

## Feed-through terminal block - ST 6 - 3031487

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Feed-through terminal block, nom. voltage: 1000 V, nominal current: 41 A, connection method: Spring-cage connection, number of connections: 2, cross section: 0.2 mm<sup>2</sup> - 10 mm<sup>2</sup>, AWG: 24 - 8, width: 8.2 mm, color: gray, mounting type: NS 35/7,5, NS 35/15

### Your advantages

- ✓ As well as saving space, the compact design and front connection enable user-friendly wiring in a small amount of space
- ✓ The consistent double function shaft offers every opportunity for time-saving potential distribution and accommodating test accessories
- ✓ The large wiring space enables the use of conductors with ferrules and plastic collars within the nominal cross section
- ✓ Tested for railway applications




### Key Commercial Data

Packing unit	50 pc
Minimum order quantity	50 pc
GTIN	 4 017918 186944
GTIN	4017918186944
Weight per Piece (excluding packing)	16.320 g
Custom tariff number	85369010
Country of origin	Germany

### Technical data

#### General

Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	6 mm <sup>2</sup>
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Area of application	Railway industry

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### Technical data

#### General

	Machine building
	Plant engineering
	Process industry
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	1.31 W
Designation	Level 1 above 1 below 1
Maximum load current	52 A (with 10 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	41 A
Nominal voltage U <sub>N</sub>	1000 V
Open side panel	Yes
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
Finger protection	guaranteed
Result of surge voltage test	Test passed
Surge voltage test setpoint	9.8 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	2.2 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Result of bending test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	0.2 mm <sup>2</sup> / 0.2 kg
	6 mm <sup>2</sup> / 1.4 kg
	10 mm <sup>2</sup> / 2 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.2 mm <sup>2</sup>
Tractive force setpoint	10 N
Conductor cross section tensile test	6 mm <sup>2</sup>
Tractive force setpoint	80 N
Conductor cross section tensile test	10 mm <sup>2</sup>
Tractive force setpoint	90 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	5 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	≤ 3.2 mV
Result of temperature-rise test	Test passed

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### Technical data

#### General

Short circuit stability result	Test passed
Conductor cross section short circuit testing	6 mm <sup>2</sup>
Short-time current	0.72 kA
Conductor cross section short circuit testing	10 mm <sup>2</sup>
Short-time current	1.2 kA
Result of thermal test	Test passed
Ageing test for screwless modular terminal block temperature cycles	192
Proof of thermal characteristics (needle flame) effective duration	30 s
Result of aging test	Test passed
Oscillation, broadband noise test result	Test passed
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 2, bogie-mounted
Test frequency	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz
ASD level	11.83 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
Acceleration	4.25 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °C
Static insulating material application in cold	-60 °C
Behavior in fire for rail vehicles (DIN 5510-2)	Test passed
Flame test method (DIN EN 60695-11-10)	V0
Oxygen index (DIN EN ISO 4589-2)	>32 %
NF F16-101, NF F10-102 Class I	2
NF F16-101, NF F10-102 Class F	2
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
Calorimetric heat release NFPA 130 (ASTM E 1354)	27,5 MJ/kg
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

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### Technical data

#### Dimensions

Width	8.2 mm
End cover width	2.2 mm
Length	69.5 mm
Height NS 35/7,5	43.5 mm
Height NS 35/15	51 mm

#### Connection data

Connection	1 level
Connection method	Spring-cage connection
Stripping length	12 mm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	10 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	8
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	6 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	24
Max. AWG conductor cross section, flexible	10
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.25 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	6 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.25 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	6 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	1.5 mm <sup>2</sup>
Connection in acc. with standard	IEC/EN 60079-7
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	10 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	8
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	6 mm <sup>2</sup>
Internal cylindrical gage	A5

#### Standards and Regulations

Connection in acc. with standard	CSA
	IEC 60947-7-1
Flammability rating according to UL 94	V0
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

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### Technical data

#### Standards and Regulations

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

#### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

### Drawings

Circuit diagram



### Classifications

#### eCl@ss

eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
eCl@ss 7.0	27141120
eCl@ss 8.0	27141120
eCl@ss 9.0	27141120

#### ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 5.0	EC000897
ETIM 6.0	EC000897
ETIM 7.0	EC000897

#### UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410



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## Approvals

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#### Approvals


DNV GL / CSA / PRS / BV / LR / KR / NK / UL Recognized / cUL Recognized / IECCE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / RS / cULus Recognized


#### Ex Approvals

IECEX / ATEX / EAC Ex

### Approval details

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAE00001CS
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CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
		B	C
Nominal voltage UN		600 V	600 V
Nominal current IN		50 A	50 A
mm <sup>2</sup> /AWG/kcmil		24-8	24-8

PRS		<a href="http://www.prs.pl/">http://www.prs.pl/</a>	TE/2156/880590/17
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BV		<a href="http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials">http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials</a>	13403/D0 BV
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LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	04/20034
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KR		<a href="http://www.krs.co.kr/eng/main/main.aspx">http://www.krs.co.kr/eng/main/main.aspx</a>	HMB17372-EL002
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### Approvals

NK	<b>ClassNK</b>	<a href="http://www.classnk.or.jp/hp/en/">http://www.classnk.or.jp/hp/en/</a>	09 ME 140
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UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	50 A	50 A	
mm <sup>2</sup> /AWG/kcmil	24-8	24-8	

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	50 A	50 A	
mm <sup>2</sup> /AWG/kcmil	24-8	24-8	

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-50880
Nominal voltage UN	800 V		
mm <sup>2</sup> /AWG/kcmil	0.5-6		

VDE Gutachten mit Fertigungsüberwachung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40009035
Nominal voltage UN	800 V		
Nominal current IN	41 A		
mm <sup>2</sup> /AWG/kcmil	0.5-6		

EAC		RU C- DE.A*30.B.01742
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<https://www.phoenixcontact.com/gb/products/3031487>



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### Approvals

RS		<a href="http://www.rs-head.spb.ru/en/index.php">http://www.rs-head.spb.ru/en/index.php</a>	17.00013.272
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cULus Recognized	
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