

# MSDB 2,5-NS 35 OG - Mini feed-through terminal block



3244326

<https://www.phoenixcontact.com/us/products/3244326>

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: NS 35/7,5, NS 35/15, color: orange

## Your advantages

- Clear arrangement thanks to marking of all terminal points
- Space-saving, thanks to compact design and mounting option on a 35 mm DIN rail
- Easy potential distribution thanks to standardized plug-in bridges

## Commercial data

Item number	3244326
Packing unit	50 pc
Minimum order quantity	50 pc
Product key	BE2163
GTIN	4046356145589
Weight per piece (including packing)	8.372 g
Weight per piece (excluding packing)	8 g
Country of origin	CN

# MSDB 2,5-NS 35 OG - Mini feed-through terminal block



3244326

<https://www.phoenixcontact.com/us/products/3244326>

## Technical data

### Product properties

Product type	Miniature terminal block
Number of connections	4
Number of rows	1
Potentials	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
Internal cylindrical gage	A3
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

### Ex data

#### Rated data (ATEX/IECEx)

Identification	⊕ II 2 G Ex eb IIC Gb
Operating temperature range	-60 °C ... 110 °C
	3024193 D-MZB 1,5-NS35

# MSDB 2,5-NS 35 OG - Mini feed-through terminal block



3244326

<https://www.phoenixcontact.com/us/products/3244326>

Ex-certified accessories	1204517 SZF 1-0,6X3,5 3022276 CLIPFIX 35-5
List of bridges	Insertion bridge / ESB 2-MZDB / 3029703
Bridge data	21 A (2.5 mm <sup>2</sup> )
Ex temperature increase	40 K (21.3 A / 2.5 mm <sup>2</sup> )
Rated insulation voltage	630 V
output	(Permanent)

## Ex level General

Rated voltage	690 V
Rated current	21 A
Maximum load current	26 A
Contact resistance	0.87 mΩ

## Ex connection data General

Nominal cross section	2.5 mm <sup>2</sup>
Rated cross section AWG	14
Connection capacity rigid	0.08 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Connection capacity AWG	28 ... 12
Connection capacity flexible	0.08 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Connection capacity AWG	28 ... 14

## Dimensions

Width	10.4 mm
End cover width	4 mm
Height	42.7 mm
Depth	22 mm
Depth on NS 35/7,5	32 mm
Depth on NS 35/15	39.5 mm

## Material specifications

Color	orange (RAL 2003)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
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

# MSDB 2,5-NS 35 OG - Mini feed-through terminal block



3244326

<https://www.phoenixcontact.com/us/products/3244326>

## Surge voltage test

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
--------	-------------

### Attachment on the carrier

DIN rail/fixing support	NS 32/NS 35
Result	Test passed

### Test for conductor damage and slackening

Rotation speed	10 (+/- 2) rpm
Revolutions	135
Conductor cross-section/weight	0.08 mm <sup>2</sup> / 0.1 kg
	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):2018-05
---------------	-------------------------------------

# MSDB 2,5-NS 35 OG - Mini feed-through terminal block



3244326

<https://www.phoenixcontact.com/us/products/3244326>

Spectrum	Long life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	$6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis

## Shocks

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.)

## 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

## Mounting

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

# MSDB 2,5-NS 35 OG - Mini feed-through terminal block



3244326

<https://www.phoenixcontact.com/us/products/3244326>

## Drawings

### Circuit diagram



# MSDB 2,5-NS 35 OG - Mini feed-through terminal block





3244326


<https://www.phoenixcontact.com/us/products/3244326>


## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3244326>


 <b>CSA</b> Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
B	600 V	20 A	28 - 12	-
C	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 $mm^2$
keine	800 V	24 A	-	0.2 - 2.5

 <b>VDE approval of drawings</b> Approval ID: 40029769				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
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 $mm^2$
B	600 V	20 A	28 - 12	-
C	600 V	20 A	28 - 12	-

 <b>EAC Ex</b> Approval ID: KZ 7500525010101950				
---	--	--	--	--

 <b>IECEx</b> Approval ID: IECExPTB08.0048U				
---	--	--	--	--

 <b>ATEX</b> Approval ID: PTB08ATEX1075U				
--	--	--	--	--

# MSDB 2,5-NS 35 OG - Mini feed-through terminal block



3244326

<https://www.phoenixcontact.com/us/products/3244326>



**UKCA-EX**

Approval ID: CSAE 22UKEX1245U



**CCC**

Approval ID: 2020322313000629

# MSDB 2,5-NS 35 OG - Mini feed-through terminal block



3244326

<https://www.phoenixcontact.com/us/products/3244326>

## Classifications

### ECLASS

ECLASS-13.0	27250101
ECLASS-15.0	27250101

### ETIM

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

### UNSPSC

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

# MSDB 2,5-NS 35 OG - Mini feed-through terminal block



3244326

<https://www.phoenixcontact.com/us/products/3244326>

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

### EF3.1 Climate Change

CO2e kg	0.098 kg CO2e
---------	---------------

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)