

ST 4-MT - Knife-disconnect terminal block



3038875

<https://www.phoenixcontact.com/pc/products/3038875>

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Knife-disconnect terminal block, nom. voltage: 400 V, nominal current: 20 A, 1 level, connection method: Spring-cage connection, Rated cross section: 4 mm², cross section: 0.08 mm² - 6 mm², mounting: NS 35/7,5, NS 35/15, color: gray

Your advantages

- Three and four-conductor terminal blocks can be used for multi-conductor connections
- User-friendly wiring thanks to front connection
- Tested for railway applications
- Test pick-off parallel to the disconnect point for test plugs with 2.3 mm diameter
- Compact knife disconnect terminal block with a current carrying capacity of 20 A
- Consistent and can be double bridged for all tasks in time-saving potential supply and distribution

Commercial data

Item number	3038875
Packing unit	50 pc
Minimum order quantity	1 pc
Product key	BE2131
Catalog page	Page 232 (C-1-2019)
GTIN	4017918941246
Weight per piece (including packing)	10.789 g
Weight per piece (excluding packing)	10.67 g
Customs tariff number	85369010
Country of origin	TR

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Technical data

Product properties

Product type	Disconnect terminal block
Area of application	Railway industry
	Machine building
	Plant engineering
Number of connections	2
Number of rows	1
Potentials	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	1.02 W

Connection data

Number of connections per level	2
Nominal cross section	4 mm ²

1 level

Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A4
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.08 mm ² ... 6 mm ²
Cross section AWG	28 ... 10 (converted acc. to IEC)
Conductor cross section flexible	0.08 mm ² ... 4 mm ²
Conductor cross section, flexible [AWG]	28 ... 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm ² ... 4 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm ² ... 4 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 1 mm ²
Nominal current	20 A
Maximum load current	20 A (with 6 mm ² conductor cross section)
Nominal voltage	400 V
Nominal cross section	4 mm ²

Dimensions

Width	6.2 mm
End cover width	2.2 mm
Height	61.5 mm
Depth on NS 35/7,5	36.5 mm

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Depth on NS 35/15	44 mm
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Material specifications

Color	gray
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	7.3 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 2.5 mm ²	0.3 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	1.89 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	No
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Mechanical tests

Mechanical strength

Result	Test passed
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Attachment on the carrier

DIN rail/fixing support	NS 35
Test force setpoint	1 N
Result	Test passed

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Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.08 mm ² / 0.1 kg
	4 mm ² / 0.9 kg
	6 mm ² / 1.4 kg
Result	Test passed

Environmental and real-life conditions

Aging

Temperature cycles	192
Result	Test passed

Needle-flame test

Time of exposure	30 s
Result	Test passed

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Spectrum	Service life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s ²) 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):2008-03
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 (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 %

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Standards and regulations

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

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

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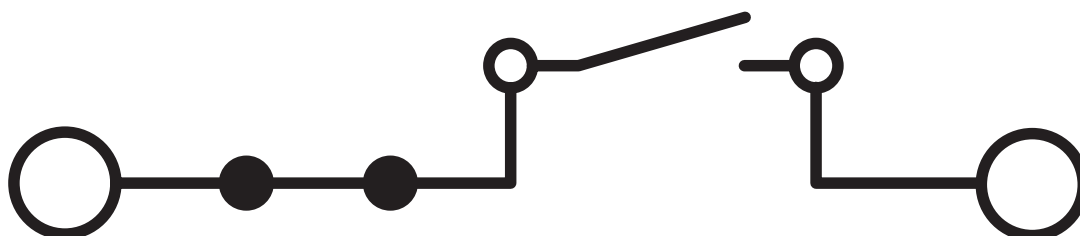


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Drawings

Circuit diagram



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/3038875>

CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	300 V	10 A	28 - 10	-
Use group C	150 V	10 A	28 - 10	-

EAC Approval ID: RU C-DE.BL08.B.00644				
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cULus Recognized Approval ID: E60425				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	300 V	10 A	28 - 10	-
Use group D	300 V	10 A	28 - 10	-

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Classifications

ECLASS

ECLASS-11.0	27141126
ECLASS-12.0	27141126
ECLASS-13.0	27250108

ETIM

ETIM 9.0	EC000902
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UNSPSC

UNSPSC 21.0	39121400
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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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