

## Micro terminal - MTTB 1,5 - 1414129

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Micro terminal, Connection type: Screw connection, Cross section: 0.14 mm<sup>2</sup> - 1.5 mm<sup>2</sup>, AWG: 26 - 16, Width: 4.2 mm, Color: gray, Mounting type: NS 15, NS 35/7,5, NS 35/15

### Why buy this product

- Design width of just 4.2 mm
- Nominal cross section of 1.5 mm<sup>2</sup>
- Snap-on foot for NS 15 and NS 35 DIN rails
- Space saving thanks to compact design and mounting option on a 15 mm DIN rail
- Clear arrangement thanks to marking of all terminal points
- Wide range of labeling options
- Easy potential distribution thanks to standardized plug-in bridges
- Bridging option on both levels

### Key Commercial Data

Packing unit	50 STK
Minimum order quantity	50 STK
GTIN	 4 017918 105419
GTIN	4017918105419
Weight per Piece (excluding packing)	5.570 g
Custom tariff number	85369010
Country of origin	Turkey

### Technical data

#### General

Number of levels	2
Number of connections	4
Nominal cross section	1.5 mm <sup>2</sup>
Color	gray

# Micro terminal - MTTB 1,5 - 1414129

## Technical data

### General

Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	4 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Connection in acc. with standard	IEC 60947-7-1
Nominal current $I_N$	17.5 A
Maximum load current	17.5 A (with 1.5 mm <sup>2</sup> conductor cross section)
Nominal voltage $U_N$	400 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	4.8 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	1.89 kV
Checking the 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	0.14 mm <sup>2</sup> / 0.2 kg
	1.5 mm <sup>2</sup> / 0.4 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.14 mm <sup>2</sup>
Tractive force setpoint	10 N
Conductor cross section tensile test	1.5 mm <sup>2</sup>
Tractive force setpoint	40 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35/NS 15
Setpoint	1 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	≤ 3.2 mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	1.5 mm <sup>2</sup>
Short-time current	0.18 kA
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s

# Micro terminal - MTTB 1,5 - 1414129

## Technical data

### General

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
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)	28 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

### Dimensions

Width	4.2 mm
Length	44 mm
Height NS 35/7,5	41 mm
Height NS 35/15	48.5 mm

### Connection data

Connection method	Screw connection
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	1.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.14 mm <sup>2</sup>
Conductor cross section flexible max.	1.5 mm <sup>2</sup>
Conductor cross section AWG min.	26
Conductor cross section AWG max.	16
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.	0.75 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.	0.75 mm <sup>2</sup>
2 conductors with same cross section, solid min.	0.14 mm <sup>2</sup>
2 conductors with same cross section, solid max.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded min.	0.14 mm <sup>2</sup>
2 conductors with same cross section, stranded max.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	0.25 mm <sup>2</sup>

# Micro terminal - MTTB 1,5 - 1414129

## Technical data

### Connection data

2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	0.34 mm <sup>2</sup>
Stripping length	6 mm
Internal cylindrical gage	A1
Screw thread	M2
Tightening torque, min	0.22 Nm
Tightening torque max	0.25 Nm

### Standards and Regulations

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

### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

### Circuit diagram



## Classifications

### eCl@ss

eCl@ss 4.0	27141118
eCl@ss 4.1	27141118
eCl@ss 5.0	27141118
eCl@ss 5.1	27141118
eCl@ss 6.0	27141120
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

# Micro terminal - MTTB 1,5 - 1414129

## Classifications

### UNSPSC

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

## Approvals


### Approvals

#### Approvals

CSA / BV / EAC / EAC / DNV GL


#### Ex Approvals

### Approval details

CSA		<a href="http://www.csagroup.org/services/testing-and-certification/certified-product-listing/">http://www.csagroup.org/services/testing-and-certification/certified-product-listing/</a>	13631
mm <sup>2</sup> /AWG/kcmil		28-14	
Nominal current IN		15 A	
Nominal voltage UN		300 V	

BV		<a href="http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials">http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials</a>	07774/D0 BV
----	---	---	-------------

EAC			EAC-Zulassung
-----	---	--	---------------

EAC			7500651.22.01.00246
-----	---	--	---------------------

DNV GL		<a href="https://www.dnvgl.com/">https://www.dnvgl.com/</a>	TAE00001CT
--------	--	---	------------

## Micro terminal - MTTB 1,5 - 1414129

### Accessories

#### Accessories

#### DIN rail

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



DIN rail, material: Steel, unperforated, height 5.5 mm, width 15 mm, length: 2 m

---

DIN rail perforated - NS 15 PERF 2000MM - 1401682



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 5.5 mm, width 15 mm, length: 2000 mm

---

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



DIN rail, material: Aluminum, perforated, height 5.5 mm, width 15 mm, length: 2 m

---

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



DIN rail, material: steel, perforated, height 5.5 mm, width 15 mm, length: 2 m

---

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 7.5 mm, width 35 mm, length: 2000 mm

---

## Micro terminal - MTTB 1,5 - 1414129

### Accessories

DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681



DIN rail, material: Steel, unperforated, height 7.5 mm, width 35 mm, length: 2 m

---

DIN rail perforated - NS 35/ 7,5 WH PERF 2000MM - 1204119



DIN rail 35 mm (NS 35)

---

DIN rail - NS 35/ 7,5 WH UNPERF 2000MM - 1204122



DIN rail 35 mm (NS 35)

---

DIN rail, unperforated - NS 35/ 7,5 AL UNPERF 2000MM - 0801704



DIN rail, unperforated, Width: 35 mm, Height: 7.5 mm, Length: 2000 mm, Color: silver

---

DIN rail perforated - NS 35/ 7,5 ZN PERF 2000MM - 1206421



DIN rail, material: Galvanized, perforated, height 7.5 mm, width 35 mm, length: 2 m

---

## Micro terminal - MTTB 1,5 - 1414129

### Accessories

DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434



DIN rail, material: Galvanized, unperforated, height 7.5 mm, width 35 mm, length: 2 m

---

DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762



DIN rail, material: Copper, unperforated, height 7.5 mm, width 35 mm, length: 2 m

---

End cap - NS 35/ 7,5 CAP - 1206560



DIN rail end piece, for DIN rail NS 35/7.5

---

End block

End clamp - CLIPFIX 35 - 3022218



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, width: 9.5 mm, color: gray

---

End clamp - CLIPFIX 35-5 - 3022276



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, with parking option for FBS...5, FBS...6, KSS 5, KSS 6, width: 5.15 mm, color: gray

---



## Micro terminal - MTTB 1,5 - 1414129

### Accessories

End clamp - E/NS 35 N - 0800886



End clamp, width: 9.5 mm, color: gray

---

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 clamp - E/UK - 1201442



End clamp, Width: 9.5 mm, Height: 35.3 mm, Length: 50.5 mm, Color: gray

---

## Micro terminal - MTTB 1,5 - 1414129

### Accessories

End clamp - E/UK 1 - 1201413



End clamps, for supporting the ends of double-level and three-level terminal blocks, width: 10 mm, color: gray

---

### End cover

Spacer plate - DG-MTTB 1,5 - 3002678



Spacer plate, Length: 44 mm, Width: 2 mm, Color: gray

---

End cover - D-MTTB 1,5 - 3002665



End cover, Length: 44.2 mm, Width: 4 mm, Height: 34.6 mm, Color: gray

---

### Labeled terminal marker

Zack Marker strip, flat - ZBF 4 CUS - 0825023



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 4.2 mm, Lettering field: 4.2 x 5.2 mm

---

Zack Marker strip, flat - ZBF 4,LGS:FORTL.ZAHLEN - 0808626



Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 4 mm, Lettering field: 4.2 x 5.2 mm

---

## Micro terminal - MTTB 1,5 - 1414129

### Accessories

#### Zack Marker strip, flat - ZBF 4,QR:FORTL.ZAHLEN - 0808820



Zack Marker strip, flat, Strip, white, labeled, Printed vertically: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 4 mm, Lettering field: 4.2 x 5.2 mm

#### Zack Marker strip, flat - ZBF 4,LGS:GERADE ZAHLEN - 0810818



Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Consecutive numbers 2 - 20, 22 - 40, etc. up to 82 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 4 mm, Lettering field: 5.15 x 4.15 mm

#### Zack Marker strip, flat - ZBF 4,LGS:UNGERADE ZAHLEN - 0810850



Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Odd numbers 1 - 19, 21 - 39, etc. up to 81 - 99, Mounting type: Snap into flat marker groove, for terminal block width: 4 mm, Lettering field: 5.15 x 4.15 mm

#### Marker for terminal blocks - UC-TMF 4 CUS - 0824630



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 4.2 mm, Lettering field: 3.6 x 5.1 mm

#### Marker for terminal blocks - UCT-TMF 4 CUS - 0829651



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 4.2 mm, Lettering field: 3.4 x 4.7 mm

### Partition plate

## Micro terminal - MTTB 1,5 - 1414129

### Accessories

Spacer plate - DP-MTTB 1,5 - 3002681



Spacer plate, Length: 44 mm, Width: 2 mm, Color: gray

---

### Screw bridge

Fixed bridge - FBRN 4-4 N - 3001569



Fixed bridge, Pitch: 4 mm, Number of positions: 4, Color: silver

---

Fixed bridge - FBRN 5-4 N - 3001572



Fixed bridge, Number of positions: 5, Color: silver

---

Fixed bridge - FBRN 6-4 N - 3001585



Fixed bridge, Number of positions: 6, Color: silver

---

Fixed bridge - FBRN 7-4 N - 3001598



Fixed bridge, Number of positions: 7, Color: silver

---

## Micro terminal - MTTB 1,5 - 1414129

### Accessories

Fixed bridge - FBRN 8-4 N - 3001608



Fixed bridge, Pitch: 4 mm, Number of positions: 8, Color: silver

---

Fixed bridge - FBRN 10-4 N - 3001624



Fixed bridge, Pitch: 4.2 mm, Number of positions: 10, Color: silver

---

Fixed bridge - FBRN 20-4 N - 3001637



Fixed bridge, Number of positions: 20, Color: silver

---

### Screwdriver tools

Screwdriver - SZS 0,4X2,5 VDE - 1205037



Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

---

### Terminal marking

Zack Marker strip, flat - ZBF 4:UNBEDRUCKT - 0808587



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 4 mm, Lettering field: 4.2 x 5.2 mm

---

## Micro terminal - MTTB 1,5 - 1414129

### Accessories

#### Marker for terminal blocks - UC-TMF 4 - 0818166



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, THERMOMARK CARD, THERMOMARK PRIME, Mounting type: Snap into flat marker groove, for terminal block width: 4.2 mm, Lettering field: 3.6 x 5.1 mm

---

#### Marker for terminal blocks - UCT-TMF 4 - 0828742



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, THERMOMARK PRIME, Mounting type: Snap into flat marker groove, for terminal block width: 4.2 mm, Lettering field: 3.4 x 4.7 mm

---

#### Test socket

#### Test adapter - PAI-4 - 3030925



4 mm test adapter, for all terminal blocks with 4.2 mm to 8.2 mm pitch