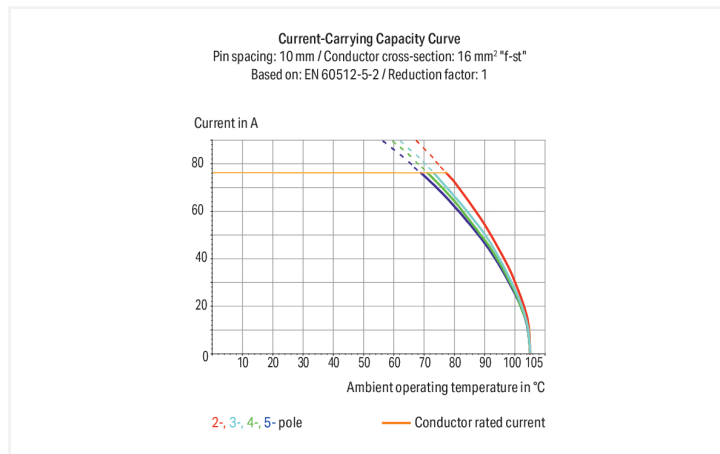


# Data Sheet | Item Number: 745-502/011-000

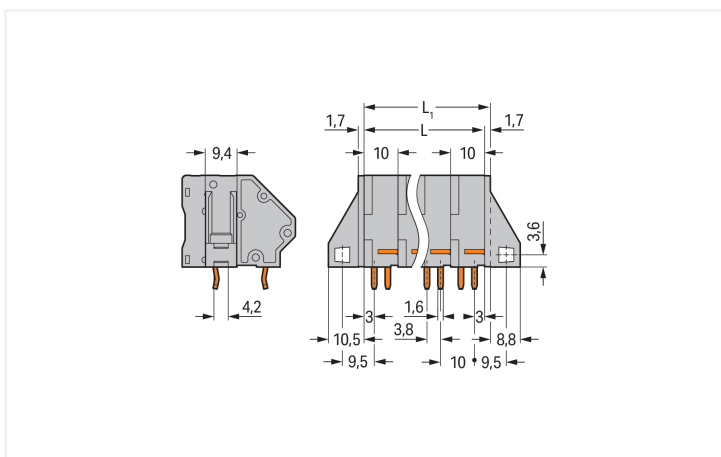
PCB terminal block; 16 mm<sup>2</sup>; Pin spacing 10 mm; 2-pole; CAGE CLAMP®; commo-  
ning option; gray

<https://www.wago.com/745-502/011-000>



Color: ■ gray

Similar to illustration



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 10 \text{ mm}$   
 $L_1 = L + 1.7 \text{ mm} \triangleq \text{version without mounting flange}$

## PCB terminal block, 745 Series, 45 °conductor entry to board

Connect conductors quickly and securely with this PCB terminal block (item number 745-502/011-000). It is a universal connector that can be used practically anywhere, for example, as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. Strip lengths must be between 12 and 13 mm when connecting conductors to this PCB terminal block. This product features one conductor terminal and utilizes CAGE CLAMP®. Our highly-rated and maintenance-free CAGE CLAMP® connection makes it easy to connect all conductor types without having to prepare the conductor. For example, you don't need to crimp ferrules. The dimensions are (21.7 x 33.5 x 33.4) mm (width x height x depth). Depending on the conductor type, this PCB terminal block is ideal for conductor cross sections ranging from 0.2 mm<sup>2</sup> to 16 mm<sup>2</sup>.

The contact surface is coated with tin. An operating tool is used to operate this PCB terminal block. THT is used to solder the PCB terminal block. Insert the conductor at an angle of 45°.

## Notes

Variants:

Other pole numbers  
 Versions for Ex e II and Ex i  
 Other colors  
 Mixed-color PCB connector strips  
 Versions with mounting flanges  
 Direct marking  
 Solder pin length: 5 mm  
 Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

## Electrical data

Ratings per	IEC/EN 60664-1			Approvals per	UL 1059		
Overvoltage category	III	III	II	Use group	B	C	D
Pollution degree	3	2	2	Rated voltage	300 V	-	300 V
Nominal voltage	320 V	250 V	630 V	Rated current	10 A	-	10 A
Rated impulse withstand voltage	4 kV	4 kV	4 kV				
Rated current	76 A	76 A	76 A				

Approvals per	CSA		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	10 A	-	10 A

## Connection Data

Clamping units	2	<b>Connection 1</b>	
Total number of potentials	2	Connection technology	CAGE CLAMP®
Number of connection types	1	Actuation type	Operating tool
Number of levels	1	Solid conductor	0.2 ... 16 mm <sup>2</sup> / 24 ... 6 AWG
Number of jumper slots	1	Fine-stranded conductor	0.2 ... 16 mm <sup>2</sup> / 24 ... 6 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 10 mm <sup>2</sup>
		Fine-stranded conductor; with uninsulated ferrule	0.25 ... 10 mm <sup>2</sup>
		Strip length	12 ... 13 mm / 0.47 ... 0.51 inches
		Conductor connection direction to PCB	45 °
		Pole number	2

## Physical data

Pin spacing	10 mm / 0.394 inches
Width	21.7 mm / 0.854 inches
Height	33.5 mm / 1.319 inches
Height from the surface	27 mm / 1.063 inches
Depth	33.4 mm / 1.315 inches
Solder pin length	6.5 mm
Solder pin dimensions	1.2 x 1.6 mm
!	2.2 <sup>(±0.1)</sup> mm

### Mechanical data

Mounting type	Mounting flange
---------------	-----------------

### PCB contact

PCB contact	THT
Solder pin arrangement	over the entire terminal strip (in-line)
Number of solder pins per potential	4

### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact Plating	Tin
Fire load	0.363 MJ
Weight	21.6 g

### Environmental requirements

Limit temperature range	-60 ... +105 °C
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### Commercial data

Product Group	4 (Printed Circuit Connectors)
PU (SPU)	24 pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918302852
Customs tariff number	85369010000

### Product Classification

UNSPSC	39121409
eCl@ss 10.0	27-44-04-01
eCl@ss 9.0	27-44-04-01
ETIM 9.0	EC002643
ETIM 10.0	EC002643
ECCN	NO US CLASSIFICATION

### Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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## Approvals / Certificates

### General approvals



Approval	Standard	Certificate Name
CSA DEKRA Certification B.V.	C22.2 No. 158	1604421
UR Underwriters Laboratories Inc.	UL 1059	E45172

## Downloads

### Environmental Product Compliance

#### Compliance Search

Environmental Product Compliance 745-502/011-000	↓
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## Documentation

### Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB	↓
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## CAD/CAE-Data

### CAD data

2D/3D Models 745-502/011-000	↓
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### CAE data

EPLAN Data Portal 745-502/011-000	↓
ZUKEN Portal 745-502/011-000	↓

### PCB Design

Symbol and Footprint via SamacSys 745-502/011-000	↓
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Symbol and Footprint via Ultra Librarian 745-502/011-000	↓
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**1 Compatible Products**

**1.1 Optional Accessories**

**1.1.1 Ferrule**

**1.1.1.1 Ferrule**

 <b>Item No.: 216-262</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	 <b>Item No.: 216-263</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	 <b>Item No.: 216-264</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	 <b>Item No.: 216-284</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black
 <b>Item No.: 216-289</b> Ferrule; Sleeve for 10 mm <sup>2</sup> / AWG 8; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	 <b>Item No.: 216-209</b> Ferrule; Sleeve for 10 mm <sup>2</sup> / AWG 8; insulated; electro-tin plated; red	 <b>Item No.: 216-109</b> Ferrule; Sleeve for 10 mm <sup>2</sup> / AWG 8; un-insulated; electro-tin plated	 <b>Item No.: 216-210</b> Ferrule; Sleeve for 16 mm <sup>2</sup> / AWG 6; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue
 <b>Item No.: 216-110</b> Ferrule; Sleeve for 16 mm <sup>2</sup> / AWG 6; un-insulated; electro-tin plated; brown metallic	 <b>Item No.: 216-266</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	 <b>Item No.: 216-286</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	 <b>Item No.: 216-267</b> Ferrule; Sleeve for 4 mm <sup>2</sup> / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray
 <b>Item No.: 216-287</b> Ferrule; Sleeve for 4 mm <sup>2</sup> / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	 <b>Item No.: 216-208</b> Ferrule; Sleeve for 6 mm <sup>2</sup> / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow	 <b>Item No.: 216-288</b> Ferrule; Sleeve for 6 mm <sup>2</sup> / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow	 <b>Item No.: 216-108</b> Ferrule; Sleeve for 6 mm <sup>2</sup> / AWG 10; un-insulated; electro-tin plated; silver-colored

**1.1.2 Jumper**

**1.1.2.1 Jumper**



**Item No.: 745-582**  
 Jumper; 2-way; silver-colored

**1.1.3 Marking**

**1.1.3.1 Marker**

 <b>Item No.: 2009-145/000-006</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue	 <b>Item No.: 2009-145/000-007</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray	 <b>Item No.: 2009-145/000-023</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green	 <b>Item No.: 2009-145/000-012</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange
 <b>Item No.: 2009-145/000-005</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red	 <b>Item No.: 2009-145/000-024</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet	 <b>Item No.: 2009-145</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	 <b>Item No.: 2009-145/000-002</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow
 <b>Item No.: 248-501/000-006</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue	 <b>Item No.: 248-501/000-007</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray	 <b>Item No.: 248-501/000-023</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green	 <b>Item No.: 248-501/000-017</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green

1.1.3.1 Marker



**Item No.: 248-501/000-012**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange



**Item No.: 248-501/000-005**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red



**Item No.: 248-501/000-024**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet



**Item No.: 248-501**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



**Item No.: 248-501/000-002**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow



**Item No.: 793-5501/000-006**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue



**Item No.: 793-5501/000-007**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray



**Item No.: 793-5501/000-023**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green



**Item No.: 793-5501/000-017**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green



**Item No.: 793-5501/000-012**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange



**Item No.: 793-5501/000-005**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red



**Item No.: 793-5501/000-024**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet



**Item No.: 793-5501**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 793-5501/000-002**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



**Item No.: 793-501/000-006**

WMB marking card; as card; not stretchable; plain; snap-on type; blue



**Item No.: 793-501/000-007**

WMB marking card; as card; not stretchable; plain; snap-on type; gray



**Item No.: 793-501/000-023**

WMB marking card; as card; not stretchable; plain; snap-on type; green



**Item No.: 793-501/000-017**

WMB marking card; as card; not stretchable; plain; snap-on type; light green



**Item No.: 793-501/000-012**

WMB marking card; as card; not stretchable; plain; snap-on type; orange



**Item No.: 793-501/000-005**

WMB marking card; as card; not stretchable; plain; snap-on type; red



**Item No.: 793-501/000-024**

WMB marking card; as card; not stretchable; plain; snap-on type; violet



**Item No.: 793-501**

WMB marking card; as card; not stretchable; plain; snap-on type; white



**Item No.: 793-501/000-002**

WMB marking card; as card; not stretchable; plain; snap-on type; yellow



**Item No.: 2009-115/000-006**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



**Item No.: 2009-115/000-007**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



**Item No.: 2009-115/000-023**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



**Item No.: 2009-115/000-017**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green



**Item No.: 2009-115/000-012**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



**Item No.: 2009-115/000-024**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



**Item No.: 2009-115**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 2009-115/000-002**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.1.4 Test and measurement

1.1.4.1 Testing accessories

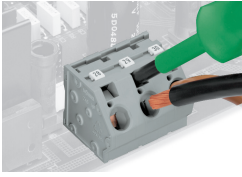


**Item No.: 210-136**

Test plug; 2 mm Ø; with 500 mm cable; red

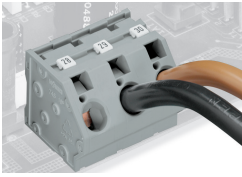
## Installation Notes

### Conductor termination



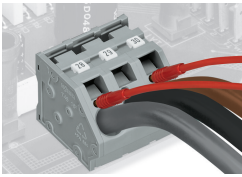
Inserting/removing a conductor via 5.5 mm screwdriver – 745 Series, 16 mm<sup>2</sup>.

### Marking



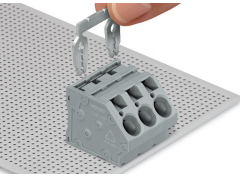
Marking via Mini-WSB and WMB markers or factory direct marking – 745 Series.

### Testing

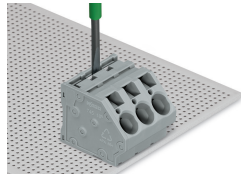


Testing with test plug – 745 Series.

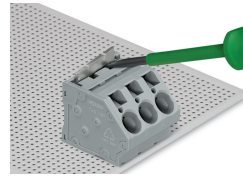
### Commoning



Inserting a comb-style jumper bar.



To insert a comb-style jumper bar, push it down using a screwdriver until it hits the backstop – 745 Series.



To remove the jumper bar, lift it up using a screwdriver – 745 Series.