PTVC 2,5-MT - Knife-disconnect terminal block

1079059

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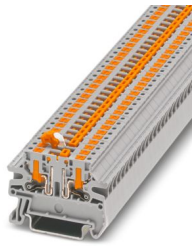


Knife-disconnect terminal block, nom. voltage: 400 V, nominal current: 20 A, connection method: Push-in connection, Rated cross section: 2.5 mm^2, cross section: 0.14 mm^2 - 4 mm^2, mounting: NS 35/7,5, NS 35/15, color: gray

Your advantages

- The secure end position of the lever-type disconnect knife ensures that the switching states of the knife disconnect terminal blocks are permanently secured and are always clearly recognizable
- The circuits can be opened easily with a standard screwdriver
- Clear wiring, thanks to lateral conductor entry
- The compact design enables wiring in a confined space
- The Push-in connection terminal blocks are characterized by the system features of the CLIPLINE complete system
- In addition to the testing option in the double function shaft, all terminal blocks provide an additional test pick-off

Commercial data

Item number	1079059
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE2331
Product key	BE2331
Catalog page	Page 89 (C-1-2019)
GTIN	4055626796925
Weight per piece (including packing)	6.98 g
Weight per piece (excluding packing)	6.27 g
Customs tariff number	85369010
Country of origin	CN

Technical data

Notes

General

Note	The maximum load current of a single clamping unit must not be exceeded.

Product properties

Product type	Disconnect 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	6 kV
Maximum power dissipation for nominal condition	0.77 W

Connection data

Number of connections per level	2
Nominal cross section	2.5 mm²

Level 1 above 1 below 1

Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.14 mm² ... 4 mm²
Cross section AWG	26 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm² ... 2.5 mm²
Conductor cross section, flexible [AWG]	26 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm² ... 2.5 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm² ... 2.5 mm²
Conductor cross-section flexible (2 conductors with the same cross-section, with TWIN ferrule and plastic sleeve)	0.5 mm² ... 1 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	1 mm²
Nominal current	20 A (at 2.5 mm²)
Maximum load current	20 A (with 4 mm² conductor cross section, rigid)
Nominal voltage	400 V
Nominal cross section	2.5 mm²

Level 1 above 1 below 1 Connection cross sections directly pluggable

Conductor cross section rigid	1 mm² ... 4 mm²
Conductor cross-section flexible (ferrule without plastic sleeve)	2.5 mm² ...
Flexible conductor cross section (ferrule with plastic sleeve)	2.5 mm² ...

Dimensions

Width	5.2 mm
End cover width	2.2 mm
Height	50.8 mm
Depth	35.3 mm
Depth on NS 35/7,5	36.8 mm
Depth on NS 35/15	44.3 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
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °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
Calorimetric heat release NFPA 130 (ASTM E 1354)	27,5 MJ/kg
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 2.5 mm²	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	Yes

Mechanical tests

Mechanical strength

Result	Test passed

Attachment on the carrier

DIN rail/fixing support	NS 35
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.14 mm² / 0.2 kg
	2.5 mm² / 0.7 kg
	4 mm² / 0.9 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):2018-05
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

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 %

Standards and regulations

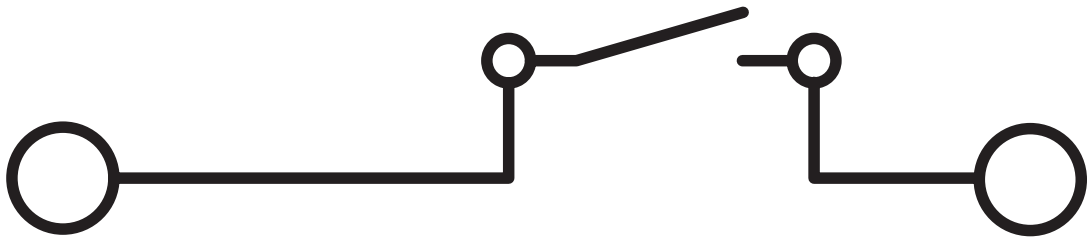
Connection in acc. with standard	IEC 60947-7-1

Mounting

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

Drawings

Circuit diagram



Approvals

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CSA
Approval ID: 158887

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	300 V	20 A	26 - 12	-
Use group D				
	300 V	10 A	26 - 12	-

EAC
Approval ID: RU C-DE.BL08.B.00644

cULus Recognized
Approval ID: E60425

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Classifications

ECLASS

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

ETIM

ETIM 9.0	EC000902

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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