

High-current terminal block - UKH 150 - 3010110

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High-current terminal block, nom. voltage: 1000 V, nominal current: 309 A, connection method: Screw connection, number of connections: 2, cross section: 35 mm² - 150 mm², AWG: 2 - 300 kcmil, width: 31 mm, height: 107.3 mm, color: gray, mounting type: NS 35/15, NS 32

Your advantages

- ✓ Reliable cable connection is ensured by three-point centering of the conductor in the prismatic sleeve base
- ✓ Low contact resistance of the contact surface due to ribbing
- ✓ Screw locking by means of spring-loaded elements in the clamping part



Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 091842
GTIN	4017918091842
Weight per Piece (excluding packing)	370.000 g
Custom tariff number	85369010
Country of origin	India

Technical data

General

Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	150 mm ²
Color	gray
Insulating material	PA

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Technical data

General

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	9.55 W
Maximum load current	309 A (with 150 mm ² conductor cross section)
Nominal current I _N	309 A
Nominal voltage U _N	1000 V
Open side panel	No
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand 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
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	35 mm ² / 6.8 kg
	50 mm ² / 9.5 kg
	150 mm ² / 15 kg
Tensile test result	Test passed
Conductor cross section tensile test	35 mm ²
Tractive force setpoint	190 N
Conductor cross section tensile test	50 mm ²
Tractive force setpoint	472 N
Conductor cross section tensile test	150 mm ²
Tractive force setpoint	427 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 32/NS 35
Setpoint	15 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

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General

Conductor cross section short circuit testing	150 mm ²
Short-time current	18 kA
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
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	31 mm
Length	100 mm
Height	107.3 mm
Height NS 35/15	118.5 mm
Height NS 32	116 mm

Connection data

Note	Screws with hexagonal socket
Connection method	Screw connection
Connection in acc. with standard	IEC 60947-7-1
Note	Note: Product releases, connection cross sections and notes on connecting aluminum cables can be found in the download area.
Conductor cross section solid min.	35 mm ²
Conductor cross section solid max.	150 mm ²
Conductor cross section AWG min.	2
Conductor cross section AWG max.	300 kcmil
Conductor cross section flexible min.	50 mm ²

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Connection data

Conductor cross section flexible max.	150 mm ²
Min. AWG conductor cross section, flexible	1/0
Max. AWG conductor cross section, flexible	300 kcmil
Conductor cross section flexible, with ferrule without plastic sleeve min.	50 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve max.	150 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve min.	50 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve max.	150 mm ²
Cross section with insertion bridge, solid max.	150 mm ²
Cross section with insertion bridge, stranded max.	120 mm ²
2 conductors with same cross section, solid min.	25 mm ²
2 conductors with same cross section, solid max.	50 mm ²
2 conductors with same cross section, stranded min.	35 mm ²
2 conductors with same cross section, stranded max.	50 mm ²
2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	25 mm ²
2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	50 mm ²
Connection in acc. with standard	IEC/EN 60079-7
Conductor cross section solid min.	35 mm ²
Conductor cross section solid max.	150 mm ²
Conductor cross section AWG min.	2
Conductor cross section AWG max.	300
Conductor cross section flexible min.	50 mm ²
Conductor cross section flexible max.	150 mm ²
Stripping length	40 mm
Internal cylindrical gage	B14
Screw thread	M10
Tightening torque, min	25 Nm
Tightening torque max	30 Nm

Standards and Regulations

Connection in acc. with standard	CSA
	IEC 60947-7-1
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

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Technical data

Environmental Product Compliance

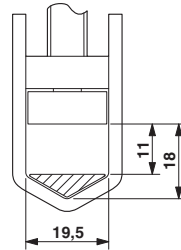
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

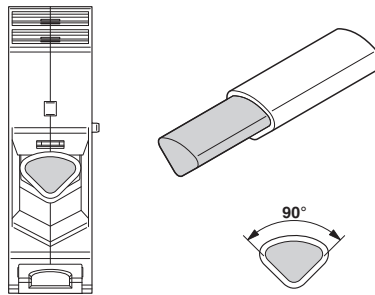
Circuit diagram



Dimensional drawing



Schematic diagram



Connecting aluminum cables. Further notes can be found in the download area

Classifications

eCl@ss

eCl@ss 4.0	27141120
eCl@ss 4.1	27141120
eCl@ss 5.0	27141120
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

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Classifications

ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 5.0	EC000897
ETIM 6.0	EC000897

UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410

Approvals

Approvals

Approvals

DNV GL / PRS / CSA / PRS / UL Recognized / EAC

Ex Approvals

IECEX / ATEX / UL Recognized / cUL Recognized / EAC Ex / cULus Recognized

Approval details

DNV GL		http://exchange.dnv.com/tari/	TAE00001CT
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PRS		http://www.prs.pl/	TE/2156/880590/17
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Approvals

CSA		http://www.csagroup.org/services-industries/product-listing/	13631
		B	C
Nominal voltage UN		600 V	600 V
Nominal current IN		275 A	275 A
mm ² /AWG/kcmil		2-300	2-300

PRS		http://www.prs.pl/	TE/1824/880590/09
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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		285 A	285 A
mm ² /AWG/kcmil		2-300	2-300

EAC			RU C- DE.AI30.B.01102
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Accessories

Accessories

DIN rail

DIN rail perforated - NS 32 PERF 2000MM - 1201002



DIN rail perforated, G profile, width: 32 mm, height: 15 mm, acc. 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 32 UNPERF 2000MM - 1201015



DIN rail, unperforated, G profile, width: 32 mm, height: 15 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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

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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

End block

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Accessories

End clamp - E/AL-NS 32 - 1201659



End clamp, for end support of UKH 50 - UKH 240, is pushed onto DIN rail NS 32 and fixed with 2 screws, width: 10 mm, color: Aluminum

End clamp - E/AL-NS 35 - 1201662



End clamp, for end support of UKH 50 to UKH 240, is pushed onto DIN rail NS 35 and fixed with 2 screws, width: 10 mm, color: aluminum

Insertion bridge

Insertion bridge - EB 3-31/UKH - 0201391



Insertion bridge, pitch: 31 mm, number of positions: 3, color: gray

Insertion bridge - EB 2-31/UKH - 0201388



Insertion bridge, pitch: 31 mm, number of positions: 2, color: gray

Labeled terminal marker

Warning label - WS-2K - 1004513



Adhesive warning plate, self-adhesive, black print: lightning flash with mixed version - "Vorsicht Spannung - Attention Danger" size of label: 32 x 26 mm

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Accessories

Zack marker strip - ZB 22 CUS - 0824949



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 22 mm, lettering field size: 10.5 x 21.8 mm

Zack marker strip - ZB 22,LGS:L1-N,PE - 0811875



Zack marker strip, Strip, white, labeled, printed horizontally: L1, L2, L3, N, PE, mounting type: snap into tall marker groove, for terminal block width: 22 mm, lettering field size: 10.5 x 21.8 mm

Zack marker strip - ZB 25 CUS - 0802752



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 25 mm, lettering field size: 25 x 10 mm

Marker for terminal blocks - TMT 10 R CUS - 0824500



Marker for terminal blocks, can be ordered: by line, white, labeled according to customer specifications, mounting type: snap into universal marker groove, snap into flat marker groove, for terminal block width: 10.2 mm, lettering field size: 6.35 x 10.15 mm

Mounting material

Insertion profile - UKH 150/240 EP - 3009244



Insertion profile, color: silver

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Accessories

Pick-off terminal block

Pick-off terminal block - AGK 10-UKH 150/240 - 3003554



Pick-off terminal block, nom. voltage: 1000 V, nominal current: 57 A, connection method: Screw connection, number of connections: 1, cross section: 0.5 mm² - 10 mm², AWG: 20 - 8, width: 10.2 mm, height: 34.7 mm, color: gray, mounting type: on base element

Socket spanner

Screwdriver - SF-THEX 8-200 - 1212643



T-handle screwdriver, for Allen screws, hexagonal (with chamfer), size: hex 8 x 200 mm, ergonomically shaped handle, matt chrome-plated

Terminal marking

Zack marker strip - ZB 22:UNBEDRUCKT - 0811862



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: 22 mm, lettering field size: 10.5 x 21.8 mm

Zack marker strip - ZB 25:UNPRINTED - 0802751



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Marker pen, mounting type: snap into tall marker groove, for terminal block width: 25 mm, lettering field size: 25 x 10 mm

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Accessories

Marker for terminal blocks - TMT 10 R - 0816210



Marker for terminal blocks, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK S1.1, perforated, mounting type: snap into universal marker groove, snap into flat marker groove, for terminal block width: 10.2 mm, lettering field size: 6.35 x 10.15 mm