

## Mini feed-through terminal block - MSDBV 2,5-M - 3249198

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Mini feed-through terminal block, Connection method: Spring-cage connection, Cross section: 0.08 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 28 - 12, Width: 10.4 mm, Height: 22 mm, Color: gray, Mounting type: Direct mounting with flange



### Why buy this product

- 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

### Key Commercial Data

Packing unit	50 STK
GTIN	 4 046356 166409

### Technical data

#### General

Number of levels	1
Number of connections	4
Nominal cross section	2.5 mm <sup>2</sup>
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Connection in acc. with standard	IEC 60947-7-1
Maximum load current	30 A (with 4 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	24 A
Nominal voltage U <sub>N</sub>	800 V
Open side panel	Yes
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
Finger protection	guaranteed

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## Technical data

### General

Result of surge voltage test	Test passed
Surge voltage test setpoint	9.8 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	2 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Result of bending test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test 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
Tensile test result	Test passed
Conductor cross section tensile test	0.08 mm <sup>2</sup>
Tractive force setpoint	5 N
Conductor cross section tensile test	2.5 mm <sup>2</sup>
Tractive force setpoint	50 N
Conductor cross section tensile test	4 mm <sup>2</sup>
Tractive force setpoint	60 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	≤ 3.2 mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	2.5 mm <sup>2</sup>
Short-time current	0.3 kA
Conductor cross section short circuit testing	4 mm <sup>2</sup>
Short-time current	0.48 kA
Result of aging test	Test passed
Ageing test for screwless modular terminal block temperature cycles	192
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Oscillation, broadband noise test result	Test passed
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 1, class B, body mounted
Test frequency	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz
ASD level	0.02 g <sup>2</sup> /Hz
Acceleration	0.8g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03

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## Technical data

### General

Shock form	Half-sine
Acceleration	5 g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Static insulating material application in cold	-60 °C

### Dimensions

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

### Connection data

Connection method	Spring-cage connection
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	0.08 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	28
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.08 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	28
Max. AWG conductor cross section, flexible	14
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	0.5 mm <sup>2</sup>
Connection in acc. with standard	IEC/EN 60079-7
Stripping length	8 mm

### Standards and Regulations

Connection in acc. with standard	CSA
	IEC 60947-7-1
Flammability rating according to UL 94	V0

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## Classifications

### eCl@ss

eCl@ss 4.0	27141120
eCl@ss 4.1	27141120
eCl@ss 5.0	27141120
eCl@ss 5.1	27141120
eCl@ss 6.0	27141120
eCl@ss 7.0	27141120
eCl@ss 8.0	27141120
eCl@ss 9.0	27141120

### ETIM

ETIM 2.0	EC000902
ETIM 3.0	EC000902
ETIM 4.0	EC000902
ETIM 5.0	EC000897

### UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410

## Approvals

### Approvals

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#### Approvals

UL Recognized / cUL Recognized / CSA / VDE Zeichengenehmigung / IEC CB Scheme / EAC / cULus Recognized

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#### Ex Approvals

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#### Approvals submitted

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#### Approval details

# Mini feed-through terminal block - MSDBV 2,5-M - 3249198

## Approvals

UL Recognized

	B	C	D
mm <sup>2</sup> /AWG/kcmil	28-12	28-12	28-12
Nominal current I <sub>N</sub>	20 A	20 A	5 A
Nominal voltage U <sub>N</sub>	300 V	300 V	600 V

cUL Recognized

	B	C	D
mm <sup>2</sup> /AWG/kcmil	28-12	28-12	28-12
Nominal current I <sub>N</sub>	20 A	20 A	5 A
Nominal voltage U <sub>N</sub>	300 V	300 V	600 V

CSA

	B	C	D
mm <sup>2</sup> /AWG/kcmil	28-12	28-12	28-12
Nominal current I <sub>N</sub>	20 A	20 A	20 A
Nominal voltage U <sub>N</sub>	600 V	600 V	600 V

VDE Zeichengenehmigung

mm <sup>2</sup> /AWG/kcmil	0.2-2.5
Nominal current I <sub>N</sub>	24 A
Nominal voltage U <sub>N</sub>	800 V


IECEE CB Scheme

mm <sup>2</sup> /AWG/kcmil	0.2-2.5
Nominal voltage U <sub>N</sub>	800 V

EAC

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### Approvals

cULus Recognized 

### Drawings

Circuit diagram



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