

# MSDBV 2,5-M - Mini feed-through terminal block



3249198

<https://www.phoenixcontact.com/us/products/3249198>

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.



Mini feed-through terminal block, nom. voltage: 800 V, nominal current: 24 A, number of connections: 4, connection method: Spring-cage connection, Rated cross section: 2.5 mm<sup>2</sup>, 1 level, cross section: 0.08 mm<sup>2</sup> - 4 mm<sup>2</sup>, mounting type: Direct mounting with flange, 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	3249198
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE02
Product key	BE2163
GTIN	4046356166409
Weight per piece (including packing)	6.372 g
Weight per piece (excluding packing)	3.16 g
Customs tariff number	85369010
Country of origin	CN

# MSDBV 2,5-M - Mini feed-through terminal block



3249198

<https://www.phoenixcontact.com/us/products/3249198>

## 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 <sup>2</sup>

#### 1 level

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

### Dimensions

Width	10.4 mm
End cover width	4 mm
Height	32 mm
Depth	22 mm

### Material specifications

Color	gray (RAL 7042)
-------	-----------------

# MSDBV 2,5-M - Mini feed-through terminal block



3249198

<https://www.phoenixcontact.com/us/products/3249198>

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 $\leq$ 45 K
Result	Test passed
Short-time withstand current 2.5 mm <sup>2</sup>	0.3 kA
Short-time withstand current 4 mm <sup>2</sup>	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

### Mechanical strength

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

### Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
	0.08 mm <sup>2</sup> / 0.1 kg

# MSDBV 2,5-M - Mini feed-through terminal block



3249198

<https://www.phoenixcontact.com/us/products/3249198>

Conductor cross-section/weight	2.5 mm <sup>2</sup> / 0.7 kg
	4 mm <sup>2</sup> / 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	Long life test category 1, class B, body mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
ASD level	0.02g <sup>2</sup> /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 (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
	IEC/EN 60079-7

# MSDBV 2,5-M - Mini feed-through terminal block



3249198

<https://www.phoenixcontact.com/us/products/3249198>

## Mounting

Mounting type

Direct mounting with flange

# MSDBV 2,5-M - Mini feed-through terminal block

3249198

<https://www.phoenixcontact.com/us/products/3249198>



## Drawings

### Circuit diagram



# MSDBV 2,5-M - Mini feed-through terminal block





3249198

<https://www.phoenixcontact.com/us/products/3249198>


## Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3249198>


 <b>CSA</b> Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
B	600 V	20 A	28 - 12	-
C	600 V	20 A	28 - 12	-
D	600 V	20 A	28 - 12	-

 <b>IECEE CB Scheme</b> Approval ID: DE1-62820				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine	800 V	24 A	-	0.2 - 2.5

 <b>EAC</b> Approval ID: RU C-DE.BL08.B.00644				
---	--	--	--	--

 <b>VDE Zeichengenehmigung</b> Approval ID: 40029769				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine	800 V	24 A	-	0.2 - 2.5

 <b>cULus Recognized</b> Approval ID: E60425				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
B	600 V	20 A	28 - 12	-
C	600 V	20 A	28 - 12	-
D	600 V	5 A	28 - 12	-

 <b>EAC</b> Approval ID: KZ7500651131219505				
---	--	--	--	--

# MSDBV 2,5-M - Mini feed-through terminal block

3249198

<https://www.phoenixcontact.com/us/products/3249198>



# MSDBV 2,5-M - Mini feed-through terminal block



3249198

<https://www.phoenixcontact.com/us/products/3249198>

## Classifications

### ECLASS

ECLASS-13.0	27250101
ECLASS-15.0	27250101

### ETIM

ETIM 10.0	EC000897
-----------	----------

### UNSPSC

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

# MSDBV 2,5-M - Mini feed-through terminal block



3249198

<https://www.phoenixcontact.com/us/products/3249198>

## 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%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - 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](mailto:info@phoenixcon.com)