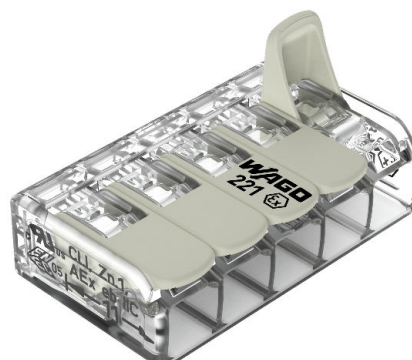


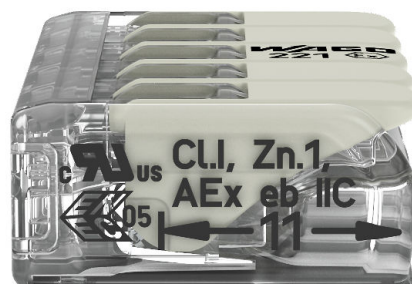
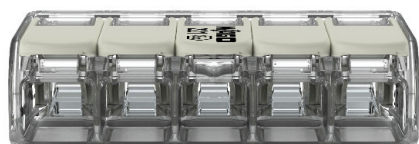
## Data Sheet | Item Number: 221-485

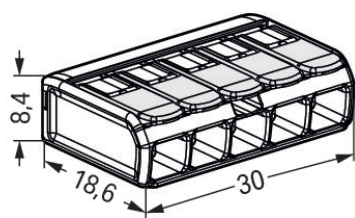
Splicing connector with levers; for all conductor types; for Ex e applications; max. 4 mm<sup>2</sup>; 5-conductor; transparent housing; Operating temperature (max.): 105 °C; 4,00 mm<sup>2</sup>; transparent

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



Color: ☐ transparent





Dimensions in mm



Splicing connector with levers, 221 Series, lever

Splicing connector with levers (item number 221-485) is designed for fault-free electrical installations. From wiring intercom systems to installing electrical ovens, connecting different conductor types is quick and hassle-free with WAGO's compact 221 Series splicing connector, which allows you to quickly and safely connect different types of conductors. Strip lengths must be 11 mm when connecting conductors to splicing connector with levers. This product features conductor terminals and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection provides a reliable and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. The item's dimensions are 30 x 8.4 x 18.6 mm (width x height x depth). Splicing connector with levers is suitable 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 lever, 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).

Notes	
General safety instructions	<div><b>NOTICE: Observe installation and safety instructions!</b></div> <div><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></div> <div><b>To be sold only with installation instructions!</b></div>
Safety Information	The permissible operating voltage of the connector with carrier (440 V or 275 V) depends on the mounting type.
Safety information 2	<div>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.</div> <div>The use of these components requires a new assessment by a notified certification agency.</div>



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

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)	<a href="#">Information on material specifications can be found here</a>
Color	transparent
Material group	Illa
Insulation material (main housing)	Polycarbonate (PC)
Flammability class per UL94	V2
Fire load	0.089 MJ
Actuator color	light gray
Weight	4.4 g

Environmental requirements	
Ambient temperature (storage)	-40 ... +60 °C
Continuous operating temperature	-55 ... +105 °C




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 8.0		EC000446
ECCN		NO US CLASSIFICATION

Environmental Product Compliance		
RoHS Compliance Status		Compliant, No Exemption

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
  					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60998	NTR NL-7990	ATEX-Attestation of Con- formity WAGO GmbH & Co. KG	-	-
cULus_Listed_667F Underwriters Laboratories Inc.	UL 486C	E69654	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
ENEC 05 DEKRA Certification B.V.	EN 60669, EN 60998	71-152248	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for marine applications			Approvals for hazardous areas		
			     		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
LR Lloyds Register	EN 60998	LR22207029TA	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 19.1781 U



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 221-485

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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


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1 Compatible Products


1.1 Optional Accessories

1.1.1 Mounting adapter

1.1.1.1 Mounting accessories



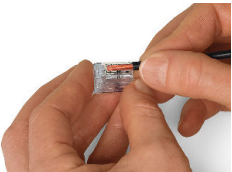
Item No.: 221-500/000-006  
Mounting carrier; 221 Series - 4 mm²; for DIN-35 rail mounting/screw mounting; blue



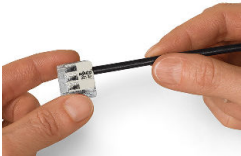
Item No.: 221-501  
Mounting carrier; for Ex applications; 221 Series - 4 mm²; for DIN-35 rail mounting/screw mounting; light gray

Installation Notes

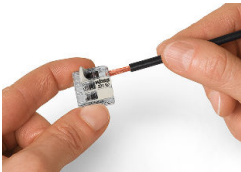
Conductor termination



Strip conductor to 11 mm (0.43 inch).

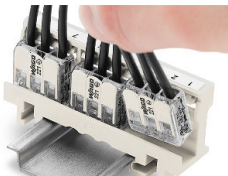


Then, lower the lever to close the clamp.



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

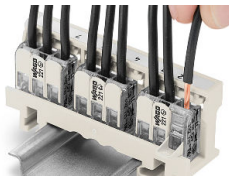
Installation



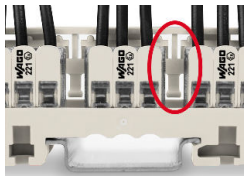
Inserting a connector into the mounting carrier.



Removing a connector from the mounting carrier.



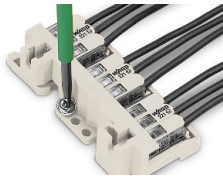
Removing a conductor.



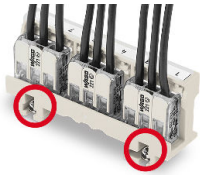
**Mounting type (440 V)**  
Using spacers between the connectors.



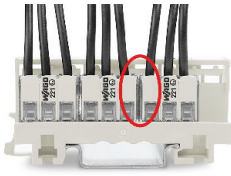
**Mounting type (440 V)**  
Vertical mounting on DIN-35 rail



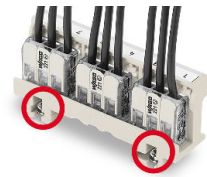
**Mounting type (440 V)**  
Horizontal screw mounting on a flat surface



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

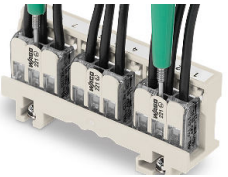


**Mounting type (275 V)**  
No spacers are used between the connectors.



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

Testing



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