

MSDBV 2,5-F - Double-mini flange terminal block



3249172

<https://www.phoenixcontact.com/us/products/3249172>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Double-mini flange terminal block, nom. voltage: 800 V, nominal current: 24 A, number of connections: 4, connection method: Spring-cage connection, 1 level, Rated cross section: 2.5 mm², cross section: 0.08 mm² - 4 mm², mounting type: direct screw connection, color: gray

Your advantages

- Space saving thanks to compact design and mounting option on a 15 mm DIN rail
- Clear arrangement thanks to marking of all terminal points
- Easy potential distribution thanks to standardized plug-in bridges

Commercial data

Item number	3249172
Packing unit	1 pc
Minimum order quantity	50 pc
Sales key	BE02
Product key	BE2165
Catalog page	Page 303 (C-3-2013)
GTIN	4046356166379
Weight per piece (including packing)	6.396 g
Weight per piece (excluding packing)	3.12 g
Customs tariff number	85369010
Country of origin	CN

MSDBV 2,5-F - Double-mini flange terminal block



3249172

<https://www.phoenixcontact.com/us/products/3249172>

Technical data

Product properties

Product type	Miniature terminal block
Number of connections	4
Number of rows	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	0.77 W

Connection data

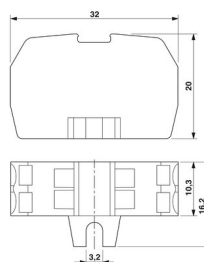
Number of connections per level	2
Nominal cross section	2.5 mm ²

1 level

Stripping length	8 mm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.08 mm ² ... 4 mm ²
Cross section AWG	28 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.08 mm ² ... 2.5 mm ²
Conductor cross section, flexible [AWG]	28 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm ² ... 2.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm ² ... 2.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ²
Nominal current	24 A
Maximum load current	30 A (with 4 mm ² conductor cross section)
Nominal voltage	800 V
Nominal cross section	2.5 mm ²
Connection in acc. with standard	IEC/EN 60079-7

Dimensions

Dimensional drawing



MSDBV 2,5-F - Double-mini flange terminal block



3249172

<https://www.phoenixcontact.com/us/products/3249172>

Width	10.4 mm
End cover width	4 mm
Height	32 mm
Depth	22 mm
Hole diameter	3.2 mm

Material specifications

Color	gray
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	9.8 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 2.5 mm ²	0.3 kA
Short-time withstand current 4 mm ²	0.48 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	Yes
-----------------	-----

Mechanical tests

MSDBV 2,5-F - Double-mini flange terminal block



3249172

<https://www.phoenixcontact.com/us/products/3249172>

Mechanical strength

Result	Test passed
--------	-------------

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.08 mm ² / 0.1 kg
	2.5 mm ² / 0.7 kg
	4 mm ² / 0.9 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 1, class B, body mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
ASD level	0.02g ² /Hz
Acceleration	0.8g
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	5g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

Ambient conditions

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 (storage/transport)	30 % ... 70 %

MSDBV 2,5-F - Double-mini flange terminal block



3249172

<https://www.phoenixcontact.com/us/products/3249172>

Standards and regulations

Connection in acc. with standard	IEC 60947-7-1
	IEC/EN 60079-7

Mounting

Mounting type	direct screw connection
---------------	-------------------------

MSDBV 2,5-F - Double-mini flange terminal block





3249172


<https://www.phoenixcontact.com/us/products/3249172>


Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3249172>

 CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	600 V	20 A	28 - 12	-
Use group C	600 V	20 A	28 - 12	-
Use group D	600 V	20 A	28 - 12	-

 IECEE CB Scheme Approval ID: DE1-62820				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	800 V	24 A	-	0.2 - 2.5

 EAC Approval ID: RU C-DE.BL08.B.00644				
---	--	--	--	--

 VDE Zeichengenehmigung Approval ID: 40029769				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	800 V	24 A	-	0.2 - 2.5

 cULus Recognized Approval ID: E60425				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	600 V	20 A	28 - 12	-
Use group C	600 V	20 A	28 - 12	-
Use group D	600 V	5 A	28 - 12	-

MSDBV 2,5-F - Double-mini flange terminal block



3249172

<https://www.phoenixcontact.com/us/products/3249172>

Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250101

ETIM

ETIM 8.0	EC000897
----------	----------

UNSPSC

UNSPSC 21.0	39121400
-------------	----------

MSDBV 2,5-F - Double-mini flange terminal block



3249172

<https://www.phoenixcontact.com/us/products/3249172>

Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Phoenix Contact 2023 © - all rights reserved
<https://www.phoenixcontact.com>

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