

## Feed-through terminal block - BTP 3,5 - 3281116

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Feed-through terminal block, nom. voltage: 690 V, nominal current: 32 A, connection method: Push-in connection, number of connections: 4, cross section: 0.2 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 24 - 12, width: 10 mm, color: black, mounting type: NS 35/7,5, NS 35/15

### Why buy this product

- ✓ Easy and tool-free direct plug-in thanks to push-in multi-conductor connection
- ✓ Easy potential distribution with time-saving jumper system
- ✓ Safety for users thanks to integrated shock protection
- ✓ Maximum overview thanks to extensive marking and labeling of every terminal point
- ✓ Reduction in logistics costs with the uniform CLIPLINE complete system accessories

### Key Commercial Data

Packing unit	50 STK
Minimum order quantity	50 STK
GTIN	 4 055626 119175
GTIN	4055626119175

### Technical data

#### General

Number of levels	1
Number of connections	4
Potentials	1
Nominal cross section	4 mm <sup>2</sup>
Color	black
Insulating material	PC
Flammability rating according to UL 94	V0
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III

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## Technical data

### General

Insulating material group	IIIa
Maximum power dissipation for nominal condition	1.02 W
Ambient temperature (operation)	-40 °C ... 110 °C
Maximum load current	32 A (The maximum load current must not be exceeded by the total current of all connected conductors.)
Nominal current I <sub>N</sub>	32 A
Nominal voltage U <sub>N</sub>	690 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	1.89 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	0.2 mm <sup>2</sup> / 0.2 kg
	4 mm <sup>2</sup> / 0.9 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.2 mm <sup>2</sup>
Tractive force setpoint	10 N
Conductor cross section tensile test	4 mm <sup>2</sup>
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
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	4 mm <sup>2</sup>
Short-time current	0.48 kA
Result of thermal test	Test passed
Ageing test for screwless modular terminal block temperature cycles	192
Proof of thermal characteristics (needle flame) effective duration	30 s
Result of aging test	Test passed
Oscillation, broadband noise test result	Test passed

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## Technical data

### General

Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 2, bogie-mounted
Test frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	$6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$
Acceleration	3.12 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.)

### Dimensions

Width	10 mm
Length	46 mm
Height NS 35/7,5	38.2 mm
Height NS 35/15	45.7 mm

### Connection data

Connection method	Push-in connection
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	0.2 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.	12
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	4 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.	0.25 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.	0.25 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm <sup>2</sup>
Stripping length	10 mm ... 12 mm

### Connection data (JIS standard)

Connection method	Push-in connection
Connection in acc. with standard	JIS 8207-7-1
Single-wire/terminal point, solid diameter min.	0.5 mm

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## Technical data

### Connection data (JIS standard)

Single-wire/terminal point, solid diameter max.	2 mm
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	3.5 mm <sup>2</sup>
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.	2 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.	2 mm <sup>2</sup>
Connection cross sections directly pluggable	0.8 mm 2 mm
Single-wire/terminal point, solid diameter min.	0.8 mm
Single-wire/terminal point, solid diameter max.	2 mm
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.	2 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.	2 mm <sup>2</sup>
Nominal current I <sub>N</sub>	30 A
Maximum load current	30 A
Nominal voltage U <sub>N</sub>	600 V

### Standards and Regulations

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

### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

Circuit diagram



## Approvals

Approvals

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Approvals

CSA / UL Recognized / cUL Recognized / DNV GL / cULus Recognized

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Ex Approvals


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## Approvals

### Approval details

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
		B	C
Nominal voltage UN		600 V	600 V
Nominal current IN		20 A	20 A
mm²/AWG/kcmil		26-12	26-12

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
		B	C
Nominal voltage UN		600 V	600 V
Nominal current IN		20 A	20 A
mm²/AWG/kcmil		26-12	26-12

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
		B	C
Nominal voltage UN		600 V	600 V
Nominal current IN		20 A	20 A
mm²/AWG/kcmil		26-12	26-12

DNV GL	<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	TAE00001S2
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cULus Recognized	
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