

Item description

Safety Information:

221 Series LEVER-NUTS® for Ex splicing connectors obtain AEx (class 1, zone 1) rating when used in conjunction with the mounting carrier, which can either be clamped onto a DIN rail or screwed tightly to any smooth surface.

This component is only approved in conjunction with mounting adapter (221-501). The mounting carrier fulfills the standard requirement for securing the clamping point. When the connectors are placed flush together within the carrier, the working voltage is 275 V. For applications with working voltages up to 440 V, the connectors are inserted so that there is a visible space between each connector.

**Data
Notes**

| | |
|----------------------|---|
| Safety information 1 | 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 (221-501). 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, 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. |

Subject to changes. Please also observe the further product documentation!



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

| | |
|--------------------------------|---|
| Ratings per | IEC/EN 60079-7 |
| Approvals per | UL 60079 |
| Rated voltage UL (Use Group C) | 440 V |
| Rated current UL (Use Group C) | 20 A |
| 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

| | |
|-----------------------------------|--------------------------------|
| Total number of connection points | 2 |
| Total number of potentials | 1 |
| Connection technology | CAGE CLAMP® |
| Actuation type | Lever |
| Connectable conductor materials | Copper |
| Nominal cross-section | 4 mm² |
| 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 inch |
| Wiring direction | Side-entry wiring |

Physical data

| | |
|--------|----------------------|
| Width | 13.2 mm / 0.52 inch |
| Height | 8.6 mm / 0.327 inch |
| Depth | 18.8 mm / 0.732 inch |

Material data

| | |
|-----------------------------|-------------|
| Color | transparent |
| Flammability class per UL94 | V2 |
| Fire load | 0.025 MJ |

Subject to changes. Please also observe the further product documentation!

WAGO Corporation
 Germantown, WI 53022
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| | |
|-------------------|------------|
| Color of actuator | light gray |
| Weight | 1.9 g |

Environmental requirements






| | |
|----------------------------------|-----------------|
| Continuous operating temperature | -55 ... +105 °C |
|----------------------------------|-----------------|

Commercial data

| | |
|-----------------------|------------------|
| PU (SPU) | 1000 (100) Stück |
| Packaging type | box |
| Country of origin | DE |
| GTIN | 4055143837422 |
| Customs tariff number | 85369010000 |

Approvals / Certificates

Ex-Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|--|--------------------------|---|
|  | AEx Underwriters Laboratories Inc. | UL 60079 | E185892 |
|  | ATEX Physikalisch Technische Bundesanstalt | IEC 60079-0 | PTB 18 ATEX 1019 U (II 2 G Ex eb IIC Gb bzw. I M 2 Ex eb I Mb) |
|  | CCCEX CQST/CNEx | CNCA-C23-01 | 2020312313000184 |
|  | EAC Brjansker Zertifizierungsstelle | TP TC 012/2011 | RU C-DE.AM02.B. 00127/19 |
|  | IECEX Physikalisch Technische Bundesanstalt | IEC 60079-0 | IECEX PTB 18.0045 U (Ex eb IIC Gb or Ex eb I Mb) |

Country specific Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|------|----------|--------------------------|------------------|
|------|----------|--------------------------|------------------|

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CCA
DEKRA Certification B.V.

EN 60998

NTR NL-
7827




KEMA/KEUR
DEKRA Certification B.V.


EN 60998

71-
113253

Ship Approvals



| Logo | Approval | Additional Approval Text | Certificate name |
|---|-----------------------|--------------------------|------------------|
|  | LR Lloyds Register | EN 60998 | 04/20013 (E8) |

UL-Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|--------------------------------------|--------------------------|------------------|
|  | UL Underwriters Laboratories Inc. | UL 486C | E69654 |

Optional accessories

Mounting adapter

| Mounting accessories | | | |
|--|---|--|--|
|  | Item no.: 221-501 Mounting carrier, 221 series (24-12 AWG); for DIN-35 rail/panel mount; white, Ex | www.wago.com/221-501 | |
|  | Item no.: 221-500/000-006 Mounting carrier; 221 series (24 - 12 AWG); for DIN-35 rail/panel mount; blue | www.wago.com/221-500/000-006 | |

Downloads

Documentation

Bid Text

| | | | |
|--------------|--------------|---------|----------|
| 221-482 | May 21, 2019 | docx | Download |
| docx - Datei | | 16.4 kB | |

221-482

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221-482

X81 - Datei

May 21, 2019

xml
4.2 kB

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System Description

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

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

Additional Information

Technical explanations

Apr 3, 2019

pdf
2.2 MB

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CAD files**CAD data**

2D/3D Models 221-482

URL

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CAE data

ZUKEN Portal 221-482

URL

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Environmental Product Compliance**Compliance Search**

Environmental Product Compliance 221-482

URL

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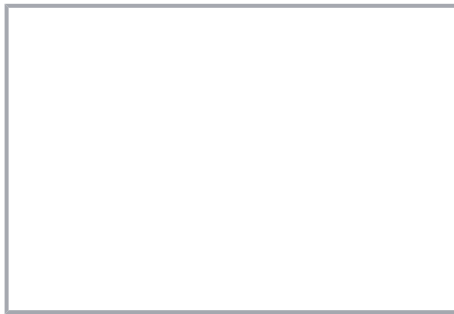
COMPACT Splicing Connector; for all conductor types; for Ex e applications; max. 4 mm²; 2-conductor; with levers; transparent housing; Operating temperature (max.): 105 °C; 4,00 mm²; transparent

Installation Notes**Conductor termination**

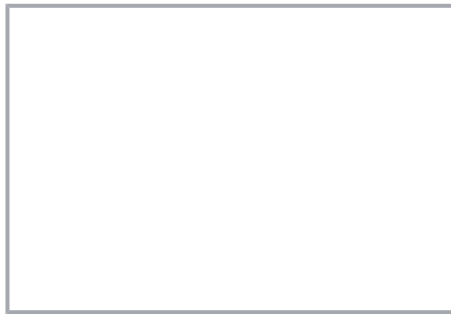
Subject to changes. Please also observe the further product documentation!

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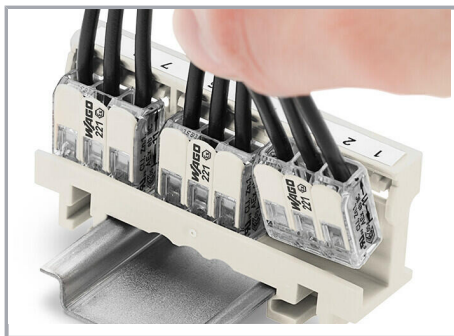
Strip conductor to 11 mm (0.43 inch).



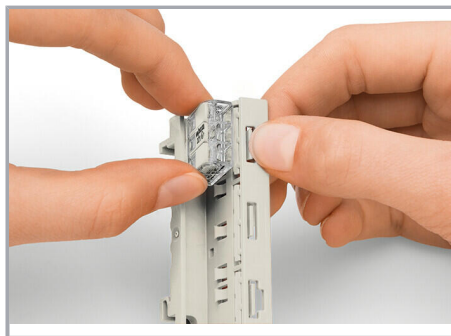
Then, lower the lever to close the clamp.



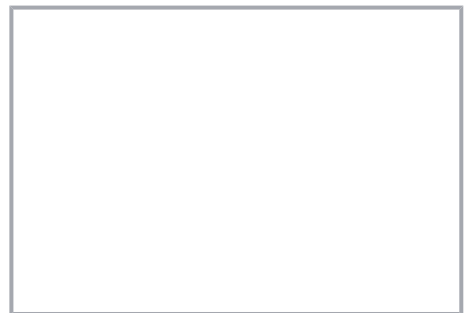
Termination: Lift the lever to open the clamping unit and insert a stripped conductor.



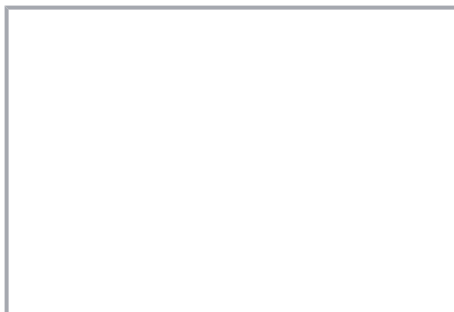
Inserting a connector into the mounting carrier.



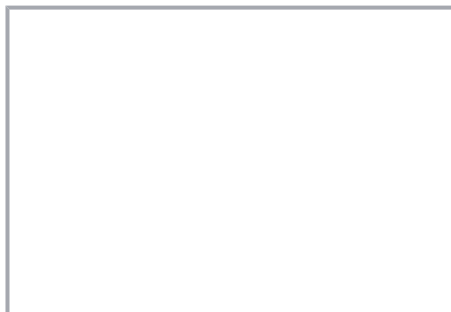
Removing a connector from the mounting carrier.



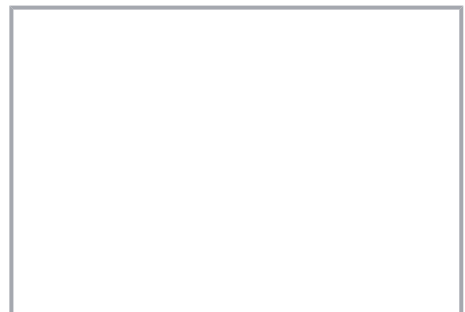
Removing a conductor.



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

Subject to changes. Please also observe the further product documentation!



Mounting type (440 V)

Mounting the carrier via non-conductive screws.



Mounting type (275 V)

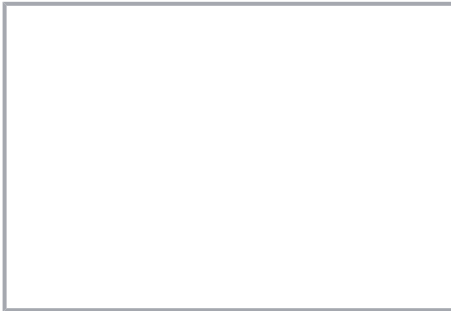
No spacers are used between the connectors.



Mounting type (275 V)

Mounting the carrier using conductive screws.

Testing



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

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