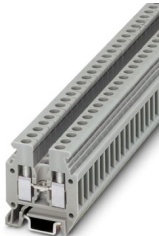


1413036

<https://www.phoenixcontact.com/us/products/1413036>

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Mini feed-through terminal block, nom. voltage: 500 V, nominal current: 24 A, number of connections: 2, connection method: Screw connection, 1 level, Rated cross section: 2.5 mm², cross section: 0.2 mm² - 4 mm², mounting type: NS 15, color: gray

Your advantages

- Separating disks, partition plates, and test sockets complete the range of accessories
- Clear arrangement thanks to marking of all terminal points
- Space saving thanks to compact design and mounting option on a 15 mm DIN rail
- Easy potential distribution thanks to standardized plug-in bridges

Commercial data

Item number	1413036
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE12
Product key	BE1261
Catalog page	Page 517 (CL1-2011)
GTIN	4017918021115
Weight per piece (including packing)	4.806 g
Weight per piece (excluding packing)	4.407 g
Customs tariff number	85369010
Country of origin	IN

MBK 3/E-Z - Mini feed-through terminal block



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<https://www.phoenixcontact.com/us/products/1413036>

Technical data

Product properties

Product type	Miniature terminal block
Number of connections	2
Number of rows	1
Potentials	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	0.77 W

Connection data

Number of connections per level	2
Nominal cross section	2.5 mm ²

1 level

Screw thread	M3
Tightening torque	0.6 ... 0.8 Nm
Stripping length	8 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.2 mm ² ... 4 mm ²
Cross section AWG	24 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section, flexible [AWG]	24 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm ² ... 2.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.25 mm ² ... 1.5 mm ²
Cross-section with insertion bridge, rigid	2.5 mm ²
Cross-section with insertion bridge, flexible	2.5 mm ²
2 conductors with same cross section, solid	0.2 mm ² ... 1 mm ²
2 conductors with same cross section, flexible	0.2 mm ² ... 1.5 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 1 mm ²
Nominal current	24 A
Maximum load current	32 A (with 4 mm ² conductor cross section)
Nominal voltage	500 V
Nominal cross section	2.5 mm ²

MBK 3/E-Z - Mini feed-through terminal block



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Ex data

Rated data (ATEX/IECEx)

Identification	Ex II 2 G Ex eb IIC Gb
Operating temperature range	-60 °C ... 105 °C
Ex-certified accessories	1415021 D-MBK/E
	1205053 SZS 0,6X3,5
	1421633 E/MK
List of bridges	Fixed bridge / FBRI 2-5 N / 3000227
	Fixed bridge / FBRI 3-5 N / 3000201
	Fixed bridge / FBRI 5-5 N / 3000188
	Fixed bridge / FBRI 6-5 N / 3000256
	Fixed bridge / FBRI 10-5 N / 2770642
	Fixed bridge / FBRI 20-5 N / 3000515
Bridge data	22 A / 2.5 mm ²
Ex temperature increase	40 K (23.1 A / 2.5 mm ²)
Rated voltage	275 V
for bridging with bridge	250 V
- At bridging between non-adjacent terminal blocks	176 V
Rated insulation voltage	250 V
output	(Permanent)

Ex level General

Rated current	21 A
Maximum load current	27.5 A
Contact resistance	0.5 mΩ

Ex connection data General

Torque range	0.6 Nm ... 0.8 Nm
Nominal cross section	2.5 mm ²
Rated cross section AWG	14
Connection capacity rigid	0.2 mm ² ... 4 mm ²
Connection capacity AWG	24 ... 12
Connection capacity flexible	0.2 mm ² ... 2.5 mm ²
Connection capacity AWG	24 ... 14
2 conductors with same cross section, solid	0.2 mm ² ... 1.5 mm ²
2 conductors with the same cross-section AWG rigid	24 ... 16
2 conductors with same cross section, stranded	0.2 mm ² ... 1.5 mm ²
2 conductors with the same cross-section AWG flexible	24 ... 16

Dimensions

Width	5.2 mm
End cover width	1 mm

Material specifications

MBK 3/E-Z - Mini feed-through terminal block



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Color	gray
Flammability rating according to UL 94	V2
Insulating material group	I
Insulating material	PA
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °C
Relative insulation material temperature index (Elec., UL 746 B)	125 °C

Electrical tests

Surge voltage test

Result	Test passed
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Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 2.5 mm ²	0.3 kA
Short-time withstand current 4 mm ²	0.48 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	1.89 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	Yes
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Mechanical tests

Mechanical strength

Result	Test passed
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Attachment on the carrier

DIN rail/fixing support	NS 15
Test force setpoint	1 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.2 mm ² / 0.2 kg
	2.5 mm ² / 0.7 kg
	4 mm ² / 0.9 kg
Result	Test passed

Environmental and real-life conditions

MBK 3/E-Z - Mini feed-through terminal block



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Needle-flame test

Time of exposure	30 s
Result	Test passed

Ambient conditions

Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (storage/transport)	30 % ... 70 %

Standards and regulations

Connection in acc. with standard	IEC 60947-7-1
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Mounting

Mounting type	NS 15
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MBK 3/E-Z - Mini feed-through terminal block

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Drawings

Circuit diagram



MBK 3/E-Z - Mini feed-through terminal block



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1413036>

 cULus Recognized Approval ID: E60425				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	300 V	20 A	28 - 12	-
Use group C				
	300 V	20 A	28 - 12	-
Use group F				
	500 V	20 A	28 - 12	-
Use group D				
	600 V	5 A	28 - 12	-

 ATEX Approval ID: KEMA 01ATEX2134U	
--	--

 EAC Ex Approval ID: RU C-DE.HA91.B.00066	
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 IECEx Approval ID: IECEx KEM 07.0008U	
---	--

 CCC Approval ID: 2020322313000629	
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MBK 3/E-Z - Mini feed-through terminal block



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Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250101

ETIM

ETIM 8.0	EC000897
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)

MBK 3/E-Z - Mini feed-through terminal block

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<https://www.phoenixcontact.com/us/products/1413036>



Accessories

i Note: Applying some accessories below might limit this product.

FBRI 10-5 N - Fixed bridge

2770642

<https://www.phoenixcontact.com/us/products/2770642>



Fixed bridge, pitch: 5.2 mm, number of positions: 10, color: silver

i Max. current carrying capacity: 24 A

EBL 10- 5 - Insertion bridge

2303132

<https://www.phoenixcontact.com/us/products/2303132>



Insertion bridge, pitch: 5.2 mm, number of positions: 10, color: gray

i Max. current carrying capacity: 24 A

MBK 3/E-Z - Mini feed-through terminal block

1413036

<https://www.phoenixcontact.com/us/products/1413036>



SBRN 2-7 - Switching jumper

1413230

<https://www.phoenixcontact.com/us/products/1413230>



Switching jumper, pitch: 7 mm, number of positions: 2, color: silver

 Max. current carrying capacity: 24 A

FBRI 2-5 N - Fixed bridge

3000227

<https://www.phoenixcontact.com/us/products/3000227>



Fixed bridge, pitch: 5 mm, number of positions: 2, color: silver

 Max. current carrying capacity: 24 A

MBK 3/E-Z - Mini feed-through terminal block

1413036

<https://www.phoenixcontact.com/us/products/1413036>



FBRI 3-5 N - Fixed bridge

3000201

<https://www.phoenixcontact.com/us/products/3000201>



Fixed bridge, pitch: 5 mm, number of positions: 3, color: silver

 Max. current carrying capacity: 24 A

FBRI 4-5 N - Fixed bridge

3000191

<https://www.phoenixcontact.com/us/products/3000191>



Fixed bridge, pitch: 5 mm, number of positions: 4, color: silver

 Max. current carrying capacity: 24 A

MBK 3/E-Z - Mini feed-through terminal block

1413036

<https://www.phoenixcontact.com/us/products/1413036>



FBRI 5-5 N - Fixed bridge

3000188

<https://www.phoenixcontact.com/us/products/3000188>



Fixed bridge, number of positions: 5, color: silver

 Max. current carrying capacity: 24 A

FBRI 6-5 N - Fixed bridge

3000256

<https://www.phoenixcontact.com/us/products/3000256>



Fixed bridge, number of positions: 6, color: silver

 Max. current carrying capacity: 24 A

MBK 3/E-Z - Mini feed-through terminal block

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<https://www.phoenixcontact.com/us/products/1413036>



FBRI 7-5 N - Fixed bridge

3000269

<https://www.phoenixcontact.com/us/products/3000269>



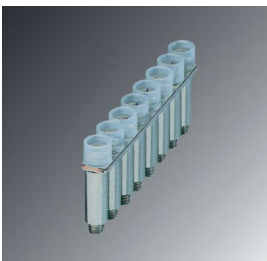
Fixed bridge, number of positions: 7, color: silver

 Max. current carrying capacity: 24 A

FBRI 8-5 N - Fixed bridge

3000272

<https://www.phoenixcontact.com/us/products/3000272>



Fixed bridge, number of positions: 8, color: silver

 Max. current carrying capacity: 24 A

MBK 3/E-Z - Mini feed-through terminal block

1413036

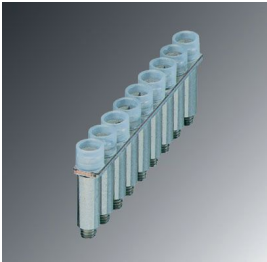
<https://www.phoenixcontact.com/us/products/1413036>



FBRI 9-5 N - Fixed bridge

3000285

<https://www.phoenixcontact.com/us/products/3000285>



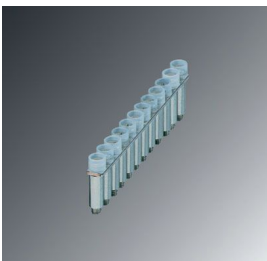
Fixed bridge, number of positions: 9, color: silver

 Max. current carrying capacity: 24 A

FBRI 12-5 N - Fixed bridge

3000434

<https://www.phoenixcontact.com/us/products/3000434>



Fixed bridge, number of positions: 12, color: silver

 Max. current carrying capacity: 24 A

MBK 3/E-Z - Mini feed-through terminal block

1413036

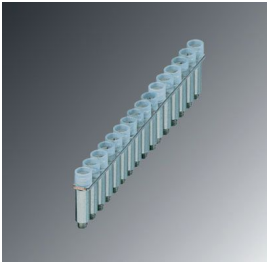
<https://www.phoenixcontact.com/us/products/1413036>



FBRI 16-5 N - Fixed bridge

3000476

<https://www.phoenixcontact.com/us/products/3000476>



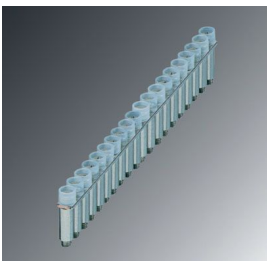
Fixed bridge, number of positions: 16, color: silver

 Max. current carrying capacity: 24 A

FBRI 20-5 N - Fixed bridge

3000515

<https://www.phoenixcontact.com/us/products/3000515>



Fixed bridge, pitch: 5 mm, number of positions: 20, color: silver

 Max. current carrying capacity: 24 A

MBK 3/E-Z - Mini feed-through terminal block

1413036

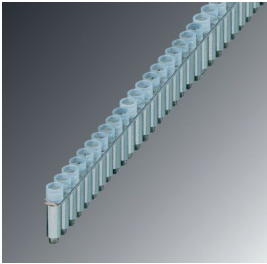
<https://www.phoenixcontact.com/us/products/1413036>



FBRI 40-5 N - Fixed bridge

3006823

<https://www.phoenixcontact.com/us/products/3006823>



Fixed bridge, number of positions: 40, color: silver

 Max. current carrying capacity: 24 A

D-MBK/E - End cover

1415021

<https://www.phoenixcontact.com/us/products/1415021>



End cover, width: 1 mm, height: 26.2 mm, color: gray

MBK 3/E-Z - Mini feed-through terminal block

1413036

<https://www.phoenixcontact.com/us/products/1413036>



FB-150 METER - Fixed bridge

0201595

<https://www.phoenixcontact.com/us/products/0201595>



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

RPS - Reducing plug

0201647

<https://www.phoenixcontact.com/us/products/0201647>



Reducing plug, number of positions: 1, color: gray

MBK 3/E-Z - Mini feed-through terminal block

1413036

<https://www.phoenixcontact.com/us/products/1413036>



TS-KK 3 - Separating plate

2770215

<https://www.phoenixcontact.com/us/products/2770215>



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

ATP-MBK - Partition plate

1413227

<https://www.phoenixcontact.com/us/products/1413227>



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

MBK 3/E-Z - Mini feed-through terminal block

1413036

<https://www.phoenixcontact.com/us/products/1413036>



SBS 5:UNBEDRUCKT - Marker card

1007219

<https://www.phoenixcontact.com/us/products/1007219>



Marker card, Card, white, unlabeled, can be labeled with: Marker pen, perforated, mounting type: snap into tall marker groove, snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 6 x 5.1 mm, Number of individual labels: 250

SZS 0,6X3,5 - Screwdriver

1205053

<https://www.phoenixcontact.com/us/products/1205053>



Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

MBK 3/E-Z - Mini feed-through terminal block

1413036

<https://www.phoenixcontact.com/us/products/1413036>



NS 15 UNPERF 2000MM VPE 10 - DIN rail, unperforated

1401695

<https://www.phoenixcontact.com/us/products/1401695>



DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

NS 15 PERF 2000MM VPE 10 - DIN rail perforated

1401682

<https://www.phoenixcontact.com/us/products/1401682>



DIN rail perforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

MBK 3/E-Z - Mini feed-through terminal block

1413036

<https://www.phoenixcontact.com/us/products/1413036>



NS 15 AL PERF 2000MM VPE 10 - DIN rail perforated

1401763

<https://www.phoenixcontact.com/us/products/1401763>



DIN rail perforated, Pack of 10 (20 m), acc. to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver

NS 15 WH PERF 2000MM-VPE 10 - DIN rail perforated

1204096

<https://www.phoenixcontact.com/us/products/1204096>



DIN rail perforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver

MBK 3/E-Z - Mini feed-through terminal block

1413036

<https://www.phoenixcontact.com/us/products/1413036>



ZB 5 :UNBEDRUCKT - Zack marker strip

1050004

<https://www.phoenixcontact.com/us/products/1050004>



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 5.1 x 10.5 mm, Number of individual labels: 10

ZB 5 CUS - Zack marker strip

0824962

<https://www.phoenixcontact.com/us/products/0824962>



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm, Number of individual labels: 10

MBK 3/E-Z - Mini feed-through terminal block



1413036

<https://www.phoenixcontact.com/us/products/1413036>

ZB 5,LGS:FORTL.ZAHLEN - Zack marker strip

1050017

<https://www.phoenixcontact.com/us/products/1050017>



Zack marker strip, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm, Number of individual labels: 10

ZB 5,QR:FORTL.ZAHLEN - Zack marker strip

1050020

<https://www.phoenixcontact.com/us/products/1050020>



Zack marker strip, white, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm

MBK 3/E-Z - Mini feed-through terminal block

1413036

<https://www.phoenixcontact.com/us/products/1413036>



ZB 5,LGS:GLEICHE ZAHLEN - Zack marker strip

1050033

<https://www.phoenixcontact.com/us/products/1050033>



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: Identical numbers 1 or 2, etc. up to 100, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm, Number of individual labels: 10

ZB 5,LGS:L1-N,PE - Zack marker strip

1050415

<https://www.phoenixcontact.com/us/products/1050415>



Zack marker strip, Strip, white, labeled, horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm, Number of individual labels: 10

MBK 3/E-Z - Mini feed-through terminal block

1413036

<https://www.phoenixcontact.com/us/products/1413036>



UC-TM 5 - Marker for terminal blocks

0818108

<https://www.phoenixcontact.com/us/products/0818108>



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 4.6 x 10.5 mm, Number of individual labels: 96

UC-TM 5 CUS - Marker for terminal blocks

0824581

<https://www.phoenixcontact.com/us/products/0824581>



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 10.5 x 4.6 mm, Number of individual labels: 96

MBK 3/E-Z - Mini feed-through terminal block

1413036

<https://www.phoenixcontact.com/us/products/1413036>



UCT-TM 5 - Marker for terminal blocks

0828734

<https://www.phoenixcontact.com/us/products/0828734>



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 4.6 x 10.5 mm, Number of individual labels: 72

UCT-TM 5 CUS - Marker for terminal blocks

0829595

<https://www.phoenixcontact.com/us/products/0829595>



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 4.6 x 10.5 mm, Number of individual labels: 72

MBK 3/E-Z - Mini feed-through terminal block

1413036

<https://www.phoenixcontact.com/us/products/1413036>



GBS 5-25X12 - Group marker label for terminal marking

0810588

<https://www.phoenixcontact.com/us/products/0810588>



Group marker label, snaps onto terminal center for screw, spring-cage and quick connection terminal blocks, labeled with a 25 x 12 mm label or manually with the B-STIFT, in the foot part with ZB 5

GBS 5-25X5 - Group marker label for terminal marking

0829126

<https://www.phoenixcontact.com/us/products/0829126>



Group marking label, can be snapped into terminal center for screw, spring-cage, push-in, and fast connection terminal blocks, can be labeled with a 24 x 4 mm label or manually using B-STIFT, in the foot part with ZB 5

MBK 3/E-Z - Mini feed-through terminal block

1413036

<https://www.phoenixcontact.com/us/products/1413036>



STP 5-2-ZB - Marker carriers

3037643

<https://www.phoenixcontact.com/us/products/3037643>

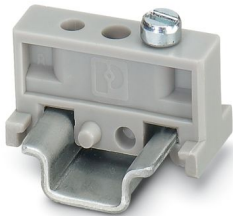


Marker carriers, snaps into ST 2,5 spring-cage terminal blocks, can be marked with UC-TM 5, UC-TMF 5, UCT-TM 5, UCT-TMF 5, ZB 5, or ZBF 5, gray, unlabeled, mounting type: snapped

E/MBK - End bracket

1401637

<https://www.phoenixcontact.com/us/products/1401637>



End clamp, width: 6.2 mm, color: gray

MBK 3/E-Z - Mini feed-through terminal block

1413036

<https://www.phoenixcontact.com/us/products/1413036>

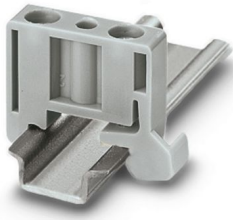


E/MK 1 - End bracket

1421659

<https://www.phoenixcontact.com/us/products/1421659>

End clamp width: 6 mm, color: gray



PSBJ 3/13/4 - Test plug strip

0201304

<https://www.phoenixcontact.com/us/products/0201304>

Test plug strip, number of positions: 1, color: silver



MBK 3/E-Z - Mini feed-through terminal block

1413036

<https://www.phoenixcontact.com/us/products/1413036>



PSB 3/10/4 - Test plug strip

0601292

<https://www.phoenixcontact.com/us/products/0601292>

Test plug strip, number of positions: 1, color: silver



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