

## Feed-through terminal block - STU 10/ 4X2,5 - 3033139

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Feed-through terminal block, Connection method: Screw connection, Cross section: 0.5 mm<sup>2</sup> - 16 mm<sup>2</sup>, AWG: 20 - 6, Width: 10.3 mm, Color: gray, Mounting type: NS 35/7,5, NS 35/15

### Product Features

- The STU 10/4x2,5 spring-cage hybrid terminal block is a space-saving potential distributor that distributes a 10 mm<sup>2</sup> supply line to four 2.5 mm<sup>2</sup> connections
- The system-internal distribution is via four spring-cage connections with a nominal cross section of 2.5 mm<sup>2</sup>
- The double bridge shaft supports further potential distributions
- Supplied using a 10 mm<sup>2</sup> screw connection
- Can be consistently bridged to standard terminal blocks in the ST spring-cage terminal block series



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
Weight per Piece (excluding packing)	21.41 g
Custom tariff number	85369010
Country of origin	Poland

### Technical data

#### General

Number of levels	1
Number of connections	5
Nominal cross section	10 mm <sup>2</sup>
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	8 kV
Pollution degree	3

## Feed-through terminal block - STU 10/ 4X2,5 - 3033139

### Technical data

#### General

Overvoltage category	III
Insulating material group	I
Connection method	Screw connection
Connection in acc. with standard	IEC 60947-7-1
Maximum load current	57 A
Nominal current I <sub>N</sub>	55 A
Nominal voltage U <sub>N</sub>	800 V
Connection method	Spring-cage connection
Connection in acc. with standard	IEC 60947-7-1
Maximum load current	24 A
Nominal current I <sub>N</sub>	24 A
Nominal voltage U <sub>N</sub>	800 V
Open side panel	ja
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
Finger protection	guaranteed
Surge voltage test setpoint	9.8 kV
Result of surge voltage test	Test passed
Power frequency withstand voltage setpoint	2 kV
Result of power-frequency withstand voltage test	Test passed
Checking the mechanical stability of terminal points (5 x conductor connection)	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
	0.5 mm <sup>2</sup> / 0.3 kg
	10 mm <sup>2</sup> / 2 kg
	16 mm <sup>2</sup> / 2.9 kg
Result of bending test	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

## Feed-through terminal block - STU 10/ 4X2,5 - 3033139

### Technical data

#### General

Conductor cross section tensile test	0.5 mm <sup>2</sup>
Tractive force setpoint	20 N
Tensile test result	Test passed
Tight fit on carrier	NS 35
Setpoint	5 N
Result of tight fit test	Test passed
Requirements, voltage drop	≤ 1.6 mV
Result of voltage drop test	Test passed
Temperature-rise test	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
Short circuit stability result	Test passed
Ageing test for screwless modular terminal block temperature cycles	192
Result of aging test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Result of thermal test	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 <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz
ASD level	6.12 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
Acceleration	3.12 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Oscillation, broadband noise 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.)
Shock test result	Test passed
Temperature index, insulating material (DIN EN 60216-1 (VDE 0304-21))	125 °C
Static insulating material application in cold	-60 °C

#### Dimensions

## Feed-through terminal block - STU 10/ 4X2,5 - 3033139

### Technical data

#### Dimensions

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

#### Connection data

Connection method	Screw connection
Connection in acc. with standard	IEC 60947-7-1
Screw thread	M4
Tightening torque, min	1.5 Nm
Tightening torque max	1.8 Nm
Stripping length	8 mm ... 10 mm
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	16 mm <sup>2</sup>
Conductor cross section AWG min.	20
Conductor cross section AWG max.	6
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	16 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	20
Max. AWG conductor cross section, flexible	6
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	10 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	10 mm <sup>2</sup>
2 conductors with same cross section, solid min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, solid max.	4 mm <sup>2</sup>
2 conductors with same cross section, stranded min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded max.	4 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	2.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	6 mm <sup>2</sup>
Nominal current I <sub>N</sub>	55 A
Maximum load current	57 A

## Feed-through terminal block - STU 10/ 4X2,5 - 3033139

### Technical data

#### Connection data

Nominal voltage $U_N$	800 V
Internal cylindrical gage	A6
Connection method	Spring-cage connection
Connection in acc. with standard	IEC 60947-7-1
Stripping length	8 mm ... 10 mm
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.	24
Conductor cross section AWG max.	10
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	24
Max. AWG conductor cross section, flexible	12
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, min.	0.14 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	0.5 mm <sup>2</sup>
Nominal current $I_N$	24 A
Maximum load current	24 A
Nominal voltage $U_N$	800 V

#### Standards and Regulations

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

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#### Approvals

UL Recognized / cUL Recognized / EAC / EAC / BV / cULus Recognized

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#### Ex Approvals

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#### Approvals submitted

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### Approval details

UL Recognized 		
	B	C
mm <sup>2</sup> /AWG/kcmil	20-8	20-8

# Feed-through terminal block - STU 10/ 4X2,5 - 3033139

## Approvals

	B	C
Nominal current IN	50 A	50 A
Nominal voltage UN	600 V	600 V

cUL Recognized

	B	C
mm <sup>2</sup> /AWG/kcmil	20-8	20-8
Nominal current IN	50 A	50 A
Nominal voltage UN	600 V	600 V

EAC

EAC

BV

cULus Recognized

## Drawings

Circuit diagram

