

https://www.phoenixcontact.com/us/products/2716046



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Device terminal block, nom. voltage: 500 V, nominal current: 32 A, number of connections: 8, number of positions: 4, connection method: Screw connection, Rated cross section:  $4 \text{ mm}^2$ , cross section:  $0.2 \text{ mm}^2 - 4 \text{ mm}^2$ , mounting type: direct screw connection, color: gray

### Your advantages

· Touch-proof shock protection

#### Commercial data

Item number	2716046	
Packing unit	50 pc	
Minimum order quantity	50 pc	
Sales key	BE12	
Product key	BE1265	
Catalog page	Page 577 (C-1-2019)	
GTIN	4017918061784	
Weight per piece (including packing)	28.774 g	
Weight per piece (excluding packing)	28.715 g	
Customs tariff number	85369010	
Country of origin	TR	



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## Technical data

### Product properties

Product type	Feed-through terminal block
Number of positions	4
Number of connections	8
Number of rows	1
Potentials	4
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

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 1.5 mm²  2 conductors with same cross section, flexible 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)  Nominal current 32 A  Maximum load current 32 A (with 4 mm² conductor cross section)  Nominal rorss section 4 mm²  4 mm²	Number of connections per level	8
Tightening torque  Stripping length  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  1 conductor cross section flexible (ferrule with plastic sleeve)  2 conductors with same cross section, solid  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible, with ferrule without plastic sleeve  2 conductors with same cross section, flexible, with ferrule without plastic sleeve  2 conductors with same cross section, flexible, with TWIN ferrule with plastic sleeve  1 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve  2 conductors with same cross section, flexible, with TWIN ferrule with plastic sleeve  32 A  Maximum load current  32 A  Maximum load current  500 V	Nominal cross section	4 mm²
Stripping length 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 Conductor cross section, flexible [AWG] 24 12 (converted acc. to IEC) 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 0.25 mm² 1.5 mm² 0.26 mm² 1.5 mm² 0.27 mm² 1.5 mm² 0.28 mm² 1.5 mm² 0.29 mm² 1.5 mm² 0.20 m	Screw thread	M3
Internal cylindrical gage  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  Conductor cross section, flexible [AWG]  Conductor cross section, flexible [ferrule without plastic sleeve)  Conductor cross-section flexible (ferrule with plastic sleeve)  Plexible conductor cross section (ferrule with plastic sleeve)  2 conductors with same cross section, solid  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible, with ferrule  without plastic sleeve  2 conductors with the same cross section, flexible, with TWIN  ferrule with plastic sleeve  Nominal current  32 A  Maximum load current  Nominal voltage  500 V	Tightening torque	0.6 0.8 Nm
Connection in acc. with standard  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]  Conductor cross-section flexible (ferrule without plastic sleeve)  Conductor cross-section flexible (ferrule without plastic sleeve)  Flexible conductor cross section (ferrule with plastic sleeve)  2 conductors with same cross section, solid  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible, with ferrule without plastic sleeve  2 conductors with same cross section, flexible, with ferrule with plastic sleeve  2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve  Nominal current  32 A  Maximum load current  32 A (with 4 mm² conductor cross section)  Nominal voltage	Stripping length	8 mm
Conductor cross section rigid  Cross section AWG  24 12 (converted acc. to IEC)  Conductor cross section, flexible  Conductor cross section, flexible [AWG]  Conductor cross-section flexible (ferrule without plastic sleeve)  Conductor cross section flexible (ferrule with plastic sleeve)  Conductor cross section (ferrule with plastic sleeve)  Plexible conductor cross section (ferrule with plastic sleeve)  2 conductors with same cross section, solid  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible, with ferrule without plastic sleeve  2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve  Nominal current  32 A  Maximum load current  32 A (with 4 mm² conductor cross section)  Nominal voltage	Internal cylindrical gage	A3
Cross section AWG  Conductor cross section flexible  Conductor cross section, flexible [AWG]  Conductor cross section flexible (ferrule without plastic sleeve)  Conductor cross section flexible (ferrule with plastic sleeve)  Plexible conductor cross section (ferrule with plastic sleeve)  2 conductors with same cross section, solid  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible, with ferrule without plastic sleeve  2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve  2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve  Nominal current  32 A  Maximum load current  32 A (with 4 mm² conductor cross section)  Nominal voltage	Connection in acc. with standard	IEC 60947-7-1
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 0.2 mm² 1.5 mm²  2 conductors with same cross section, flexible, with ferrule without plastic sleeve 0.25 mm² 1.5 mm²  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	Conductor cross section rigid	0.2 mm <sup>2</sup> 4 mm <sup>2</sup>
Conductor cross section, flexible [AWG]  Conductor cross-section flexible (ferrule without plastic sleeve)  Flexible conductor cross section (ferrule with plastic sleeve)  2 conductors with same cross section, solid  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible, with ferrule without plastic sleeve  2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve  Nominal current  32 A  Maximum load current  Nominal voltage  24 12 (converted acc. to IEC)  0.25 mm² 4 mm²  0.25 mm² 2.5 mm²  0.2 mm² 1.5 mm²  0.25 mm² 1.5 mm²  0.5 mm² 1 mm²  32 A  Maximum load current  32 A  Mominal voltage	Cross section AWG	24 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)  Flexible conductor cross section (ferrule with plastic sleeve)  2 conductors with same cross section, solid  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible, with ferrule without plastic sleeve  2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve  Nominal current  32 A  Maximum load current  32 A (with 4 mm² conductor cross section)  Nominal voltage	Conductor cross section flexible	0.2 mm <sup>2</sup> 4 mm <sup>2</sup>
Flexible conductor cross section (ferrule with plastic sleeve)  2 conductors with same cross section, solid  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible, with ferrule without plastic sleeve  2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve  Nominal current  32 A  Maximum load current  32 A (with 4 mm² conductor cross section)  Nominal voltage	Conductor cross section, flexible [AWG]	24 12 (converted acc. to IEC)
2 conductors with same cross section, solid  2 conductors with same cross section, flexible  2 conductors with same cross section, flexible, with ferrule without plastic sleeve  2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve  Nominal current  32 A  Maximum load current  32 A (with 4 mm² conductor cross section)  Nominal voltage	Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm² 4 mm²
2 conductors with same cross section, flexible  2 conductors with same cross section, flexible, with ferrule without plastic sleeve  2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve  Nominal current  32 A  Maximum load current  32 A (with 4 mm² conductor cross section)  Nominal voltage	Flexible conductor cross section (ferrule with plastic sleeve)	0.25 mm² 2.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve  2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve  Nominal current  32 A  Maximum load current  32 A (with 4 mm² conductor cross section)  Nominal voltage	2 conductors with same cross section, solid	0.2 mm <sup>2</sup> 1.5 mm <sup>2</sup>
without plastic sleeve  2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve  Nominal current  32 A  Maximum load current  32 A (with 4 mm² conductor cross section)  Nominal voltage  500 V	2 conductors with same cross section, flexible	0.2 mm <sup>2</sup> 1.5 mm <sup>2</sup>
ferrule with plastic sleeve  Nominal current  32 A  Maximum load current  32 A (with 4 mm² conductor cross section)  Nominal voltage  500 V	•	0.25 mm² 1.5 mm²
Maximum load current32 A (with 4 mm² conductor cross section)Nominal voltage500 V	•	0.5 mm <sup>2</sup> 1 mm <sup>2</sup>
Nominal voltage 500 V	Nominal current	32 A
	Maximum load current	32 A (with 4 mm² conductor cross section)
Nominal cross section 4 mm <sup>2</sup>	Nominal voltage	500 V
	Nominal cross section	4 mm²

### Dimensions



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Dimensional drawing	38 - 18 -
Width	38 mm
Height	22 mm
Depth	24 mm
Hole diameter	3.2 mm

### Material specifications

Color	gray (RAL 7042)		
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))	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		

#### 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	
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



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Terminal block mounting	When attaching the product to the mounting surface, please ensure that the housing is not damaged when tightening the center screw
Mechanical data	
Open side panel	No
echanical tests	
Mechanical strength	
Result	Test passed
Test for conductor damage and slackening	
Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.2 mm² / 0.2 kg
	1.5 mm² / 0.4 kg
	4 mm² / 0.9 kg
Result	Test passed
Needle-flame test Time of exposure	30 s
Needle-flame test	30 s Test passed
Needle-flame test Time of exposure Result	
Needle-flame test Time of exposure	
Needle-flame test  Time of exposure  Result  Ambient conditions	Test passed -60 °C 110 °C (Operating temperature range incl. self-heating
Needle-flame test  Time of exposure  Result  Ambient conditions  Ambient temperature (operation)	Test passed  -60 °C 110 °C (Operating temperature range incl. self-heating for max. short-term operating temperature, see RTI Elec.)  -25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to
Needle-flame test  Time of exposure  Result  Ambient conditions  Ambient temperature (operation)  Ambient temperature (storage/transport)	-60 °C 110 °C (Operating temperature range incl. self-heating for max. short-term operating temperature, see RTI Elec.)  -25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Needle-flame test  Time of exposure  Result  Ambient conditions  Ambient temperature (operation)  Ambient temperature (storage/transport)  Ambient temperature (assembly)  Ambient temperature (actuation)  Permissible humidity (operation)	Test passed  -60 °C 110 °C (Operating temperature range incl. self-heating for max. short-term operating temperature, see RTI Elec.)  -25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)  -5 °C 70 °C  -5 °C 70 °C  20 % 90 %
Needle-flame test  Time of exposure  Result  Ambient conditions  Ambient temperature (operation)  Ambient temperature (storage/transport)  Ambient temperature (assembly)  Ambient temperature (actuation)	Test passed  -60 °C 110 °C (Operating temperature range incl. self-heating for max. short-term operating temperature, see RTI Elec.)  -25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)  -5 °C 70 °C  -5 °C 70 °C
Needle-flame test  Time of exposure  Result  Ambient conditions  Ambient temperature (operation)  Ambient temperature (storage/transport)  Ambient temperature (assembly)  Ambient temperature (actuation)  Permissible humidity (operation)	Test passed  -60 °C 110 °C (Operating temperature range incl. self-heating for max. short-term operating temperature, see RTI Elec.)  -25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)  -5 °C 70 °C  -5 °C 70 °C  20 % 90 %
Needle-flame test  Time of exposure  Result  Ambient conditions  Ambient temperature (operation)  Ambient temperature (storage/transport)  Ambient temperature (assembly)  Ambient temperature (actuation)  Permissible humidity (operation)  Permissible humidity (storage/transport)	Test passed  -60 °C 110 °C (Operating temperature range incl. self-heating for max. short-term operating temperature, see RTI Elec.)  -25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)  -5 °C 70 °C  -5 °C 70 °C  20 % 90 %
Time of exposure Result  Ambient conditions  Ambient temperature (operation)  Ambient temperature (storage/transport)  Ambient temperature (assembly)  Ambient temperature (actuation)  Permissible humidity (operation)  Permissible humidity (storage/transport)  andards and regulations	Test passed  -60 °C 110 °C (Operating temperature range incl. self-heatin for max. short-term operating temperature, see RTI Elec.)  -25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)  -5 °C 70 °C  -5 °C 70 °C  20 % 90 %  30 % 70 %
Needle-flame test  Time of exposure  Result  Ambient conditions  Ambient temperature (operation)  Ambient temperature (storage/transport)  Ambient temperature (assembly)  Ambient temperature (actuation)  Permissible humidity (operation)  Permissible humidity (storage/transport)  andards and regulations  Connection in acc. with standard	Test passed  -60 °C 110 °C (Operating temperature range incl. self-heatin for max. short-term operating temperature, see RTI Elec.)  -25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)  -5 °C 70 °C  -5 °C 70 °C  20 % 90 %  30 % 70 %

center screw

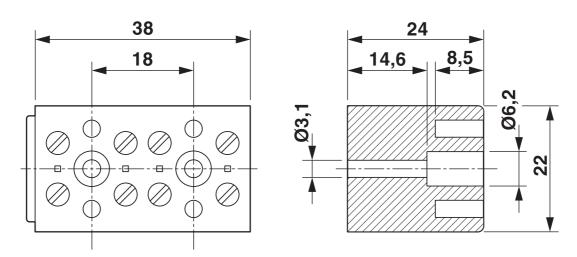
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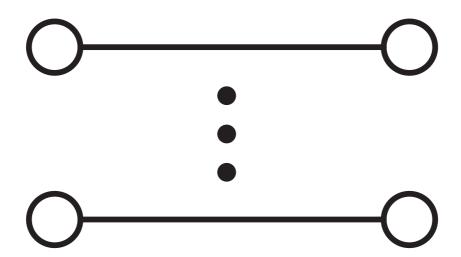


## Drawings

### Dimensional drawing



Circuit diagram





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## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2716046

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

c <b>F11</b> us	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

#### **ECLASS**

	ECLASS-11.0	27141106		
	ECLASS-13.0	27141106		
	ECLASS-12.0	27141106		
ETIM				
ETIM				
	ETIM 9.0	EC001284		
UNSPSC				
	UNSPSC 21.0	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	afaf3197-00b5-42fb-b913-1cf17be21855

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