

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



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
- Screw locking by means of spring-loaded elements in the clamping part
- Low contact resistance of the contact surface due to ribbing



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	China

Technical data

General

Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	150 mm²
Color	gray
Insulating material	PA



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 mm² conductor cross section)
Nominal current I _N	309 A
Nominal voltage U _N	1000 V
Open side panel	No
Ambient temperature (operation)	-60 °C 105 °C (max. short-term operating temperature 125°C)
Ambient temperature (storage/transport)	-25 °C 60 °C (for a short time, not exceeding 24h, -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
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
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 bending test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Tensile test result	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
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
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
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03



Technical data

General

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 (m/s²)²/Hz
Acceleration	3.12 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock form	Semi-sinusoidal
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	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
Screw thread	M10
Stripping length	40 mm
Tightening torque, min	25 Nm
Tightening torque max	30 Nm
Connection in acc. with standard	IEC60947-7-1



Technical data

Connection data

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 mm²
Conductor cross section AWG min.	2
Conductor cross section AWG max.	300 kcmil
Conductor cross section flexible min.	50 mm ²
Conductor cross section flexible max.	150 mm²
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 mm²
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 mm²
2 conductors with same cross section, solid min.	25 mm²
2 conductors with same cross section, solid max.	50 mm ²
2 conductors with same cross section, stranded min.	35 mm²
2 conductors with same cross section, stranded max.	50 mm ²
Two conductors with the same cross section stranded, with ferrule and without plastic sleeve, minimum	25 mm²
Two conductors with the same cross section stranded, with ferrule and without plastic sleeve, maximum	50 mm ²
Connection in acc. with standard	IEC/EN60079-7
Conductor cross section solid min.	35 mm²
Conductor cross section solid max.	150 mm²
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
Internal cylindrical gage	B14

Standards and Regulations

Connection in acc. with standard	CSA
	IEC60947-7-1
	IEC/EN60079-7
Flammability rating according to UL 94	V0



Technical data

Environmental Product Compliance

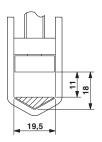
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

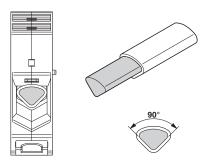
Circuit diagram



Dimensional drawing



Schematic diagram



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

Classifications

eCl@ss

eCl@ss 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 8.0	27141120
eCl@ss 9.0	27141120



Classifications

ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 5.0	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

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

Ex Approvals

 ${\sf IECEx\,/\,ATEX\,/\,UL\,\,Recognized\,/\,\,cUL\,\,Recognized\,/\,\,EAC\,\,Ex\,/\,\,cULus\,\,Recognized}$

Approval details

DNV GL https://approvalfinder.dnvgl.com/ TAE00001CT



Approvals

CSA (P	http://www.csagroup.org/services-indus	stries/product-listing/ 13631
	В	С
Nominal voltage UN	600 V	600 V
Nominal current IN	275 A	275 A
mm²/AWG/kcmil	2-300	2-300

PRS	San Andrews	http://www.prs.pl/	TE/2156/880590/17
-----	-------------	--------------------	-------------------

UL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 60425	
	В	С
Nominal voltage UN	600 V	600 V
Nominal current IN	285 A	285 A
mm²/AWG/kcmil	2-300	2-300

EAC	ERC	RU C- DE.Al30.B.01102
-----	-----	--------------------------

RS (S)	http://www.rs-head.spb.ru/en/index.php	17.00013.272
--------	--	--------------

FAC	COL	RU C-
EAC	t H I	DE.BL08.B.00534

Accessories

Accessories

DIN rail



Accessories

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

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



Accessories

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

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



Accessories

End cap - NS 35/15 CAP - 1206573



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

End block

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



Accessories

Labeled terminal marker

Warning label - WS-2K - 1004513



Adhesive warning plate, self-adhesive, black print: lightning flash with mixed verson - "Vorsicht Spannung - Attention Danger" size of label: $32 \times 26 \text{ mm}$

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, Number of individual labels: 4

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, Number of individual labels: 4

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, Number of individual labels: 4

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



Accessories

Mounting material

Insertion profile - UKH 150/240 EP - 3009244



Insertion profile, color: silver

Pick-off terminal block

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



Pick-off terminal block, Can only be used in conjunction with UKH 150/240, 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, Number of individual labels: 4



Accessories

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, Number of individual labels: 4

Marker for terminal blocks - TMT 10 R - 0816210



Marker for terminal blocks, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, 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, Number of individual labels: 10000

Phoenix Contact 2021 © - all rights reserved http://www.phoenixcontact.com