

## Feed-through terminal block - BT 2,0 - 3281123

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Feed-through terminal block, nom. voltage: 690 V, nominal current: 24 A, connection method: Ring cable lug, number of connections: 2, width: 8 mm, color: black, mounting type: NS 35/7,5, NS 35/15

### Why buy this product

- Convenient ring cable lug connection thanks to the screw connection principle with spring-guided screw; maintenance-free with integrated screw locking
- 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	
GTIN	4055626119106

### Technical data

#### General

Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	2.5 mm <sup>2</sup>
Color	black
Insulating material	PC
Flammability rating according to UL 94	V0
Rated surge voltage	6 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	0.77 W
Ambient temperature (operation)	-40 °C ... 110 °C
Maximum load current	24 A
Nominal current $I_N$	24 A
Nominal voltage $U_N$	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	7.3 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	2.5 mm <sup>2</sup> / 0.7 kg
Tensile test result	Test passed
Conductor cross section tensile test	2.5 mm <sup>2</sup>
Tractive force setpoint	50 N
Conductor cross section tensile test	2 mm <sup>2</sup>
Tractive force setpoint	50 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	2.5 mm <sup>2</sup>
Short-time current	0.3 kA
Conductor cross section short circuit testing	2 mm <sup>2</sup>
Short-time current	0.24 kA
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

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### General

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
Test directions	X-, Y- and Z-axis (pos. and neg.)
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C

### Dimensions

Width	8 mm
Length	42 mm
Height NS 35/7,5	33.5 mm
Height NS 35/15	41 mm

### Connection data

Connection method	Ring cable lug
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section flexible min.	0.14 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	26
Max. AWG conductor cross section, flexible	14
Cable lug connection according to standard	DIN 46234
Min. cross section for cable lug connection	0.14 mm <sup>2</sup>
Max. cross section for cable lug connection	2.5 mm <sup>2</sup>
AWG min	26
AWG max	16
Hole diameter, min.	3.7 mm
Cable lug width, max.	6.8 mm
Bolt diameter	3.5 mm
Screw thread	M3,5
Tightening torque, min	1 Nm
Tightening torque max	1.3 Nm
Screw thread	M3,5
Tightening torque, min	1 Nm
Tightening torque max	1.3 Nm

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## Technical data

### Connection data (JIS standard)

Connection method	Ring cable lug
Connection in acc. with standard	JIS 8207-7-1
Single-wire/terminal point, solid diameter min.	0.5 mm
Single-wire/terminal point, solid diameter max.	1.6 mm
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	2 mm <sup>2</sup>
Cable lug connection according to standard	JIS 8207-7-1
Min. cross section for cable lug connection	0.5 mm <sup>2</sup>
Max. cross section for cable lug connection	2 mm <sup>2</sup>
Hole diameter, min.	3.7 mm
Cable lug width, max.	6.8 mm
Bolt diameter	3.5 mm
Screw thread	M3,5
Tightening torque, min	1 Nm
Tightening torque max	1.3 Nm
Nominal current I <sub>N</sub>	21 A
Maximum load current	21 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

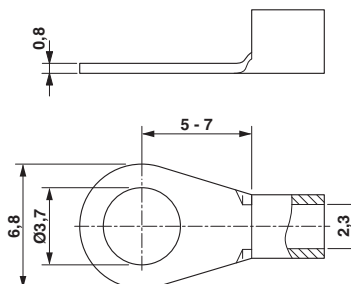
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

Circuit diagram

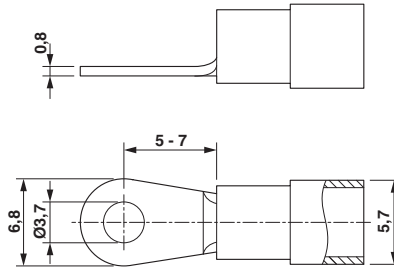


Dimensional drawing



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Dimensional drawing



## Approvals

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

#### Ex Approvals

### Approval details

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	15 A	15 A	
mm <sup>2</sup> /AWG/kcmil	26-14	26-14	


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	15 A	15 A	
mm <sup>2</sup> /AWG/kcmil	26-14	26-14	

DNV GL	<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	TAE0001S2
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## Approvals

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	15 A	15 A	
mm <sup>2</sup> /AWG/kcmil	26-14	26-14	

cULus 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>
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