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



https://www.wago.com/221-413/995-012



Color: Transparent

Splicing connector with levers, 221 Series, CAGE CLAMP®

Our splicing connector with levers (item number 221-413/995-012) ensures effortless electrical installations. From wiring intercom systems to installing electrical ovens, connecting different conductor types is quick and simple with WAGO's compact 221 Series splicing connector, which allows you to quickly and safely connect different types of conductors. Conductors should only be connected to splicing connector with levers if their strip length is 11 mm. Rated current and voltage are key factors to consider when choosing a splicing connector, as they indicate possible applications and uses. This product has a rated voltage of 450 V and a rated current of 32 A, making it suitable for high-load applications. This product features conductor terminals and utilizes CAGE CLAMP®. Our celebrated universal connection known as CAGE CLAMP® is industry-leading when it comes to connection technology and electrical interconnections. The item's dimensions are (18.8 x 8.4 x 18.8) mm (width x height x depth). Depending on the conductor type, splicing connector with levers is ideal 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 item includes:



# Item No.: 221-413

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

transparent

https://www.wago.com/221-413/995-012



#### **Notes**

General safety information

#### 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 impulse withstand voltage	-	-	4 kV
Rated current	-	-	32 A

Approvals per		UL 486C	
Use group	В	С	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	18.8 mm / 0.732 inches

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

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## **Environmental requirements**

Ambient temperature (operation) +85 °C

Continuous operating temperature 105 °C

Temperature marking per EN 60998 T85

#### Commercial data

 PU (SPU)
 216 (12) pcs

 Packaging type
 Blister foil

 Country of origin
 DE

 GTIN
 406966001907

 Customs tariff number
 85369010000

#### **Product Classification**

 UNSPSC
 39121409

 ETIM 9.0
 EC000446

 ETIM 10.0
 EC000446

ECCN NO US CLASSIFICATION

## **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

# **Downloads**

# **Environmental Product Compliance**

## Compliance Search

Environmental Product Compliance 221-413/995-012



# 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; 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 mm² connectors; without splicing connectors; Size 1; gray

Item No.: 207-1333 Gelbox; Branch; for cables; with gel; 221, 2x73 Series; max. 4 mm² connectors; without splicing connectors; Size 3; gray

https://www.wago.com/221-413/995-012



#### 1.1.2 Jumper

lated; blue

#### 1.1.2.1 Jumper



Jumper; for conductor entry; 2-way; insu-

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

Item No.: 221-500/000-006

Item No.: 221-941/000-006

#### 1.1.3.1 Mounting accessories



Mounting carrier; 221 Series - 4 mm<sup>2</sup>; for

DIN-35 rail mounting/screw mounting;

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 mm<sup>2</sup>; for DIN-35 rail mounting/screw mounting;



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

blue

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



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



Mounting carrier; for 3-conductor terminal blocks; 221 Series - 4 mm²; with snapin mounting foot for horizontal mounting; white



Mounting carrier; for 3-conductor terminal blocks; 221 Series - 4 mm<sup>2</sup>; with snapin 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).



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  $\dots$  4 mm², as well as solid or stranded conductors from 0.2  $\dots$  4 mm² (24  $\dots$  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.

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# Application







Custom low-voltage lighting system



Lighting distribution in a ceiling canopy



Pendant light connection in a suspended ceiling

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