

ST 10 - Feed-through terminal block



3036110

<https://www.phoenixcontact.com/de/produkte/3036110>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Feed-through terminal block, nom. voltage: 1000 V, nominal current: 57 A, number of connections: 2, connection method: Spring-cage connection, Rated cross section: 10 mm², cross section: 0.2 mm² - 16 mm², mounting type: NS 35/7,5, NS 35/15, color: gray

Your advantages

- The flexible options for reducing bridging in the CLIPLINE complete system can be found in "Accessories for the CLIPLINE complete modular terminal block system"
- The double bridge shaft not only enables individual chain bridging, but also reducing bridging to spring-cage terminal blocks with smaller cross sections
- Tested for railway applications

ST 10 - Feed-through terminal block

3036110

<https://www.phoenixcontact.com/de/produkte/3036110>



Technical data

Product properties

Product type	Feed-through terminal block
Product family	ST
Area of application	Railway industry
	Machine building
	Plant engineering
	Process industry
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	1.82 W

Connection data

Number of connections per level	2
Nominal cross section	10 mm ²

Level 1 above 1 below 1

Stripping length	18 mm
Internal cylindrical gage	A6
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.2 mm ² ... 16 mm ²
Cross section AWG	24 ... 6 (converted acc. to IEC)
Conductor cross section flexible	0.2 mm ² ... 10 mm ²
Conductor cross section, flexible [AWG]	24 ... 8 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm ² ... 10 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.25 mm ² ... 10 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	1.5 mm ² ... 2.5 mm ²
Nominal current	57 A
Maximum load current	65 A (with 16 mm ² conductor cross section)
Nominal voltage	1000 V
Nominal cross section	10 mm ²

Ex data

Rated data (ATEX/IECEx)

ST 10 - Feed-through terminal block



3036110

<https://www.phoenixcontact.com/de/produkte/3036110>

Identification	II 2 GD Ex eb IIC Gb
Operating temperature range	-60 °C ... 110 °C
Ex-certified accessories	3036644 D-ST 10
	1206612 SZF 3-1,0X5,5
	3022276 CLIPFIX 35-5
	3022218 CLIPFIX 35
List of bridges	Plug-in bridge / FBS 2-10 / 3005947
	Plug-in bridge / FBS 5-10 / 3005948
Bridge data	53.5 A / 10 mm ²
Ex temperature increase	40 K (56.6 A / 10 mm ²)
Rated voltage	550 V
for bridging with bridge	550 V
Rated insulation voltage	500 V
output	(Permanent)

Ex level General

Rated current	51 A
Maximum load current	59.5 A
Contact resistance	0.4 mΩ

Ex connection data General

Nominal cross section	10 mm ²
Rated cross section AWG	8
Connection capacity rigid	1.5 mm ² ... 16 mm ²
Connection capacity AWG	16 ... 6
Connection capacity flexible	1.5 mm ² ... 10 mm ²
Connection capacity AWG	16 ... 8

Dimensions

Width	10.2 mm
End cover width	2.2 mm
Height	71.5 mm
Depth on NS 35/7,5	50.3 mm
Depth on NS 35/15	57.8 mm

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

ST 10 - Feed-through terminal block



3036110

<https://www.phoenixcontact.com/de/produkte/3036110>

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
	Test passed
Short-time withstand current 10 mm ²	1.2 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 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	0.2 mm ² / 0.2 kg
	10 mm ² / 2 kg
	16 mm ² / 2.9 kg
Result	Test passed

Environmental and real-life conditions

Aging

ST 10 - Feed-through terminal block



3036110

<https://www.phoenixcontact.com/de/produkte/3036110>

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):2022-06
Spectrum	Service life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	$6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$
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):2022-06
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, no longer than 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

ST 10 - Feed-through terminal block

3036110

<https://www.phoenixcontact.com/de/produkte/3036110>



Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT Deutschland GmbH
Flachsmarktstraße 8
D-32825 Blomberg
+49 52 35/3-1 20 00
info@phoenixcontact.de