Splicing connector with levers; for all conductor types; for Ex e applications; max. 4 mm²; 10-conductor; transparent housing; Operating temperature (max.): $105 \,^{\circ}$ C; $4,00 \, \text{mm}^2$; transparent



https://www.wago.com/221-490





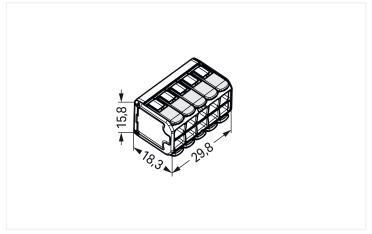
Color:

transparent









Dimensions in mm

https://www.wago.com/221-490



Splicing connector with levers, 221 Series, lever

Enjoy convenient electrical installations with splicing connector with levers (item number 221-490). From intercom system wiring to electric ovens—connecting various conductor types is quick and hassle-free with WAGO's compact 221 Series splicing connector. Conductors can only be connected to splicing connector with levers if their strip length is between 10 mm and 12 mm. This product features conductor terminals and utilizes CAGE CLAMP®. Our highly-rated and maintenance-free CAGE CLAMP® connection makes it easy to connect all conductor types without having to prepare the conductor. For example, you don't need to crimp ferrules. The dimensions are 29.8 x 15.8 x 18.3 mm (width x height x depth). Depending on the conductor type, splicing connector with levers is ideal 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 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).

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!
Safety Information	in grounded power lines

UL 6	60079		Ex information	
В	С	D	Ratings per	ATEX: PTB 18 ATEX 1019 U / IECEx: PTB
- 44	40 V	-		18.0045U (Ex eb IIC Gb)
- 2	0 A	_	Rated voltage EN (Ex e II)	440 V
_			Rated current (Ex e II)	32 A
	B - 44	- 440 V	B C D - 440 V -	B C D Ratings per - 440 V 20 A - Rated voltage EN (Ex e II)

Connection data				
Clamping units	10		Connection 1	
Total number of potentials	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	10 12 mm / 0.39 0.47 inches	
			Wiring direction	Side-entry wiring

https://www.wago.com/221-490



Physical data		
Width	29.8 mm / 1.173 inches	
Height	15.8 mm / 0.62 inches	
Depth	18.3 mm / 0.72 inches	

Material data	
Note (material data)	
	<u>Information on material specifications can be found here</u>
Color	transparent
Cover color	transparent
Material group	Illa
Insulation material (main housing)	Polycarbonate (PC)
Flammability class per UL94	V2
Fire load	0.132 MJ
Actuator color	light gray
Weight	7 g

Environme	ental requi	irements

Ambient temperature (operation) +85 °C Temperature marking per EN 60998 T85

0		
Commercial data		
PU (SPU)	150 (15) pcs	
Packaging type	Box	
Country of origin	DE	
GTIN	406696668087	
Customs tariff number	85369010000	

Product classification	
UNSPSC	39121409
ETIM 9.0	EC000446
ECCN	NO US CLASSIFICATION

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-8062
ENEC 05 DEKRA Certification B.V.	IEC 60998	71-152248

Approvals for hazardous areas



Approval	Standard	Certificate Name
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)
IECEx Physikalisch Technische Bundesanstalt	IEC 60079-0	IECEx PTB 18.0045U (Ex eb IIC Gb, Ex eb I Mb)

https://www.wago.com/221-490



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 221-490



1 Compatible Products

1.1 Optional Accessories

1.1.1 Mounting adapter

1.1.1.1 Mounting accessories



Item No.: 221-539/1000-000

Mounting carrier with strain relief; for 10wire connectors; 221 Series - 4 mm²; for DIN-15 rail; for Ex applications; light gray

Item No.: 221-549/1000-000

Mounting carrier with strain relief; for 10wire connectors; 221 Series - 4 mm²; for DIN-35 rail; for Ex applications; light gray

NEW YORK

Item No.: 221-539/1002-000 Mounting carrier; for 10-wire connectors; 221 Series - 4 mm²; for DIN-15 rail; for Ex applications; light gray

Item No.: 221-549/1002-000

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm²; for DIN-35 rail; for Ex applications; light gray

Installation Notes

Conductor termination



Strip conductor to 11 mm (0.43 inch).



Pull up an orange lever to open the clamping unit.



Then insert the conductor and push the lever back down, flush with the connector housing.



Compact, lever-operated splicing connectors:

Tool-free connection of fine-stranded conductors from 0.14 ... 4 mm², as well as solid or stranded conductors from 0.2 ... 4 mm² (24 ... 12 AWG).

Safety:

The lever's specially designed rest position reliably prevents accidental unclamping of a connected conductor.

Application safety, for any type of conductor (solid, stranded, fine-stranded), is confirmed by approvals like ENEC or UL.

Application



Wiring fine-stranded conductors in junction boxes.



Custom low-voltage lighting system



Lighting distribution in a ceiling canopy



Pendant light connection in a suspended ceiling

https://www.wago.com/221-490



Testing



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

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$