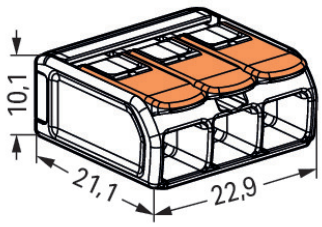
# Data Sheet | Item Number: 221-613

Splicing connector with levers; for all conductor types; max. 6 mm²; 3-conductor; transparent housing; Surrounding air temperature: max 85°C (T85); 6,00 mm²; transparent

https://www.wago.com/221-613




Color: transparent

Dimensions in mm

Splicing connector with levers, 221 Series, lever

Easy electrical installations are guaranteed with splicing connector with levers (item number 221-613). From wiring intercom systems to installing electrical ovens, connecting different conductor types is quick and hassle-free with WAGO's compact 221 Series splicing connector, which allows you to quickly and safely connect different types of conductors. Ensure that the strip lengths are between 12 and 14 mm when connecting conductors to splicing connector with levers. This splicing connector has a rated voltage of 450 V and can handle currents up to 41 A, making it suitable for high-load applications. Featuring conductor terminals along with CAGE CLAMP®, this product delivers reliable performance. 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 item's dimensions are (22.9 x 10.1 x 21.1) mm (width x height x depth). Splicing connector with levers is suitable for conductor cross sections ranging from 0.5 mm² to 6 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 information | **NOTICE: Observe installation and safety instructions!**<br><br>▪ **Only to be used by electricians!**<br>▪ Do not work under voltage/load!<br>▪ Use only for proper use!<br>▪ Observe national regulations/standards/guidelines!<br>▪ Observe technical specifications for the products!<br>▪ Observe the number of permissible potentials!<br>▪ Do not use damaged/dirty components!<br>▪ Observe conductor types, cross-sections and strip lengths!<br>▪ Insert conductor until it hits the product's backstop!<br>▪ Use original accessories!<br><br>**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 impulse withstand voltage | - | - | 4 kV |
| Rated current | - | - | 41 A |

| Approvals per | UL 486C | | |
|---|---|---|---|
| Use group | B | C | D |
| Rated voltage | - | 600 V | - |
| Rated current | - | 30 A | - |

### General information

| | |
|---|---|
| Wiring direction | Side-entry wiring |

## 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 | 6 mm² / 10 AWG |
| Solid conductor | 0.5 … 6 mm² / 20 … 10 AWG |
| Stranded conductor | 0.5 … 6 mm² / 20 … 10 AWG |
| Fine-stranded conductor | 0.5 … 6 mm² / 20 … 10 AWG |
| Strip length | 12 … 14 mm / 0.47 … 0.55 inches |
| Wiring direction | Side-entry wiring |

## Physical data

| | |
|---|---|
| Width | 22.9 mm / 0.902 inches |
| Height | 10.1 mm / 0.398 inches |
| Depth | 21.1 mm / 0.831 inches |

## Material data

| | |
|---|---|
| Note (material data) | Information on material specifications can be found here |
| Color | transparent |
| Cover color | transparent |
| Material group | IIIa |
| Insulation material (main housing) | Polycarbonate (PC) |
| Flammability class per UL94 | V2 |
| Fire load | 0.065 MJ |
| Actuator color | orange |
| Weight | 4 g |

## Environmental requirements

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


Continued on next page

## Commercial data

| | |
|---|---|
| PU (SPU) | 300 (30) pcs |
| Packaging type | Box |
| Country of origin | CH |
| GTIN | 4055143715416 |
| Customs tariff number | 85369010000 |

## Product Classification

| | |
|---|---|
| UNSPSC | 39121409 |
| eCl@ss 10.0 | 27-14-11-04 |
| eCl@ss 9.0 | 27-14-11-04 |
| ETIM 9.0 | EC000446 |
| ETIM 10.0 | EC000446 |
| ECCN | NO US CLASSIFICATION |

## Environmental Product Compliance

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

## Approvals / Certificates

### General approvals

| Approval | Standard | Certificate Name |
|---|---|---|
| CB<br>DEKRA Certification B.V. | IEC 60998 | NL-114612 |
| cULus_Listed_667F<br>Underwriters Laboratories Inc. | UL 486C | E69654 |
| ENEC 05<br>DEKRA Certification B.V. | EN 60998 | 71-152265 |
| UL<br>Underwriters Laboratories Inc. | UL 467 | E201573 |

### Approvals for marine applications

| Approval | Standard | Certificate Name |
|---|---|---|
| ABS<br>American Bureau of Shipping | EN 60998 | 23-2417173-PDA |
| LR<br>Lloyds Register | EN 60998 | LR2446364TA |
| PRS<br>Polski Rejestr Statków | EN 60998 | TE/1093/880590/23 |

### 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 | - | - |


Continued on next page

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 221-613

### Documentation

**Bid Text**

| | | |
|---|---|---|
| 221-613 | 19.02.2019 | xml 3.48 KB |
| 221-613 | 23.01.2019 | docx 15.05 KB |
| ausschreiben.de 221-613 | | |

### CAD/CAE-Data

**CAD data**

2D/3D Models 221-613

**CAE data**

EPLAN Data Portal 221-613

ZUKEN Portal 221-613

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 General accessories

##### 1.1.1.1 Moisture protection



Item No.: 207-1431
Gelbox; Branch; for cables; with gel; 221 Series; max. 6 mm² connectors; without splicing connectors; Size 1; gray



Item No.: 207-1433
Gelbox; Branch; for cables; with gel; 221 Series; max. 6 mm² 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


Continued on next page

### 1.1.3 Mounting adapter

#### 1.1.3.1 Mounting accessories



Item No.: 221-510/000-006
Mounting carrier; 221 Series - 6 mm²; for DIN-35 rail mounting/screw mounting; blue



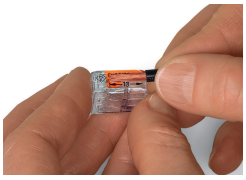
Item No.: 221-510/000-053
Mounting carrier; 221 Series - 6 mm²; for DIN-35 rail mounting/screw mounting; dark gray-yellow



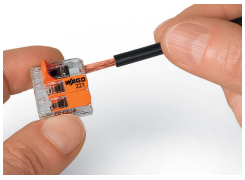
Item No.: 221-510
Mounting carrier; 221 Series - 6 mm²; for DIN-35 rail mounting/screw mounting; orange

## Installation Notes

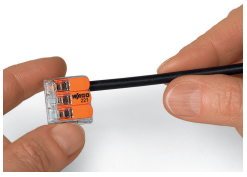
### Conductor termination



Strip conductor to 12 … 14 mm.

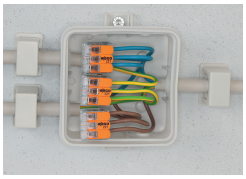


Termination: Lift the lever to open the clamping unit and insert a stripped conductor.

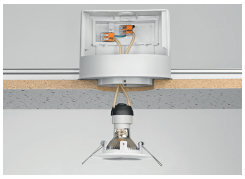


Then, lower the lever to close the clamp.

### 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 (6 mm²), 221 Series