

Feed-through terminal block - ST 2,5 - 3031212

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Feed-through terminal block, Connection method: Spring-cage connection, Cross section: 0.08 mm² - 4 mm², AWG: 28 - 12, Width: 5.2 mm, Color: gray, Mounting type: NS 35/7,5, NS 35/15

Product Features

- The consistent double function shaft offers every opportunity for time-saving potential distribution and accommodating test accessories
- As well as saving space, the compact design and front connection enable user-friendly wiring in a small amount of space
- The large wiring space enables the use of conductors with ferrules and plastic collars within the nominal cross section
- Tested for railway applications



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
Weight per Piece (excluding packing)	6.0 g
Custom tariff number	85369010
Country of origin	Germany

Technical data

General

Number of levels	1
Number of connections	2
Nominal cross section	2.5 mm ²
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Area of application	Railway industry
	Machine building

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Technical data

General

	Plant engineering
	Process industry
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	31 A (with 4 mm ² conductor cross section)
Nominal current I _N	24 A (at 2.5 mm ²)
Nominal voltage U _N	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
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 ² / 0.1 kg
	2.5 mm ² / 0.7 kg
	4 mm ² / 0.9 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.08 mm ²
Tractive force setpoint	5 N
Conductor cross section tensile test	2.5 mm ²
Tractive force setpoint	50 N
Conductor cross section tensile test	4 mm ²
Tractive force setpoint	60 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	1 N
Result of voltage-drop test	Test passed

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Technical data

General

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 ²
Short-time current	0.3 kA
Conductor cross section short circuit testing	4 mm ²
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 2, bogie mounted
Test frequency	f ₁ = 5 Hz to f ₂ = 250 Hz
ASD level	0.964 (m/s ²) ² /Hz
Acceleration	4.25 g
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
Shock form	Half-sine
Acceleration	30g
Shock duration	18 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))	125 °C
Static insulating material application in cold	-60 °C

Dimensions

Width	5.2 mm
End cover width	2.2 mm
Length	48.5 mm
Height NS 35/7,5	36.5 mm
Height NS 35/15	44 mm

Connection data

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Technical data

Connection data

Connection method	Spring-cage connection
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	0.08 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section AWG min.	28
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.08 mm ²
Conductor cross section flexible max.	2.5 mm ²
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 ²
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm ²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	0.5 mm ²
Connection in acc. with standard	IEC/EN 60079-7
Conductor cross section solid min.	0.08 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section AWG min.	28
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.08 mm ²
Conductor cross section flexible max.	2.5 mm ²
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3

Standards and Regulations

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

Classifications

eCl@ss

eCl@ss 4.0	27141121
eCl@ss 4.1	27141121
eCl@ss 5.0	27141120
eCl@ss 5.1	27141120

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Classifications

eCl@ss

eCl@ss 6.0	27141120
eCl@ss 7.0	27141120
eCl@ss 8.0	27141120
eCl@ss 9.0	27141120

ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
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

Approvals

UL Recognized / VDE Gutachten mit Fertigungsüberwachung / cUL Recognized / LR / GL / BV / RS / ABS / KR / NK / IEC EE CB Scheme / CSA / EAC / EAC / cULus Recognized

Ex Approvals

IECEX / ATEX / EAC Ex

Approvals submitted

Approval details

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Approvals

UL Recognized		
	B	C
mm ² /AWG/kcmil	28-12	28-12
Nominal current I _N	20 A	20 A
Nominal voltage U _N	600 V	600 V

VDE Gutachten mit Fertigungsüberwachung	
mm ² /AWG/kcmil	0.2-2.5
Nominal current I _N	24 A
Nominal voltage U _N	800 V

cUL Recognized		
	B	C
mm ² /AWG/kcmil	28-12	28-12
Nominal current I _N	20 A	20 A
Nominal voltage U _N	600 V	600 V

LR

GL

BV

RS

ABS

KR

NK

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Approvals

IECEE CB Scheme	
mm ² /AWG/kcmil	2.5
Nominal voltage UN	800 V

CSA	B	C
mm ² /AWG/kcmil	28-12	28-12
Nominal current IN	20 A	20 A
Nominal voltage UN	600 V	600 V

EAC

EAC

cULus Recognized

Drawings

Circuit diagram

