

**Data Sheet | Item Number: 221-413**

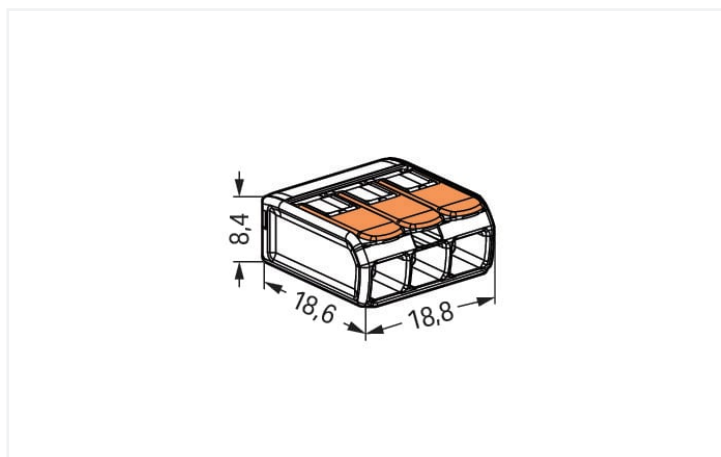
Splicing connector with levers; for all conductor types; max. 4 mm<sup>2</sup>; 3-conductor;  
with levers; transparent housing; Surrounding air temperature: max 85°C (T85); 4,00  
mm<sup>2</sup>; transparent



<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**

Sicherheitshandhabungshinweis          Safety information	<p><b>NOTICE: Observe installation and safety instructions!</b></p> <ul style="list-style-type: none"> <li>• <b>Only to be used by electricians!</b></li> <li>• Do not work under voltage/load!</li> <li>• Use only for proper use!</li> <li>• Observe national regulations/standards/guidelines!</li> <li>• Observe technical specifications for the products!</li> <li>• Observe the number of permissible potentials!</li> <li>• Do not use damaged/dirty components!</li> <li>• Observe conductor types, cross-sections and strip lengths!</li> <li>• Insert conductor until it hits the product's backstop!</li> <li>• Use original accessories!</li> </ul> <p><b>To be sold only with installation instructions!</b></p> in grounded power lines
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**Electrical data**

Ratings per	EN 60664			Approvals per	UL 486C		
Overvoltage category	III	III	II	Use group	B	C	D
Pollution degree	3	2	2	Rated voltage	-	600 V	-
Nominal voltage	-	-	450 V	Rated current	-	20 A	-
Rated surge voltage	-	-	4 kV				
Rated current	-	-	32 A				

**Connection data**

Connection points: 3 Total number of potentials: 1	<p><b>Connection 1</b></p> 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
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### 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)	<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
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### Approvals / Certificates

#### General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60998	NTR NL-7990
cULus_Listed_667F Underwriters Laboratories Inc.	UL 486C	E69654
ENEC 05 DEKRA Certification B.V.	EN 60669, EN 60998	71-127529
UL_Listed_64KA UL International Germany GmbH	UL 467	E201573

#### 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	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	18-HG1755093-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	EN 60998	TAE000015T
LR Lloyds Register	EN 60998	LR22207029TA

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 221-413	<a href="#">↓</a>

Documentation

Bid Text			
221-413	19.02.2019	xml 3.43 KB	<a href="#">↓</a>
221-413	23.01.2019	docx 15.29 KB	<a href="#">↓</a>
ausschreiben.de 221-413			<a href="#">↓</a>

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 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

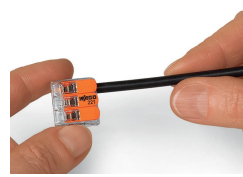
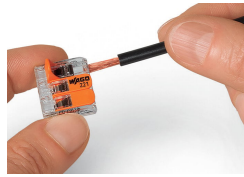
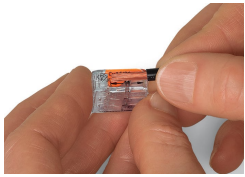


**Item No.: 221-523**

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).

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:

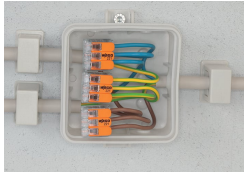
Tool-free connection of fine-stranded conductors from 0.14 ... 4 mm<sup>2</sup>, as well as solid or stranded conductors from 0.2 ... 4 mm<sup>2</sup> (24 ... 12 AWG).

#### 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