

Data sheet

Order No.: 1777798

Type: FRONT-MSTB 2,5/ 8-STF-5,08

Plug component, Front screw connection



The figure shows a 10-position version of the product

1 Main features



- | | | | |
|---------------------------|------------------------|------------------------|---------------------|
| • No. of pos. | 8 | • Nominal current | 12 A |
| • Conductor cross section | 2.5 mm ² | • Nominal voltage | 320 V |
| • Color | green | • Connection direction | 0 ° |
| • Pitch | 5.08 mm | • Type of packaging | packed in cardboard |
| • Connection method | Front screw connection | | |

2 Your advantages

Well-known connection principle allows worldwide use

Optimized for tight installation situations: operation and conductor connection from one direction

Screwable flange for superior mechanical stability

Low temperature rise, thanks to maximum contact force

Allows connection of two conductors



Make sure you always use the latest documentation.

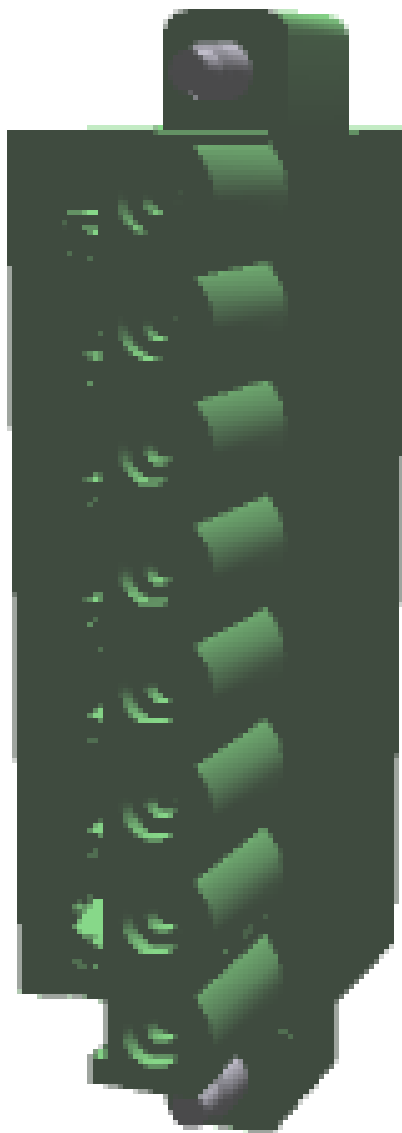
It can be downloaded at: phoenixcontact.net/product/1777798

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4 3D model in PDF can be activated (Acrobat Reader only)



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5 [Redacted]

5.1 [Redacted]

5.2 [Redacted]

5.3 [Redacted]
Material of metal parts

6 [Redacted] Insulating material data [Redacted] Housing [Redacted]

7 Dimensions

7.1 [Redacted]

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8 Series drawing

9 Distribution drawing

10 Application

10.1 Temperature limitations

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11 Mechanical tests

11.1 Mechanical test group A

11.1.1 Termination and connection method

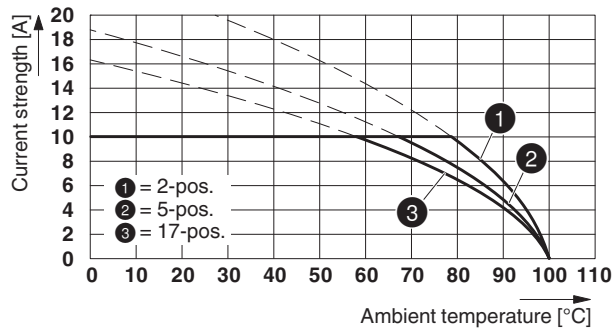
11.1.1.1 Pull-out test
Termination and connection method: pull-out test

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13 Electrical tests

13.1 Electrical data

13.2 Air and creepage distances



18
 /derating curves

Type: FRONT-MSTB 2,5/...-STF-5,08 with MDSTB 2,5/...-GF-5,08

Type: FRONT-MSTB 2,5/...-STF-5,08 with MDSTBV 2,5/...-GF-5,08

93029_1000_en

Type: FRONT-MSTB 2,5/...-STF-5,08 with CC 2,5/...-GF-5,08 P26THR

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Type: FRONT-MSTB 2,5/...-STF-5,08 with MSTB 2,5/...-GF-5,08

Type: FRONT-MSTB 2,5/...-STF-5,08 with CCV 2,5/...-GF-5,08 P26THR



16 Environmental and durability tests

16.1 Vibration test

Specification	IEC 60068-2-6:2007-12
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16.2 Climatic Environment

Specification	IEC 61984:2008-10
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18 Approvals

CSA

VDE Gutachten mit Fertigungsüberwachung

IECEE CB Scheme

cULus Recognized

EAC

DNV GL

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25 Commercial Data

Order No.	1777798
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Order No.	Type
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Description	Order No.	Type
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29 Combination tests

FRONT-MSTB 2,5/...-STF	MDSTB 2,5/...-GF	MDSTBV 2,5/...-GF	CC 2,5/...-GF	MSTB 2,5/...-GF
Specification	IEC 61984	IEC 61984	IEC 61984	IEC 61984
Mechanical tests (A)				
Insertion/withdrawal force per position	approx. 12 N / 9 N	approx. 8 N / 6 N	approx. 8 N / 6 N	approx. 8 N / 6 N
Polarization when inserted Requirement >20 N	Test passed	Test passed	Test passed	Test passed
Contact holder in insert Requirements >20 N	Test passed	Test passed	Test passed	Test passed
Durability tests (B)				
Contact resistance R ₁	1.9 mΩ	2.6 mΩ	1.4 mΩ	1.4 mΩ
Insertion/withdrawal cycles	25	25	25	25
Contact resistance R ₂	1.9 mΩ	2.6 mΩ	1.4 mΩ	1.4 mΩ
Rated impulse voltage at sea level Voltage waveform ≥ (1.2/50 μs)	4.8 kV	4.8 kV	4.8 kV	4.8 kV
Power-frequency withstand voltage Voltage waveform ≥ (50/60 Hz)	2.21 kV	2.21 kV	2.21 kV	2.21 kV
Insulation resistance Requirements > 5 MΩ	> 0.2 TΩ	> 0.2 TΩ	> 0.2 TΩ	> 0.2 TΩ
Thermal tests (C)				
Tested number of positions	17	18	12	24
Tested conductor cross section	2.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²
Test current	10 A	10 A	12 A	12 A
Upper limiting temperature Requirements < 100°C	Test passed	Test passed	Test passed	Test passed
Climatic tests (D)				
Test sequence 1: low temperature storage	-40 °C/2 h	-40 °C/2 h	-40 °C/2 h	-40 °C/2 h
Test sequence 2: heat storage	100 °C/168 h	100 °C/168 h	100 °C/168 h	100 °C/168 h
Test sequence 3: noxious gas storage (ISO 6988)	0.2 dm ³ SO ₂ on 300 dm ³ / 40 °C/1 cycle	0.2 dm ³ SO ₂ on 300 dm ³ / 40 °C/1 cycle	0.2 dm ³ SO ₂ on 300 dm ³ / 40 °C/1 cycle	0.2 dm ³ SO ₂ on 300 dm ³ / 40 °C/1 cycle
Rated impulse voltage at sea level Voltage waveform ≥ (1.2/50 μs)	4.8 kV	4.8 kV	4.8 kV	4.8 kV
Power-frequency withstand voltage Voltage waveform ≥ (50/60 Hz)	2.21 kV	2.21 kV	2.21 kV	2.21 kV
Environmental and endurance tests (E)				
Specification	IEC 61984:2008-10	IEC 61984:2008-10	IEC 61984:2008-10	IEC 61984:2008-10
Degree of protection	Finger safety with IP20 test finger	Finger safety with IP20 test finger	Finger safety with IP20 test finger	Finger safety with IP20 test finger

1777798 FRONT-MSTB 2,5/ 8-STF-5,08**FRONT-MSTB 2,5/..-STF****CCV 2,5/..-GF**

Specification

IEC 61984

Mechanical tests (A)

Insertion/withdrawal force per position

approx. 8 N / 6 N

Polarization when inserted

Test passed

Requirement >20 N

Contact holder in insert

Test passed

Requirements >20 N

Durability tests (B)Contact resistance R_1 1.3 m Ω

Insertion/withdrawal cycles

25

Contact resistance R_2 1.4 m Ω

Rated impulse voltage at sea level

4.8 kV

Voltage waveform \geq (1.2/50 μ s)

Power-frequency withstand voltage

2.21 kV

Voltage waveform \geq (50/60 Hz)

Insulation resistance

> 0.1 T Ω Requirements > 5 M Ω **Thermal tests (C)**

Tested number of positions

12

Tested conductor cross section

2.5 mm²

Test current

12 A

Upper limiting temperature

Test passed

Requirements < 100°C

Climatic tests (D)

Test sequence 1: low temperature storage

-40 °C/2 h

Test sequence 2: heat storage

100 °C/168 h

Test sequence 3: noxious gas storage
(ISO 6988)0.2 dm³ SO₂ on 300 dm³/
40 °C/1 cycle

Rated impulse voltage at sea level

4.8 kV

Voltage waveform \geq (1.2/50 μ s)

Power-frequency withstand voltage

2.21 kV

Voltage waveform \geq (50/60 Hz)**Environmental and endurance tests (E)**

Specification

IEC 61984:2008-10

Degree of protection

Finger safety with IP20
test finger