for 4 mm Ø safety test plugs, latches into the bridge shaft; color: Yellow

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



Test adapter, for 4 mm Ø safety test plugs, latches into the bridge shaft; color: Red

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



Test adapter, for 4 mm Ø safety test plugs, latches into the bridge shaft; color: Green

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



Test adapter, for 4 mm Ø safety test plugs, latches into the bridge shaft; color: Black

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Accessories

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



Test adapter, for 4 mm Ø safety test plugs, latches into the bridge shaft; color: Gray

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



Test adapter, for 4 mm Ø safety test plugs, latches into the bridge shaft; color: Violet

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



Test adapter, for 4 mm Ø safety test plugs, latches into the bridge shaft; color: Brown

Test plugs - PS-5 - 3030983



Test plugs, Color: red

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



Test plugs, Color: red

Drawings

Circuit diagram



