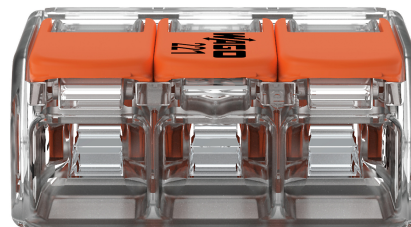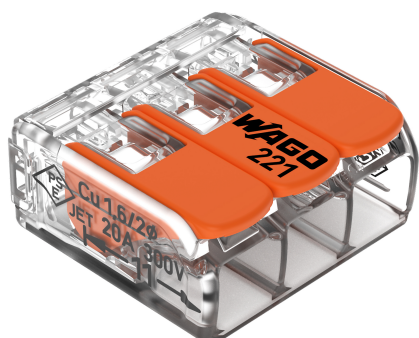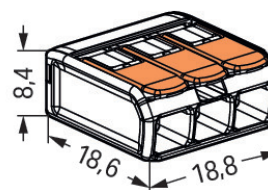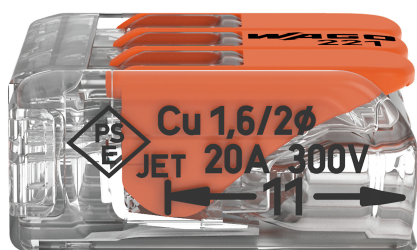# Data Sheet | Item Number: 221-413

Splicing connector with levers; for all conductor types; max. 4 mm²; 3-conductor; transparent housing; Surrounding air temperature: max 85℃ (T85); 4,00 mm²; transparent

Color: ☐ transparent

Dimensions in mm

Splicing connector with levers, 221 Series, lever

Enjoy easy electrical installations with splicing connector with levers (item number 221-413). From intercom system wiring to electric ovens—connecting different conductor types is quick and hassle-free with WAGO's compact 221 Series splicing connector. Our splicing connector is rated for 450 V and is designed to handle a rated current of up to 32 A. It is therefore suitable for high-load applications. Ensure that the strip lengths are 11 mm when connecting conductors to splicing connector with levers. This product features conductor terminals and utilizes CAGE CLAMP®. Our reliable and maintenance-free CAGE CLAMP® connection makes it easy to connect all types of conductors without having to prepare the conductor. For example, you don't need to crimp ferrules. Dimensions: 18.8 x 8.4 x 18.6 mm (width x height x depth). Splicing connector with levers is suitable for conductor cross sections ranging from 0.2 mm² to 4 mm².

WAGO's 221 Series Splicing Connector with levers impresses with its innovative design for different conductor cross-sections. That's why WAGO's lever-equipped splicing connector holds a unique trademark within electrical interconnection technology. The flat levers, which fit seamlessly into the 221's base, act like a cast when closed and can be positioned neatly in any housing without disturbing edges. Due to the wide design of each leaver, they can all be operated perfectly without tools for convenient conductor terminations. The transparent housing displays robust technology and enables immediate visual inspection for the correct contact of solid, stranded and fine-stranded conductors. Resembling piano keys, the levers' design perfectly combines the functional and aesthetic connection technology "Made by WAGO." This product is designed for specific Ex applications (please refer to the product datasheet).

Notes

General safety instructions	**NOTICE: Observe installation and safety instructions!**
	• **Only to be used by electricians!**
	• Do not work under voltage/load!
	• Use only for proper use!
	• Observe national regulations/standards/guidelines!
	• Observe technical specifications for the products!
	• Observe the number of permissible potentials!
	• Do not use damaged/dirty components!
	• Observe conductor types, cross-sections and strip lengths!
	• Insert conductor until it hits the product's backstop!
	• Use original accessories!
	To be sold only with installation instructions!
Safety Information	in grounded power lines

Electrical data

Ratings per		EN 60664		
Overvoltage category	III	III	II	
Pollution degree	3	2	2	
Nominal voltage	-	-	450 V	
Rated surge voltage	-	-	4 kV	
Rated current	-	-	32 A	

Approvals per		UL 486C		
Use group	B	C	D	
Rated voltage	-	600 V	-	
Rated current	-	20 A	-	

Connection data

Clamping units	3
Total number of potentials	1

Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Lever
Connectable conductor materials	Copper
Nominal cross-section	4 mm² / 12 AWG
Solid conductor	0.2 … 4 mm² / 24 … 12 AWG
Stranded conductor	0.2 … 4 mm² / 24 … 12 AWG
Fine-stranded conductor	0.14 … 4 mm² / 24 … 12 AWG
Strip length	11 mm / 0.43 inches
Wiring direction	Side-entry wiring

Physical data

Width	18.8 mm / 0.74 inches
Height	8.4 mm / 0.331 inches
Depth	18.6 mm / 0.732 inches

Material data

Note (material data)	Information on material specifications can be found here
Color	transparent
Material group	IIIa
Insulation material (main housing)	Polycarbonate (PC)
Flammability class per UL94	V2
Fire load	0.064 MJ
Actuator color	orange
Weight	2.5 g

Environmental requirements

Ambient temperature (operation)	+85 °C
Continuous operating temperature	105 °C
Temperature marking per EN 60998	T85

Commercial data

Product Group	7 (Push Wire Conn.)
PU (SPU)	500 (50) pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821808442
Customs tariff number	85369010000

Product classification

UNSPSC	39121409

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

Declarations of conformity and manufacturer's declarations

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

WAGO

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product
Compliance 221-413 ↓

Documentation

Bid Text

221-413	19.02.2019	xml 3.43 KB	↓
221-413	23.01.2019	docx 15.29 KB	↓
ausschreiben.de 221-413			↓

CAD/CAE-Data

CAD data

2D/3D Models 221-413 ↓

CAE data

EPLAN Data Portal
221-413 ↓

ZUKEN Portal 221-413 ↓

1 Compatible Products

1.1 Optional Accessories

1.1.1 General accessories

1.1.1.1 Empty housings

Item No.: 207-4301
Junction box; Branch; for multicore cables;
221 Series; max. 4 mm² connectors; wi-
thout splicing connectors; white

1.1.1.2 Moisture protection

Item No.: 207-1331
Gelbox; Branch; for cables; with gel; 221,
2x73 Series; max. 4 mm² connectors; wi-
thout splicing connectors; Size 1; gray

Item No.: 207-1333
Gelbox; Branch; for cables; with gel; 221,
2x73 Series; max. 4 mm² connectors; wi-
thout splicing connectors; Size 3; gray

1.1.2 Jumper

1.1.2.1 Jumper

Item No.: 221-941/000-006

Jumper; for conductor entry; 2-way; insulated; blue

Item No.: 221-942/000-006

Jumper; for conductor entry; 2-way; insulated; blue

Item No.: 221-941

Jumper; for conductor entry; 2-way; insulated; dark gray

Item No.: 221-942

Jumper; for conductor entry; 2-way; insulated; dark gray

1.1.3 Mounting adapter

1.1.3.1 Mounting accessories

Item No.: 221-500/000-006

Mounting carrier; 221 Series - 4 mm²; for DIN-35 rail mounting/screw mounting; blue

Item No.: 221-500/000-053

Mounting carrier; 221 Series - 4 mm²; for DIN-35 rail mounting/screw mounting; dark gray-yellow

Item No.: 221-500

Mounting carrier; 221 Series - 4 mm²; for DIN-35 rail mounting/screw mounting; orange

Item No.: 221-503/000-004

Mounting carrier; for 3-conductor terminal blocks; 221 Series - 4 mm²; for screw mounting; black

Item No.: 221-503

Mounting carrier; for 3-conductor terminal blocks; 221 Series - 4 mm²; for screw mounting; white

Item No.: 221-513/000-004

Mounting carrier; for 3-conductor terminal blocks; 221 Series - 4 mm²; with snap-in mounting foot for horizontal mounting; black

Item No.: 221-513

Mounting carrier; for 3-conductor terminal blocks; 221 Series - 4 mm²; with snap-in mounting foot for horizontal mounting; white
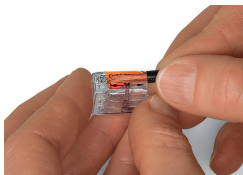
Item No.: 221-523/000-004

Mounting carrier; for 3-conductor terminal blocks; 221 Series - 4 mm²; with snap-in mounting foot for vertical mounting; black
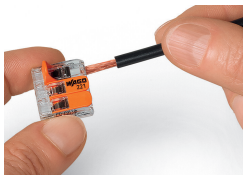
Item No.: 221-523

Mounting carrier; for 3-conductor terminal blocks; 221 Series - 4 mm²; with snap-in mounting foot for vertical mounting; white
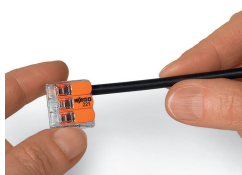
Installation Notes

Conductor termination

Strip conductor to 11 mm (0.43 inch).

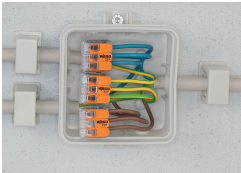Pull up an orange lever to open the clamping unit.

Then insert the conductor and push the lever back down, flush with the connector housing.

Compact, lever-operated splicing connectors:
Tool-free connection of fine-stranded conductors from 0.14 … 4 mm², as well as solid or stranded conductors from 0.2 … 4 mm² (24 … 12 AWG).
Safety:
The lever's specially designed rest position reliably prevents accidental unclamping of a connected conductor.
Application safety, for any type of conductor (solid, stranded, fine-stranded), is confirmed by approvals like ENEC or UL.

Application

Wiring fine-stranded conductors in junction boxes.

Custom low-voltage lighting system

Lighting distribution in a ceiling canopy

Pendant light connection in a suspended ceiling

Current addresses can be found at:: www.wago.com