

3247055

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High-current terminal block, nom. voltage: 1000 V, nominal current: 309 A, number of connections: 2, connection method: Screw connection, Rated cross section: 150 mm², cross section: 35 mm² - 150 mm², mounting type: NS 35/15, NS 32, color: black/yellow

### Your advantages

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

### Commercial data

Item number	3247055
Packing unit	1 pc
Minimum order quantity	3 pc
Sales key	BE13
Product key	BE1311
GTIN	4046356707213
Weight per piece (including packing)	378.6 g
Weight per piece (excluding packing)	349.53 g
Customs tariff number	85369010
Country of origin	IN



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### Technical data

### Product properties

Product type	High current terminal block
Number of connections	2
Number of rows	1
Potentials	1
Insulation characteristics	
Overvoltage category	III
Degree of pollution	3

### Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	9.55 W

### Connection data

Number of connections per level	2
Nominal cross section	150 mm²
Screw thread	M10
Note	Screws with hexagonal socket
Tightening torque	25 30 Nm
Stripping length	40 mm
Internal cylindrical gage	B14
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	35 mm² 150 mm²
Cross section AWG	1/0 250 kcmil (converted acc. to IEC)
Conductor cross section flexible	50 mm² 150 mm²
Conductor cross section, flexible [AWG]	1/0 250 kcmil (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	50 mm² 150 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	50 mm² 150 mm²
Cross-section with insertion bridge, rigid	150 mm²
Cross-section with insertion bridge, flexible	120 mm²
2 conductors with same cross section, solid	25 mm² 50 mm²
2 conductors with same cross section, flexible	35 mm² 50 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	25 mm² 50 mm²
Nominal current	309 A
Maximum load current	309 A (with 150 mm² conductor cross section)
Nominal voltage	1000 V
Note	Note: Product releases, connection cross sections and notes on connecting aluminum cables can be found in the download area.
Nominal cross section	150 mm²

### Ex data



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### Rated data (ATEX/IECEx)

Identification	
Operating temperature range	-60 °C 110 °C
Ex-certified accessories	1201947 VDE-ISS 8
	1201659 E/AL-NS 32
	1201662 E/AL-NS 35
List of bridges	Insertion bridge / EB 2-31/UKH / 0201388
	Insertion bridge / EB 3-31/UKH / 0201391
Bridge data	195.5 A / 150 mm²
Ex temperature increase	40 K (281.5 A / 150 mm²)
Rated voltage	1100 V
at bridging with insertion bridge	880 V
Rated insulation voltage	1000 V
output	(Permanent)

### Ex level General

Rated current	256 A
Maximum load current	256 A
Contact resistance	0.06 mΩ

### Ex connection data General

Torque range	25 Nm 30 Nm
Nominal cross section	150 mm²
Rated cross section AWG	300 kcmil
Connection capacity rigid	35 mm² 150 mm²
Connection capacity AWG	2 300 kcmil
Connection capacity flexible	50 mm² 150 mm²
Connection capacity AWG	1/0 300 kcmil
2 conductors with same cross section, solid	25 mm² 50 mm²
2 conductors with the same cross-section AWG rigid	4 1/0
2 conductors with same cross section, stranded	35 mm² 50 mm²
2 conductors with the same cross-section AWG flexible	2 1/0

### Dimensions

Width	31 mm
Height	100 mm
Depth	107.3 mm
Depth on NS 32	116 mm
Depth on NS 35/15	118.5 mm

### Material specifications

Color	black/yellow
Flammability rating according to UL 94	V0
Insulating material group	1
Insulating material	PA



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Static insulating material application in cold	-60 °C
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
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
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

### Electrical tests

### Surge voltage test

Result	Test passed
Temperature-rise test	
Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 150 mm²	18 kA
Result	Test passed
Power-frequency withstand voltage	
Test voltage setpoint	2.2 kV
Result	Test passed

### Mechanical properties

Mechanical	data

Open side panel	No

Test passed

50 mm<sup>2</sup> / 9.5 kg 150 mm<sup>2</sup> / 15 kg

Test passed

### Mechanical tests

Result

Result

### Mechanical strength

Attachment on the carrier		
DIN rail/fixing support	NS 32/NS 35	
Result	Test passed	
Test for conductor damage and slackening		
Rotation speed	10 (+/- 2) rpm	
Revolutions	135	
Conductor cross section/weight	35 mm² / 6.8 kg	

### Environmental and real-life conditions



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Time of exposure	30 s
Result	Test passed
Oscillation/broadband noise	
Specification	DIN EN 50155 (VDE 0115-200):2018-05
Spectrum	Service life test category 2, bogie-mounted
Frequency	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz
ASD level	6.12 (m/s²)²/Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed
Shocks	
Specification	DIN EN 50155 (VDE 0115-200):2018-05
Pulse shape	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed
ambient conditions	
Ambient temperature (storage/transport)	-25 °C 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C 70 °C
Ambient temperature (actuation)	-5 °C 70 °C
Permissible humidity (storage/transport)	30 % 70 %
andards and regulations	
Connection in acc. with standard	IEC 60947-7-1
unting	
Mounting type	NS 35/15
	NS 32



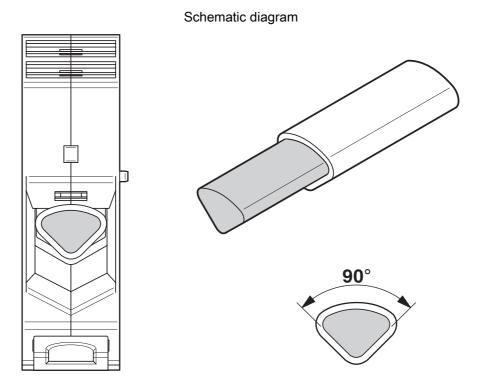
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### Drawings

Circuit diagram





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



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### **Approvals**

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/3247055



EAC

Approval ID: RU C-DE.BL08.B.00534

CULus Recognized Approval ID: E60425				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	600 V	285 A	2 - 300	-
Multi-conductor connection	600 V	285 A	4 - 1/0	-
Use group C				
	600 V	285 A	2 - 300	-
Multi-conductor connection	600 V	285 A	4 - 1/0	-



**ATEX** 

Approval ID: KEMA99ATEX8332U



**EAC Ex** 

Approval ID: RU C-DE.HA91.B.00066



**IECEx** 

Approval ID: IECEx KEM 06.0030U



CCC

Approval ID: 2020322313000623



**UKCA-EX** 

Approval ID: DEKRA 21UKEX0309U



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### Classifications

### **ECLASS**

	ECLASS-11.0	27141120
	ECLASS-13.0	27250101
ETIM		
LIIW		
	ETIM 9.0	EC000897
UNSPSC		
	UNSPSC 21.0	39121400

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### Environmental product compliance

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



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### Accessories



Note: Applying some accessories below might limit this product.

### EB 3-31/UKH - Insertion bridge

0201391

https://www.phoenixcontact.com/us/products/0201391



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

Max. current carrying capacity: 232 A

### EB 2-31/UKH - Insertion bridge

0201388

https://www.phoenixcontact.com/us/products/0201388



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

Max. current carrying capacity: 232 A



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### NS 32 PERF 2000MM-VPE 10 - DIN rail perforated

1201002

https://www.phoenixcontact.com/us/products/1201002



DIN rail perforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, G profile, color: silver

### NS 32 UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201015

https://www.phoenixcontact.com/us/products/1201015



DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, G profile, color: silver



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

1201730

https://www.phoenixcontact.com/us/products/1201730

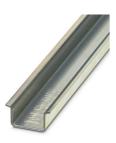


DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

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

1201714

https://www.phoenixcontact.com/us/products/1201714



DIN rail, unperforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver



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

0806602

https://www.phoenixcontact.com/us/products/0806602



DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: white

### NS 35/15 WH UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1204135

https://www.phoenixcontact.com/us/products/1204135



DIN rail, unperforated, Pack of 10 (20 m), similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver



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

1201756

https://www.phoenixcontact.com/us/products/1201756



DIN rail, unperforated, similar to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver

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

1206599

https://www.phoenixcontact.com/us/products/1206599



DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, Standard profile, color: silver



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

1206586

https://www.phoenixcontact.com/us/products/1206586



DIN rail, unperforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, Standard profile, color: silver

### NS 35/15 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201895

https://www.phoenixcontact.com/us/products/1201895



DIN rail, unperforated, Pack of 10 (20 m), similar to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored



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### NS 35/15 CAP - End cap

1206573

https://www.phoenixcontact.com/us/products/1206573

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



### ZB 22:UNBEDRUCKT - Zack marker strip

0811862

https://www.phoenixcontact.com/us/products/0811862



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 22 mm, lettering field size: 10.5 x 21.8 mm, Number of individual labels: 4



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### ZB 22 CUS - Zack marker strip

#### 0824949

https://www.phoenixcontact.com/us/products/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

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

#### 0811875

https://www.phoenixcontact.com/us/products/0811875



Zack marker strip, Strip, white, labeled, printed horizontally: L1, L2, L3, N, PE, mounting type: snapped, for terminal block width: 22 mm, lettering field size: 10. 5 x 21.8 mm, Number of individual labels: 50



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#### TMT 10 R - Marker for terminal blocks

0816210

https://www.phoenixcontact.com/us/products/0816210



Marker for terminal blocks, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLL MASTER 300/600, THERMOMARK X1.2, THERMOMARK S1.1, perforated, mounting type: snapped, 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

#### TMT 10 R CUS - Marker for terminal blocks

0824500

https://www.phoenixcontact.com/us/products/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.  $35 \times 10.15$  mm



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### E/AL-NS 32 - End bracket

1201659

https://www.phoenixcontact.com/us/products/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  $^{\circ}$ 

### E/AL-NS 35 - End bracket

1201662

https://www.phoenixcontact.com/us/products/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



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WS-2K - Warning label

1004513

https://www.phoenixcontact.com/us/products/1004513

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



### UKH 150/240 EP - Insertion profile

3009244

https://www.phoenixcontact.com/us/products/3009244

Insertion profile, color: silver





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

3003554

https://www.phoenixcontact.com/us/products/3003554



Pick-off terminal block, nom. voltage: 1000 V, nominal current: 57 A, number of connections: 1, connection method: Screw connection, Rated cross section: 10 mm², cross section: 0.5 mm² - 10 mm², mounting type: on base element, color: gray

### WS-4K - Warning label

1004584

https://www.phoenixcontact.com/us/products/1004584

Adhesive warning plate, self-adhesive, black print: lightning flash with mixed verson - "Vorsicht Spannung - Attention Danger" size of label: 13 x 23.5 mm





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### SF-THEX 8-200 - Screwdriver

1212643

https://www.phoenixcontact.com/us/products/1212643



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

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