

1086475

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High-current terminal block, nom. voltage: 1000 V, nominal current: 220 A, number of connections: 2, number of positions: 1, connection method: Screw connection, Rated cross section: 95 mm<sup>2</sup>, cross section: 16 mm<sup>2</sup> - 95 mm<sup>2</sup>, Rated cross section: 95 mm<sup>2</sup>, cross section: 16 mm<sup>2</sup> - 95 mm<sup>2</sup>, mounting type: NS 35/15, NS 35/7,5, color: gray

### Your advantages

- · Maintenance-free terminal points that are greased beforehand simplify the connection of aluminum conductors
- · Tailor-made screw connection for multi-stranded aluminum conductors and copper wires
- · Extremely robust housing made from fiberglass-reinforced polyamide with V0 approval
- · The special design of the UBAL enables the simultaneous connection of aluminum and copper conductors in various connections

#### Commercial data

Item number	1086475
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	BE13
Product key	BE1311
GTIN	4055626875682
Weight per piece (including packing)	97.27 g
Weight per piece (excluding packing)	97.07 g
Customs tariff number	85369010
Country of origin	EE



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### Technical data

#### Notes

General	Terminal block for aluminum and copper conductors (AL-CU)
General	
Note	We recommend using ferrules when using flexible donductor.

### Product properties

Product type	Feed-through terminal block
Product family	UBAL
Number of positions	1
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	7.54 W

### Connection data

Nominal cross section	95 mm²
uminum conductor	
Connection method	Screw connection
Screw thread	M14
Note	Screws with hexagonal socket
	The following values apply to aluminum conductors
	The values for aluminum conductors relate to rigid and multi- stranded conductors in accordance with EN 60228. Application notes on connecting aluminum conductors can be found in the download area.
Tightening torque	20 Nm
Stripping length	27 mm
Connection in acc. with standard	IEC 61238-1
Conductor cross-section rigid	16 mm² 95 mm²
Cross section AWG	4 4/0 (converted acc. to IEC)
Nominal current	220 A
Maximum load current	220 A (with 95 mm <sup>2</sup> conductor cross-section – test current in accordance with IEC 61238-1)
Nominal voltage	1000 V
Nominal cross section	95 mm²



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#### Copper conductor

•••	
Note	The following values apply to copper wires
	Flexible conductors, class 5, in accordance with EN 60228.
Tightening torque	20 Nm
Stripping length	27 mm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	16 mm² 95 mm²
Cross section AWG	4 4/0 (converted acc. to IEC)
Conductor cross-section flexible	50 mm² 70 mm²
Conductor cross-section flexible (ferrule without plastic sleeve)	16 mm² 70 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	16 mm² 70 mm²
2 conductors with same cross section, flexible	16 mm² 35 mm²
Nominal current	232 A
Maximum load current	232 A (with 95 mm² conductor cross-section)
Nominal voltage	1000 V
Nominal cross section	95 mm²

#### **Dimensions**

Width	25.1 mm
Height	93.6 mm
Depth	58 mm
Depth on NS 35/7,5	58 mm
Depth on NS 35/15	65.5 mm
Hole diameter	2.75 mm

### Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0
Insulating material group	II
Insulating material	PA
Relative insulation material temperature index (Elec., UL 746 B)	400 °C

### Electrical tests

### Surge voltage test

Test voltage setpoint	8 kV
Result	Test passed

#### Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 95 mm²	11.4 kA
Result	Test passed

### Power-frequency withstand voltage



1086475

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Test voltage setpoint	2.2 kV
Result	Test passed
chanical properties	
manical properties	
echanical data	
Open side panel	No
chanical tests	
echanical strength	
Result	Test passed
tachment on the carrier	
DIN rail/fixing support	NS 35
Test force setpoint	15 N
Result	Test passed
not for conductor domage and classics	
est for conductor damage and slackening	10 rpm
Revolutions	10 rpm 135
	135
	16 mm² / 2 0 kg
Conductor cross-section/weight	16 mm² / 2.9 kg
	16 mm² / 2.9 kg 95 mm²/14 kg Test passed
Conductor cross-section/weight  Result  ironmental and real-life conditions  eedle-flame test	95 mm²/14 kg Test passed
Conductor cross-section/weight  Result  ironmental and real-life conditions  eedle-flame test  Time of exposure	95 mm²/14 kg Test passed  10 s
Conductor cross-section/weight  Result  ironmental and real-life conditions  eedle-flame test	95 mm²/14 kg Test passed
Conductor cross-section/weight  Result  ironmental and real-life conditions  eedle-flame test  Time of exposure	95 mm²/14 kg Test passed  10 s
Conductor cross-section/weight  Result  ironmental and real-life conditions  eedle-flame test  Time of exposure  Result	95 mm²/14 kg Test passed  10 s
Conductor cross-section/weight  Result  ironmental and real-life conditions  eedle-flame test  Time of exposure  Result  scillation/broadband noise	95 mm²/14 kg  Test passed  10 s  Test passed  DIN EN 50155 (VDE 0115-200):2018-05  Long life test category 2, bogie-mounted
Conductor cross-section/weight  Result  ironmental and real-life conditions  eedle-flame test  Time of exposure  Result  scillation/broadband noise  Specification  Spectrum  Frequency	95 mm²/14 kg  Test passed  10 s  Test passed  DIN EN 50155 (VDE 0115-200):2018-05  Long life test category 2, bogie-mounted $f_1 = 5$ Hz to $f_2 = 250$ Hz
Conductor cross-section/weight  Result  ironmental and real-life conditions  eedle-flame test  Time of exposure  Result  scillation/broadband noise  Specification  Spectrum  Frequency  ASD level	95 mm²/14 kg  Test passed  10 s  Test passed  DIN EN 50155 (VDE 0115-200):2018-05  Long life test category 2, bogie-mounted $f_1 = 5$ Hz to $f_2 = 250$ Hz $6.12 \text{ (m/s²)²/Hz}$
Conductor cross-section/weight  Result  ironmental and real-life conditions  eedle-flame test  Time of exposure  Result  scillation/broadband noise  Specification  Spectrum  Frequency  ASD level  Acceleration	95 mm²/14 kg  Test passed  10 s  Test passed  DIN EN 50155 (VDE 0115-200):2018-05  Long life test category 2, bogie-mounted $f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$ 6.12 (m/s²)²/Hz 3.12g
Conductor cross-section/weight  Result  ironmental and real-life conditions  eedle-flame test  Time of exposure  Result  scillation/broadband noise  Specification  Spectrum  Frequency  ASD level  Acceleration  Test duration per axis	95 mm²/14 kg  Test passed  10 s  Test passed  DIN EN 50155 (VDE 0115-200):2018-05  Long life test category 2, bogie-mounted $f_1 = 5$ Hz to $f_2 = 250$ Hz  6.12 (m/s²)²/Hz  3.12g  5 h
Conductor cross-section/weight  Result  ironmental and real-life conditions  eedle-flame test  Time of exposure  Result  scillation/broadband noise  Specification  Spectrum  Frequency  ASD level  Acceleration  Test duration per axis  Test directions	95 mm²/14 kg  Test passed  10 s  Test passed  DIN EN 50155 (VDE 0115-200):2018-05  Long life test category 2, bogie-mounted $f_1 = 5$ Hz to $f_2 = 250$ Hz  6.12 (m/s²)²/Hz  3.12g  5 h  X-, Y- and Z-axis
Conductor cross-section/weight  Result  ironmental and real-life conditions  eedle-flame test  Time of exposure  Result  scillation/broadband noise  Specification  Spectrum  Frequency  ASD level  Acceleration  Test duration per axis	95 mm²/14 kg  Test passed  10 s  Test passed  DIN EN 50155 (VDE 0115-200):2018-05  Long life test category 2, bogie-mounted $f_1 = 5$ Hz to $f_2 = 250$ Hz  6.12 (m/s²)²/Hz  3.12g  5 h
Conductor cross-section/weight  Result  ironmental and real-life conditions  eedle-flame test  Time of exposure  Result  scillation/broadband noise  Specification  Spectrum  Frequency  ASD level  Acceleration  Test duration per axis  Test directions	95 mm²/14 kg  Test passed  10 s  Test passed  DIN EN 50155 (VDE 0115-200):2018-05  Long life test category 2, bogie-mounted $f_1 = 5$ Hz to $f_2 = 250$ Hz  6.12 (m/s²)²/Hz  3.12g  5 h  X-, Y- and Z-axis
Conductor cross-section/weight  Result  ironmental and real-life conditions  eedle-flame test  Time of exposure  Result  scillation/broadband noise  Specification  Spectrum  Frequency  ASD level  Acceleration  Test duration per axis  Test directions  Result	95 mm²/14 kg  Test passed  10 s  Test passed  DIN EN 50155 (VDE 0115-200):2018-05  Long life test category 2, bogie-mounted $f_1 = 5$ Hz to $f_2 = 250$ Hz  6.12 (m/s²)²/Hz  3.12g  5 h  X-, Y- and Z-axis
Conductor cross-section/weight  Result  ironmental and real-life conditions  eedle-flame test  Time of exposure  Result  scillation/broadband noise  Specification  Spectrum  Frequency  ASD level  Acceleration  Test duration per axis  Test directions  Result  nocks	95 mm²/14 kg  Test passed  10 s  Test passed  DIN EN 50155 (VDE 0115-200):2018-05  Long life test category 2, bogie-mounted $f_1 = 5$ Hz to $f_2 = 250$ Hz  6.12 (m/s²)²/Hz  3.12g  5 h  X-, Y- and Z-axis  Test passed
Result  ironmental and real-life conditions  eedle-flame test  Time of exposure  Result  scillation/broadband noise  Specification  Spectrum  Frequency  ASD level  Acceleration  Test duration per axis  Test directions  Result  nocks  Pulse shape	95 mm²/14 kg  Test passed  10 s  Test passed  DIN EN 50155 (VDE 0115-200):2018-05  Long life test category 2, bogie-mounted  f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz  6.12 (m/s²)²/Hz  3.12g  5 h  X-, Y- and Z-axis  Test passed  Half-sine
Result  ironmental and real-life conditions  eedle-flame test  Time of exposure  Result  scillation/broadband noise  Specification  Spectrum  Frequency  ASD level  Acceleration  Test duration per axis  Test directions  Result  nocks  Pulse shape  Acceleration	95 mm²/14 kg  Test passed  10 s  Test passed  DIN EN 50155 (VDE 0115-200):2018-05  Long life test category 2, bogie-mounted  f₁ = 5 Hz to f₂ = 250 Hz  6.12 (m/s²)²/Hz  3.12g  5 h  X-, Y- and Z-axis  Test passed  Half-sine  30g
Result  ironmental and real-life conditions  eedle-flame test  Time of exposure  Result  scillation/broadband noise  Specification  Spectrum  Frequency  ASD level  Acceleration  Test duration per axis  Test directions  Result  nocks  Pulse shape  Acceleration  Shock duration	95 mm²/14 kg  Test passed  10 s  Test passed  DIN EN 50155 (VDE 0115-200):2018-05  Long life test category 2, bogie-mounted  f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz  6.12 (m/s²)²/Hz  3.12g  5 h  X-, Y- and Z-axis  Test passed  Half-sine  30g  18 ms



1086475

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#### Ambient conditions

Ambient temperature (operation)	-60 °C 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see RTI Elec.)
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 (operation)	20 % 90 %
Permissible humidity (storage/transport)	30 % 70 %

### Standards and regulations

Connection in acc. with standard	IEC 61238-1
	IEC 60947-7-1

### Mounting

Mounting type	NS 35/15
	NS 35/7,5



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### Drawings

Circuit diagram





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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1086475



#### EAC

Approval ID: KZ7500651131219505



1086475

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### Classifications

### **ECLASS**

	ECLASS-13.0	27250101
	ECLASS-15.0	27250101
ET	TIM	
	ETIM 9.0	EC000897
UN	ISPSC	

UNSPSC 21.0 39121400



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### Environmental product compliance

#### EU RoHS

o exemptions
<u> </u>
ardous substances above the limits
stance above 0.1 wt%

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