

https://www.phoenixcontact.com/us/products/2716020



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Device terminal block, nom. voltage: 500 V, nominal current: 32 A, number of connections: 4, number of positions: 2, connection method: Screw connection, Rated cross section:  $4 \text{ mm}^2$ , cross section:  $6.2 \text{ mm}^2$ , mounting type: direct screw connection, color: gray

## Your advantages

· Touch-proof shock protection

### Commercial data

Item number	2716020
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE12
Product key	BE1265
Catalog page	Page 577 (C-1-2019)
GTIN	4017918061760
Weight per piece (including packing)	15.336 g
Weight per piece (excluding packing)	15.262 g
Customs tariff number	85369010
Country of origin	TR



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## Technical data

## Product properties

Product type	Feed-through terminal block
Product family	G
Number of positions	2
Number of connections	4
Number of rows	1
Potentials	2
Insulation characteristics	
Overvoltage category	III
Degree of pollution	3

## Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	1.02 W

## Connection data

Number of connections per level	4
Nominal cross section	4 mm²
Screw thread	M3
Tightening torque	0.6 0.8 Nm
Stripping length	8 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.2 mm² 4 mm²
Cross section AWG	24 12 (converted acc. to IEC)
Conductor cross section flexible	0.2 mm² 4 mm²
Conductor cross section, flexible [AWG]	24 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm² 4 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.25 mm² 2.5 mm²
2 conductors with same cross section, solid	0.2 mm² 1.5 mm²
2 conductors with same cross section, flexible	0.2 mm² 1.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> 1.5 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 1 mm²
Nominal current	32 A
Maximum load current	32 A (with 4 mm² conductor cross section)
Nominal voltage	500 V
Nominal cross section	4 mm²

#### **Dimensions**



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Dimensional drawing	20 24 15.6 p.5 2 25 25 25 25 25 25 25 25 25 25 25 25
Width	20 mm
Height	22 mm
Depth	24 mm
Hole diameter	3.2 mm

## Material specifications

Color	gray
Flammability rating according to UL 94	V0
Insulating material group	1
Insulating material	PA
Static insulating material application in cold	-60 °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
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

## Electrical tests

## Surge voltage test

Test voltage setpoint	7.3 kV
Result	Test passed

### Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
	Test passed
Short-time withstand current 4 mm²	0.48 kA
Result	Test passed

#### Power-frequency withstand voltage

Test voltage setpoint	1.89 kV
Result	Test passed

## Mechanical properties

#### General

Terminal block mounting	When attaching the product to the mounting surface, please
	ensure that the housing is not damaged when tightening the



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	center screw
lechanical data	
Open side panel	No
echanical tests	
Mechanical strength	
Result	Test passed
Test for conductor damage and slackening	
Rotation speed	10 (+/- 2) rpm
Revolutions	135
Conductor cross section/weight	0.2 mm² / 0.2 kg
	4 mm² / 0.9 kg
Result	Test passed
Needle-flame test Time of exposure	30 s
Result	Test passed
1.000.1	. con passes
Oscillation/broadband noise	
Specification	DIN EN 50155 (VDE 0115-200):2022-06
Spectrum	Service life test category 2, bogie-mounted
Frequency	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz
	$f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$ 6.12 (m/s²)²/Hz
Frequency ASD level Acceleration	$f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$ $6.12 \text{ (m/s}^2)^2/\text{Hz}$ $3.12g$
Frequency ASD level	$f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$ $6.12 \text{ (m/s}^2)^2/\text{Hz}$ $3.12g$ $5 \text{ h}$
Frequency ASD level Acceleration	$f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$ $6.12 \text{ (m/s}^2)^2/\text{Hz}$ $3.12g$ $5 \text{ h}$ $X$ -, $Y$ - and $Z$ -axis
Frequency ASD level Acceleration Test duration per axis	$f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$ $6.12 \text{ (m/s}^2)^2/\text{Hz}$ $3.12g$ $5 \text{ h}$
Frequency ASD level Acceleration Test duration per axis Test directions	$f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$ $6.12 \text{ (m/s}^2)^2/\text{Hz}$ $3.12g$ $5 \text{ h}$ $X$ -, $Y$ - and $Z$ -axis
Frequency ASD level Acceleration Test duration per axis Test directions Result	$f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$ $6.12 \text{ (m/s}^2)^2/\text{Hz}$ $3.12g$ $5 \text{ h}$ $X$ -, $Y$ - and $Z$ -axis
Frequency ASD level Acceleration Test duration per axis Test directions Result	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz 6.12 (m/s²)²/Hz 3.12g 5 h X-, Y- and Z-axis Test passed
Frequency ASD level Acceleration Test duration per axis Test directions Result Shocks Specification	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz 6.12 (m/s²)²/Hz 3.12g 5 h X-, Y- and Z-axis Test passed  DIN EN 50155 (VDE 0115-200):2022-06
Frequency ASD level Acceleration Test duration per axis Test directions Result Shocks Specification Pulse shape	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz 6.12 (m/s²)²/Hz 3.12g 5 h X-, Y- and Z-axis Test passed  DIN EN 50155 (VDE 0115-200):2022-06 Half-sine
Frequency ASD level Acceleration Test duration per axis Test directions Result Shocks Specification Pulse shape Acceleration	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz 6.12 (m/s²)²/Hz 3.12g 5 h X-, Y- and Z-axis Test passed  DIN EN 50155 (VDE 0115-200):2022-06 Half-sine 5g
Frequency ASD level Acceleration Test duration per axis Test directions Result Shocks Specification Pulse shape Acceleration Shock duration	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz 6.12 (m/s²)²/Hz 3.12g 5 h X-, Y- and Z-axis Test passed  DIN EN 50155 (VDE 0115-200):2022-06 Half-sine 5g 30 ms
Frequency ASD level Acceleration Test duration per axis Test directions Result Shocks Specification Pulse shape Acceleration Shock duration Number of shocks per direction	$f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$ $6.12 \text{ (m/s}^2)^2/\text{Hz}$ $3.12g$ $5 \text{ h}$ $X-, Y- \text{ and } Z-\text{axis}$ $\text{Test passed}$ $DIN \text{ EN } 50155 \text{ (VDE } 0115-200):2022-06$ $\text{Half-sine}$ $5g$ $30 \text{ ms}$ $3$
Frequency ASD level Acceleration Test duration per axis Test directions Result Shocks Specification Pulse shape Acceleration Shock duration Number of shocks per direction Test directions	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz 6.12 (m/s²)²/Hz 3.12g 5 h X-, Y- and Z-axis Test passed  DIN EN 50155 (VDE 0115-200):2022-06 Half-sine 5g 30 ms 3 X-, Y- and Z-axis (pos. and neg.)
Frequency ASD level Acceleration Test duration per axis Test directions Result Shocks Specification Pulse shape Acceleration Shock duration Number of shocks per direction Test directions Result Ambient conditions	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz 6.12 (m/s²)²/Hz 3.12g 5 h X-, Y- and Z-axis Test passed  DIN EN 50155 (VDE 0115-200):2022-06 Half-sine 5g 30 ms 3 X-, Y- and Z-axis (pos. and neg.) Test passed
Frequency ASD level Acceleration Test duration per axis Test directions Result Shocks Specification Pulse shape Acceleration Shock duration Number of shocks per direction Test directions Result	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz 6.12 (m/s²)²/Hz 3.12g 5 h X-, Y- and Z-axis Test passed  DIN EN 50155 (VDE 0115-200):2022-06 Half-sine 5g 30 ms 3 X-, Y- and Z-axis (pos. and neg.)
Frequency ASD level Acceleration Test duration per axis Test directions Result Shocks Specification Pulse shape Acceleration Shock duration Number of shocks per direction Test directions Result Ambient conditions	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz 6.12 (m/s²)²/Hz 3.12g 5 h X-, Y- and Z-axis Test passed  DIN EN 50155 (VDE 0115-200):2022-06 Half-sine 5g 30 ms 3 X-, Y- and Z-axis (pos. and neg.) Test passed



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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 60947-7-1
Mounting	
Mounting type	direct screw connection
Terminal block mounting	When attaching the product to the mounting surface, please ensure that the housing is not damaged when tightening the center screw

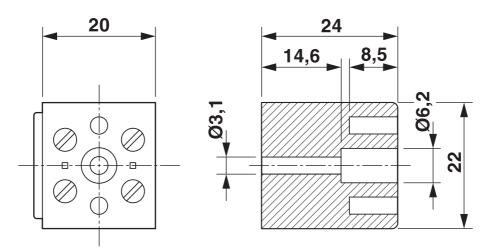
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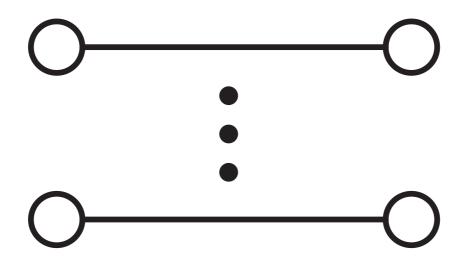


# Drawings

## Dimensional drawing



Circuit diagram





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# Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2716020

•	CSA Approval ID: 13631				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		300 V	30 A	26 - 10	-

ERC	EAC
	Approval ID: RU C-DE.BL08.B.00534

CULus Recognized Approval ID: E60425				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	300 V	30 A	26 - 10	-

ClassNK	NK Approval ID: 09 ME 142
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# Classifications

UNSPSC 21.0

### **ECLASS**

ECLASS-11.0		27141106
ECLASS-13.0		27141106
ECLASS-12.0		27141106
ETIM		
ETIM 9.0		EC001284
UNSPSC		

39121400



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# Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	916a3aff-76f0-4300-8975-c2f6caddb4e7



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#### Accessories

### BN WH - Marker for terminal blocks

1401404

https://www.phoenixcontact.com/us/products/1401404



Marker for terminal blocks, Stud, white, unlabeled, can be labeled with: Marker pen, mounting type: plug in, for terminal block width: 4.2 mm, lettering field size:  $4 \times 4$  mm

### WS-G5/2 - Warning label

2720029

https://www.phoenixcontact.com/us/products/2720029

Warning plate, for the device terminal block G 5, completely covers the surface of the terminal block, 2-pos.





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### EA-G 5/2 SONDERBEDRUCKUNG - Cover profile

1301407

https://www.phoenixcontact.com/us/products/1301407

Single cover for the G 5/2 terminal block, printed according to customer requirements



#### SZS 0,6X3,5 - Screwdriver

1205053

https://www.phoenixcontact.com/us/products/1205053



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

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