

3002416

https://www.phoenixcontact.com/us/products/3002416

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Feed-through terminal block, nom. voltage: 400 V, nominal current: 24 A, connection method: Screw connection, 1 level, Rated cross section: 2.5 mm<sup>2</sup>, cross section: 0.2 mm<sup>2</sup> - 2.5 mm<sup>2</sup>, mounting type: NS 35/7,5, NS 35/15, NS 32, color: blue

#### Your advantages

- · These twin modular terminal blocks are designed for the basic task of potential branching
- Universal foot for mounting on NS 35.. or NS 32... DIN rails
- Two independent conductor connections can be used on the control cabinet side
- · Easy connection of different types of conductors with different cross sections
- · Can be bridged in the terminal center, even with neighboring feed-through terminal blocks aligned

#### Commercial data

Item number	3002416
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE12
Product key	BE1212
GTIN	4017918090258
Weight per piece (including packing)	10.56 g
Weight per piece (excluding packing)	10.56 g
Customs tariff number	85369010
Country of origin	TR



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#### Technical data

#### Product properties

Product type	Multi-conductor terminal block	
Product family	UK	
Number of connections	3	
Number of rows	2	
Potentials	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

Number of connections per level	3
Nominal cross section	2.5 mm²

#### 1 level

1 level			
Connection method	Screw connection		
Screw thread	M3		
Tightening torque	0.5 0.6 Nm		
Stripping length	8 mm		
Connection in acc. with standard	IEC 60947-7-1		
Conductor cross-section rigid	0.2 mm² 2.5 mm²		
Cross section AWG	24 14 (converted acc. to IEC)		
Conductor cross-section flexible	0.2 mm² 2.5 mm²		
Conductor cross-section, flexible [AWG]	24 14 (converted acc. to IEC)		
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm² 1.5 mm²		
Flexible conductor cross-section (ferrule with plastic sleeve) 0.25 mm² 1 mm²			
Cross-section with insertion bridge, rigid	2.5 mm²		
Cross-section with insertion bridge, flexible	2.5 mm²		
2 conductors with same cross section, solid	0.2 mm² 0.5 mm²		
2 conductors with same cross section, flexible	0.2 mm² 0.5 mm²		
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 0.5 mm²		
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 0.75 mm²		
Nominal current	24 A (with a 2.5 mm² conductor cross-section)		
Maximum load current	24 A (at a conductor cross-section of 2.5 mm²; it must not be exceeded by the total current.)		
Nominal voltage	400 V		



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Nominal cross section	2.5 mm <sup>2</sup>	
mensions		
Width	5.2 mm	
End cover width	2 mm	
Height	50.5 mm	
Depth on NS 32	52 mm	
Depth on NS 35/7,5	47 mm	
Depth on NS 35/15	54.5 mm	
aterial specifications		
Color	blue (RAL 5015)	
Flammability rating according to UL 94	V2	
Insulating material group	I	
Insulating material	PA	
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °C	
Relative insulation material temperature index (Elec., UL 746 B)	125 °C	
Surge voltage test  Test voltage setpoint	7.3 kV	
	7.3 kV Test passed	
Test voltage setpoint		
Test voltage setpoint  Result		
Test voltage setpoint  Result  Femperature-rise test	Test passed	
Test voltage setpoint  Result  Temperature-rise test  Requirement temperature-rise test	Test passed  Increase in temperature ≤ 45 K	
Test voltage setpoint  Result  Temperature-rise test  Requirement temperature-rise test  Result	Test passed  Increase in temperature ≤ 45 K  Test passed	
Test voltage setpoint  Result  Temperature-rise test  Requirement temperature-rise test  Result  Short-time withstand current 2.5 mm²	Test passed  Increase in temperature ≤ 45 K  Test passed  0.3 kA	
Test voltage setpoint  Result  Temperature-rise test  Requirement temperature-rise test  Result  Short-time withstand current 2.5 mm²  Result	Test passed  Increase in temperature ≤ 45 K  Test passed  0.3 kA	
Test voltage setpoint  Result  Temperature-rise test  Requirement temperature-rise test  Result  Short-time withstand current 2.5 mm²  Result  Power-frequency withstand voltage	Test passed  Increase in temperature ≤ 45 K  Test passed  0.3 kA  Test passed	
Test voltage setpoint  Result  Temperature-rise test  Requirement temperature-rise test  Result  Short-time withstand current 2.5 mm²  Result  Power-frequency withstand voltage  Test voltage setpoint	Test passed  Increase in temperature ≤ 45 K  Test passed  0.3 kA  Test passed  1.89 kV	
Test voltage setpoint  Result  Temperature-rise test  Requirement temperature-rise test  Result  Short-time withstand current 2.5 mm²  Result  Power-frequency withstand voltage  Test voltage setpoint  Result	Test passed  Increase in temperature ≤ 45 K  Test passed  0.3 kA  Test passed  1.89 kV	
Test voltage setpoint  Result  Temperature-rise test  Requirement temperature-rise test  Result  Short-time withstand current 2.5 mm²  Result  Power-frequency withstand voltage  Test voltage setpoint  Result  echanical properties	Test passed  Increase in temperature ≤ 45 K  Test passed  0.3 kA  Test passed  1.89 kV	
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Test voltage setpoint Result  Temperature-rise test Requirement temperature-rise test Result Short-time withstand current 2.5 mm² Result  Power-frequency withstand voltage Test voltage setpoint Result  Echanical properties  Mechanical data Open side panel	Test passed  Increase in temperature ≤ 45 K  Test passed  0.3 kA  Test passed  1.89 kV  Test passed	
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Test voltage setpoint Result  Temperature-rise test Requirement temperature-rise test Result Short-time withstand current 2.5 mm² Result  Power-frequency withstand voltage Test voltage setpoint Result  Chanical properties  Mechanical data Open side panel  Chanical strength	Increase in temperature ≤ 45 K  Test passed  0.3 kA  Test passed  1.89 kV  Test passed	



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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
	0.5 mm² / 0.3 kg
	2.5 mm² / 0.7 kg
Result	Test passed
vironmental and real-life conditions	
Time of exposure	30 s
Result	Test passed

# Needle-flame test Time of exposure 30 s Result Test passed Ambient conditions Ambient temperature (operation) -60 °C ... 110 °C (Operating temperature range incl. se

Ambient temperature (operation)	-60 °C 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see 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 (operation)	20 % 90 %
Permissible humidity (storage/transport)	30 % 70 %

#### Standards and regulations

Connection in acc. with standard	IEC 60947-7-1

#### Mounting

Mounting type	NS 35/7,5
	NS 35/15
	NS 32



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## Drawings

Circuit diagram





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#### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/3002416

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>
keine				
	300 V	20 A	28 - 12	-

CB scheme	IECEE CB Scheme Approval ID: NL-65621	•			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
		24 V	400 A	-	- 2.5

**EAC**Approval ID: KZ7500651131219505

cULus Re	ecognized E60425			
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
В				
	300 V	20 A	30 - 12	-
С				
	150 V	20 A	30 - 12	-
F				
	400 V	20 A	30 - 12	-
D				
	300 V	10 A	30 - 12	-

KEUR	KEMA-KEUR Approval ID: 2191242.0	1			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
		400 V	24 A	-	-

KEMA	KEMA-KEUR Approval ID: 71-11984	)			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					



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400 V	24 A	-	-



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## Classifications

#### **ECLASS**

	ECLASS-13.0	27250101
	ECLASS-15.0	27250101
ET	IM	
	ETIM 9.0	EC000897
UN	ISPSC	

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	d578ef22-4fe6-4a4f-a276-b40852ece3fc

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