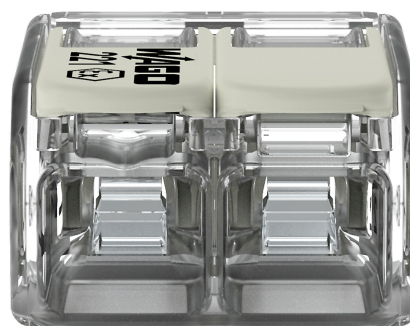
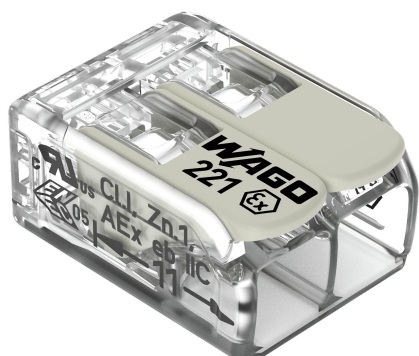


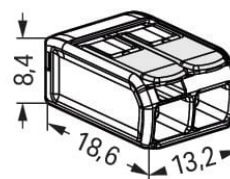
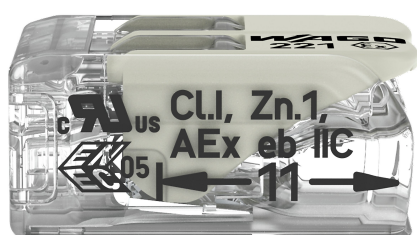
Data Sheet | Item Number: 221-482

Splicing connector with levers; for all conductor types; for Ex e applications; max. 4 mm²; 2-conductor; transparent housing; Operating temperature (max.): 105 °C; 4,00 mm²; transparent

<https://www.wago.com/221-482>



Color: ☐ transparent



Dimensions in mm

Splicing connector with levers, 221 Series, transparent

Our splicing connector with levers (item number 221-482) ensures effortless electrical installations. From intercom system wiring to electric ovens—connecting different conductor types is quick and easy with WAGO's practical 221 Series splicing connector. Strip lengths must be 11 mm when connecting conductors to splicing connector with levers. Featuring conductor terminals along with CAGE CLAMP®, this product delivers reliable performance. 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. The item's dimensions are 13.2 x 8.4 x 18.6 mm (width x height x depth). Depending on the type of conductor, 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	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! The permissible operating voltage of the connector with carrier (440 V or 275 V) depends on the mounting type. 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.
Safety Information	
Safety information 2	

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)	24.5 A

Connection data	
Clamping units	2
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

Connection 1	
Wiring direction	Side-entry wiring

Physical data	
Width	13.2 mm / 0.52 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	0.034 MJ
Actuator color	light gray
Weight	1.7 g

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

Commercial data	
eCl@ss 10.0	27-14-11-04
eCl@ss 9.0	27-14-11-04
ETIM 9.0	EC000446
ETIM 8.0	EC000446
PU (SPU)	1000 (100) pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143837422
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	E69654
ENEC 05 DEKRA Certification B.V.	EN 60669,EN 60998	71-127529

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
ATEX-Attestation of Con- formity WAGO GmbH & Co. KG	-	-
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-



Approvals for marine applications



Approval	Standard	Certificate Name
LR Lloyds Register	EN 60998	LR22207029TA

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 19.1781 U

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 221-482



Documentation

System Description
System Description 221-482, 221-483, 221-485

pdf
1151.51 KB



Bid Text			
221-482	21.05.2019	docx 15.98 KB	
221-482	21.05.2019	xml 4.09 KB	
ausschreiben.de 221-482			



CAD/CAE-Data

CAD data
2D/3D Models 221-482



CAE data
EPLAN Data Portal 221-482
ZUKEN Portal 221-482



1 Compatible Products
1.1 Optional Accessories
1.1.1 Mounting adapter
1.1.1.1 Mounting accessories

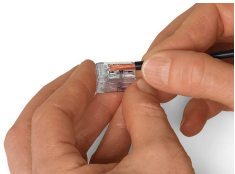


Item No.: 221-500/000-006
Mounting carrier; 221 Series - 4 mm²; for DIN-35 rail mounting/screw mounting; blue

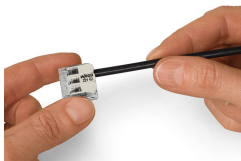
Item No.: 221-501
Mounting carrier; for Ex applications; 221 Series - 4 mm²; for DIN-35 rail mounting/screw mounting; light gray

Installation Notes

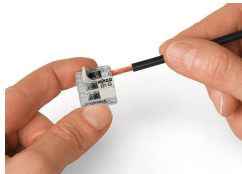
Conductor termination



Strip conductor to 11 mm (0.43 inch).

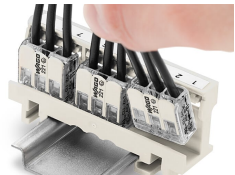


Then, lower the lever to close the clamp.

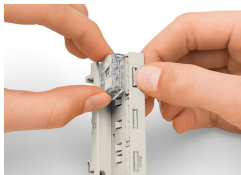


Termination: Lift the lever to open the clamping unit and insert a stripped conductor.

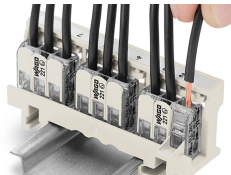
Installation



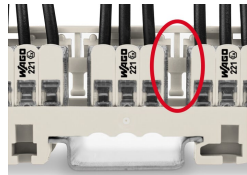
Inserting a connector into the mounting carrier.



Removing a connector from the mounting carrier.



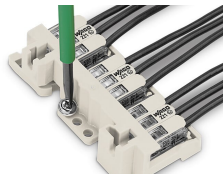
Removing a conductor.



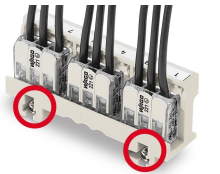
Mounting type (440 V)
Using spacers between the connectors.



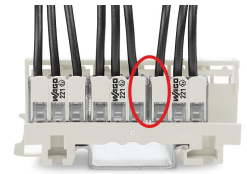
Mounting type (440 V)
Vertical mounting on DIN-35 rail



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



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

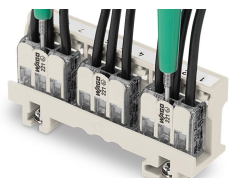


Mounting type (275 V)
No spacers are used between the connectors.



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

Testing



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