

Data Sheet | Item Number: 221-482

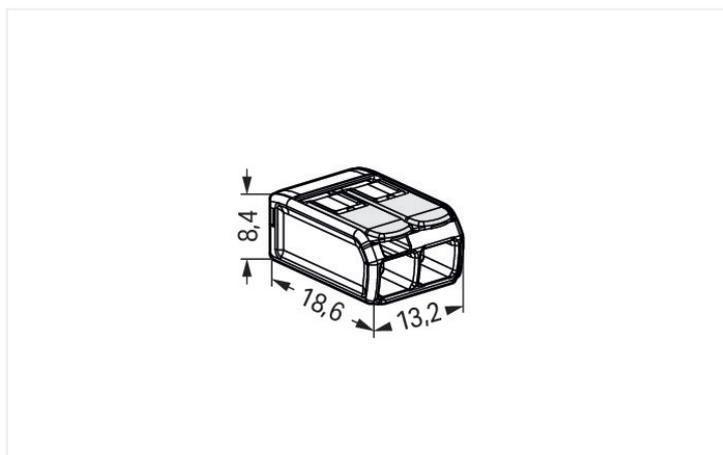
Splicing connector with levers; for all conductor types; for Ex e applications; max. 4 mm²; 2-conductor; transparent housing; Operating temperature (max.): 105 °C; 4,00 mm²; transparent



<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 information	<p>NOTICE: Observe installation and safety instructions!</p> <ul style="list-style-type: none"> • 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! <p>To be sold only with installation instructions!</p>
Safety Information	The permissible operating voltage of the connector with carrier (440 V or 275 V) depends on the mounting type.
Safety information 2	<p>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.</p> <p>The use of these components requires a new assessment by a notified certification agency.</p>

Electrical data				
Approvals per	UL 60079			Ex information
Use group	B	C	D	Ratings per
Rated voltage	-	440 V	-	ATEX: PTB 18 ATEX 1019 U / IECEx: PTB 18.0045U (Ex eb IIC Gb)
Rated current	-	20 A	-	Rated voltage EN (Ex e II)
				440 V
				Rated current (Ex e II)
				24.5 A

Connection data		Connection 1	
Clamping units	2	Connection technology	CAGE CLAMP®
Total number of potentials	1	Actuation type	Lever
		Connectable conductor materials	Copper
		Nominal cross-section	4 mm ² / 12 AWG
		Solid conductor	0.2 ... 4 mm ² / 24 ... 12 AWG
		Stranded conductor	0.2 ... 4 mm ² / 24 ... 12 AWG
		Fine-stranded conductor	0.14 ... 4 mm ² / 24 ... 12 AWG
		Strip length	11 mm / 0.43 inches

Connection 1

Wiring direction	Side-entry wiring
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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	0.035 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

PU (SPU)	1000 (100) pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143837422
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
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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	71-152248

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	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	
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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

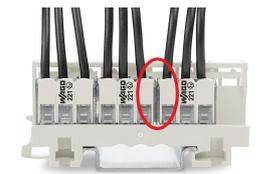


Inserting a connector into the mounting carrier.

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.

Installation



Mounting type (275 V)

Mounting the carrier using conductive screws.

Testing



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