STS 4-TWIN - Feed-through terminal block

3031665

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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, Rated cross section: 4 mm^2, 1 level, cross section: 0.08 mm^2 - 6 mm^2, mounting type: NS 35/7,5, NS 35/15, color: gray

Your advantages

- Same shape and pitch as the feed-through terminal blocks
- Cross connection to adjacent feed-through terminal blocks with the consistent FBS ... plug-in bridge system

Commercial data

Item number	3031665
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE02
Product key	BE2112
GTIN	4017918193317
Weight per piece (including packing)	11.858 g
Weight per piece (excluding packing)	11.15 g
Customs tariff number	85369010
Country of origin	DE

Technical data

Product properties

Product type	Multi-conductor terminal block
Product family	STS
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

Connection method	Spring-cage connection
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 cross section	4 mm²
Nominal current	32 A (with 6 mm² conductor cross-section)
Maximum load current	38 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

Ex data

Rated data (ATEX/IECEx)

Identification	Ⓔx II 2 G Ex eb IIC Gb
Operating temperature range	-60 °C ... 110 °C

Ex-certified accessories	3031704 D-STS 4
	3024481 ATP-ST 6
	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
	Plug-in bridge / FBS 50-6 / 3032224
Bridge data	27 A (4 mm²)
Ex temperature increase	40 K (30 A / 4 mm²)
for bridging with bridge	550 V
- At bridging between non-adjacent terminal blocks	352 V
- At cut-to-length bridging	352 V
- At cut-to-length bridging with cover	352 V
- At cut-to-length bridging with partition plate	550 V
Rated insulation voltage	500 V
output	(Permanent)

Ex level General

Rated voltage	550 V
Rated current	30 A
Maximum load current	33 A
Contact resistance	0.75 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	64.5 mm
Depth on NS 35/7,5	43 mm
Depth on NS 35/15	50.5 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
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

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 4 mm²	0.48 kA
Short-time withstand current 6 mm²	0.72 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	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 35
Test force setpoint	1 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross-section/weight	0.08 mm² / 0.1 kg
	4 mm² / 0.9 kg
	6 mm² / 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

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

Classifications

ECLASS

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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