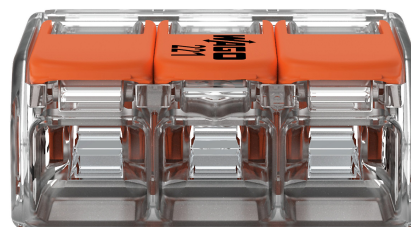
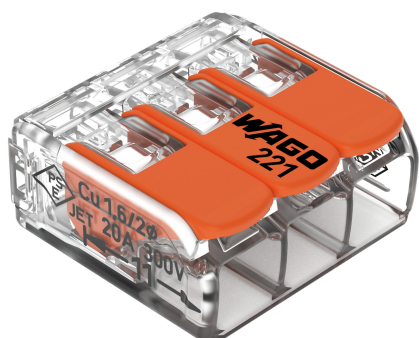


## Data Sheet | Item Number: 221-413

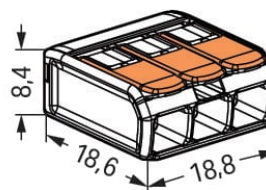
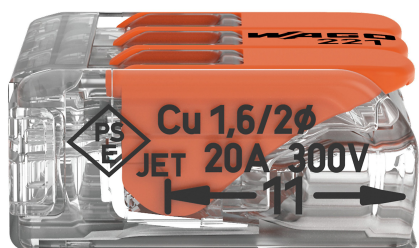
COMPACT Splicing Connector; for all conductor types; max. 4 mm<sup>2</sup>; 3-conductor; with levers; transparent housing; Surrounding air temperature: max 85°C (T85); 4,00 mm<sup>2</sup>; transparent



<https://www.wago.com/221-413>



Color:  transparent



Dimensions in mm

### Your benefits:

- Ease of use – pull the lever up, insert a conductor and push the lever back down
- Available as 2-, 3- and 5-wire connectors
- Easily terminate conductors from 0.14 to 4 mm<sup>2</sup>
- Connect solid, stranded and fine-stranded conductors
- Save time for installers and device manufacturers
- Quickly install devices with higher power consumption
- Safely install long cable runs with larger conductor cross sections
- Mounting carrier for installation conforms to standards
- Custom carriers are possible

## Notes

Safety information in grounded power lines

## Electrical data

## Ratings per IEC/EN

|                            |   |
|----------------------------|---|
| Ratings per                | EN 60664  |
| Nominal voltage (II/2)     | 450 V   |
| Rated surge voltage (II/2) | 4 kV  |
| Rated current              | 32 A  |
| Legend (ratings)           | (II / 2) $\hat{=}$ Overvoltage category II / Pollution degree 2 |

## Ratings per UL 1059

|                                |         |
|--------------------------------|---------|
| Approvals per                  | UL 486C |
| Rated voltage UL (Use Group C) | 600 V   |
| Rated current UL (Use Group C) | 20 A    |

## Connection data

|                            |   |
|----------------------------|---|
| Connection points          | 3 |
| Total number of potentials | 1 |

## Connection 1

|                                 |  |
|---------------------------------|--|
| Connection technology           | CAGE CLAMP®                                |
| Actuation type                  | Lever                                      |
| Connectable conductor materials | Copper                                     |
| Nominal cross-section           | 4 mm <sup>2</sup> / 12 AWG                 |
| Solid conductor                 | 0.2 ... 4 mm <sup>2</sup> / 24 ... 12 AWG  |
| Stranded conductor              | 0.2 ... 4 mm <sup>2</sup> / 24 ... 12 AWG  |
| Fine-stranded conductor         | 0.14 ... 4 mm <sup>2</sup> / 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 | 8.6 mm / 0.327 inches  |
| Depth  | 18.8 mm / 0.732 inches |

## Material data

|                             |  |
|-----------------------------|--|
| Note (material data)        | <a href="#">Information on material specifications can be found here</a> |
| Color                       | transparent  |
| Insulation material         | 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.) |
| eCl@ss 10.0           | 27-14-11-04         |
| eCl@ss 9.0            | 27-14-11-04         |
| ETIM 8.0              | EC000446            |
| ETIM 7.0              | EC000446            |
| PU (SPU)              | 500 (50) pcs        |
| Packaging type        | Box                 |
| Country of origin     | DE                  |
| GTIN                  | 4050821808442       |
| Customs tariff number | 85369010000         |

### Environmental Product Compliance

|                        |                         |
|------------------------|-------------------------|
| RoHS Compliance Status | Compliant, No Exemption |
|------------------------|-------------------------|

### Approvals / Certificates

#### General approvals



| Approval  | Standard | Certificate Name |
|---|----------|------------------|
| CCA<br>DEKRA Certification B.V.                 | EN 60998 | NTR NL-7827      |
| ENEC 05<br>DEKRA Certification B.V.             | EN 60998 | 71-113253 REV.1  |
| UL_Listed_64KA<br>UL International Germany GmbH | UL 467   | E201573          |
| UL<br>UL International Germany GmbH             | UL 486C  | E69654           |

#### Declarations of conformity and manufacturer's declarations

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

#### Approvals for marine applications



| Approval   | Standard | Certificate Name |
|--|----------|------------------|
| ABS<br>American Bureau of Shipping               | -        | 18-HG1755093-PDA |
| DNV GL<br>Det Norske Veritas, Germanischer Lloyd | EN 60998 | TAE000015T       |
| LR<br>Lloyds Register                            | EN 60998 | LR22207029TA     |

### Downloads

#### Environmental Product Compliance

| Compliance Search                        |   |
|--|---|
| Environmental Product Compliance 221-413 | ↓ |

## Documentation

| Bid Text                   |            |                  |   |
|----------------------------|------------|------------------|---|
| 221-413                    | 19.02.2019 | xml<br>3.43 KB   | ↓ |
| 221-413                    | 23.01.2019 | docx<br>15.29 KB | ↓ |
| ausschreiben.de<br>221-413 |            |                  | ↓ |

## CAD/CAE-Data

| CAD data             |   |
|----------------------|---|
| 2D/3D Models 221-413 | ↓ |

| CAE data                     |   |
|------------------------------|---|
| EPLAN Data Portal<br>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 mm<sup>2</sup> connectors; without splicing connectors; white

##### 1.1.1.2 Moisture protection



**Item No.: 207-1331**  
 Gelbox; Branch; for cables; with gel; 221, 2x73 Series; max. 4 mm<sup>2</sup> connectors; without splicing connectors; Size 1; gray



**Item No.: 207-1333**  
 Gelbox; Branch; for cables; with gel; 221, 2x73 Series; max. 4 mm<sup>2</sup> connectors; without 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 mm<sup>2</sup>; for DIN-35 rail mounting/screw mounting; blue

**Item No.: 221-500/000-053**

Mounting carrier; 221 Series - 4 mm<sup>2</sup>; for DIN-35 rail mounting/screw mounting; dark gray-yellow

**Item No.: 221-500**

Mounting carrier; 221 Series - 4 mm<sup>2</sup>; for DIN-35 rail mounting/screw mounting; orange

**Item No.: 221-503/000-004**

Mounting carrier; for 3-conductor terminal blocks; 221 Series - 4 mm<sup>2</sup>; for screw mounting; black



**Item No.: 221-503**

Mounting carrier; for 3-conductor terminal blocks; 221 Series - 4 mm<sup>2</sup>; for screw mounting; white

**Item No.: 221-513/000-004**

Mounting carrier; for 3-conductor terminal blocks; 221 Series - 4 mm<sup>2</sup>; with snap-in mounting foot for horizontal mounting; black

**Item No.: 221-513**

Mounting carrier; for 3-conductor terminal blocks; 221 Series - 4 mm<sup>2</sup>; 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 mm<sup>2</sup>; with snap-in mounting foot for vertical mounting; black

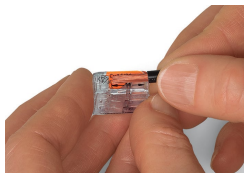


**Item No.: 221-523**

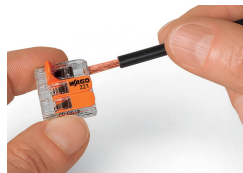
Mounting carrier; for 3-conductor terminal blocks; 221 Series - 4 mm<sup>2</sup>; with snap-in mounting foot for vertical mounting; white

### Installation Notes

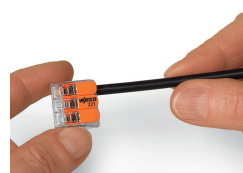
#### Conductor termination



Strip conductor to 11 mm (0.43 inch).

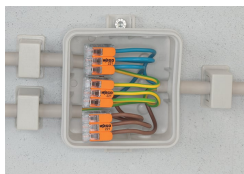


Termination: Lift the lever to open the clamping unit and insert a stripped conductor.



Then, lower the lever to close the clamp.

### 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



COMPACT Splicing Connectors for All Conductor Types (4 mm<sup>2</sup>), 221 Series



Compact, lever-operated splicing connectors:

Tool-free connection of up to five stripped, fine-stranded conductors from 0.14 ... 4 mm<sup>2</sup>, as well as solid or stranded conductors from 0.2 ... 4 mm<sup>2</sup> (24 ... 12 AWG).

How they work:

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.

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.