STU 10/ 4X2,5 - Potential collective terminal

3033139

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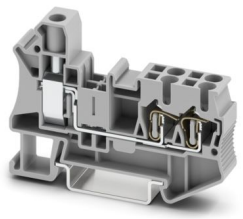


Potential collective terminal, nom. voltage: 800 V, nominal current: 55 A, connection method: Screw connection, Rated cross section: 10 mm^2, cross section: 0.5 mm^2 - 16 mm^2, connection method: Spring-cage connection, Rated cross section: 2.5 mm^2, cross section: 0.08 mm^2 - 4 mm^2, mounting: NS 35/7,5, NS 35/15, color: gray

Your advantages

- The STU 10/4x2,5 spring-cage hybrid terminal block is a space-saving potential distributor that distributes a 10 mm² supply line to four 2.5 mm² connections
- Supplied using a 10 mm² screw connection
- The system-internal distribution is via four spring-cage connections with a nominal cross section of 2.5 mm²
- The double bridge shaft supports further potential distributions
- Can be consistently bridged to standard terminal blocks in the ST spring-cage terminal block series

Commercial data

Item number	3033139
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE2119
Product key	BE2119
GTIN	4046356148030
Weight per piece (including packing)	20.7 g
Weight per piece (excluding packing)	20.7 g
Customs tariff number	85369010
Country of origin	PL

Technical data

Product properties

Product family	STU
Number of connections	5
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

Type of additional hybrid connection	UT 10
Number of connections per level	5
Nominal cross section	10 mm²
Connection method	Screw connection
Screw thread	M4
Tightening torque	1.5 ... 1.8 Nm
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A6
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.5 mm² ... 16 mm²
Cross section AWG	20 ... 8 (converted acc. to IEC)
Conductor cross-section flexible	0.5 mm² ... 16 mm²
Conductor cross-section, flexible [AWG]	20 ... 6 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm² ... 10 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.5 mm² ... 10 mm²
2 conductors with same cross section, rigid	0.5 mm² ... 4 mm²
2 conductors with same cross section, flexible	0.5 mm² ... 4 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.5 mm² ... 2.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² ... 6 mm²
Nominal cross section	10 mm²
Nominal current	55 A
Maximum load current	57 A
Nominal voltage	800 V

Level 1 above 1+2

Connection method	Spring-cage connection

Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.08 mm² ... 4 mm²
Cross section AWG	24 ... 10 (converted acc. to IEC)
Conductor cross-section flexible	0.08 mm² ... 2.5 mm²
Conductor cross-section, flexible [AWG]	24 ... 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm² ... 2.5 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.14 mm² ... 2.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.14 mm² ... 0.5 mm²
Nominal cross section	2.5 mm²
Nominal current	24 A
Maximum load current	24 A
Nominal voltage	800 V

Dimensions

Width	10.3 mm
End cover width	2.2 mm
Height	68 mm
Depth	46.9 mm
Depth on NS 35/7,5	48.3 mm
Depth on NS 35/15	55.8 mm

Material specifications

Color	gray (RAL 7042)
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))	125 °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)	27,5 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 ≤ 45 K
Result	Test passed
Short-time withstand current 2.5 mm²	0.3 kA
Short-time withstand current 4 mm²	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 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	0.08 mm² / 0.1 kg
	2.5 mm² / 0.7 kg
	4 mm² / 0.9 kg
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross-section/weight	0.5 mm² / 0.3 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	Long 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, 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

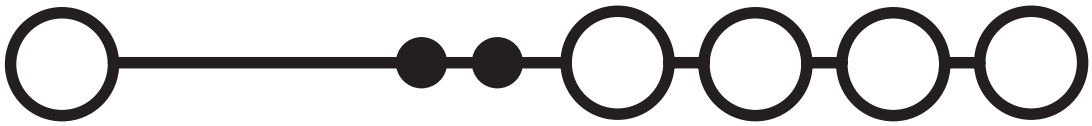
Connection in acc. with standard	IEC 60947-7-1
	IEC 60947-7-1

Mounting

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

Drawings

Circuit diagram



Approvals

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EAC
Approval ID: RU C-DE.BL08.B.00644

cULus Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
Spring-cage connection	600 V	20 A	28 - 12	-
Screw connection	600 V	50 A	20 - 8	-
C				
Spring-cage connection	600 V	20 A	28 - 12	-
Screw connection	600 V	50 A	20 - 8	-

EAC
Approval ID: KZ7500651131219505

Classifications

ECLASS

ECLASS-13.0	27250201
ECLASS-15.0	27250201

ETIM

ETIM 10.0	EC000897

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	4b39fc3b-78d8-4be9-86db-79b177a3b772

EF3.1 Climate Change

CO2e kg	0.047 kg CO2e

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