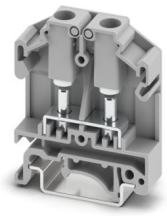
OTTA 6 - Bolt connection terminal block

0790433

https://www.phoenixcontact.com/us/products/0790433

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Bolt connection terminal block, nom. voltage: 800 V, nominal current: 41 A, number of connections: 2, connection method: Bolt connection, Rated cross section: 6 mm^2, mounting type: NS 35/7,5, NS 35/15, NS 32, color: gray

Commercial data

Item number	0790433
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE45
Product key	BE4513
GTIN	4017918005542
Weight per piece (including packing)	19.06 g
Weight per piece (excluding packing)	19 g
Customs tariff number	85369010
Country of origin	IN

Technical data

Notes

General

Note	The rated insulation voltage applies to insulated cable lugs acc. DIN 46237:1970-07 and for uninsulated cable lugs acc. DIN 46234:1980-03 with shrink sleeve.

Product properties

Product type	Bolt connection terminal block
Product family	OTTA
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	1.31 W

Connection data

Number of connections per level	2
Nominal cross section	6 mm²
Connection method	Bolt connection
Stripping length	The stripping length depends on the specification provided by the cable lug manufacturer.
Connection in acc. with standard	IEC 60947-7-1
Nominal cross section	6 mm²
Nominal current	41 A
Maximum load current	41 A (with 6 mm² conductor cross-section)
Nominal voltage	800 V

Cable lug connection DIN 46234:1980-03

Connection in acc. with standard	DIN 46234:1980-03
Cross section	0.1 mm² ... 6 mm²
Cross section range AWG	24 ... 10 (converted acc. to IEC)
Hole diameter	4.3 mm
Width	9.6 mm
Bolt diameter	4 mm
Screw thread	M4
Tightening torque	1.5 ... 1.8 Nm
Connection in acc. with standard	DIN 46237:1970-07

Cross section	0.5 mm² ... 6 mm²
Cross section range AWG	20 ... 10 (converted acc. to IEC)
Hole diameter	4.3 mm
Width	9.6 mm
Bolt diameter	4 mm
Screw thread	M4
Tightening torque	1.5 ... 1.8 Nm

Dimensions

Width	11 mm
End cover width	1.5 mm
Height	43.5 mm
Depth on NS 32	57 mm
Depth on NS 35/7,5	52 mm
Depth on NS 35/15	59.5 mm

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
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

Test voltage setpoint	9.8 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 6 mm²	0.72 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2.2 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	Yes

Mechanical tests

Mechanical strength

Result	Test passed

Attachment on the carrier

DIN rail/fixing support	NS 32/NS 35
Test force setpoint	5 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 (+/- 2) rpm
Revolutions	135
Conductor cross-section/weight	6 mm² / 1.4 kg
Result	Test passed

Environmental and real-life conditions

Needle-flame test

Time of exposure	30 s
Result	Test passed

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2022-06
Spectrum	Long life test category 2, bogie-mounted
Frequency	f_1 = 5 Hz to f_2 = 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	5g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

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 60947-7-1

Mounting

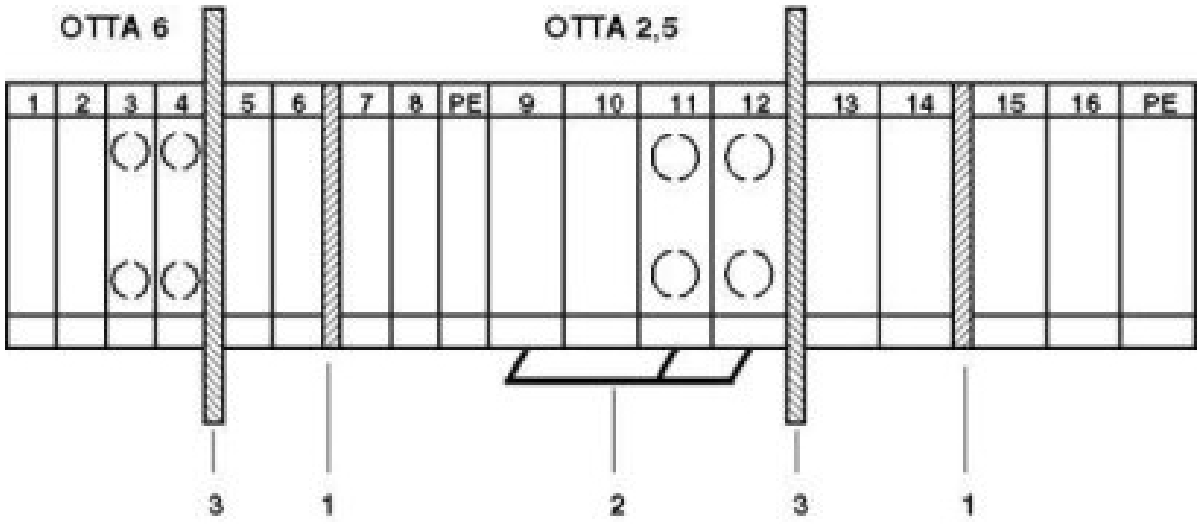
Mounting type	NS 35/7,5
	NS 35/15
	NS 32

Drawings

Circuit diagram



Circuit diagram



1 = cover
2 = insertion bridge
3 = partition plate

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/0790433

CSA
Approval ID: 13631

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	600 V	30 A	22 - 10	-

UL Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	600 V	30 A	-	-
C				
	600 V	30 A	-	-

IECEE CB Scheme
Approval ID: DE1-64022

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	800 V	41 A	-	0.2 - 2.5

EAC
Approval ID: RU C-DE.BL08.B.00540

VDE Zeichengenehmigung
Approval ID: 40017896

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	800 V	41 A	-	0.2 - 6

EAC
Approval ID: KZ7500651131219505

DNV
Approval ID: TAE00001CT

Classifications

ECLASS

ECLASS-13.0	27250101
ECLASS-15.0	27250101

ETIM

ETIM 10.0	EC000897

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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