

## 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 mm<sup>2</sup> - 4 mm<sup>2</sup>, 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	1 pc
Minimum order quantity	50 pc
GTIN	 4 017918 021344
GTIN	4017918021344
Weight per Piece (excluding packing)	7.830 g
Custom tariff number	85369010
Country of origin	Poland

### Technical data

#### General

Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	4 mm <sup>2</sup>
Color	gray
Insulating material	PA

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## Technical data

### General

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 <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	32 A
Nominal voltage U <sub>N</sub>	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 <sup>2</sup> / 0.2 kg
	4 mm <sup>2</sup> / 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 <sup>2</sup>

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### Technical data

#### General

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
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 <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	4 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	24
Max. AWG conductor cross section, flexible	12

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## Technical data

### Connection data

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.	4 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.	2.5 mm <sup>2</sup>
Cross section with insertion bridge, solid max.	4 mm <sup>2</sup>
Cross section with insertion bridge, stranded max.	2.5 mm <sup>2</sup>
2 conductors with same cross section, solid min.	0.2 mm <sup>2</sup>
2 conductors with same cross section, solid max.	1.5 mm <sup>2</sup>
2 conductors with same cross section, stranded min.	0.2 mm <sup>2</sup>
2 conductors with same cross section, stranded max.	1.5 mm <sup>2</sup>
Two conductors with the same cross section, flexible, with TWIN ferrules, with plastic sleeve, minimum	0.5 mm <sup>2</sup>
Two conductors with the same cross section, flexible, with TWIN ferrules, with plastic sleeve, maximum	2.5 mm <sup>2</sup>
Two conductors with the same cross section stranded, with ferrule and without plastic sleeve, minimum	0.25 mm <sup>2</sup>
Two conductors with the same cross section stranded, with ferrule and without plastic sleeve, maximum	1.5 mm <sup>2</sup>
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



# Mini feed-through terminal block - MBK 5 - 1415018

## Classifications

### eCl@ss

eCl@ss 10.0.1	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
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

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#### Approvals

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

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#### Ex Approvals

## Mini feed-through terminal block - MBK 5 - 1415018


### Approvals


#### Approval details


NK	<b>ClassNK</b>	<a href="http://www.classnk.or.jp/hp/en/">http://www.classnk.or.jp/hp/en/</a>	09 ME 142
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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
Nominal voltage UN		300 V	
Nominal current IN		10 A	
mm <sup>2</sup> /AWG/kcmil		28-10	

NK	<b>ClassNK</b>	<a href="http://www.classnk.or.jp/hp/en/">http://www.classnk.or.jp/hp/en/</a>	84ME 47Z
Nominal voltage UN		500 V	
Nominal current IN		36 A	
mm <sup>2</sup> /AWG/kcmil		4	

EAC		EAC-Zulassung	
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LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	88/20086
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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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## Approvals

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	D
Nominal voltage UN	300 V	150 V	300 V
Nominal current IN	30 A	30 A	10 A
mm <sup>2</sup> /AWG/kcmil	26-10	26-10	26-10

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	D
Nominal voltage UN	300 V	150 V	300 V
Nominal current IN	30 A	30 A	10 A
mm <sup>2</sup> /AWG/kcmil	26-10	26-10	26-10

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	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

### Component plug terminal block

## Mini feed-through terminal block - MBK 5 - 1415018

### Accessories

#### Component connector - ST-BE - 2802316



Component connector, to connect 2-pos. components to the basic terminal block, to be secured with screw-type clamping units, 19 mm high, max. 16 A

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#### Component connector - ST-BE-LA 24 - 2802374



Component plug, with light indicator, to connect 2-pos. components into the basic terminal block, height: 19 mm, color: Gray, voltage light indicator: 24 V DC

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#### Component connector - ST-BE-LA230 - 2802387



Component plug, with light indicator, to connect 2-pos. components into the basic terminal block, height: 19 mm, color: gray, voltage light indicator: 230 V AC/DC

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#### Component connector - ST-1N4007 - 2802329



Component plug, with universal diode, to connect 2-pos. components into the basic terminal block, height: 19 mm, color: Gray

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#### Component connector - ST-BE-VP - 2802332



Component plug, for 4-pos. components, two basic terminal blocks required per plug, 19 mm high

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## Mini feed-through terminal block - MBK 5 - 1415018

### Accessories

Component connector - ST-B250C1500 - 2802345



Component plug, with bridge rectifier B 250 C 1500, for 4-pos. components, reverse voltage: 600 V, nominal voltage: 250 V, nominal current: 1.5 A, two basic terminal blocks are required per plug, height: 19 mm, color: gray

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### 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

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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

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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

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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

## Mini feed-through terminal block - MBK 5 - 1415018

### Accessories

#### End block

End clamp - E/MBK - 1401637



End clamp, width: 6.2 mm, color: gray

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End clamp - E/MK - 1421633



End clamp, width: 6.2 mm, color: gray

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End clamp - E/MK 1 - 1421659



End clamp width: 6 mm, color: gray

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#### End cover

End cover - D-MBK 3/5 - 1413023



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

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#### Fuse

## Mini feed-through terminal block - MBK 5 - 1415018

### Accessories

Fuse plug - ST-SI-UK 4 - 0921011



Fuse plug, nominal current: 6.3 A, length: 33.1 mm, width: 6.1 mm, height: 45.7 mm, color: black

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Fuse plug - ST-SILED 12-UK 4 - 0921024



Fuse plug, nominal current: 6.3 A, length: 33.1 mm, width: 6.1 mm, height: 45.7 mm, color: black

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Fuse plug - ST-SILED 24-UK 4 - 0921037



Fuse plug, nominal current: 6.3 A, length: 33.1 mm, width: 6.1 mm, height: 45.7 mm, color: black

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Fuse plug - ST-SILED 60-UK 4 - 0921040



Fuse plug, nominal current: 6.3 A, length: 33.1 mm, width: 6.1 mm, height: 45.7 mm, color: black

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Fuse plug - ST-SILA250-UK 4 - 0921053



Fuse plug, nominal current: 6.3 A, length: 33.1 mm, width: 6.1 mm, height: 45.7 mm, color: black

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### Insertion bridge

## Mini feed-through terminal block - MBK 5 - 1415018

### Accessories

Insertion bridge - EB 2- 6 - 0201155



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

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Insertion bridge - EB 3- 6 - 0201142



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

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Insertion bridge - EB 10- 6 - 0201139



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

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### Insulating sleeve

Bridge bar isolator - IS-K 4 - 1302338



Bridge bar isolator, color: gray

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### 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

## Mini feed-through terminal block - MBK 5 - 1415018

### Accessories

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#### 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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Partition plate - ATP-MBK - 1413227



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

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#### Plug

Isolating plugs - ST-K 4 - 5025462



Isolating plug, silver-plated, can be used in UK...-TG, UKK...-TG, UDK...-TG, MBK...-TG, DIK...-TG, DOK...-TG, and ZFK...-TG disconnect terminal blocks, color: gray

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#### Screw bridge

Jumper - ISSBI 10- 6 - 0301505



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

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## Mini feed-through terminal block - MBK 5 - 1415018

### Accessories

Fixed bridge - FBI 10- 6 - 0203250



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

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Fixed bridge - FBI 20- 6 - 0201867



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

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Fixed bridge - FBI 100- 6 - 0201650



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

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### Switching jumper

Switching jumper - SBRN 2-9 - 1415238



Switching bridge, 2-pos.

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### Test plug terminal block

Reducing plug - RPS - 0201647



Reducing plug, color: gray

## Mini feed-through terminal block - MBK 5 - 1415018

### Accessories

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#### Test socket

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



Female test connector, color: silver

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



Female test connector, color: silver

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