

Data Sheet | Item Number: 221-683

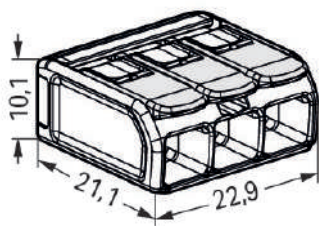
Splicing connector with levers; for all conductor types; for Ex e applications; max. 6 mm²; 3-conductor; transparent housing; Operating temperature (max.): 105 °C; 6,00 mm²; transparent

<https://www.wago.com/221-683>



Color: ☐ transparent





Dimensions in mm

Splicing connector with levers, 221 Series, CAGE CLAMP®

Splicing connector with levers (item number 221-683) simplifies 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 between 12 mm and 14 mm when connecting conductors to splicing connector with levers. This product features conductor terminals and utilizes CAGE CLAMP®. Our trusted universal connection known as CAGE CLAMP® is the industry standard when it comes to connection technology and electrical interconnections. The dimensions are 22.9 x 10.1 x 21.1 mm (width x height x depth). Depending on the type of conductor, splicing connector with levers is designed for conductor cross sections ranging from 0.5 mm² to 6 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!
Safety Information	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.
Safety information 2	Only approved in conjunction with a mounting carrier (221-511). 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, Section 1 or EN 60079-31. When installing the connectors in an enclosure of protection type "eb" (increased safety) per EN 60079-7, 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	-	30 A	-
Ex information			
Ratings per		ATEX: PTB 19 ATEX 1001 U / IECEx: PTB 19.001 1U (Ex eb IIC Gb)	
Rated voltage EN (Ex e II)		440 V	
Rated current (Ex e II)		37 A	
Connection data			
Clamping units		3	
Total number of potentials		1	
Connection 1			
Connection technology		CAGE CLAMP®	
Actuation type		Lever	
Connectable conductor materials		Copper	
Nominal cross-section		6 mm² / 10 AWG	
Solid conductor		0.5 ... 6 mm² / 20 ... 10 AWG	
Stranded conductor		0.5 ... 6 mm² / 20 ... 10 AWG	
Fine-stranded conductor		0.5 ... 6 mm² / 20 ... 10 AWG	
Strip length		12 ... 14 mm / 0.47 ... 0.55 inches	
Wiring direction		Side-entry wiring	
Physical data			
Width		22.9 mm / 0.902 inches	
Height		10.1 mm / 0.398 inches	
Depth		21.1 mm / 0.831 inches	
Material data			
Note (material data)		Information on material specifications can be found here	
Color		transparent	
Material group		Illa	
Insulation material (main housing)		Polycarbonate (PC)	
Flammability class per UL94		V2	
Fire load		0.097 MJ	
Actuator color		light gray	
Weight		4.3 g	
Environmental requirements			
Ambient temperature (storage)		-40 ... +60 °C	
Continuous operating temperature		-55 ... +105 °C	
Commercial data			
ETIM 9.0		EC000446	
ETIM 8.0		EC000446	
PU (SPU)		300 (30) pcs	
Packaging type		Box	
Country of origin		DE	
GTIN		4055143860574	
Customs tariff number		85369010000	



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
CB DEKRA Certification B.V.	IEC 60998	NL-81003	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 60998	71-123784	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 19 ATEX 1001 U (II 2 G Ex eb IIC Gb, I M 2 Ex eb I Mb)
			CCC CNEX	GB/T 3836.3	2020312313000185 (Ex eb IIC Gb, Ex eb I Mb)
			IECEx Physikalisch Technische Bundesanstalt	IEC 60079-0	IECEx PTB 19.001 1U (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 221-683	

Documentation

Bid Text
ausschreiben.de 221-683

CAD/CAE-Data

CAD data
2D/3D Models 221-683

CAE data
EPLAN Data Portal 221-683
ZUKEN Portal 221-683

1 Compatible Products

1.1 Optional Accessories

1.1.1 Mounting adapter

1.1.1.1 Mounting accessories



Item No.: 221-510/000-006
Mounting carrier; 221 Series - 6 mm²; for DIN-35 rail mounting/screw mounting; blue

Item No.: 221-511
Mounting carrier; for Ex applications; 221 Series - 6 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



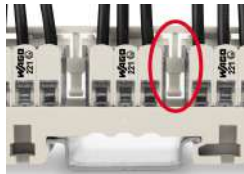
Inserting a connector into the mounting carrier.



Removing a connector from the mounting carrier.



Removing a conductor.



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

Installation

**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.