ST 4-TWIN BU - Feed-through terminal block

3031403

https://www.phoenixcontact.com/sg/products/3031403

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Feed-through terminal block, nom. voltage: 800 V, nominal current: 32 A, number of connections: 3, connection method: Spring-cage connection, 1 level, Rated cross section: 4 mm^2, cross section: 0.08 mm^2 - 6 mm^2, mounting type: NS 35/7,5, NS 35/15, color: blue

Your advantages

- The consistent double function shaft offers every opportunity for time-saving potential distribution and accommodating test accessories
- User-friendly implementation of all potential branching tasks
- Tested for railway applications
- Space-saving and practical multi-conductor connection without additional bridges

Commercial data

Item number	3031403
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	0163*
Product key	BE2112
Catalog page	Page 229 (C-1-2019)
GTIN	4017918186876
Weight per piece (including packing)	11.869 g
Weight per piece (excluding packing)	11.073 g
Customs tariff number	85369010
Country of origin	DE

Technical data

Product properties

Product type	Multi-conductor terminal block
Area of application	Railway industry
	Machine building
	Plant engineering
	Process industry
Number of connections	3
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	1.02 W

Connection data

Number of connections per level	3
Nominal cross section	4 mm²

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 mm² ... 6 mm²
Cross section AWG	28 ... 10 (converted acc. to IEC)
Conductor cross section flexible	0.08 mm² ... 4 mm²
Conductor cross section, flexible [AWG]	28 ... 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm² ... 4 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm² ... 4 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² ... 1 mm²
Nominal current	32 A (with 6 mm² conductor cross section)
Maximum load current	40 A (In the case of a 6 mm² conductor cross section, the maximum load current must not be exceeded by the total current of all connected conductors)
Nominal voltage	800 V
Nominal cross section	4 mm²

Ex data

Rated data (ATEX/IECEx)

Identification	Ⓔx II 2 GD Ex eb IIC Gb
Operating temperature range	-60 °C ... 85 °C
Ex-certified accessories	3030491 D-ST 4-TWIN
	3030789 ATP-ST-TWIN
	3036615 DS-ST 4
	1204517 SZF 1-0,6X3,5
	3022276 CLIPFIX 35-5
	3022218 CLIPFIX 35
List of bridges	Plug-in bridge / FBS 2-6 / 3030336
	Plug-in bridge / FBS 3-6 / 3030242
	Plug-in bridge / FBS 4-6 / 3030255
	Plug-in bridge / FBS 5-6 / 3030349
	Plug-in bridge / FBS 10-6 / 3030271
	Plug-in bridge / FBS 20-6 / 3030365
Bridge data	28 A / 4 mm²
Ex temperature increase	40 K (33 A / 4 mm²)
Rated voltage	550 V
for bridging with bridge	550 V
- At bridging between non-adjacent terminal blocks	352 V
- At bridging between non-adjacent terminal blocks via PE terminal block	352 V
- At cut-to-length bridging with cover	220 V
- At cut-to-length bridging with partition plate	275 V
Rated insulation voltage	500 V
output	(Permanent)

Ex level General

Rated current	30 A
Maximum load current	34.5 A
Contact resistance	0.69 mΩ

Ex connection data General

Nominal cross section	4 mm²
Rated cross section AWG	12
Connection capacity rigid	0.08 mm² ... 6 mm²
Connection capacity AWG	28 ... 10
Connection capacity flexible	0.08 mm² ... 4 mm²
Connection capacity AWG	28 ... 12

Dimensions

Width	6.2 mm
End cover width	2.2 mm
Height	71.5 mm
Depth on NS 35/7,5	36.5 mm
Depth on NS 35/15	44 mm

Material specifications

Color	blue (RAL 5015)
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

Mechanical properties

Mechanical data

Open side panel	Yes

Environmental and real-life conditions

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Spectrum	Service life test category 2, bogie-mounted
Frequency	f_1 = 5 Hz to f_2 = 250 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 %

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

To download certificates, visit the product detail page: https://www.phoenixcontact.com/sg/products/3031403

CSA
Approval ID: 13631

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	600 V	30 A	28 - 10	-
Use group C				
	600 V	30 A	28 - 10	-

IECEE CB Scheme
Approval ID: DE1-63028_M1

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	800 V	32 A	-	0.2 - 4

KR
Approval ID: HMB17372-EL002

NK
Approval ID: 09 ME 140

VDE approval of drawings
Approval ID: 40009034

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	800 V	32 A	-	0.2 - 4

cULus Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	600 V	30 A	28 - 10	-
Use group C				
	600 V	30 A	28 - 10	-

DNV
Approval ID: TAE00001CS

ATEX
Approval ID: KEMA00ATEX2129U

IECEx
Approval ID: IECEx KEM 06.0050U

CCC
Approval ID: 2020322313000621

UKCA-EX
Approval ID: DEKRA 21UKEX0301U

Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250101

ETIM

ETIM 9.0	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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