High-current terminal block - UKH 70 - 3213140

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High-current terminal block, nom. voltage: 1000 V, nominal current: 192 A, connection method: Screw connection, number of connections: 2, number of positions: 1, cross section:16 mm² - 95 mm², AWG: 4 - 3/0, width: 20.3 mm, height: 78.3 mm, color: gray, mounting type: NS 35/7,5, NS 35/15, NS 35/15-2,3, NS 32

Why buy this product

- Reliable cable connection is ensured by three-point centering of the conductor in the prismatic sleeve base
- Tested for railway applications
- 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	10 STK
GTIN	4 046356 549202
GTIN	4046356549202

Technical data

General

Number of positions	1
Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	70 mm²
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Area of application	Railway industry
	Machine building
	Plant engineering
Rated surge voltage	8 kV

High-current terminal block - UKH 70 - 3213140

Technical data

General

Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	6.27 W
Maximum load current	192 A (in case of a 70 mm² conductor cross section, the maximum load current must not be exceeded by the total current of all connected conductors.)
Nominal current I_N	192 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
Finger protection	guaranteed
Note regarding shock protection	Finger-safe protection is not guaranteed if bridges are positioned.
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
Bending test conductor cross section/weight	25 mm² / 4.5 kg
	70 mm²/10.4 kg
	95 mm²/14 kg
Tensile test result	Test passed
Conductor cross section tensile test	25 mm²
Tractive force setpoint	135 N
Conductor cross section tensile test	70 mm²
Tractive force setpoint	285 N
Conductor cross section tensile test	95 mm²
Tractive force setpoint	351 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35/NS 32
Setpoint	10 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
Conductor cross section short circuit testing	70 mm²

High-current terminal block - UKH 70 - 3213140

Technical data

General

Short-time current	8.4 kA
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Oscillation, broadband noise test result	Test passed
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 1, class B, body mounted
Test frequency	f_1 = 5 Hz to f_2 = 150 Hz
ASD level	1.857 $(m/s^2)^2$/Hz
Acceleration	0,8 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
Acceleration	5 g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis
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	20.3 mm
Length	70.5 mm
Height	78.3 mm
Height NS 35/7,5	80 mm

High-current terminal block - UKH 70 - 3213140

Technical data

Dimensions

Height NS 35/15	87.5 mm
Height NS 32	85 mm

Connection data

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.	16 mm²
Conductor cross section solid max.	95 mm²
Conductor cross section AWG min.	4
Conductor cross section AWG max.	3/0
Conductor cross section flexible min.	25 mm²
Conductor cross section flexible max.	70 mm²
Min. AWG conductor cross section, flexible	3
Max. AWG conductor cross section, flexible	2/0
Conductor cross section flexible, with ferrule without plastic sleeve min.	16 mm²
Conductor cross section flexible, with ferrule without plastic sleeve max.	70 mm²
Conductor cross section flexible, with ferrule with plastic sleeve min.	16 mm²
Conductor cross section flexible, with ferrule with plastic sleeve max.	70 mm²
2 conductors with same cross section, solid min.	16 mm²
2 conductors with same cross section, solid max.	25 mm²
2 conductors with same cross section, stranded min.	16 mm²
2 conductors with same cross section, stranded max.	25 mm²
2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	16 mm²
2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	25 mm²
Stripping length	24 mm
Internal cylindrical gage	A11
Screw thread	M8
Tightening torque, min	8 Nm
Tightening torque max	10 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 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
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High-current terminal block - UKH 70 - 3213140

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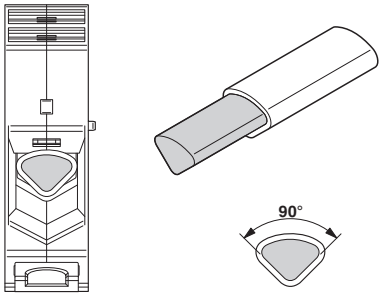
Environmental Product Compliance

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

Drawings

Circuit diagram

Schematic diagram



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

Approvals

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CSA / UL Recognized / cUL Recognized / VDE Zeichengenehmigung / IECEE CB Scheme / LR / EAC / DNV GL / PRS / cULus Recognized

Ex Approvals

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

Approval details

CSA		http://www.csagroup.org/services-industries/product-listing/	13631

	B	C
Nominal voltage UN	600 V	1000 V
Nominal current IN	192 A	192 A
mm²/AWG/kcmil	6-3/0	6-3/0

High-current terminal block - UKH 70 - 3213140

Approvals

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425

	B	C
Nominal voltage UN	1000 V	1000 V
Nominal current IN	192 A	192 A
mm²/AWG/kcmil	6-3/0	6-3/0

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425

	B	C
Nominal voltage UN	1000 V	1000 V
Nominal current IN	192 A	192 A
mm²/AWG/kcmil	6-3/0	6-3/0

VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40036517

Nominal voltage UN	1000 V

IECEE CB Scheme		http://www.iecee.org/	DE1-51473

Nominal voltage UN	1000 V
mm²/AWG/kcmil	50-70

LR		http://www.lr.org/en	14/20011

EAC		EAC-Zulassung

DNV GL	http://exchange.dnv.com/tari/	TAE00001CT

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

High-current terminal block - UKH 70 - 3213140

Approvals

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm

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