Bolt connection terminal block - RT 8 - 3049042

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Bolt connection terminal block, Note: the BE-RT... path extension is to be used for non-insulated cable lugs (see accessories)., nom. voltage: 1000 V, nominal current: 125 A, connection method: Bolt connection, number of connections: 2, number of positions: 1, width: 20.3 mm, color: gray, mounting type: NS 35/7,5, NS 35/15

Your advantages

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

RoHS

Key Commercial Data

Packing unit	1 pc
Minimum order quantity	25 pc
GTIN	4 046356 140027
GTIN	4046356140027
Weight per Piece (excluding packing)	95.688 g
Custom tariff number	85369010
Country of origin	China

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Technical data

General

Note	Note: the BE-RT... path extension is to be used for non-insulated cable lugs (see accessories).
Number of positions	1
Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	35 mm²
Color	gray
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	4.06 W
Maximum load current	125 A (with 35 mm² conductor cross section)
Nominal current I_N	125 A
Nominal voltage U_N	1000 V (Rated voltage for open disconnect point 500 V)
Open side panel	Yes
Ambient temperature (operation)	-60 °C ... 85 °C
Ambient temperature (storage/transport)	-25 °C ... 55 °C (For a short time, not exceeding 24 h, -60 to +70 °C)
Permissible humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
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
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	2.2 kV

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General

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	10 N
Result of voltage-drop test	Test passed
Result of temperature-rise test	Test passed
Requirement temperature-rise test	Increase in temperature ≤ 45 K
Short circuit stability result	Test passed
Conductor cross section short circuit testing	35 mm²
Short-time current	4.2 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
Test frequency	f_1 = 5 Hz to f_2 = 150 Hz
ASD level	0.02 g²/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
Surface flammability NFPA 130 (ASTM E 162)	passed
Specific optical density of smoke NFPA 130 (ASTM E 662)	passed
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
Smoke gas toxicity NFPA 130 (SMP 800C)	passed
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

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Technical data

General

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	20.3 mm
End cover width	2.2 mm
Length	84 mm
Height NS 35/7,5	63.8 mm
Height NS 35/15	71.3 mm

Connection data

Connection	1 level
Connection method	Bolt connection
Stripping length	The stripping length depends on the specification provided by the cable lug manufacturer.
Connection in acc. with standard	IEC 60947-7-1
Cable lug connection according to standard	DIN 46234:1980-03
Min. cross section for cable lug connection	2.5 mm²
Max. cross section for cable lug connection	35 mm²
AWG min	14
AWG max	2
Hole diameter, min.	8.4 mm
Cable lug width, max.	16 mm
Bolt diameter	8 mm
Screw thread	M8
Tightening torque, min	4.5 Nm
Tightening torque max	5 Nm
Cable lug connection according to standard	DIN 46235:1983-07
Min. cross section for cable lug connection	16 mm²
Max. cross section for cable lug connection	25 mm²
Hole diameter, min.	8.4 mm
Cable lug width, max.	14 mm
Bolt diameter	8 mm
Screw thread	M8
Tightening torque, min	4.5 Nm
Tightening torque max	5 Nm
Cable lug connection according to standard	DIN 46237:1970-07
Min. cross section for cable lug connection	2.5 mm²
Max. cross section for cable lug connection	6 mm²

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Technical data

Connection data

Hole diameter, min.	8.4 mm
Cable lug width, max.	14 mm
Bolt diameter	8 mm

Standards and Regulations

Connection in acc. with standard	CUL
	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

Classifications

eCl@ss

eCl@ss 10.0.1	27141120
eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
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

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Classifications

ETIM

ETIM 6.0	EC000897
ETIM 7.0	EC000897

UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410
UNSPSC 18.0	39121410
UNSPSC 19.0	39121410
UNSPSC 20.0	39121410
UNSPSC 21.0	39121410

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	130 A	130 A

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Approvals

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	130 A	130 A

IECEE CB Scheme		http://www.iecee.org/	DE1-62814

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

Nominal voltage UN	1000 V
Nominal current IN	125 A
mm²/AWG/kcmil	2.5-35

EAC		EAC-Zulassung

EAC		RU C-DE.A*30.B.01742

cULus Recognized	

Accessories

Accessories

DIN rail

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Accessories

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733

DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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DIN rail perforated - NS 35/ 7,5 WH PERF 2000MM - 1204119

DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/ 7,5 WH UNPERF 2000MM - 1204122

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/ 7,5 AL UNPERF 2000MM - 0801704

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

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Accessories

DIN rail perforated - NS 35/ 7,5 ZN PERF 2000MM - 1206421

DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762

DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

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End cap - NS 35/ 7,5 CAP - 1206560

DIN rail end piece, for DIN rail NS 35/7.5

DIN rail perforated - NS 35/15 PERF 2000MM - 1201730

DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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Accessories

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714

DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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DIN rail perforated - NS 35/15 WH PERF 2000MM - 0806602

DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/15 WH UNPERF 2000MM - 1204135

DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756

DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

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DIN rail perforated - NS 35/15 ZN PERF 2000MM - 1206599

DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

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Accessories

DIN rail, unperforated - NS 35/15 ZN UNPERF 2000MM - 1206586

DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895

DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

End cap - NS 35/15 CAP - 1206573

DIN rail end piece, for DIN rail NS 35/15

DIN rail, unperforated - NS 35/15-2,3 UNPERF 2000MM - 1201798

DIN rail, unperforated, Standard profile 2.3 mm, width: 35 mm, height: 15 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

End block

End clamp - CLIPFIX 35 - 3022218

Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, width: 9.5 mm, color: gray

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Accessories

End clamp - CLIPFIX 35-5 - 3022276

Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, with parking option for FBS...5, FBS...6, KSS 5, KSS 6, width: 5.15 mm, color: gray

End clamp - E/NS 35 N - 0800886

End clamp, width: 9.5 mm, color: gray

End clamp - E/UK - 1201442

End clamp, width: 9.5 mm, height: 35.3 mm, material: PA, length: 50.5 mm, Mounting on a DIN rail NS 32 or NS 35, color: gray

End clamp - E/UK 1 - 1201413

End clamps, for supporting the ends of double-level and three-level terminal blocks, width: 10 mm, color: gray

End cover

End cover - D-RT 8 - 3049194

Cover, width: 2.2 mm, color: gray

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Accessories

Jumper

Plug-in bridge - FBS 2-10 - 3005947

Plug-in bridge, pitch: 10.2 mm, number of positions: 2, color: red

Plug-in bridge - FBS 5-10 - 3005948

Plug-in bridge, pitch: 10.2 mm, number of positions: 5, color: red

Plug-in bridge - FBS 5-10 BU - 1040620

Plug-in bridge, pitch: 10.2 mm, number of positions: 5, color: blue

Labeled terminal marker

Zack marker strip - ZB 16,3 CUS - 0824946

Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 16.3 mm, lettering field size: 10.5 x 16.25 mm, Number of individual labels: 5

Zack marker strip - ZB 20,3 CUS - 0824948

Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 20.3 mm, lettering field size: 10.5 x 20.25 mm, Number of individual labels: 5

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Accessories

Partition plate

Partition plate - TPN-UK - 3003062

Partition plate, length: 110 mm, width: 2 mm, height: 69 mm, color: gray

Protective cap

Path extension - BE-RT 8 - 3049916

Path extension, color: gray

Screwdriver tools

Screwdriver - SZS 1,0X4,0 VDE - 1205066

Screwdriver, slot-headed, VDE insulated, size: 1.0 x 4.0 x 100 mm, 2-component grip, with non-slip grip

Terminal marking

Zack marker strip - ZB 16,3:UNPRINTED - 0820222

Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 16.3 mm, lettering field size: 10.5 x 16.25 mm, Number of individual labels: 5

Bolt connection terminal block - RT 8 - 3049042

Accessories

Zack marker strip - ZB 20,3:UNPRINTED - 0820248

Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 20.3 mm, lettering field size: 10.5 x 20.25 mm, Number of individual labels: 5