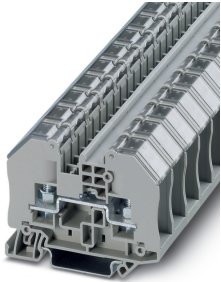


Feed-through terminal block - RTO 5-TC - 3049961

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Feed-through terminal block with bolt connection technology and transparent safety contact hood, cross section: 0.1 - 6 mm², AWG: 26 - 10, width 16.3 mm, color: gray

Your advantages

- ✓ Four bridge shafts per terminal block
- ✓ Easy bridging and potential distribution using the patented plug-in bridges from the CLIPLINE complete system
- ✓ The screws are secured against loosening by captive spring-loaded spacers
- ✓ Large-surface labeling options in the terminal center and above the terminal points
- ✓ Terminal point always freely accessible



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	 4 046356 431385
GTIN	4046356431385
Weight per Piece (excluding packing)	32.080 g
Custom tariff number	85369010
Country of origin	China

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

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Technical data

General

Potentials	1
Nominal cross section	6 mm ²
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	1.31 W
Maximum load current	41 A (with 6 mm ² conductor cross section)
Nominal current I _N	41 A
Nominal voltage U _N	1000 V
Open side panel	Yes
Shock protection test specification	IEC 60529:2001-02
Back of the hand protection	guaranteed
Finger protection	guaranteed
Result of surge voltage test	Test passed
Surge voltage test setpoint	9.6 kV
Note	The rated insulation voltage applies to insulated cable lugs acc. to DIN 46237:1970-07 and for uninsulated cable lugs acc. to DIN 46234:1980-03 with path extension.
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	2.2 kV
Note	The rated insulation voltage applies to insulated cable lugs acc. to DIN 46237:1970-07 and for uninsulated cable lugs acc. to DIN 46234:1980-03 with path extension.
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 32/NS 35
Result of voltage-drop test	Test passed
Requirements, voltage drop	$U_1 \leq 3.2 \text{ mV}; U_2 \leq 1.5 \times U_1$
Result of temperature-rise test	Test passed
Requirement temperature-rise test	Increase in temperature $\leq 45 \text{ K}$
Short circuit stability result	Test passed
Conductor cross section short circuit testing	6 mm ²
Short-time current	0.72 kA
Result of thermal test	Test passed

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Technical data

General

Proof of thermal characteristics (needle flame) effective duration	30 s
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2018-05
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 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.)
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
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	16.3 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

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

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Technical data

Connection data

Cable lug connection according to standard	DIN 46234:1980-03
Min. cross section for cable lug connection	0.5 mm ²
Max. cross section for cable lug connection	6 mm ²
AWG min	20
AWG max	10
Hole diameter, min.	5.3 mm
Cable lug width, max.	10 mm
Bolt diameter	5 mm
Screw thread	M5
Tightening torque, min	2.5 Nm
Tightening torque max	3 Nm
Cable lug connection according to standard	DIN 46237:1970-07
Min. cross section for cable lug connection	1 mm ²
Max. cross section for cable lug connection	6 mm ²
AWG min	16
AWG max	10
Hole diameter, min.	5.3 mm
Cable lug width, max.	10 mm
Bolt diameter	5 mm
Screw thread	M5
Tightening torque, min	2.5 Nm
Tightening torque max	3 Nm

Ambient conditions

Operating temperature	-60 °C ... 105 °C (max. short-term operating temperature 130°C)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Permissible humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C

Standards and Regulations

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

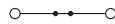
Environmental Product Compliance

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

Drawings

Feed-through terminal block - RTO 5-TC - 3049961

Circuit diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27141120
eCl@ss 11.0	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 9.0	27141120

ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
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

EAC / EAC

Feed-through terminal block - RTO 5-TC - 3049961

Approvals

Ex Approvals

Approval details

EAC		RU C- DE.A*30.B.01742
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EAC		RU C- DE.BL08.B.00540
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Accessories

Accessories

DIN rail

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

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

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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Accessories

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

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

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

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

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

Feed-through terminal block - RTO 5-TC - 3049961

Accessories

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

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

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

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

Feed-through terminal block - RTO 5-TC - 3049961

Accessories

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

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

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

Feed-through terminal block - RTO 5-TC - 3049961

Accessories

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

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

Feed-through terminal block - RTO 5-TC - 3049961

Accessories

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 3/5 - 3049097



End cover, length: 65 mm, width: 2.2 mm, height: 50.4 mm, color: gray

Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663

Insulating sleeve, color: white



Insulating sleeve - MPS-IH RD - 0201676

Insulating sleeve, color: red



Insulating sleeve - MPS-IH BU - 0201689

Insulating sleeve, color: blue



Feed-through terminal block - RTO 5-TC - 3049961

Accessories

Insulating sleeve - MPS-IH YE - 0201692

Insulating sleeve, color: yellow



Insulating sleeve - MPS-IH GN - 0201702

Insulating sleeve, color: green



Insulating sleeve - MPS-IH GY - 0201728

Insulating sleeve, color: gray



Insulating sleeve - MPS-IH BK - 0201731

Insulating sleeve, color: black



Jumper

Plug-in bridge - FBS 2-8 - 3030284



Plug-in bridge, pitch: 8.2 mm, width: 14.7 mm, number of positions: 2, color: red

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Accessories

Plug-in bridge - FBS 3-8 - 3030297



Plug-in bridge, pitch: 8.2 mm, width: 22.9 mm, number of positions: 3, color: red

Plug-in bridge - FBS 4-8 - 3030307



Plug-in bridge, pitch: 8.2 mm, width: 31.1 mm, number of positions: 4, color: red

Plug-in bridge - FBS 5-8 - 3030310



Plug-in bridge, pitch: 8.2 mm, width: 39.3 mm, number of positions: 5, color: red

Plug-in bridge - FBS 10-8 - 3030323



Plug-in bridge, pitch: 8.2 mm, width: 80.3 mm, number of positions: 10, color: red

Plug-in bridge - FBS 2-8 CT - 3033830



Plug-in bridge, pitch: 8.2 mm, width: 14.7 mm, number of positions: 2, color: orange

Feed-through terminal block - RTO 5-TC - 3049961

Accessories

Plug-in bridge - FBS 3-8 CT - 3033831



Plug-in bridge, pitch: 8.2 mm, width: 22.9 mm, number of positions: 3, color: orange

Plug-in bridge - FBS 4-8 CT - 3033832



Plug-in bridge, pitch: 8.2 mm, width: 31.1 mm, number of positions: 4, color: orange

Plug-in bridge - FBS 10-8 CT - 3033833



Plug-in bridge, pitch: 8.2 mm, width: 80.3 mm, number of positions: 10, color: orange

Plug-in bridge - FBS 2-8 BU - 3032567



Plug-in bridge, pitch: 8.2 mm, width: 14.7 mm, number of positions: 2, color: blue

Plug-in bridge - FBS 3-8 BU - 3032570



Plug-in bridge, pitch: 8.2 mm, width: 22.9 mm, number of positions: 3, color: blue

Feed-through terminal block - RTO 5-TC - 3049961

Accessories

Plug-in bridge - FBS 4-8 BU - 3032583



Plug-in bridge, pitch: 8.2 mm, width: 31.1 mm, number of positions: 4, color: blue

Plug-in bridge - FBS 5-8 BU - 3032596



Plug-in bridge, pitch: 8.2 mm, width: 39.3 mm, number of positions: 5, color: blue

Plug-in bridge - FBS 6-8 BU - 3032677



Plug-in bridge, pitch: 8.2 mm, width: 47.5 mm, number of positions: 6, color: blue

Plug-in bridge - FBS 10-8 BU - 3032606



Plug-in bridge, pitch: 8.2 mm, width: 80.3 mm, number of positions: 10, color: blue

Labeled terminal marker

Zack marker strip - ZB 16 CUS - 0827463



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 mm, lettering field size: 10.5 x 16 mm, Number of individual labels: 5

Feed-through terminal block - RTO 5-TC - 3049961

Accessories

Zack marker strip - ZB 16,LGS:L1-N,PE - 0827462



Zack marker strip, Strip, white, labeled, printed horizontally: L1, L2, L3, N, PE, 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

Marker for terminal blocks - UC-TM 16 CUS - 0824621



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 16 mm, lettering field size: 15.45 x 10.5 mm, Number of individual labels: 32

Marker for terminal blocks - UCT-TM 16 CUS - 0829637



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 16 mm, lettering field size: 14.8 x 9.6 mm, Number of individual labels: 18

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

Partition plate

Partition plate - TPNS-UK - 0706647



Partition plate, length: 80 mm, width: 2 mm, height: 70 mm, color: gray

Feed-through terminal block - RTO 5-TC - 3049961

Accessories

Spacer plate - DP PS-8 - 3036741



Spacer plate, length: 22.4 mm, width: 8.2 mm, height: 29 mm, number of positions: 1, color: red

Protective cap

Path extension - BE-RT 3/5 - 3049819



Path extension, color: gray

Short-circuit connector

Short-circuit connector - FBSRH 2-8 - 3033802



Short-circuit connector, pitch: 8.2 mm, width: 14.7 mm, number of positions: 2, color: red

Short-circuit connector - FBSRH 3-8 - 3033803



Short-circuit connector, pitch: 8.2 mm, width: 22.9 mm, number of positions: 3, color: red

Short-circuit connector - FBSRH 4-8 - 3033804



Short-circuit connector, pitch: 8.2 mm, width: 31.1 mm, number of positions: 4, color: red

Feed-through terminal block - RTO 5-TC - 3049961

Accessories

Socket spanner

Tool - SHN 8 - 1209868



Socket wrench, wrench size 8 mm

Terminal marking

Zack marker strip - ZB 16:UNPRINTED - 0827461



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 mm, lettering field size: 16 x 10.5 mm, Number of individual labels: 50

Marker for terminal blocks - UC-TM 16 - 0819217



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 16 mm, lettering field size: 15.45 x 10.5 mm, Number of individual labels: 32

Marker for terminal blocks - UCT-TM 16 - 0829146



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into tall marker groove, for terminal block width: 16 mm, lettering field size: 14.8 x 9.6 mm, Number of individual labels: 18

Feed-through terminal block - RTO 5-TC - 3049961

Accessories

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

Test plug terminal block

Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm² conductor cross section, color: gray

Test plugs - PS-8 - 3031005



Test plugs, Modular test plug, color: red

Test plugs - PS-8/2,3MM RD - 3048564



Test plugs, color: red

Test socket

Test adapter - PAI-4-N GY - 3032871



4 mm test adapter, for terminal blocks with 5.2 mm, 6.2 mm and 8.2 mm pitch

Feed-through terminal block - RTO 5-TC - 3049961

Accessories

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