

3248178

<https://www.phoenixcontact.com/us/products/3248178>

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Micro feed-through terminal block, bridged internally, nom. voltage: 500 V, nominal current: 17.5 A, number of connections: 20, connection method: Push-in connection, cross section: 0.14 mm² - 1.5 mm², mounting type: NS 15, color: gray

Commercial data

Item number	3248178
Packing unit	20 pc
Minimum order quantity	20 pc
Product key	BE2269
GTIN	4055626252186
Weight per piece (including packing)	17.35 g
Weight per piece (excluding packing)	17.35 g
Country of origin	PL

MP 20X1,5 - Micro feed-through terminal block



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Technical data

Product properties

Number of connections	20
Number of rows	1
Potentials	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	6 kV
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Connection data

Number of connections per level	20
Nominal cross section	1.5 mm ²
Rated cross section AWG	14
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A1 / B1
Connection in acc. with standard	IEC 60947-7-1/IEC 60947-7-2
Conductor cross section rigid	0.14 mm ² ... 1.5 mm ²
Cross section AWG	26 ... 16 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
Conductor cross section, flexible [AWG]	26 ... 16 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm ² ... 1.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.25 mm ² ... 1.5 mm ²
Nominal current	17.5 A
Maximum load current	17.5 A
Nominal voltage	500 V

Connection cross sections directly pluggable

Conductor cross section rigid	0.34 mm ² ... 1.5 mm ²
Conductor cross section, rigid [AWG]	24 ... 16 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm ² ... 1.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.5 mm ² ... 1.5 mm ²

Dimensions

Width	42 mm
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Material specifications

Color	gray
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA

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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 1.5 mm ²	0.18 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	1.89 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	No
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Mechanical tests

Mechanical strength

Result	Test passed
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Attachment on the carrier

DIN rail/fixing support	NS 15
Test force setpoint	1 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.14 mm ² / 0.2 kg

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	1.5 mm ² / 0.4 kg
Result	Test passed

Environmental and real-life conditions

Aging

Temperature cycles	192
Result	Test passed

Needle-flame test

Time of exposure	30 s
Result	Test passed

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Spectrum	Service life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s ²) ² /Hz
Acceleration	3.12g
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	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

Standards and regulations

Connection in acc. with standard	IEC 60947-7-1/IEC 60947-7-2
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Mounting

Mounting type	NS 15
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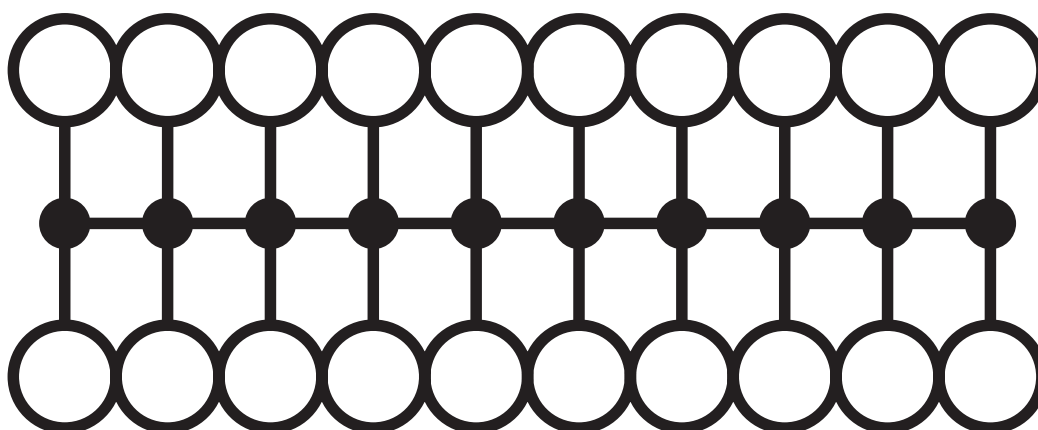


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Drawings

Circuit diagram



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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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Accessories

SZF 0-0,4X2,5 - Screwdriver

1204504

<https://www.phoenixcontact.com/us/products/1204504>



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip

MPS-MT 1-S4-B RD - Accessories

1982800

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Test plug terminal block



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CLIPFIX 15 - End bracket

3022263

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Snap-on end bracket, to be snapped onto NS 15 DIN rail



NS 15 UNPERF 2000MM VPE 10 - DIN rail, unperforated

1401695

<https://www.phoenixcontact.com/us/products/1401695>



DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

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NS 15 PERF 2000MM VPE 10 - DIN rail perforated

1401682

<https://www.phoenixcontact.com/us/products/1401682>



DIN rail perforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

NS 15 AL PERF 2000MM VPE 10 - DIN rail perforated

1401763

<https://www.phoenixcontact.com/us/products/1401763>



DIN rail perforated, Pack of 10 (20 m), acc. to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver

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NS 15 WH PERF 2000MM-VPE 10 - DIN rail perforated

1204096

<https://www.phoenixcontact.com/us/products/1204096>



DIN rail perforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver

SK 3,8 REEL P4,15 WH CUS - Marker card

0825990

<https://www.phoenixcontact.com/us/products/0825990>



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 4.15 mm, lettering field size: continuous x 3.8 mm

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TML (EX3,8)R - Marker strip

0801837

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Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMaster 300/600, THERMOMARK X1.2, mounting type: adhesive, lettering field size: continuous x 3.8 mm, Number of individual labels: 12

TML (104X3,8)R - Marker strip

0801833

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Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMaster 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 104 mm, lettering field size: 104 x 3.8 mm, Number of individual labels: 2500

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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com