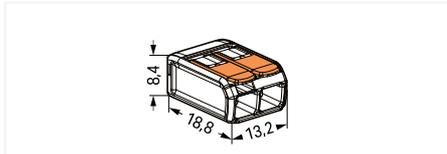


COMPACT Splicing Connector for All Conductor Types 4 mm²; 221 Series

Technical Data	
0.2 ... 4 mm ² "s+str"	24 ... 12 AWG
0.14 ... 4 mm ² "f-st"	600 V, 20 A [Ⓢ]
450 V / 4 kV / 2 ①	600 V, 20 A [Ⓢ]
I _N 32 A	
11 mm / 0.43 inch	



Dimensions in mm



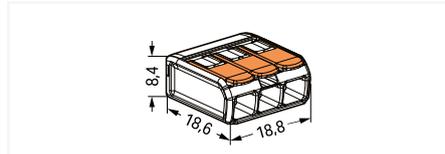
COMPACT splicing connector; for all conductor types; 2-conductor; with levers; transparent housing; continuous operating temperature (max.): 105 °C; surrounding air temperature: max 85 °C (T85)

Item No.	Pack. Unit
221-412	1000 (100)

Technical Data	
0.2 ... 4 mm ² "s+str"	24 ... 12 AWG
0.14 ... 4 mm ² "f-st"	600 V, 20 A [Ⓢ]
450 V / 4 kV / 2 ①	600 V, 20 A [Ⓢ]
I _N 32 A	
11 mm / 0.43 inch	



Dimensions in mm



COMPACT splicing connector; for all conductor types; 3-conductor; with levers; transparent housing; continuous operating temperature (max.): 105 °C; surrounding air temperature: max 85 °C (T85)

Item No.	Pack. Unit
221-413	500 (50)

- ① 450 V = rated voltage
4 kV = rated impulse voltage
2 = pollution degree
(see Section 15)
- Approvals and corresponding ratings, visit www.wago.com



Compact, lever-operated splicing connectors:
Tool-free connection of up to five stripped, fine-stranded conductors from 0.14 ... 4 mm², as well as solid or stranded conductors from 0.2 ... 4 mm² (24 ... 12 AWG).

How these 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 specially designed rest position of the lever reliably prevents accidental unclamping of a connected conductor.

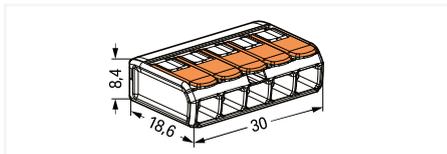
Application safety, for any type of conductor (solid, stranded, fine-stranded), is confirmed by approvals like ENEC or UL.

ENEC is the European mark for electrical products that demonstrates compliance with European safety standards. The ENEC mark is subjected to the same EN standards as the VDE mark.

While the VDE mark is only permitted in Germany, the ENEC mark is accepted in more than 20 European countries.



Dimensions in mm



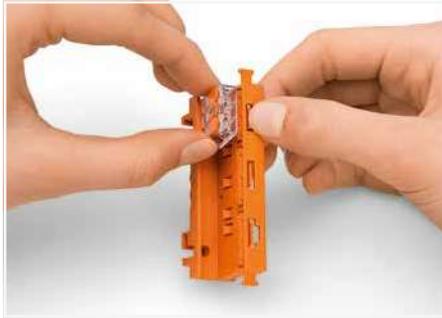
COMPACT splicing connector; for all conductor types; 5-conductor; with levers; transparent housing; continuous operating temperature (max.): 105 °C; surrounding air temperature: max 85 °C (T85)

Item No.	Pack. Unit
221-415	250 (25)

Mounting Carrier 221 Series Installation



Inserting a connector into the mounting carrier.



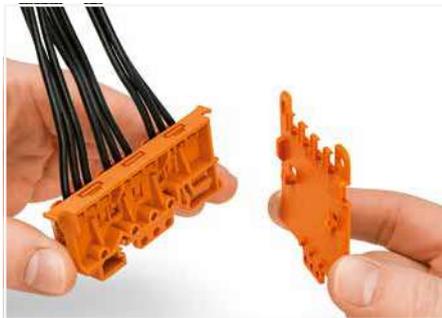
Removing a connector from the mounting carrier.



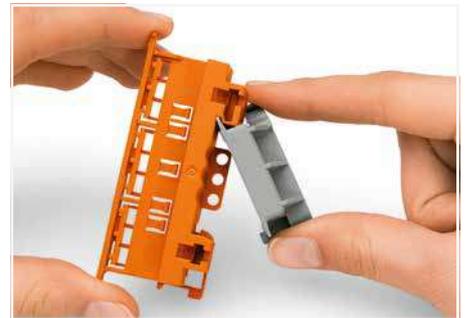
Removing a conductor.



Testing connectors via test slots on top of the carrier.



Securing a strain relief plate (222-505) to the mounting carrier.



Snapping the angled DIN-rail adapter (222-510) onto the mounting carrier.



Strain relief via cable ties on the mounting carrier (transverse to the connectors' wiring direction) – clamping units labeled via marking strips (210-334)



Vertical mounting with strain relief plate on DIN-35 rail



Horizontal mounting on DIN-35 rail using an angled DIN-rail adapter



Horizontal screw mounting with strain relief plate on a flat surface



Vertical screw mounting with strain relief plate on a flat surface

13

Mounting Carrier 221 Series



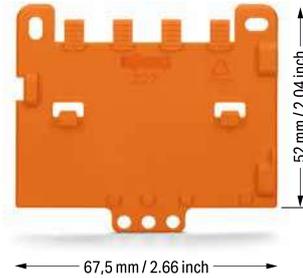
Mounting carrier; for 2-, 3- and 5-wire splicing connectors (4 mm²); 17.5 mm wide

Color	Item No.	Pack. Unit
orange	221-500	50 (10)
blue	221-500/000-006 ①	50 (10)
dark gray/yellow	221-500/000-053	50 (10)

Accessories; item-specific

Marking strips; on reel; 6 mm wide; plain; self-adhesive; white

	white	210-833	1
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Strain relief plate; for mounting carrier (221 or 222 Series); snaps on to mounting carrier; 4 mm thick

Color	Item No.	Pack. Unit
orange	222-505	50 (10)

① Carriers with a blue insulated housing are suitable for Ex i applications. Both clearances and creepage distances for the protection type "intrinsic safety Ex i" must be observed.



Angled DIN-rail adapter; in combination with mounting carrier (221-500 or 222-500) for DIN-35 rail mounting; 18.5 mm wide

Color	Item No.	Pack. Unit
gray	222-510	50 (10)

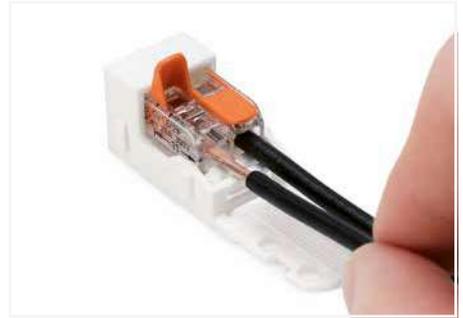
Mounting Carrier; for Single Connectors 221 Series Installation



Inserting a connector into the mounting carrier.



Removing a connector from the mounting carrier.



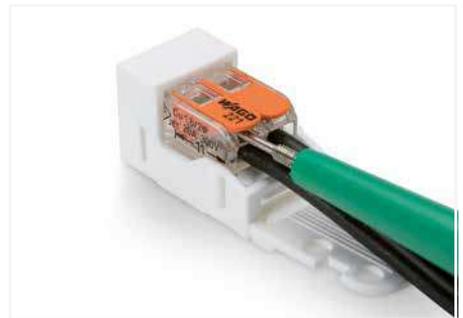
Inserting a conductor.



Use a cable tie to secure the conductors to the strain relief plate.



Labeling the mounting carrier.



Testing a connector mounted on the carrier via test slot.



The strain relief plate can be removed.



Horizontal screw mounting



Vertical screw mounting



Horizontal mounting via snap-in foot



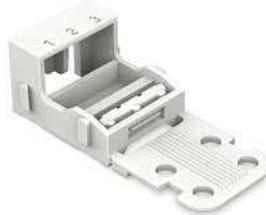
Vertical mounting via snap-in foot



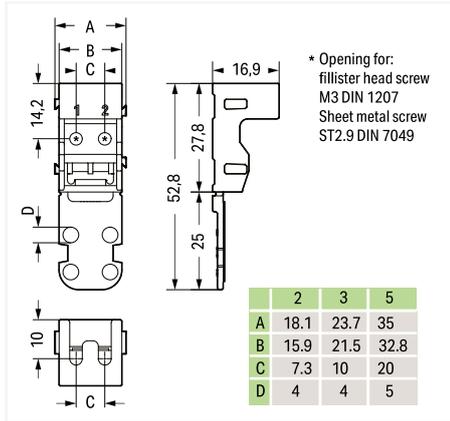
Connecting a light to the mains.

13

Mounting Carrier; for Single Connectors 221 Series



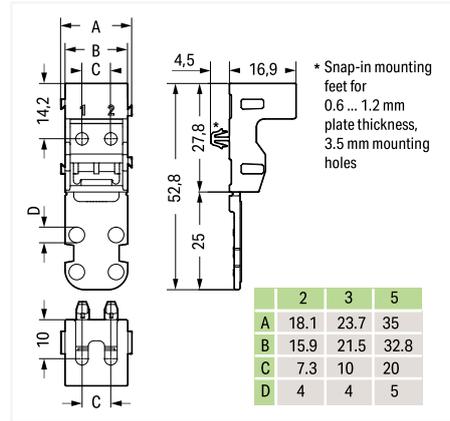
Dimensions in mm



Mounting carrier; for 2-wire connectors (4 mm²); for screw mounting
Dimensions from the surface (mm) W x H x D
18.1 x 16.9 x 52.8

Color	Item No.	Pack. Unit
○ white	221-502	50 (10)
● black	221-502/000-004	50 (10)

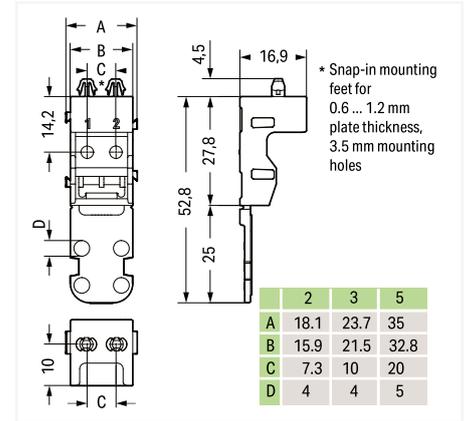
Dimensions in mm



Mounting carrier; for 3-wire connectors (4 mm²); for screw mounting
Dimensions from the surface (mm) W x H x D
18.1 x 16.9 x 52.8

Color	Item No.	Pack. Unit
○ white	221-503	50 (10)
● black	221-503/000-004	50 (10)

Dimensions in mm



Mounting carrier; for 5-wire connectors (4 mm²); for screw mounting
Dimensions from the surface (mm) W x H x D
18.1 x 16.9 x 52.8

Color	Item No.	Pack. Unit
○ white	221-505	50 (10)
● black	221-505/000-004	50 (10)

Mounting carrier; for 2-wire connectors (4 mm²); with snap-in mounting foot for horizontal mounting
Dimensions from the surface (mm) W x H x D
18.1 x 16.9 (+ 4.5 snap-in mounting foot) x 52.8

○ white	221-512	50 (10)
● black	221-512/000-004	50 (10)

Mounting carrier; for 3-wire connectors (4 mm²); with snap-in mounting foot for horizontal mounting
Dimensions from the surface (mm) W x H x D
18.1 x 16.9 (+ 4.5 snap-in mounting foot) x 52.8

○ white	221-513	50 (10)
● black	221-513/000-004	50 (10)

Mounting carrier; for 5-wire connectors (4 mm²); with snap-in mounting foot for horizontal mounting
Dimensions from the surface (mm) W x H x D
18.1 x 16.9 (+ 4.5 snap-in mounting foot) x 52.8

○ white	221-515	50 (10)
● black	221-515/000-004	50 (10)

Mounting carrier; for 2-wire connectors (4 mm²); with snap-in mounting foot for vertical mounting
Dimensions from the surface (mm) W x H x D
18.1 x 52.8 (+ 4.5 snap-in mounting foot) x 16.9

○ white	221-522	50 (10)
● black	221-522/000-004	50 (10)

Mounting carrier; for 3-wire connectors (4 mm²); with snap-in mounting foot for vertical mounting
Dimensions from the surface (mm) W x H x D
18.1 x 52.8 (+ 4.5 snap-in mounting foot) x 16.9

○ white	221-523	50 (10)
● black	221-523/000-004	50 (10)

Mounting carrier; for 5-wire connectors (4 mm²); with snap-in mounting foot for vertical mounting
Dimensions from the surface (mm) W x H x D
18.1 x 52.8 (+ 4.5 snap-in mounting foot) x 16.9

○ white	221-525	50 (10)
● black	221-525/000-004	50 (10)

More information on dimensions is available upon request.

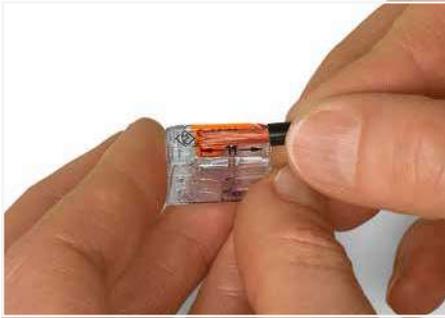
Accessories; item-specific
Marking strips; on reel; 6 mm wide; plain; self-adhesive; white

 white	210-833	1
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COMPACT Splicing Connectors for All Conductor Types

221 Series

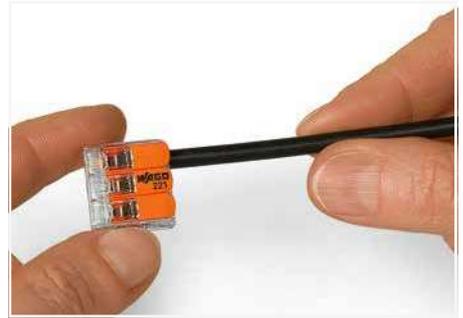
Description and Installation



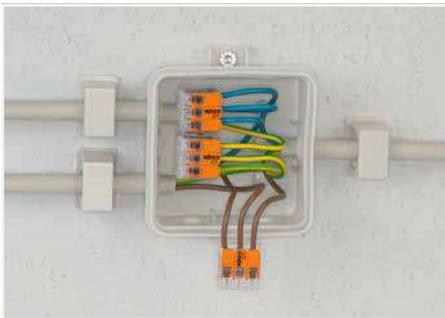
Strip conductor to 12 ... 14 mm (0,47 ... 0,55 inch).



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



Then, lower the lever to close the clamp.



Wiring fine-stranded conductors in a junction box.



Custom low-voltage lighting system



Wiring fine-stranded conductors in a junction box for in-floor heating.



Lighting distribution in ceiling canopy



Pendant light connection in suspended ceilings

13

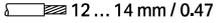
CAGE CLAMP® terminates the following copper conductors:
solid "s" stranded "st"

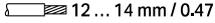
fine-stranded "f-st", also with tinned single strands

fine-stranded, tip-bonded

COMPACT Splicing Connector for All Conductor Types and Mounting Carrier

6 mm²; 221 Series

Technical Data	
0.5 ... 6 mm ²	20 ... 10 AWG
450 V / 4 kV / 2 ①	600 V, 30 A [Ⓢ]
I _N 41 A	600 V, 20 A [Ⓢ]
 12 ... 14 mm / 0.47 ... 0.55 inch	

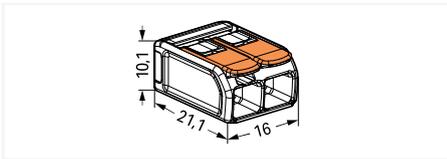
Technical Data	
0.5 ... 6 mm ²	20 ... 10 AWG
450 V / 4 kV / 2 ①	600 V, 30 A [Ⓢ]
I _N 41 A	600 V, 20 A [Ⓢ]
 12 ... 14 mm / 0.47 ... 0.55 inch	

- ① 450 V = rated voltage
4 kV = rated impulse voltage
2 = pollution degree
(see Section 15)
- ② Carriers with a blue insulated housing are suitable for Ex i applications. Both clearances and creepage distances for the protection type "intrinsic safety Ex i" must be observed.

Approvals and corresponding ratings, visit www.wago.com



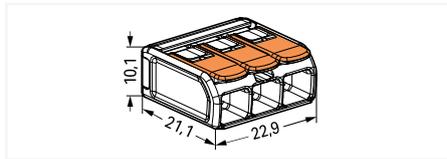
Dimensions in mm



COMPACT splicing connector; for all conductor types; 2-conductor; with levers; transparent housing; continuous operating temperature (max.): 105 °C; surrounding air temperature: max 85 °C (T85)

Item No.	Pack. Unit
221-612	500 (50)

Dimensions in mm



COMPACT splicing connector; for all conductor types; 3-conductor; with levers; transparent housing; continuous operating temperature (max.): 105 °C; surrounding air temperature: max 85 °C (T85)

Item No.	Pack. Unit
221-613	300 (30)



Compact, lever-operated splicing connectors:
Connect up to five stripped conductors from 0.5 to 6 mm² (20 ... 10 AWG) – without tools!

How these work:

Pull up one of the orange operating levers to open the clamping unit. Then insert the conductor and push the lever back down, flush with the connector housing.

Safety:

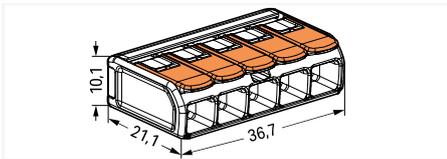
The lever's specially designed rest position reliably prevents accidental unclamping of a connected conductor. Application safety, for any type of conductor (solid, stranded, fine-stranded), is confirmed by approvals like ENEC or UL.

ENEC is the European mark for electrical products that demonstrates compliance with European safety standards. The ENEC mark is subjected to the same EN standards as the VDE mark.

While the VDE mark is only permitted in Germany, the ENEC mark is accepted in more than 20 European countries.



Dimensions in mm



COMPACT splicing connector; for all conductor types; 5-conductor; with levers; transparent housing; continuous operating temperature (max.): 105 °C; surrounding air temperature: max 85 °C (T85)

Item No.	Pack. Unit
221-615	150 (15)

Mounting carrier; for 2-, 3- and 5-wire splicing connectors (6 mm²); 19.3 mm wide

Color	Item No.	Pack. Unit
orange	221-510	50 (10)
blue	221-510/000-006 ②	50 (10)
dark gray/yellow	221-510/000-053	50 (10)

Accessories; item-specific

Marking strips; on reel; 6 mm wide; plain; self-adhesive; white

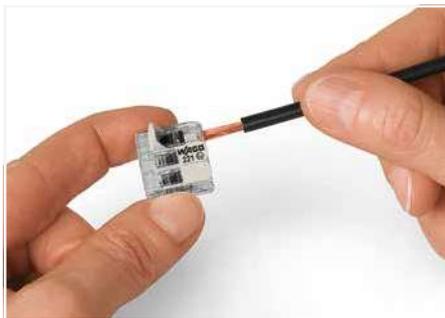
white	210-833	1
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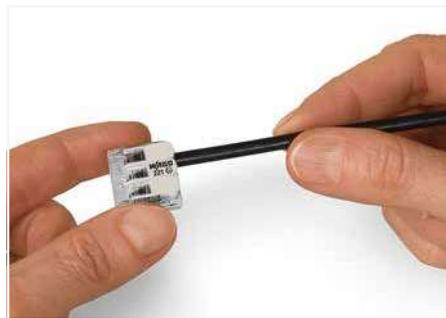
COMPACT Splicing Connectors for All Conductor Types and Mounting Carrier for Ex Splicing Connectors; for Ex eb Applications; 221 Series Description and Installation



Strip conductor to 11 mm (0.43 inch).



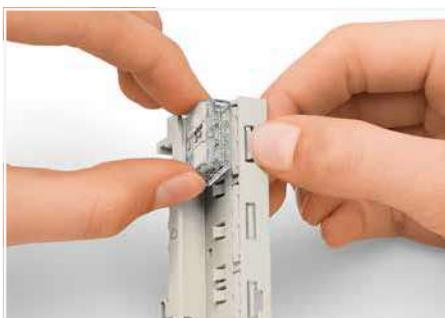
Termination: Lift the lever to open the clamping unit and insert a stripped conductor.



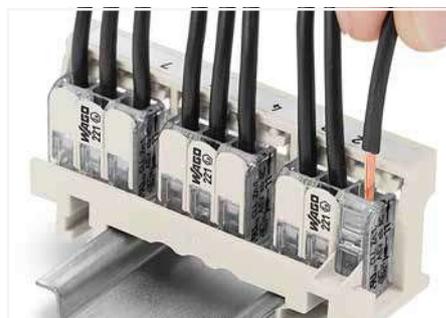
Then, lower the lever to close the clamp.



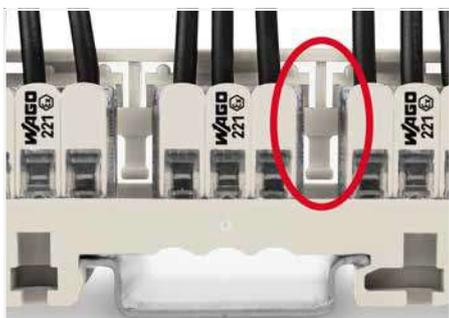
Inserting a connector into the mounting carrier.



Removing a connector from the mounting carrier.



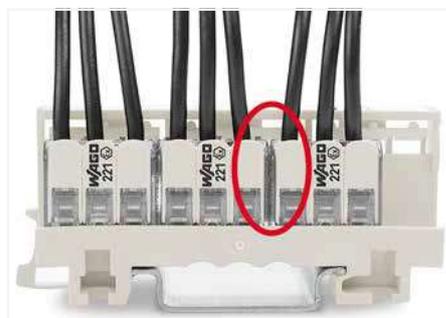
Removing a conductor.



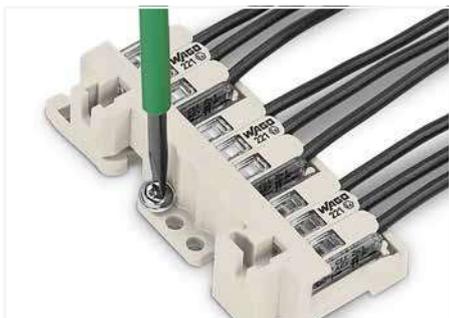
Mounting type (440 V)
A spacer integrated in the adapter can be seen between two connectors.



Mounting type (440 V)
Vertical mounting on DIN-35 rail



Mounting type (275 V)
A spacer integrated in the adapter cannot be seen between two connectors; the connector housings are close together.



Mounting type (440 V)
Horizontal screw mounting on a flat surface



Mounting type (440 V)
Mounting the carrier via non-conductive screws.

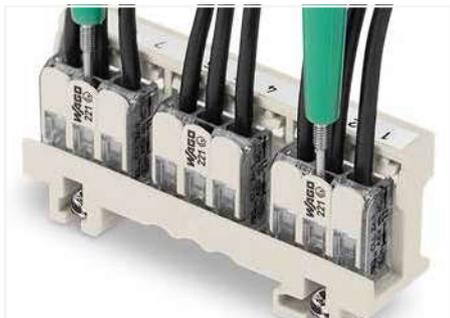


Mounting type (275 V)
Mounting the carrier using conductive screws.

CAGE CLAMP® terminates the following copper conductors:
solid "s" stranded "st"

fine-stranded "f-st",
also with tinned
single strands

fine-stranded,
tip-bonded



Easily test inserted connectors in the carrier – however they are mounted.



Wiring example in an Ex e junction box
Labeling is performed via marking strips (210-334) and pen or continuous labels (210-834), which is printed via Smart Printer (258-5000).



Carriers with a blue insulated housing are suitable for Ex i applications. Both clearances and creepage distances for the protection type "intrinsic safety Ex i" must be observed.