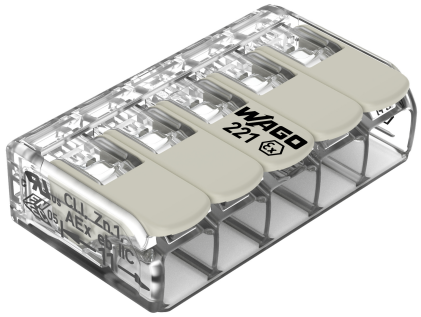
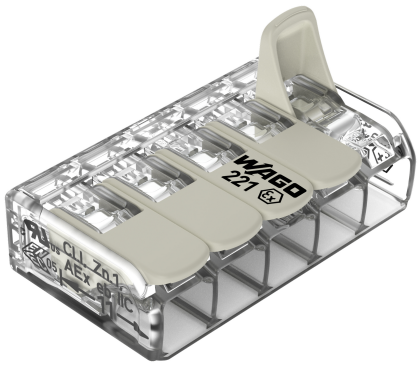
Data Sheet | Item Number: 221-485

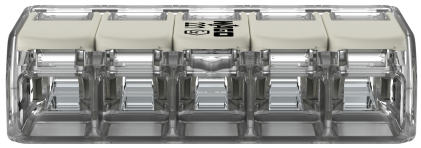
Splicing connector with levers; for all conductor types; for Ex e applications; max. 4 mm²; 5-conductor; transparent housing; Operating temperature (max.): 105 °C; 4,00 mm²; transparent

https://www.wago.com/221-485



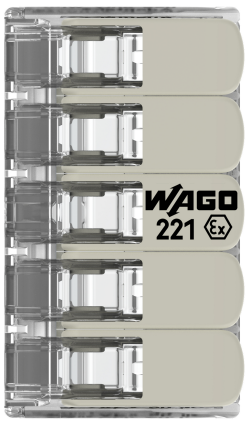


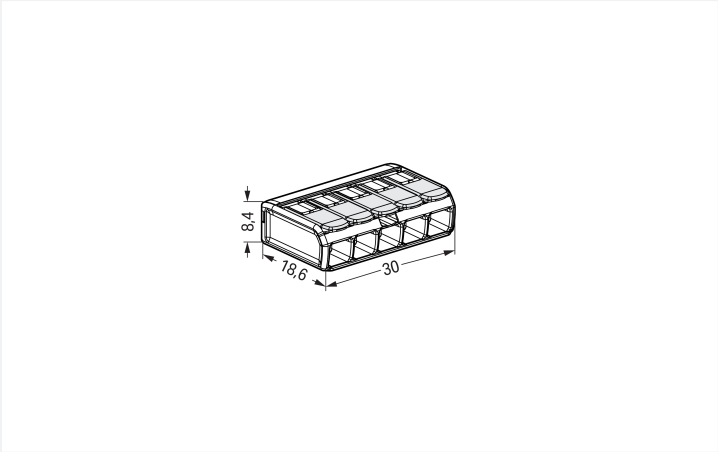
Color: transparent











Dimensions in mm

Splicing connector with levers, 221 Series, CAGE CLAMP®

Our splicing connector with levers (item number 221-485) ensures effortless electrical installations. From intercom system wiring to electric ovens—connecting various conductor types is quick and easy with WAGO's compact 221 Series splicing connector. Strip lengths must be 11 mm when connecting conductors to this splicing connector with levers. This product incorporates conductor terminals and utilizes CAGE CLAMP®. Our highly-rated and maintenance-free CAGE CLAMP® connection makes it easy to connect all types of conductors without having to prepare the conductor. For example, you don't need to crimp ferrules. Dimensions: (30 x 8.4 x 18.6) mm (width x height x depth). This splicing connector with levers is suitable for conductor cross-sections ranging from 0.2 mm² to 4 mm².

This product is suitable for certain Ex applications (see product data sheet)

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).

- Actuation via lever
- Compact sizes
- Safe and fast installation
- Suitable for specific Ex applications

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	The permissible operating voltage of the connector with carrier (440 V or 275 V) depends on the mounting type.
Safety information 2	Only approved in conjunction with a mounting carrier (221-501). Other carriers are possible, see certificate/file. The connectors must be installed in an enclosure meeting the requirements of a recognized protection type per EN 60079-0, GB/T 3836.1 Section 1 or EN 60079-31, GB/T 3836.31. When installing the connectors in an enclosure of protection type "e" (increased safety per EN 60079-7, GB/T 3836.3), the clearances and creepage distances of Table 2 for this standard must be observed. See point 1 for the use of accessories. The connectors can be used both in Group II and Group I, as the standard requirements are identical in this case. The use of these components requires a new assessment by a notified certification agency.

Electrical data

Approvals per		UL 60079	
Use group	B	C	D
Rated voltage	-	440 V	-
Rated current	-	20 A	-

Ex information

Ratings per	ATEX: PTB 18 ATEX 1019 U / IECEx: PTB 18.0045U (Ex eb IIC Gb)
Rated voltage EN (Ex e II)	440 V
Rated current (Ex e II)	32 A

General information

Wiring direction	Side-entry wiring

Connection Data

Clamping units	5
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	30 mm / 1.181 inches
Height	8.4 mm / 0.327 inches
Depth	18.6 mm / 0.732 inches

Material data

Note (material data)	Information on material specifications can be found here
Color	transparent
Material group	IIIa
Insulation material (main housing)	Polycarbonate (PC)
Flammability class per UL94	V2
Fire load	0.064 MJ
Actuator color	light gray
Weight	4.4 g

Environmental requirements

Ambient temperature (storage)	-40 … +60 °C
Continuous operating temperature	-55 … +105 °C

Continued on next page

Commercial data

PU (SPU)	250 (25) pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143837330
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

Product sustainability data	Link
RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60998	NTR NL-7827
cULus_Listed_667F Underwriters Laboratories Inc.	UL 486C	E69654
ENEC 05 DEKRA Certification B.V.	EN 60998	71-168264

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
ATEX-Attestation of Conformity WAGO GmbH & Co. KG	-	-
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

Approval	Standard	Certificate Name
LR Lloyds Register	EN 60998	LR2446364TA

Approvals for hazardous areas

Approval	Standard	Certificate Name
AEx Underwriters Laboratories Inc.	UL 60079	E185892 (AEx eb IIC resp. Ex eb IIC)
ATEX Physikalisch Technische Bundesanstalt	EN IEC 60079-0	PTB 18 ATEX 1019 U (II 2 G Ex eb IIC Gb, I M 2 Ex eb I Mb)
CCC CNEX	GB/T 3836.3	2020312313000184 (Ex eb IIC Gb, Ex eb I Mb)
IECEx Physikalisch Technische Bundesanstalt	IEC 60079-0	IECEx PTB 18.0045U (Ex eb IIC Gb, Ex eb I Mb)
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079	TÜV 23.1456 U

Continued on next page

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 221-485

Documentation

System Description

System Description 221-482, 221-483, 221-485	pdf 1151.51 KB	

Bid Text

221-485	21.05.2019	xml 4.09 KB
221-485	21.05.2019	docx 16.02 KB
ausschreiben.de 221-485		

CAD/CAE-Data

CAD data

2D/3D Models 221-485

CAE data

EPLAN Data Portal 221-485

ZUKEN Portal 221-485

1 Compatible Products

1.1 Optional Accessories

1.1.1 Mounting adapter

1.1.1.1 Mounting accessories



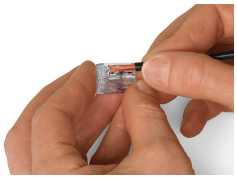
Item No.: 221-500/000-006
Mounting carrier; 221 Series - 4 mm²; for DIN-35 rail mounting/screw mounting; blue



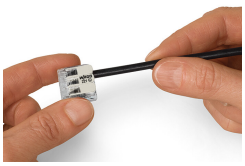
Item No.: 221-501
Mounting carrier; for Ex applications; 221 Series - 4 mm²; for DIN-35 rail mounting/screw mounting; light gray

Installation Notes

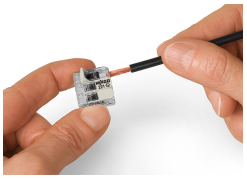
Conductor termination



Strip conductor to 11 mm (0.43 inch).



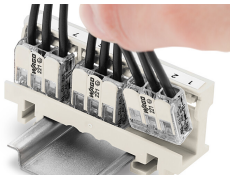
Then, lower the lever to close the clamp.



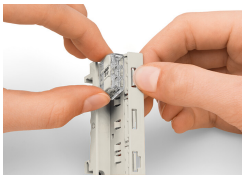
Termination: Lift the lever to open the clamping unit and insert a stripped conductor.

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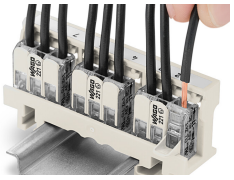
Installation



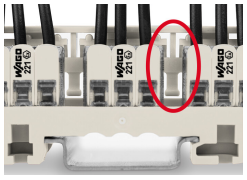
Inserting a connector into the mounting carrier.



Removing a connector from the mounting carrier.



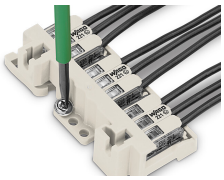
Removing a conductor.



Mounting type (440 V)
Using spacers between the connectors.



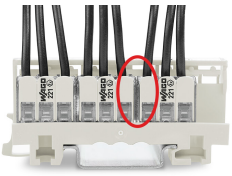
Mounting type (440 V)
Vertical mounting on DIN-35 rail



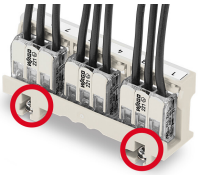
Mounting type (440 V)
Horizontal screw mounting on a flat surface



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

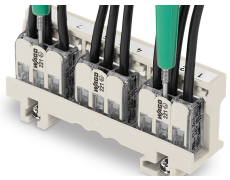


Mounting type (275 V)
No spacers are used between the connectors.



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

Testing



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