

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's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



Component terminal block, with integrated diode 1N 5408K, Connection method: Spring-cage connection, Cross section: 0.08 mm² - 4 mm², AWG: 28 - 12, Nominal current: 1.5 A, Nominal voltage: 500 V, Length: 67.5 mm, Width: 5.2 mm, Color: gray, Assembly: NS 35/7,5, NS 35/15

The illustration shows version STTB 2,5-DIO/O-U

#### Why buy this product

- For more versions and versions for soldering in components yourself, visit phoenixcontact.net/products
- ☑ Double-level diode and LED terminal blocks perform a wide range of switching tasks



#### **Key Commercial Data**

Packing unit	1
GTIN	4 046356 984164
GTIN	4046356984164
Custom tariff number	85369010

#### Technical data

#### General

Number of levels	2
Number of connections	4
Potentials	2
Nominal cross section	2.5 mm²
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Maximum load current	26 A (with 4 mm² conductor cross section)

04/13/2017 Page 1 / 16



### Technical data

#### General

Rated surge voltage	6 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	0.77 W (the value is multiplied when connecting multiple levels)
Maximum load current	1.5 A (The max. current is determined by the diode. Integrated diode 1N 5408K, reverse voltage 1000 V, maximum continuous current 1.5 A.)
Nominal current I <sub>N</sub>	1.5 A
Nominal voltage U <sub>N</sub>	500 V
Open side panel	Yes
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
Behavior in fire for rail vehicles (DIN 5510-2)	Test passed
Flame test method (DIN EN 60695-11-10)	V0
Oxygen index (DIN EN ISO 4589-2)	>32 %
NF F16-101, NF F10-102 Class I	2
NF F16-101, NF F10-102 Class F	2
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
Calorimetric heat release NFPA 130 (ASTM E 1354)	27,5 MJ/kg
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

#### **Dimensions**

Width	5.2 mm
End cover width	2.2 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 mm²
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	28

04/13/2017 Page 2 / 16



#### Technical data

#### Connection data

Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.08 mm²
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	28
Max. AWG conductor cross section, flexible	16
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.14 mm²
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, stranded, TWIN ferrules with plastic sleeve, max.	0.5 mm²
Stripping length	10 mm
Internal cylindrical gage	A3

#### Standards and Regulations

Flammability rating according to UL 94	V0
--	----

#### **Environmental Product Compliance**

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

### Drawings

#### Circuit diagram



#### Classifications

#### eCl@ss

eCl@ss 5.1	27141127
eCl@ss 6.0	27141120
eCl@ss 8.0	27141127
eCl@ss 9.0	27141127

#### **ETIM**

ETIM 4.0	EC000903
ETIM 5.0	EC000903
ETIM 6.0	EC000903

04/13/2017 Page 3 / 16



### Classifications

**UNSPSC** 

UNSPSC 13.2	39121410
Approvals	
Approvals	

Approvals

CSA / UL Recognized / cUL Recognized / EAC / cULus Recognized

Ex Approvals

#### Approval details

CSA	<b>(P</b>	http://www.csagroup.org/services/testing- and-certification/certified-product-listing/	
		В	С
mm²/AWG/kcmil		28-12	28-12
Nominal voltage UN		300 V	300 V

UL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 60425		
	В	С	D
mm²/AWG/kcmil	28-12	28-12	28-12
Nominal current IN	20 A	20 A	5 A
Nominal voltage UN	300 V	300 V	600 V

cUL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 60425			
	В	С	D	
mm²/AWG/kcmil	28-12	28-12	28-12	
Nominal current IN	20 A	20 A	5 A	
Nominal voltage UN	300 V	300 V	600 V	



### Approvals

EAC

EHE

**EAC-Zulassung** 

cULus Recognized



http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm

#### 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)

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

04/13/2017 Page 5 / 16



#### Accessories

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



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

04/13/2017 Page 6 / 16



#### 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



#### 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, unperforated, Width: 35 mm, Height: 15 mm, Length: 2000 mm, Color: silver

#### Documentation

Mounting material - ST-IL - 3039900

Operating decal for the ST terminal block





#### Accessories

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, Width: 9.5 mm, Height: 35.3 mm, Length: 50.5 mm, Color: gray

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



#### Accessories

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

#### 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



#### Accessories

Plug-in bridge - FBS 20-5 - 3030226



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 20, 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 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 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 3-5 - 3030174



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



#### Accessories

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

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



#### Accessories

Plug-in bridge - FBSR 5-5 - 3001593



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

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, 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



#### 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

04/13/2017 Page 14 / 16



#### Accessories

Partition plate

Partition plate - ATP-STTB 4 - 3030747



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

#### Screwdriver tools

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

Screwdriver - ST-BW - 1207608



Actuation tool, for all 2.5 mm<sup>2</sup> - 4.0 mm<sup>2</sup> spring-cages

#### Terminal marking

Zack Marker strip, flat - ZBF 5:UNBEDRUCKT - 0808642



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.1 x 5.2 mm



#### Accessories

Marker for terminal blocks - UC-TMF 5 - 0818153



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, 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 PRIME, 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 socket

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

Phoenix Contact 2017 © - all rights reserved http://www.phoenixcontact.com