Bolt connection terminal block - RT 3 BU - 3049110

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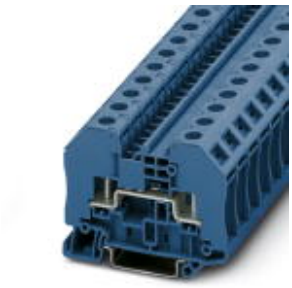

Feed-through terminal block with bolt connection technology, cross section: 0.1 … 2.5 mm², AWG: 26 … 14, width 12.3 mm, color: blue

Your advantages

- The special clamping nuts can be actuated with a normal screwdriver
- The screws are secured against loosening by captive spring-loaded spacers
- Quick and easy connection thanks to hinged cover flaps which hold the clamping nuts captive. When the flaps are open, the connection bolt is freely accessible and the cable lugs can be hooked in; after closing and engaging the flaps
- Large-surface labeling options in the terminal center and above the terminal points
- Easy bridging and potential distribution using the patented plug-in bridges from the CLIPLINE complete system
- The use of the switching lock effectively prevents unintentional switching
- Testing with the standardized test adapters and test plugs of the CLIPLINE complete system
- The hinged cover cover the live metal parts including the insulated cable lugs in the clamping area so that they are touch proof
- Tested for railway applications

RoHS

Key Commercial Data

Packing unit	50 pc
GTIN	4 046356 140157
GTIN	4046356140157

Technical data

General

Note	Note: the BE-RT... path extension is to be used for non-insulated cable lugs (see accessories).
Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	2.5 mm²
Color	blue

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Technical data

General

Insulating material	PA
Flammability rating according to UL 94	V0
Area of application	Railway industry
	Machine building
	Plant engineering
	Process industry
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	0.77 W
Designation	Level 1 above 1 below 1
Maximum load current	24 A (with a 2.5 mm² conductor cross section)
Nominal current I_N	24 A
Nominal voltage U_N	1000 V (Rated voltage for open disconnect point 500 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
Note regarding shock protection	Electric shock protection only with insulated cable lug and closed wing flap 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	2.2 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
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 mm²
Short-time current	0.3 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 1, class B, body mounted

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Technical data

General

Test frequency	f_1 = 5 Hz to f_2 = 150 Hz
ASD level	1.857 $(m/s^2)^2$/Hz
Acceleration	0,8 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	5g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Static insulating material application in cold	-60 °C
Behavior in fire for rail vehicles (DIN 5510-2)	Test passed
Flame test method (DIN EN 60695-11-10)	V0
Oxygen index (DIN EN ISO 4589-2)	>32 %
NF F16-101, NF F10-102 Class I	2
NF F16-101, NF F10-102 Class F	2
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
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
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

Dimensions

Width	12.3 mm
End cover width	2.2 mm
Length	66 mm
Height NS 35/7,5	51 mm
Height NS 35/15	58.5 mm

Connection data

Note	Connection bolts
Connection	1 level
Connection method	Bolt connection
Screw thread	M3

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Connection data

Tightening torque, min	0.6 Nm
Tightening torque max	0.8 Nm
Conductor cross section solid min.	0.5 mm²
Conductor cross section solid max.	2.5 mm²
Conductor cross section flexible min.	0.1 mm²
Conductor cross section flexible max.	2.5 mm²
Min. AWG conductor cross section, flexible	26
Max. AWG conductor cross section, flexible	14
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.1 mm²
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm²
Cable lug connection according to standard	DIN 46234
Min. cross section for cable lug connection	0.5 mm²
Max. cross section for cable lug connection	2.5 mm²
Hole diameter, min.	3.2 mm
Cable lug width, max.	6 mm
Bolt diameter	3 mm
Cable lug connection according to standard	DIN 46237
Min. cross section for cable lug connection	1 mm²
Max. cross section for cable lug connection	2.5 mm²
Hole diameter, min.	3.2 mm
Cable lug width, max.	6 mm
Bolt diameter	3 mm

Standards and Regulations

Connection in acc. with standard	CUL
Flammability rating according to UL 94	V0
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

Environmental Product Compliance

	Lead 7439-92-1
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

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Circuit diagram

Approvals

Approvals

Approvals

ABS / UL Recognized / cUL Recognized / IECEE CB Scheme / VDE Zeichengenehmigung / EAC / EAC / cULus Recognized

Ex Approvals

IECEx / ATEX / EAC Ex

Approval details

ABS	http://www.eagle.org/eagleExternalPortalWEB/	15-GD1354709-PDA

UL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425

	B	C
Nominal voltage UN	600 V	600 V
Nominal current IN	30 A	30 A

cUL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425

	B	C
Nominal voltage UN	600 V	600 V
Nominal current IN	30 A	30 A

IECEE CB Scheme	http://www.iecee.org/	DE1-50525

VDE Zeichengenehmigung	http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40022553

Nominal voltage UN	1000 V

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Approvals

Nominal current IN	24 A
mm²/AWG/kcmil	0.14-2.5

EAC

EAC-Zulassung

EAC

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cULus Recognized

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