ST 10-TWIN - Feed-through terminal block

3035288

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Feed-through terminal block, nom. voltage: 1000 V, nominal current: 57 A, number of connections: 3, connection method: Spring-cage connection, 1 level, Rated cross section: 10 mm^2, cross section: 0.2 mm^2 - 16 mm^2, mounting type: NS 35/7,5, NS 35/15, color: gray

Your advantages

- The ST ...-TWIN three-conductor spring cage terminal blocks are a space-saving alternative to standard feed-through terminal blocks where potential distribution with conductor cross sections of 10 and 16 mm² is required
- The flexible options for reducing bridging in the CLIPLINE complete system can be found in "Accessories for the CLIPLINE complete modular terminal block system"
- Tested for railway applications
- Ideal as potential distributors in ring feeder systems
- Terminal blocks with a nominal cross section of 2.5 or 4 mm² can be combined without additional wiring effort using the RB ST...(2,5/4) reducing bridge

Technical data

Product properties

Product type	Multi-conductor terminal block
Product family	ST
Area of application	Railway industry
	Machine building
	Plant engineering
Number of connections	3
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	1.82 W

Connection data

Number of connections per level	3
Nominal cross section	10 mm²

1 level

Stripping length	18 mm
Internal cylindrical gage	A6
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.2 mm² ... 16 mm²
Cross section AWG	24 ... 6 (converted acc. to IEC)
Conductor cross section flexible	0.2 mm² ... 10 mm²
Conductor cross section, flexible [AWG]	24 ... 8 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm² ... 10 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.25 mm² ... 10 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	1.5 mm² ... 2.5 mm²
Nominal current	57 A (with 16 mm² conductor cross section)
Maximum load current	57 A
Nominal voltage	1000 V
Nominal cross section	10 mm²

Dimensions

Width	10.2 mm
End cover width	2.2 mm
Height	95.4 mm

Depth on NS 35/7,5	50.3 mm
Depth on NS 35/15	57.8 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

Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 10 mm²	1.2 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2.2 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 35

Test force setpoint	5 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.2 mm² / 0.2 kg
	10 mm² / 2 kg
	16 mm² / 2.9 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 2, bogie-mounted
Frequency	f_1 = 5 Hz to f_2 = 250 Hz
ASD level	6.12 (m/s²)²/Hz
Acceleration	3.12g
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	30g
Shock duration	18 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, no longer than 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

Mounting

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

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