

3040517

<https://www.phoenixcontact.com/us/products/3040517>

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Plug, nom. voltage: 500 V, nominal current: 24 A, number of positions: 12, connection method: Spring-cage connection, Rated cross section: 2.5 mm², cross section: 0.08 mm²- 4 mm², color: gray

Your advantages

- Plug with bridging option, for use with basic terminal blocks
- Tested for railway applications

Commercial data

Item number	3040517
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	BE02
Product key	BE2144
Catalog page	Page 322 (C-1-2019)
GTIN	4017918833190
Weight per piece (including packing)	59.53 g
Weight per piece (excluding packing)	59.53 g
Customs tariff number	85366990
Country of origin	PL

SPDB 2,5/12 - Plug

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Technical data

Product properties

Product type	Terminal plug
Number of positions	12
Pitch	5.2 mm

Data management status

Article revision	06
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Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	6 kV
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Connection data

Nominal cross section	2.5 mm ²
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 61984
Conductor cross section rigid	0.08 mm ² ... 4 mm ²
Cross section AWG	28 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.08 mm ² ... 2.5 mm ²
Conductor cross section, flexible [AWG]	28 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm ² ... 2.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm ² ... 2.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ²
Nominal current	24 A
Maximum load current	24 A (with 4 mm ² conductor cross section)
Nominal voltage	500 V
Nominal cross section	2.5 mm ²

Dimensions

Width	62.4 mm
Height	39 mm
Length	32.7 mm
Pitch	5.2 mm

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0
Insulating material group	I

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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

Environmental and real-life conditions

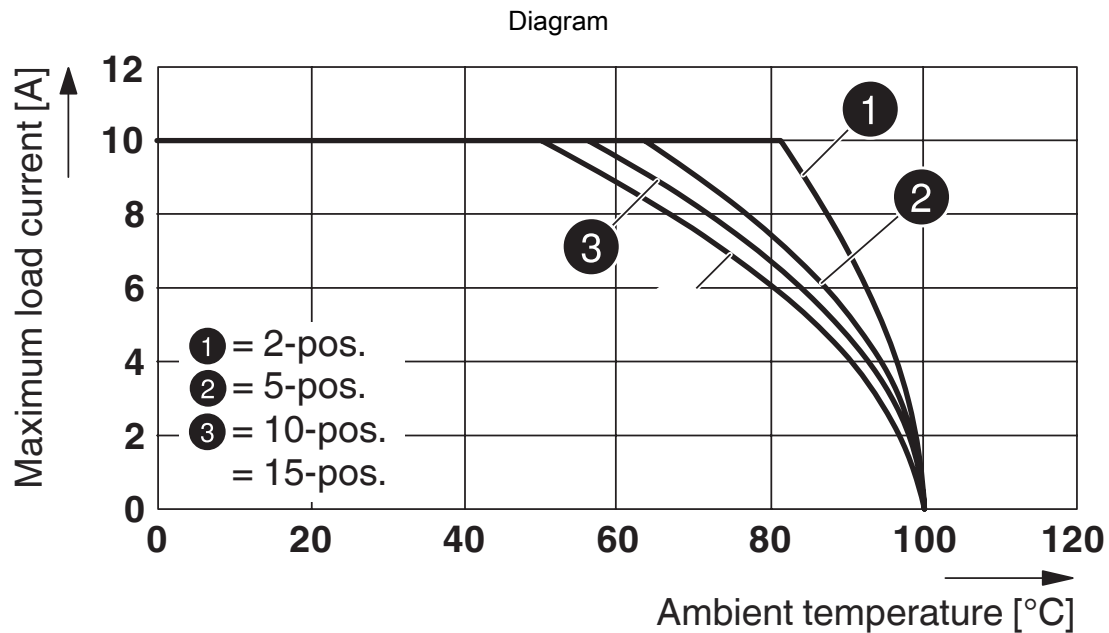
Ambient conditions

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 %

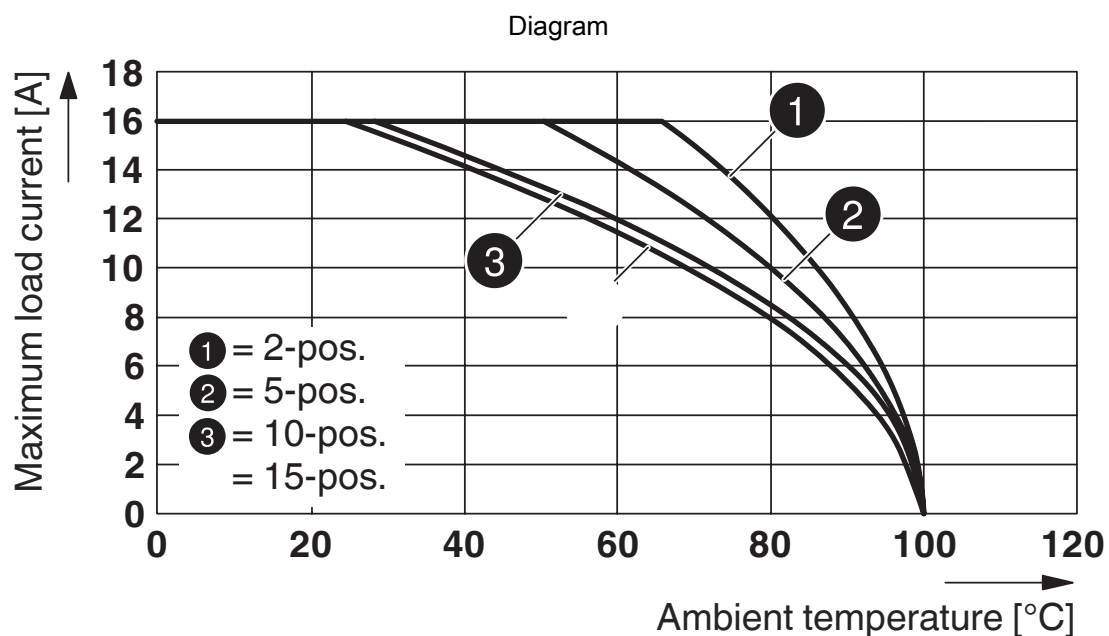
Standards and regulations

Connection in acc. with standard	IEC 61984
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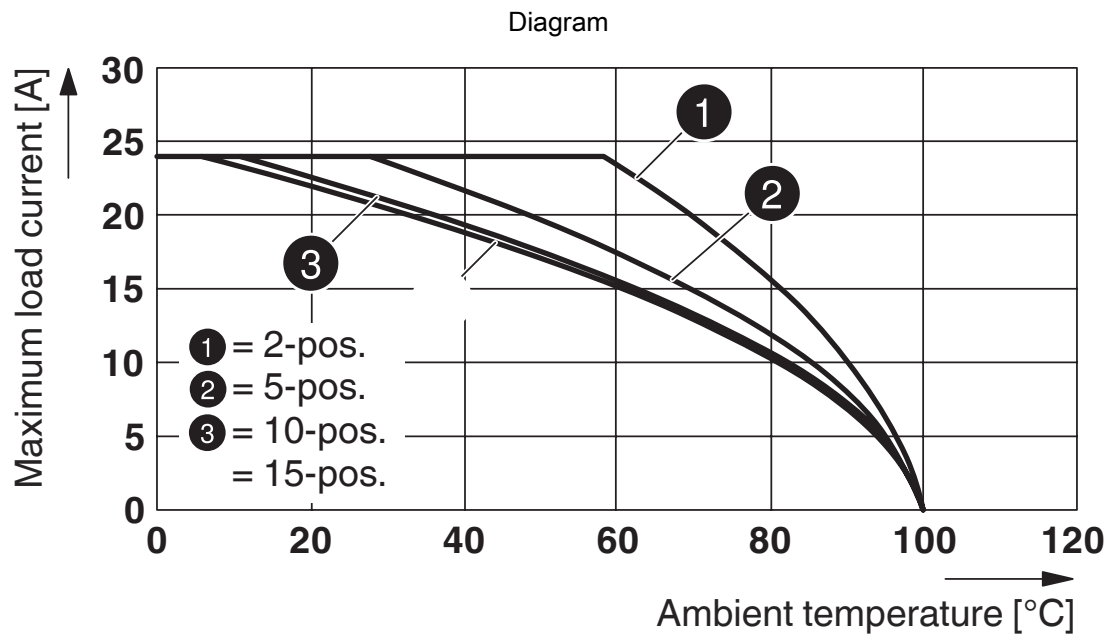
Drawings



Derating curve for ST 2,5-4L/1P, ST 2,5-4L/2P and for all plug versions SP...



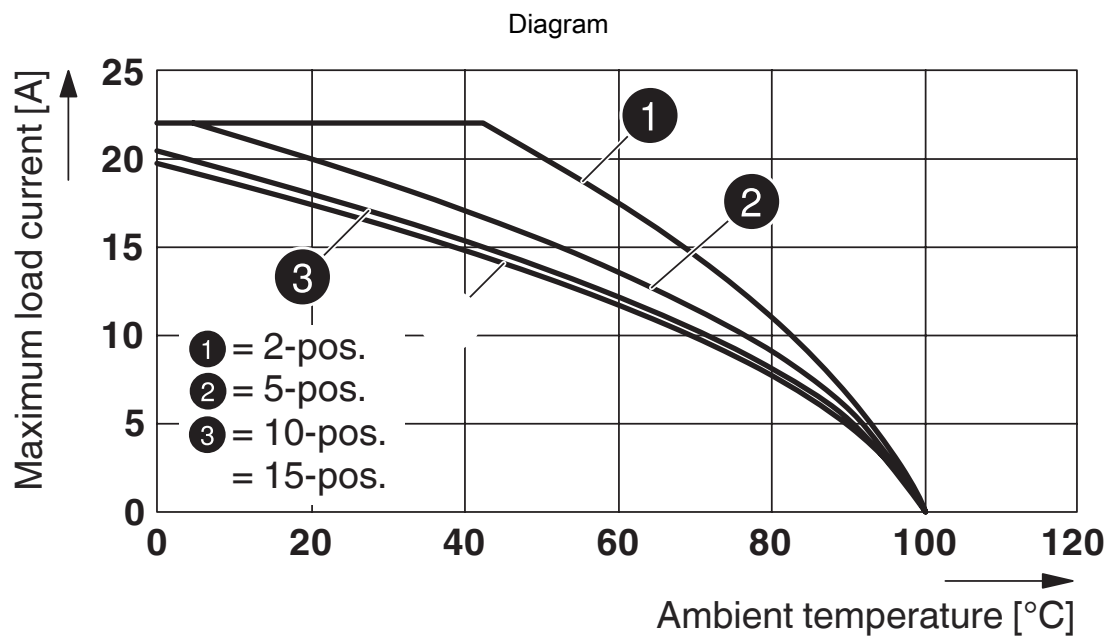
Derating curve for ST 2,5-TWIN-MT/1P, ST 2,5-TWIN-TG/1P and for all plug versions SP...



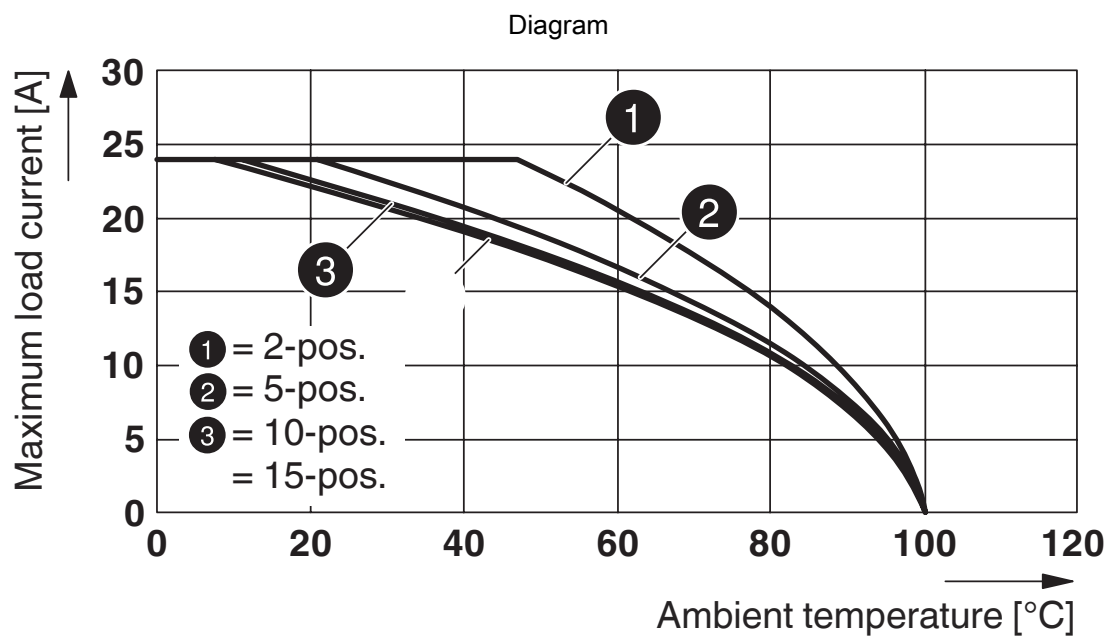
Derating curve for ST 2,5-QUATTRO/2P, ST 2,5-QUATTRO/4P and for all plug versions SP...

Circuit diagram





Derating curve for STTB 2,5/ 2P, STTB 2,5/ 2P-PV and for all plug versions SP...



Derating curve for ST 2,5/ 1P, ST 2,5/ 2P, ST 2,5-TWIN/ 1P and for all plug versions SP...

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3040517>

 CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	300 V	20 A	28 - 12	-
Use group C				
	300 V	20 A	28 - 12	-
Use group D				
	600 V	5 A	28 - 12	-

 EAC Approval ID: RU C-DE.BL08.B.00511	
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 LR Approval ID: LR2042068TA	
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 cULus Recognized Approval ID: E60425	
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 cULus Recognized Approval ID: E60425	
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DNV Approval ID: TAE00001CS	
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Classifications

ECLASS

ECLASS-11.0	27141151
ECLASS-12.0	27141151
ECLASS-13.0	27250306

ETIM

ETIM 9.0	EC002021
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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