

## Plug - SPDB 2,5/ 1-R BU - 3043268

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Plug, Connection method: Spring-cage connection, Plug connection, Number of positions: 1, Cross section: 0.08 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 28 - 12, Width: 5.2 mm, Height: 39 mm, Color: blue

Illustration shows versions of the SPDB 2,5/1-... connector in various colors

### Product Description

Connector element right, left housing with engagement pin, right closed with cover

### Why buy this product

- Plug with bridging option, for use with basic terminal blocks
- The plug with spring-cage connection is assembled directly on site by snapping together single-position plug elements
- The ST-COMBI plugs for self-assembly provide solutions that users can implement themselves
- Tested for railway applications

### Key Commercial Data

Packing unit	1 STK
Minimum order quantity	50 STK
GTIN	 4 017918 895129
GTIN	4017918895129
Weight per Piece (excluding packing)	5.600 g
Custom tariff number	85366990
Country of origin	Poland

### Technical data

#### General

Number of positions	1
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## Plug - SPDB 2,5/ 1-R BU - 3043268

### Technical data

#### General

Number of levels	1
Number of connections	1
Nominal cross section	2.5 mm <sup>2</sup>
Color	blue
Insulating material	PA
Flammability rating according to UL 94	V0
Area of application	Railway industry
	Machine building
	Plant engineering
Maximum load current	24 A (with a 2.5 mm <sup>2</sup> conductor cross section)
Rated surge voltage	6 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum load current	24 A (with 4 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	24 A
Nominal voltage U <sub>N</sub>	500 V
Open side panel	No
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	5.2 mm
Length	32.7 mm

## Plug - SPDB 2,5/ 1-R BU - 3043268

### Technical data

#### Dimensions

Height	39 mm
	24 mm
Pitch	5.2 mm

#### Connection data

Connection method	Spring-cage connection
Connection in acc. with standard	IEC 61984
Conductor cross section solid min.	0.08 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	28
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.08 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	28
Max. AWG conductor cross section, flexible	14
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	0.5 mm <sup>2</sup>
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection method	Plug connection

#### Standards and Regulations

Connection in acc. with standard	CSA
	IEC 61984
Flammability rating according to UL 94	V0

#### Environmental Product Compliance

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

### Drawings

#### Diagram

#### Derating curve

# Plug - SPDB 2,5/ 1-R BU - 3043268

for  
ST  
2,5/  
1WIN-  
1P,  
2,5/  
2P-  
1WIN-  
1P  
1WIN/  
1P  
all  
plug  
versions  
SP...

## Diagram

Derating  
curve  
for  
STTB  
2,5/  
QUATTRO/2P,  
STTB  
2,5/  
QUATTRO/4P  
and  
for  
plug  
versions  
SP...

## Diagram

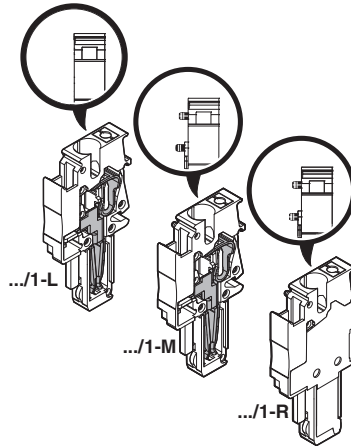
Derating  
curve  
for  
ST  
2,5-4L/1P,  
ST  
2,5-4L/2P  
and  
for  
all  
plug  
versions  
SP...

## Circuit diagram



# Plug - SPDB 2,5/ 1-R BU - 3043268

Schematic diagram



## Classifications

### eCl@ss

eCl@ss 4.0	272607xx
eCl@ss 4.1	27260701
eCl@ss 5.0	27260701
eCl@ss 5.1	27260701
eCl@ss 6.0	27141151
eCl@ss 7.0	27141151
eCl@ss 8.0	27141151
eCl@ss 9.0	27141151

### ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC002021
ETIM 5.0	EC002021
ETIM 6.0	EC002021

### UNSPSC

UNSPSC 6.01	30211802
UNSPSC 7.0901	39121402
UNSPSC 11	39121402
UNSPSC 12.01	39121402
UNSPSC 13.2	39121402

# Plug - SPDB 2,5/ 1-R BU - 3043268

## Approvals

### Approvals


#### Approvals


CSA / UL Recognized / VDE Gutachten mit Fertigungsüberwachung / cUL Recognized / LR / BV / RS / IECCEB Scheme / EAC / DNV GL / DNV GL / cULus Recognized

#### 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
	B	C	
mm <sup>2</sup> /AWG/kcmil	24-12	24-12	
Nominal current IN	20 A	20 A	
Nominal voltage UN	300 V	300 V	


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
mm <sup>2</sup> /AWG/kcmil	28-12	28-12	28-12
Nominal current IN	20 A	20 A	5 A
Nominal voltage UN	300 V	300 V	600 V

VDE Gutachten mit Fertigungsüberwachung		<a href="http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx">http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx</a>	40019518
mm <sup>2</sup> /AWG/kcmil		0.2-4	
Nominal voltage UN		500 V	

# Plug - SPDB 2,5/ 1-R BU - 3043268


## Approvals


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
mm <sup>2</sup> /AWG/kcmil	28-12	28-12	28-12
Nominal current IN	20 A	20 A	5 A
Nominal voltage UN	300 V	300 V	600 V

LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	05/20042
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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>	27721/A0 BV
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RS		<a href="http://www.rs-head.spb.ru/en/index.php">http://www.rs-head.spb.ru/en/index.php</a>	11.04057.250
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IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-57873_B1
mm <sup>2</sup> /AWG/kcmil	0.2-4		
Nominal voltage UN	500 V		

EAC			7500651.22.01.00246
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DNV GL		<a href="https://www.dnvgl.com/">https://www.dnvgl.com/</a>	E-13345 (E-9232)
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DNV GL		<a href="https://www.dnvgl.com/">https://www.dnvgl.com/</a>	TAE00001CS
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cULus 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>	
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## Plug - SPDB 2,5/ 1-R BU - 3043268

### Accessories

#### Accessories

#### Flange

Flange cover - DFS-SPDB 2,5 - 3061457



Flange cover, Length: 35.8 mm, Width: 4.5 mm, Height: 24.7 mm, Color: gray

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#### Insulating sleeve

Insulating sleeve - ISH 2,5/0,2 - 3002843



Insulating sleeve, Color: white

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Insulating sleeve - ISH 2,5/0,5 - 3002856



Insulating sleeve, Color: gray

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Insulating sleeve - ISH 2,5/1,0 - 3002869



Insulating sleeve, Color: black

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#### Jumper



## Plug - SPDB 2,5/ 1-R BU - 3043268

### Accessories

Plug-in bridge - FBS 2-5 - 3030161



Plug-in bridge, Pitch: 5.2 mm, Length: 22.7 mm, Width: 9 mm, Number of positions: 2, Color: red

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Plug-in bridge - FBS 3-5 - 3030174



Plug-in bridge, Pitch: 5.2 mm, Length: 22.7 mm, Width: 14.2 mm, Number of positions: 3, Color: red

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Plug-in bridge - FBS 4-5 - 3030187



Plug-in bridge, Pitch: 5.2 mm, Length: 22.7 mm, Width: 19.4 mm, Number of positions: 4, Color: red

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Plug-in bridge - FBS 5-5 - 3030190



Plug-in bridge, Pitch: 5.2 mm, Length: 22.7 mm, Width: 24.6 mm, Number of positions: 5, Color: red

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Plug-in bridge - FBS 10-5 - 3030213



Plug-in bridge, Pitch: 5.2 mm, Length: 22.7 mm, Width: 50.6 mm, Number of positions: 10, Color: red

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## Plug - SPDB 2,5/ 1-R BU - 3043268

### Accessories

Plug-in bridge - FBS 20-5 - 3030226



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 20, Color: red

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Plug-in bridge - FBS 50-5 - 3038930



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 50, Color: red

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Plug-in bridge - FBS 2-5 BU - 3036877



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 2, Color: blue

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Plug-in bridge - FBS 3-5 BU - 3036880



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 3, Color: blue

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Plug-in bridge - FBS 4-5 BU - 3036893



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 4, Color: blue

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## Plug - SPDB 2,5/ 1-R BU - 3043268

### Accessories

Plug-in bridge - FBS 5-5 BU - 3036903



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 5, Color: blue

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Plug-in bridge - FBS 10-5 BU - 3036916



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 10, Color: blue

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Plug-in bridge - FBS 20-5 BU - 3036929



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 20, Color: blue

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Plug-in bridge - FBS 50-5 BU - 3032114



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 50, Color: blue

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Plug-in bridge - FBS 2-5 GY - 3038969



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 2, Color: gray

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## Plug - SPDB 2,5/ 1-R BU - 3043268

### Accessories

Plug-in bridge - FBS 3-5 GY - 3038972



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 3, Color: gray

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Plug-in bridge - FBS 4-5 GY - 3038985



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 4, Color: gray

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Plug-in bridge - FBS 5-5 GY - 3038998



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 5, Color: gray

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Plug-in bridge - FBS 10-5 GY - 3039007



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 10, Color: gray

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Plug-in bridge - FBS 20-5 GY - 3038671



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 20, Color: gray

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## Plug - SPDB 2,5/ 1-R BU - 3043268

### Accessories

Plug-in bridge - FBS 50-5 GY - 3032127



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 50, Color: gray

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Plug-in bridge - FBSR 2-5 - 3033702



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 2, Color: red

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Plug-in bridge - FBSR 3-5 - 3001591



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 3, Color: red

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Plug-in bridge - FBSR 4-5 - 3001592



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 4, Color: red

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Plug-in bridge - FBSR 5-5 - 3001593



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 5, Color: red

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## Plug - SPDB 2,5/ 1-R BU - 3043268

### Accessories

Plug-in bridge - FBSR 10-5 - 3033710



Plug-in bridge, Pitch: 5.2 mm, Number of positions: 10, Color: red

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### Labeled terminal marker

Zack Marker strip, flat - ZBF 5 CUS - 0825025



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: 5 mm, Lettering field: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,LGS:FORTL.ZAHLEN - 0808671



Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,QR:FORTL.ZAHLEN - 0808697



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: 5 mm, Lettering field: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,LGS:GERADE ZAHLEN - 0810821



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: 5 mm, Lettering field: 5.15 x 5.15 mm

## Plug - SPDB 2,5/ 1-R BU - 3043268

### Accessories

Zack Marker strip, flat - ZBF 5,LGS:UNGERADE ZAHLEN - 0810863



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: 5 mm, Lettering field: 5.15 x 5.15 mm

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Marker for terminal blocks - UC-TMF 5 CUS - 0824638



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: 5.2 mm, Lettering field: 4.6 x 5.1 mm

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Marker for terminal blocks - UCT-TMF 5 CUS - 0829658



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: 5.2 mm, Lettering field: 4.4 x 4.7 mm

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Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

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Marker pen - X-PEN 0,35 - 0811228



Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

## Plug - SPDB 2,5/ 1-R BU - 3043268

### Accessories

#### Mounting material

Strain relief - PDZ/2 - 3040562



Strain relief, Length: 3 mm, Width: 9.6 mm, Height: 23 mm, Number of positions: 2, Color: black

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Strain relief - PDZ/4 - 3040575



Strain relief, Length: 3 mm, Width: 19.9 mm, Height: 23 mm, Number of positions: 4, Color: black

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Latching - PR - 3040559



Latching, Number of positions: 1, Color: orange

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Latching - PR/2 - 3040630



Latching, Number of positions: 2, Color: orange

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Latching - PRT/2 - 3040631



Latching, can only be released using a screwdriver, Number of positions: 2, Color: orange

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## Plug - SPDB 2,5/ 1-R BU - 3043268

### Accessories

Latching - PRZ - 3040614



Latching, Length: 3 mm, Width: 5.2 mm, Number of positions: 2, Color: orange

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### Screwdriver tools

Screwdriver - ST-BW - 1207608



Actuation tool, for all 2.5 mm<sup>2</sup> - 4.0 mm<sup>2</sup> spring-cages

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### Shield connection

Shield connection clip - PSH 3- 6 - 3040591



Shield connection clip, Color: black

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Shield connection clip - PSH 5-10 - 3040601



Shield connection clip, Color: black

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### Terminal marking

## Plug - SPDB 2,5/ 1-R BU - 3043268

### Accessories

Zack Marker strip, flat - ZBF 5:UNBEDRUCKT - 0808642



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.1 x 5.2 mm

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Marker for terminal blocks - UC-TMF 5 - 0818153



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, Mounting type: Snap into flat marker groove, for terminal block width: 5.2 mm, Lettering field: 4.6 x 5.1 mm

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Marker for terminal blocks - UCT-TMF 5 - 0828744



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, Mounting type: Snap into flat marker groove, for terminal block width: 5.2 mm, Lettering field: 4.4 x 4.7 mm