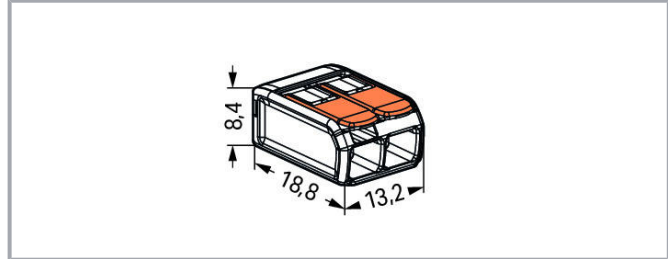


## Data sheet | Item number: 221-412

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

[www.wago.com/221-412](http://www.wago.com/221-412)



### Item description

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

Subject to changes. Please also observe the further product documentation!

WAGO Kontakttechnik GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at 01788 568 008.



- Time savings for installers and device manufacturers
- Quickly install devices with higher levels of power consumption
- Safely install long cable runs with larger conductor cross sections
- Mounting carrier for installation conforms to standards
- Custom carriers are possible

**Safety information 1:**

in grounded power lines

**Data****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) ≙ Overvoltage category II / Pollution degree 2 |

**Ratings per UL**

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

**Connection data**

|                                   |                                            |
|-----------------------------------|--------------------------------------------|
| Connection technology             | CAGE CLAMP®                                |
| Actuation type                    | Lever                                      |
| Connectable conductor materials   | Copper<br>Copper                           |
| Nominal cross-section             | 4 mm <sup>2</sup>                          |
| 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 inch                          |
| Total number of connection points | 2                                          |
| Total number of potentials        | 1                                          |
| Wiring type                       | Side-entry wiring                          |

Subject to changes. Please also observe the further product documentation!

## Physical data

|        |                      |
|--------|----------------------|
| Width  | 13.2 mm / 0.52 inch  |
| Height | 8.6 mm / 0.327 inch  |
| Depth  | 18.8 mm / 0.732 inch |

## Material data

|                             |             |
|-----------------------------|-------------|
| Color                       | transparent |
| Flammability class per UL94 | V2          |
| Fire load                   | 0.033 MJ    |
| Color of actuator           | orange      |
| Weight                      | 1.7 g       |

## Environmental requirements



|                                         |        |
|-----------------------------------------|--------|
| Surrounding air temperature (operation) | 85 °C  |
| Continuous operating temperature        | 105 °C |
| Temperature marking per EN 60998        | T85    |

## Commercial data

|                       |                     |
|-----------------------|---------------------|
| Product Group         | 7 (Push Wire Conn.) |
| Packaging type        | BOX                 |
| Country of origin     | DE                  |
| GTIN                  | 4050821808435       |
| Customs tariff number | 85369010000         |




## Approvals / Certificates

### Country specific Approvals



| Logo                                                                               | Approval                        | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|---------------------------------|--------------------------|------------------|
|  | CCA<br>DEKRA Certification B.V. | EN 60998                 | NTR NL-7642      |
|  | CCA<br>DEKRA Certification B.V. | EN 60998                 | 71-101731        |

Subject to changes. Please also observe the further product documentation!

## Ship Approvals





| Logo                                                                              | Approval                                                | Additional Approval Text | Certificate name         |
|-----------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------|--------------------------|
|   | <b>ABS</b><br>American Bureau of Shipping               | -                        | 18-<br>HG1755093-<br>PDA |
|   | <b>DNV GL</b><br>Det Norske Veritas, Germanischer Lloyd | EN 60998                 | TAE000015T               |
|  | <b>LR</b><br>Lloyds Register                            | EN 60998                 | 04/20013<br>(E8)         |

## UL-Approvals










| Logo                                                                                | Approval                                    | Additional Approval Text | Certificate name |
|-------------------------------------------------------------------------------------|---------------------------------------------|--------------------------|------------------|
|   | <b>UL</b><br>Underwriters Laboratories Inc. | UL 467                   | E201573          |
|  | <b>UL</b><br>Underwriters Laboratories Inc. | UL 486C                  | E69654           |

## Compatible products

## Mounting adapter

|                                                                                   |                                                                                                                                                  |                                                                                |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
|  | <b>Item no.: 221-500</b><br>Mounting carrier; 221 Series - 4 mm <sup>2</sup> ; for DIN-35 rail mounting/screw mounting; orange                   | <a href="http://www.wago.com/221-500">www.wago.com/221-500</a>                 |
|  | <b>Item no.: 221-500/000-006</b><br>Mounting carrier; 221 Series - 4 mm <sup>2</sup> ; for DIN-35 rail mounting/screw mounting; blue             | <a href="http://www.wago.com/221-500/000-006">www.wago.com/221-500/000-006</a> |
|  | <b>Item no.: 221-500/000-053</b><br>Mounting carrier; 221 Series - 4 mm <sup>2</sup> ; for DIN-35 rail mounting/screw mounting; dark gray-yellow | <a href="http://www.wago.com/221-500/000-053">www.wago.com/221-500/000-053</a> |
|  | <b>Item no.: 221-502</b><br>Mounting carrier; for 2-conductor terminal blocks; 221 Series - 4 mm <sup>2</sup> ; for screw mounting; white        | <a href="http://www.wago.com/221-502">www.wago.com/221-502</a>                 |

Subject to changes. Please also observe the further product documentation!

|                                                                                   |                                                                                                                                                                                   |                                                                                |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
|    | <b>Item no.: 221-502/000-004</b><br>Mounting carrier; for 2-conductor terminal blocks; 221 Series - 4 mm <sup>2</sup> ; for screw mounting; black                                 | <a href="http://www.wago.com/221-502/000-004">www.wago.com/221-502/000-004</a> |
|    | <b>Item no.: 221-512</b><br>Mounting carrier; for 2-conductor terminal blocks; 221 Series - 4 mm <sup>2</sup> ; with snap-in mounting foot for horizontal mounting; white         | <a href="http://www.wago.com/221-512">www.wago.com/221-512</a>                 |
|    | <b>Item no.: 221-512/000-004</b><br>Mounting carrier; for 2-conductor terminal blocks; 221 Series - 4 mm <sup>2</sup> ; with snap-in mounting foot for horizontal mounting; black | <a href="http://www.wago.com/221-512/000-004">www.wago.com/221-512/000-004</a> |
|    | <b>Item no.: 221-522</b><br>Mounting carrier; for 2-conductor terminal blocks; 221 Series - 4 mm <sup>2</sup> ; with snap-in mounting foot for vertical mounting; white           | <a href="http://www.wago.com/221-522">www.wago.com/221-522</a>                 |
|    | <b>Item no.: 221-522/000-004</b><br>Mounting carrier; for 2-conductor terminal blocks; 221 Series - 4 mm <sup>2</sup> ; with snap-in mounting foot for vertical mounting; black   | <a href="http://www.wago.com/221-522/000-004">www.wago.com/221-522/000-004</a> |
| <b>Jumper</b>                                                                     |                                                                                                                                                                                   |                                                                                |
|    | <b>Item no.: 221-941</b><br>Jumper; for conductor entry; 2-way; insulated; dark gray                                                                                              | <a href="http://www.wago.com/221-941">www.wago.com/221-941</a>                 |
|    | <b>Item no.: 221-941/000-006</b><br>Jumper; for conductor entry; 2-way; insulated; blue                                                                                           | <a href="http://www.wago.com/221-941/000-006">www.wago.com/221-941/000-006</a> |
|  | <b>Item no.: 221-942</b><br>Jumper; for conductor entry; 2-way; insulated; dark gray                                                                                              | <a href="http://www.wago.com/221-942">www.wago.com/221-942</a>                 |
|  | <b>Item no.: 221-942/000-006</b><br>Jumper; for conductor entry; 2-way; insulated; blue                                                                                           | <a href="http://www.wago.com/221-942/000-006">www.wago.com/221-942/000-006</a> |

## Downloads

### Documentation

#### Bid Text

|                                                         |             |                 |          |
|---------------------------------------------------------|-------------|-----------------|----------|
| 221-412<br>docx - Datei                                 | 23 Jan 2019 | docx<br>15.6 kB | Download |
| 221-412<br>X81 - Datei                                  | 19 Feb 2019 | xml<br>3.5 kB   | Download |
| <b>Additional Information</b><br>Technical explanations | 3 Apr 2019  | pdf<br>2.2 MB   | Download |

Subject to changes. Please also observe the further product documentation!

## CAD/CAE-Data

### CAD data

| 2D/3D Models 221-412 | URL | Download |
|----------------------|-----|----------|
|                      |     |          |

### CAE data

| EPLAN Data Portal 221-412 | URL | Download |
|---------------------------|-----|----------|
|                           |     |          |

| ZUKEN Portal 221-412 | URL | Download |
|----------------------|-----|----------|
|                      |     |          |

## Environmental Product Compliance

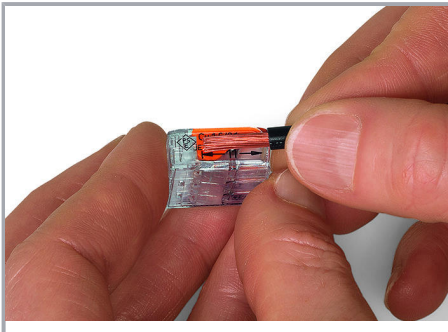
### Compliance Search

| Environmental Product Compliance 221-412 | URL | Download |
|------------------------------------------|-----|----------|
|                                          |     |          |

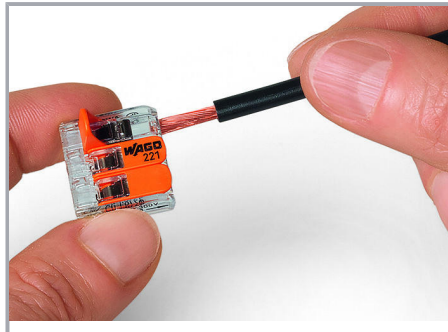
COMPACT Splicing Connector; for all conductor types; max. 4 mm<sup>2</sup>; 2-conductor; with levers; transparent housing; Surrounding air temperature: max 85°C (T85); 4,00 mm<sup>2</sup>; transparent

## Installation Notes

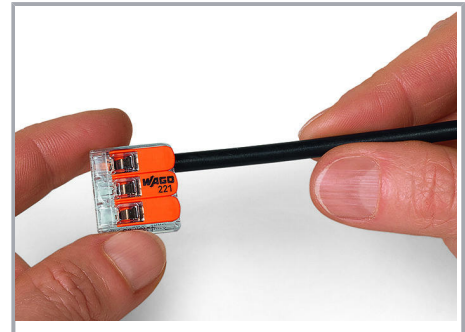
### Conductor termination



Strip conductor to 11 mm (0.43 inch).



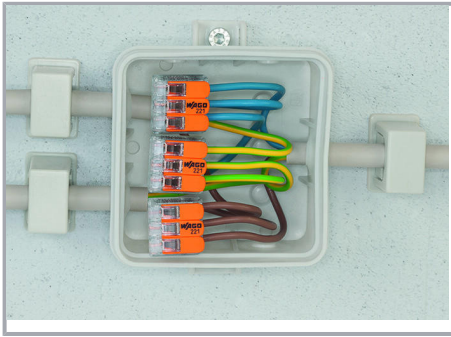
Termination: Lift the lever to open the clamping unit and insert a stripped conductor.



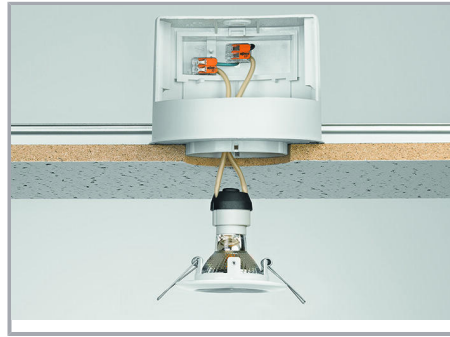
Then, lower the lever to close the clamp.

### Application

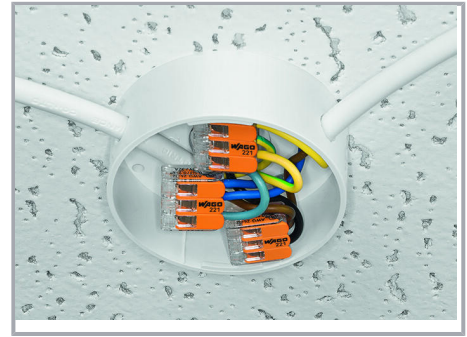
Subject to changes. Please also observe the further product documentation!



Wiring fine-stranded conductors in junction boxes.



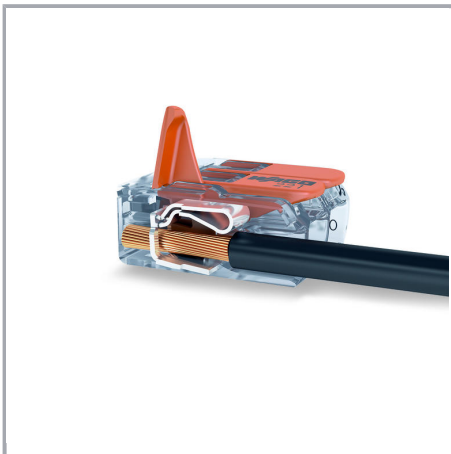
Custom low-voltage lighting system



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

Subject to changes. Please also observe the further product documentation!



**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.

Subject to changes. Please also observe the further product documentation!