

# ST 2,5-TWIN/ 1P-PE - Spring-cage protective conductor terminal block



3042120

<https://www.phoenixcontact.com/us/products/3042120>

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Spring-cage protective conductor terminal block, number of connections: 3, connection method: Spring-cage/plug-in connection, 1st level connection left, cross section: 0.08 mm<sup>2</sup> - 4 mm<sup>2</sup>, 1st level connection right, mounting type: NS 35/7,5, NS 35/15, color: green-yellow

## Your advantages

- Same shape and pitch as the basic terminal blocks
- Tested for railway applications

## Commercial data

Item number	3042120
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE02
Product key	BE2142
GTIN	4017918927172
Weight per piece (including packing)	10.464 g
Weight per piece (excluding packing)	10.383 g
Customs tariff number	85369010
Country of origin	PL

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## Technical data

### Product properties

Product type	Ground terminal block
Product family	ST
Area of application	Railway industry
	Machine building
	Plant engineering
Number of connections	3
Number of rows	1

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	0.77 W

### Connection data

Grounding foot	Yes
Number of connections per level	3
Nominal cross section	2.5 mm <sup>2</sup>

### 1st level connection left

Connection method	Spring-cage/plug-in connection
Note	Please observe the current carrying capacity of the DIN rails.
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 61984
Conductor cross-section rigid	0.08 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Cross section AWG	28 ... 12 (converted acc. to IEC)
Conductor cross-section flexible	0.08 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	28 ... 14 (converted acc. to IEC)
Conductor cross-section flexible ultrasound-compressed	0.34 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section, flexible [AWG] ultrasound-compressed	22 ... 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>

### Dimensions

Width	5.2 mm
End cover width	2.2 mm
Height	60.5 mm

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Depth on NS 35/7,5	36.5 mm
Depth on NS 35/15	44 mm

## Material specifications

Color	green-yellow
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))	125 °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)	27,5 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

## Mechanical properties

### Mechanical data

Open side panel	Yes
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## Environmental and real-life conditions

### Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Spectrum	Long life test category 1, class B, body mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
ASD level	$0.964 \text{ (m/s}^2\text{)}^2\text{/Hz}$
Acceleration	0.58g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

### Shocks

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Pulse shape	Half-sine
Acceleration	5g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)

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Result	Test passed
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## Ambient conditions

Ambient temperature (operation)	-60 °C ... 100 °C (max. operating temperature range including self-heating, see derating curve)
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 (operation)	20 % ... 90 %
Permissible humidity (storage/transport)	30 % ... 70 %

## Standards and regulations

Connection in acc. with standard	IEC 61984
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## Mounting

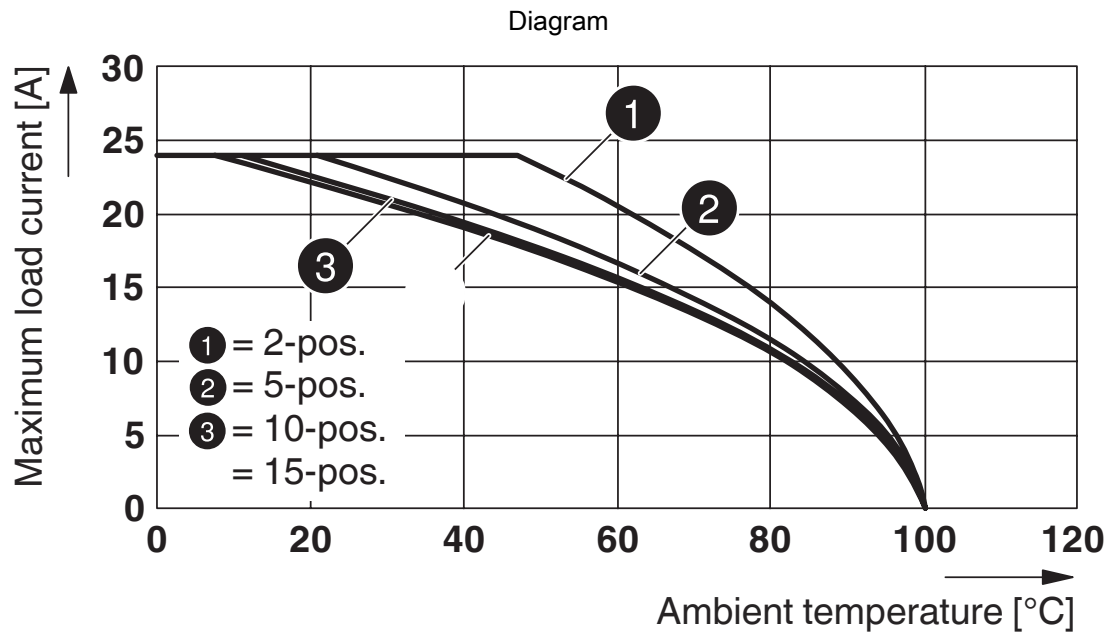
Mounting type	NS 35/7,5
	NS 35/15

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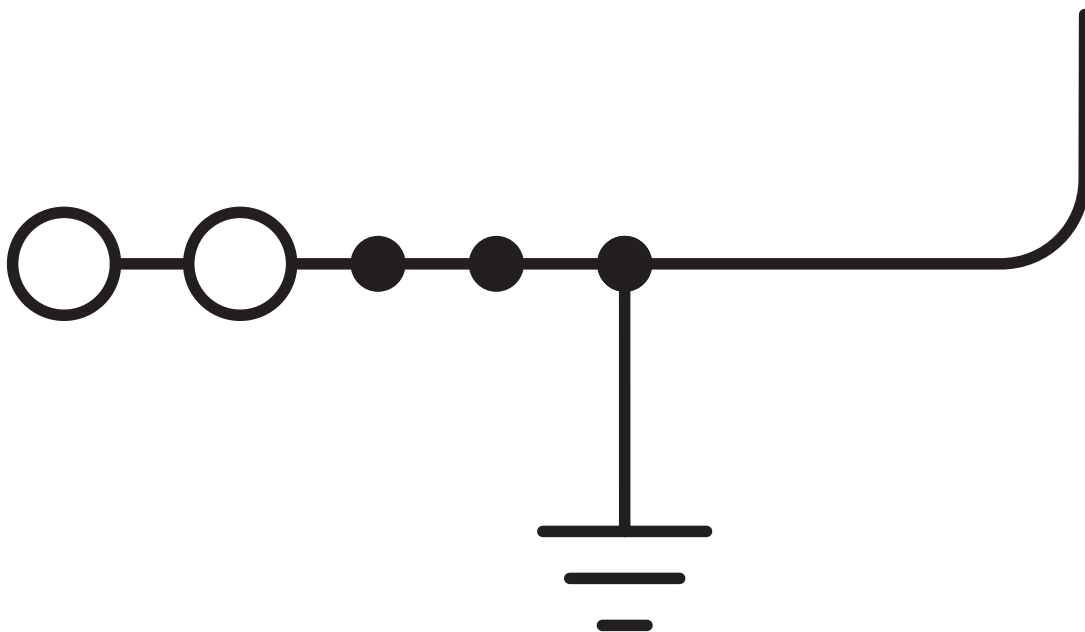
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## Drawings



Applies to all male connector variants SP...

## Circuit diagram



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## Approvals


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 <b>CSA</b> Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
B	-	-	28 - 12	-
C	-	-	28 - 12	-
D	-	-	28 - 12	-

 <b>IECEE CB Scheme</b> Approval ID: DE1-62736/B1/B2				
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 <b>EAC</b> Approval ID: RU C-DE.BL08.B.00644				
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 <b>VDE Zeichengenehmigung</b> Approval ID: 40019518				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine	-	-	-	0.2 - 2.5

 <b>cULus Recognized</b> Approval ID: E60425				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
B	-	-	28 - 12	-
C	-	-	28 - 12	-
F	-	-	28 - 12	-

<b>DNV</b> Approval ID: TAE00001CS				
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**EAC**

Approval ID: KZ7500651131219505

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## Classifications

### ECLASS

ECLASS-13.0	27250103
ECLASS-15.0	27250103

### ETIM

ETIM 10.0	EC000901
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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
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### 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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### EF3.1 Climate Change

CO2e kg	0.05 kg CO2e
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