

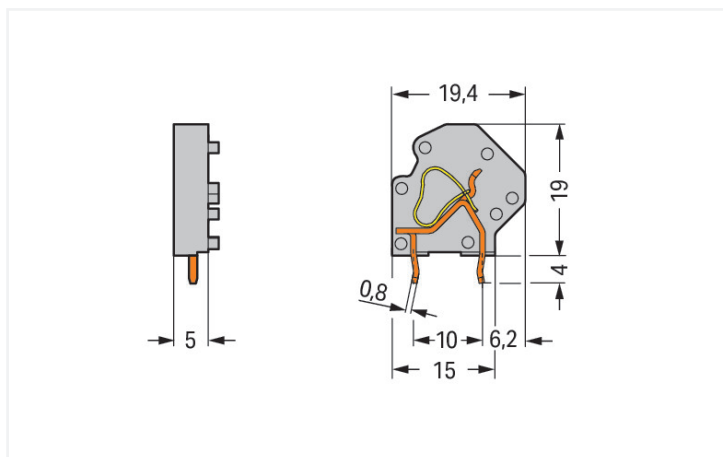
Data Sheet | Item Number: 745-3801

Stackable PCB terminal block; 4 mm²; Pin spacing 5 mm; 1-pole; CAGE CLAMP®; gray

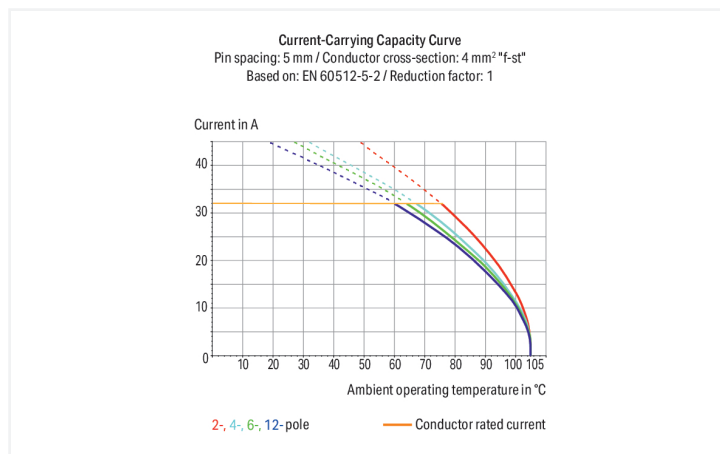
<https://www.wago.com/745-3801>



Color: ■ gray



Dimensions in mm



PCB terminal block, 745 Series, with 5 mm pin spacing

Our PCB terminal block (item number 745-3801) ensures effortless electrical installations. You can count on trusted safety with these PCB terminal blocks, perfect for a wide range of applications when designing your devices. Conductors should only be connected to this PCB terminal block if their strip length is between 8 and 9 mm. Featuring one conductor terminal along with CAGE CLAMP®, this connector outperforms the competition. Our renowned universal connection known as CAGE CLAMP® leads the way when it comes to connection technology and electrical interconnections. The dimensions are (6.5 x 23 x 19.4) mm (width x height x depth). Depending on the conductor type, this PCB terminal block is designed for conductor cross sections ranging from 0.08 mm² to 4 mm².

The contact surface is coated with tin. An operating tool is used to operate this PCB terminal block. The PCB terminal block is designed for THT soldering. Insert the conductor into the board at a 45° angle..



Notes	
Variants:	Versions for Ex e II and Ex i Other colors 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	
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	320 V	320 V	630 V
Rated impulse withstand voltage	4 kV	4 kV	4 kV
Rated current	32 A	32 A	32 A

Approvals per		UL 1059	
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	20 A	-	10 A

Approvals per		CSA	
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	20 A	-	10 A

Connection Data

Clamping units	1
Total number of potentials	1
Number of connection types	1
Number of levels	1

Connection 1	
Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Solid conductor	0.08 ... 4 mm² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 4 mm² / 28 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm²
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Conductor connection direction to PCB	45 °
Pole number	1

Physical data

Pin spacing	5 mm / 0.197 inches
Width	6.5 mm / 0.256 inches
Height	23 mm / 0.906 inches
Height from the surface	19 mm / 0.748 inches
Depth	19.4 mm / 0.764 inches
Solder pin length	4 mm
Solder pin dimensions	0.8 x 1.2 mm
!	1.5 (+0.1) mm



PCB contact		
PCB contact	THT	
Solder pin arrangement	within the terminal block (in-line)	
Number of solder pins per potential	2	

Material data		
Note (material data)	Information on material specifications can be found here	
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 _{Cu})	
Contact Plating	Tin	
Fire load	0.026 MJ	
Weight	1.8 g	

Environmental requirements		
Limit temperature range	-60 ... +105 °C	

Commercial data		
Product Group	4 (Printed Circuit Connectors)	
PU (SPU)	200 (50) pcs	
Packaging type	Box	
Country of origin	PL	
GTIN	4045454001193	
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	

Approvals / Certificates		
General approvals		General approvals
   		cURus Underwriters Laboratories Inc.
		UL 1059
		E45172
Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7095
CCA DEKRA Certification B.V.	EN 60947	71-112275
CSA DEKRA Certification B.V.	C22.2 No. 158	1604421



Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 745-3801



Documentation

Additional Information
Technical Section
03.04.2019
pdf 2027.26 KB



CAD/CAE-Data

CAD data
2D/3D Models 745-3801



CAE data
EPLAN Data Portal 745-3801
ZUKEN Portal 745-3801



PCB Design
Symbol and Footprint via SamacSys 745-3801
Symbol and Footprint via Ultra Librarian 745-3801





1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



Item No.: 745-3100
End plate; 1.5 mm thick; snap-fit type; gray

1.1.1.2 Intermediate plate



Item No.: 745-3138
Spacer; for extending the pin spacing; 2.5 mm thick; gray

1.2 Optional Accessories

1.2.1 Ferrule

1.2.1.1 Ferrule



Item No.: 216-241
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



Item No.: 216-141
Ferrule; Sleeve for 0.5 mm² / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-242
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-262
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-142
Ferrule; Sleeve for 0.75 mm² / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-243
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-263
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-143
Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-244
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-264
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-284
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-144
Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored



Item No.: 216-246
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Item No.: 216-266
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Item No.: 216-286
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Item No.: 216-106
Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; silver-colored



1.2.2 Marking

1.2.2.1 Marking strip



Item No.: 210-332/500-202
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/500-205
Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/500-204
Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/500-206
Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.2.3 Test and measurement

1.2.3.1 Testing accessories



Item No.: 210-136
Test plug; 2 mm Ø; with 500 mm cable; red

1.2.4 Tool

1.2.4.1 Operating tool



Item No.: 210-658
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured



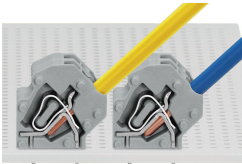
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



Item No.: 210-657
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

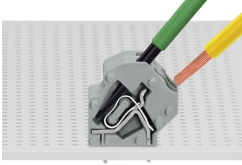
Installation Notes

Installation



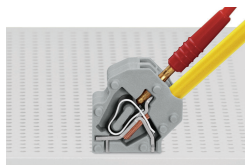
Saving space: two PCB terminal strips arranged in a row

Conductor termination



Inserting a conductor via 3.5 mm screwdriver.

Testing



Testing with 2 mm Ø test plug.