

Mini feed-through terminal block - MBK 5 - 1415018

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Mini feed-through terminal block, nom. voltage: 500 V, nominal current: 32 A, connection method: Screw connection, number of connections: 2, cross section: 0.2 mm² - 4 mm², AWG: 24 - 12, width: 6.2 mm, color: gray, mounting type: NS 15

Your advantages

- ✓ Space saving thanks to compact design and mounting option on a 15 mm DIN rail
- ✓ Clear arrangement thanks to marking of all terminal points
- ✓ Easy potential distribution thanks to standardized plug-in bridges



Key Commercial Data

Packing unit	50 pc
GTIN	 4 017918 021344
GTIN	4017918021344

Technical data

General

Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	4 mm ²
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	6 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	1.02 W
Maximum load current	32 A (with 4 mm ² conductor cross section)

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Technical data

General

Nominal current I_N	32 A
Nominal voltage U_N	500 V
Open side panel	Yes
Ambient temperature (operation)	-60 °C ... 85 °C
Ambient temperature (storage/transport)	-25 °C ... 55 °C (For a short time, not exceeding 24 h, -60 to +70 °C)
Permissible humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Shock protection test specification	IEC 60529:2001-02
Back of the hand protection	guaranteed
Finger protection	guaranteed
Result of surge voltage test	Test passed
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	1.89 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 ² / 0.2 kg
	4 mm ² / 0.9 kg
Tensile test result	Test passed
Result of tight fit on support	Test passed
Tight fit on carrier	NS 15
Setpoint	1 N
Result of voltage-drop test	Test passed
Result of temperature-rise test	Test passed
Requirement temperature-rise test	Increase in temperature ≤ 45 K
Short circuit stability result	Test passed
Conductor cross section short circuit testing	4 mm ²
Short-time current	0.48 kA
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Static insulating material application in cold	-60 °C
Surface flammability NFPA 130 (ASTM E 162)	passed
Specific optical density of smoke NFPA 130 (ASTM E 662)	passed
Calorimetric heat release NFPA 130 (ASTM E 1354)	27,5 MJ/kg
Smoke gas toxicity NFPA 130 (SMP 800C)	passed

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Technical data

General

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

Dimensions

Width	6.2 mm
End cover width	2.5 mm
Length	28 mm
Height NS 15	32 mm

Connection data

Note	Terminal point
Connection	1 level
Connection method	Screw connection
Screw thread	M3
Stripping length	8 mm
Tightening torque, min	0.6 Nm
Tightening torque max	0.8 Nm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	4 mm ²
Min. AWG conductor cross section, flexible	24
Max. AWG conductor cross section, flexible	12
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.25 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve max.	4 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.25 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm ²
Cross section with insertion bridge, solid max.	4 mm ²
Cross section with insertion bridge, stranded max.	2.5 mm ²
2 conductors with same cross section, solid min.	0.2 mm ²
2 conductors with same cross section, solid max.	1.5 mm ²
2 conductors with same cross section, stranded min.	0.2 mm ²
2 conductors with same cross section, stranded max.	1.5 mm ²
Two conductors with the same cross section, flexible, with TWIN ferrules, with plastic sleeve, minimum	0.5 mm ²
Two conductors with the same cross section, flexible, with TWIN ferrules, with plastic sleeve, maximum	2.5 mm ²

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Connection data

Two conductors with the same cross section stranded, with ferrule and without plastic sleeve, minimum	0.25 mm²
Two conductors with the same cross section stranded, with ferrule and without plastic sleeve, maximum	1.5 mm²
Internal cylindrical gage	A4

Standards and Regulations

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

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Circuit diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27141120
eCl@ss 11.0	27141120
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

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Classifications

ETIM

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
UNSPSC 18.0	39121410
UNSPSC 19.0	39121410
UNSPSC 20.0	39121410
UNSPSC 21.0	39121410

Approvals

Approvals

Approvals

NK / CSA / NK / EAC / LR / EAC / EAC / UL Recognized / cUL Recognized / DNV GL / cULus Recognized

Ex Approvals

Approval details

NK	ClassNK	http://www.classnk.or.jp/hp/en/	09 ME 142
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CSA		http://www.csagroup.org/services-industries/product-listing/	13631
Nominal voltage UN		300 V	
Nominal current IN		10 A	
mm²/AWG/kcmil		28-10	

NK	ClassNK	http://www.classnk.or.jp/hp/en/	84ME 47Z
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Approvals

EAC		EAC-Zulassung
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LR		http://www.lr.org/en	LR2016282TA
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EAC		RU C- DE.A*30.B.01742
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EAC		RU C- DE.BL08.B.00534
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UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425
	B	C	D
Nominal voltage UN	300 V	150 V	300 V
Nominal current IN	30 A	30 A	10 A
mm²/AWG/kcmil	26-10	26-10	26-10

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425
	B	C	D
Nominal voltage UN	300 V	150 V	300 V
Nominal current IN	30 A	30 A	10 A
mm²/AWG/kcmil	26-10	26-10	26-10

DNV GL		https://approvalfinder.dnvgl.com/	TAE00001CT
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cULus Recognized	
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Accessories

Accessories

Bridge

Fixed bridge - FB-150 METER - 0201595



Cross connection rail, for fixed bridging of identical inputs and outputs, made of Cu, nickel-plated, 1 m long

DIN rail

DIN rail, unperforated - NS 15 UNPERF 2000MM - 1401695



DIN rail, unperforated, Standard profile, width: 15 mm, height: 5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail perforated - NS 15 PERF 2000MM - 1401682



DIN rail perforated, Standard profile, width: 15 mm, height: 5.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail perforated - NS 15 AL PERF 2000MM - 1401763



DIN rail perforated, Standard profile, width: 15 mm, height: 5.5 mm, acc. to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

DIN rail perforated - NS 15 WH PERF 2000MM - 1204096



DIN rail perforated, Standard profile, width: 15 mm, height: 5.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

End block

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Accessories

End clamp - E/MBK - 1401637



End clamp, width: 6.2 mm, color: gray

End clamp - E/MK - 1421633



End clamp, width: 6.2 mm, color: gray

End clamp - E/MK 1 - 1421659



End clamp width: 6 mm, color: gray

End cover

End cover - D-MBK 3/5 - 1413023



End cover, length: 28 mm, width: 2.5 mm, height: 30.2 mm, color: gray

Insertion bridge

Insertion bridge - EB 2- 6 - 0201155



Insertion bridge, pitch: 6.2 mm, number of positions: 2, color: gray

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Accessories

Insertion bridge - EB 3- 6 - 0201142



Insertion bridge, pitch: 6.2 mm, number of positions: 3, color: gray

Insertion bridge - EB 10- 6 - 0201139



Insertion bridge, pitch: 6.2 mm, number of positions: 10, color: gray

Insulating sleeve

Bridge bar isolator - IS-K 4 - 1302338



Bridge bar isolator, color: gray

Labeled terminal marker

Marker pin Zack strip - BN-ZB 6,2/WH CUS - 0824276



Marker pin Zack strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: plug in, for terminal block width: 6.2 mm, lettering field size: 4 x 4 mm

Partition plate

Separating plate - TS-KK 3 - 2770215



Separating plate, length: 14 mm, width: 0.5 mm, height: 16 mm, color: gray

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Accessories

Partition plate - ATP-MBK - 1413227



Partition plate, length: 42.5 mm, width: 2.5 mm, height: 30.5 mm, color: gray

Screw bridge

Jumper - ISSBI 10- 6 - 0301505



Jumper, pitch: 6 mm, number of positions: 10, color: silver

Fixed bridge - FBI 10- 6 - 0203250



Fixed bridge, pitch: 6.2 mm, number of positions: 10, color: silver

Fixed bridge - FBI 20- 6 - 0201867



Fixed bridge, pitch: 6.2 mm, number of positions: 20, color: silver

Fixed bridge - FBI 100- 6 - 0201650



Fixed bridge, pitch: 6.2 mm, number of positions: 100, color: silver

Switching jumper

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Accessories

Switching jumper - SBRN 2-9 - 1415238



Switching bridge, 2-pos.

Test plug terminal block

Reducing plug - RPS - 0201647



Reducing plug, color: gray

Test socket

Female test connector - PSBJ 3/13/4 - 0201304



Female test connector, color: silver

Female test connector - PSB 3/10/4 - 0601292



Female test connector, color: silver