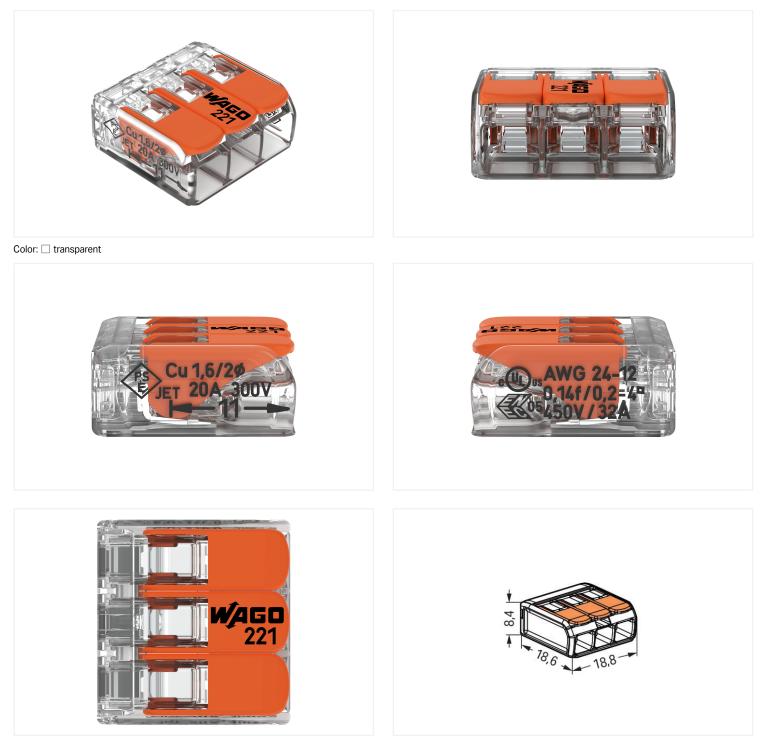
# Data Sheet | Item Number: 221-413 COMPACT Splicing Connector; for all conductor types; max. 4 mm<sup>2</sup>; 3-conductor; with levers; transparent housing; Surrounding air temperature: max 85°C (T85); 4,00 mm<sup>2</sup>; transparent



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



Dimensions in mm

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

## 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

Electrical data							
Ratings per		EN 60664		Approvals per		UL 486C	
Overvoltage category	Ш	Ш	Ш	Use group	В	С	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				

nection data			
onnection points	3	Connection 1	
lotal number of potentials	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
Insulation material	Polycarbonate (PC)
Flammability class per UL94	V2
Fire load	0.064 MJ
Actuator color	orange
Weight	2.5 g

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



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 DEKRA Certification B.V.	EN 60998	NTR NL-7990
cULus_Listed_667F Underwriters Laboratories Inc.	UL 486C	UL-CA-L69654
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 Confor- mity WAGO GmbH & Co. KG	-	-
UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

## Approvals for marine applications

ABS.	ADDREAM CONCEPTION AND CONCEPTION AN
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RONED P	204M	
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

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



# Documentation

Bid Text			
221-413	19.02.2019	xml 3.43 KB	$\downarrow$
221-413	23.01.2019	docx 15.29 KB	$\downarrow$
ausschreiben.de 221-413			$\downarrow$

### CAD/CAE-Data

CAD data	
2D/3D Models 221-413	
	<u> </u>

CAE data	
EPLAN Data Portal 221-413	$\downarrow$
ZUKEN Portal 221-413	$\downarrow$

#### **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

1

Item No.: 221-941 Jumper; for conductor entry; 2-way; insulated; dark gray

1

# 1

Item No.: 221-942 Jumper; for conductor entry; 2-way; insulated; dark gray

# 1.1.3 Mounting adapter

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

#### 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.: 221-503

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 snap-in mounting foot for vertical mounting; white

#### Item No.: 221-500/000-053 Mounting carrier; 221 Series

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

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

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

# Item No.: 221-500

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

### Item No.: 221-513

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



# 100

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.: 221-523/000-004

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

## 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  $0.14 \dots 4 \text{ mm}^2$ , as well as solid or stranded conductors from  $0.2 \dots 4 \text{ mm}^2$  (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

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

Current addresses can be found at:: <u>www.wago.com</u>