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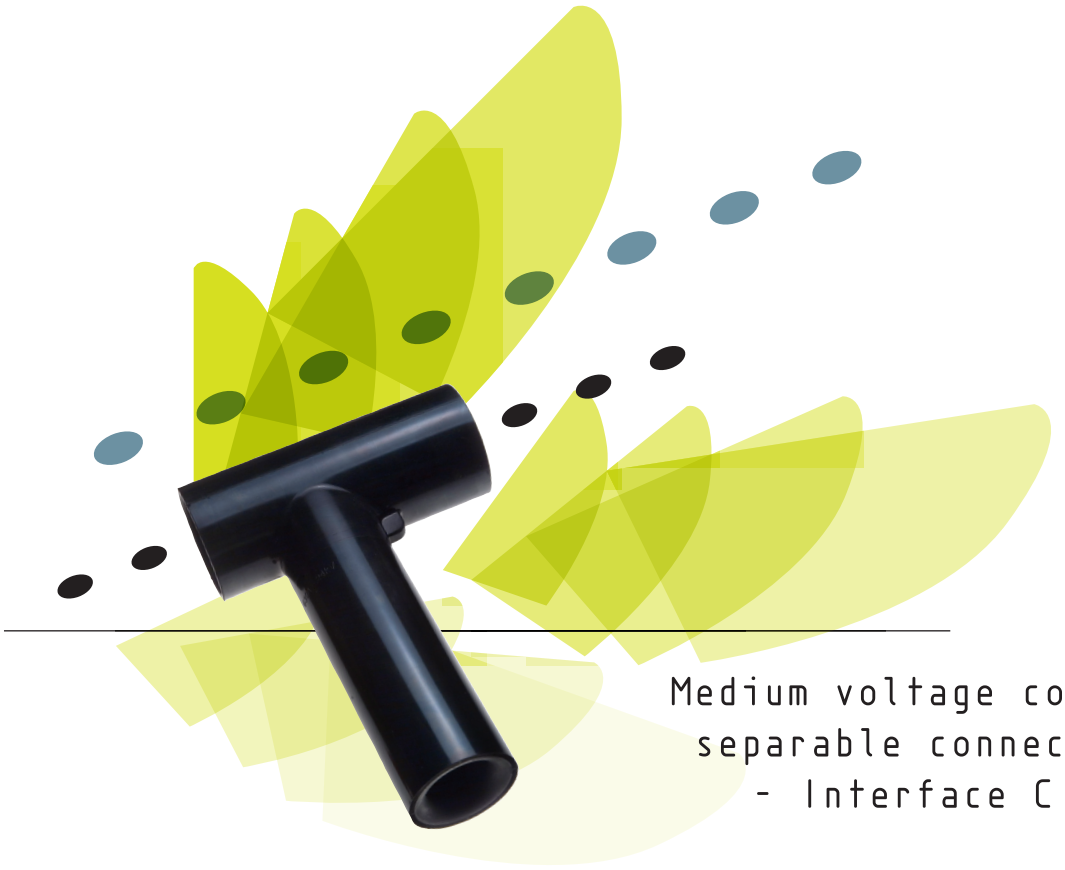

# Medium voltage compact separable connectors

## - Interface C -

Catalogue 2011

THORNE & DERRICK UK

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# Nexans Network Solutions Div. Euromold

## COMPANY PRESENTATION

### EUROMOLD

Euromold is the leading European specialised designer, manufacturer and distributor of prefabricated cable accessories for medium voltage energy distribution. Euromold provides a complete range of accessories for underground cables: premoulded EPDM rubber connectors for cables and epoxy bushings for transformers and switchgear, as well as a large range of cold-shrinkable terminations and joints from 12 to 42 kV. Euromold is also the manufacturer of electrical components for the high voltage accessories of the Nexans group.

### ISO 9001 Certificate

Since 1992, Euromold's commitment to quality is demonstrated by its ISO 9001 certification.

### International standards

All our products meet the International standards like CENELEC HD 629.1, CENELEC EN 50180, IEC 60137, IEC 60502-4... or country specifications. Official certificates, CESI, KEMA, ATEX... prove the conformity of our products. Long duration tests of existing or new products are continuously performed in our test fields.

### Laboratory accreditation

Since June 2000, Euromold's independent ELAB laboratory obtained the BELAC accreditation no.144-TEST conform with the European standards for laboratories ISO 17025 for electrical testing of low and medium voltage cable accessories according to the international standards EN 50393, IEC 60502-4, IEC 61442 and HD 629.

While every care is taken to ensure that the information contained in this publication is correct, no legal responsibility can be accepted for any inaccuracy. Nexans Network Solutions N.V. - Div. Euromold reserves the right to alter or modify the characteristics of its products described in this catalogue as standards and technology evolve.

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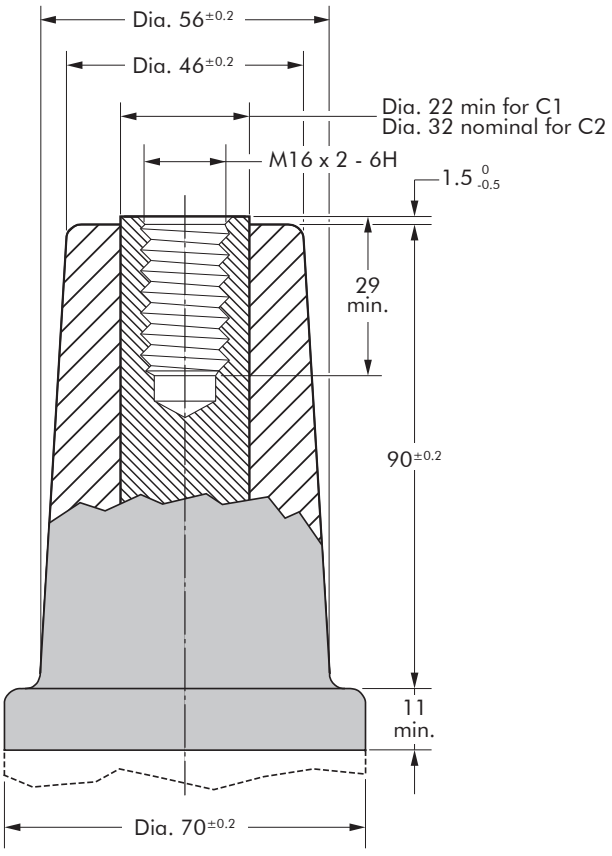
# SEPARABLE CONNECTORS
## INTERFACE C

## Table of contents

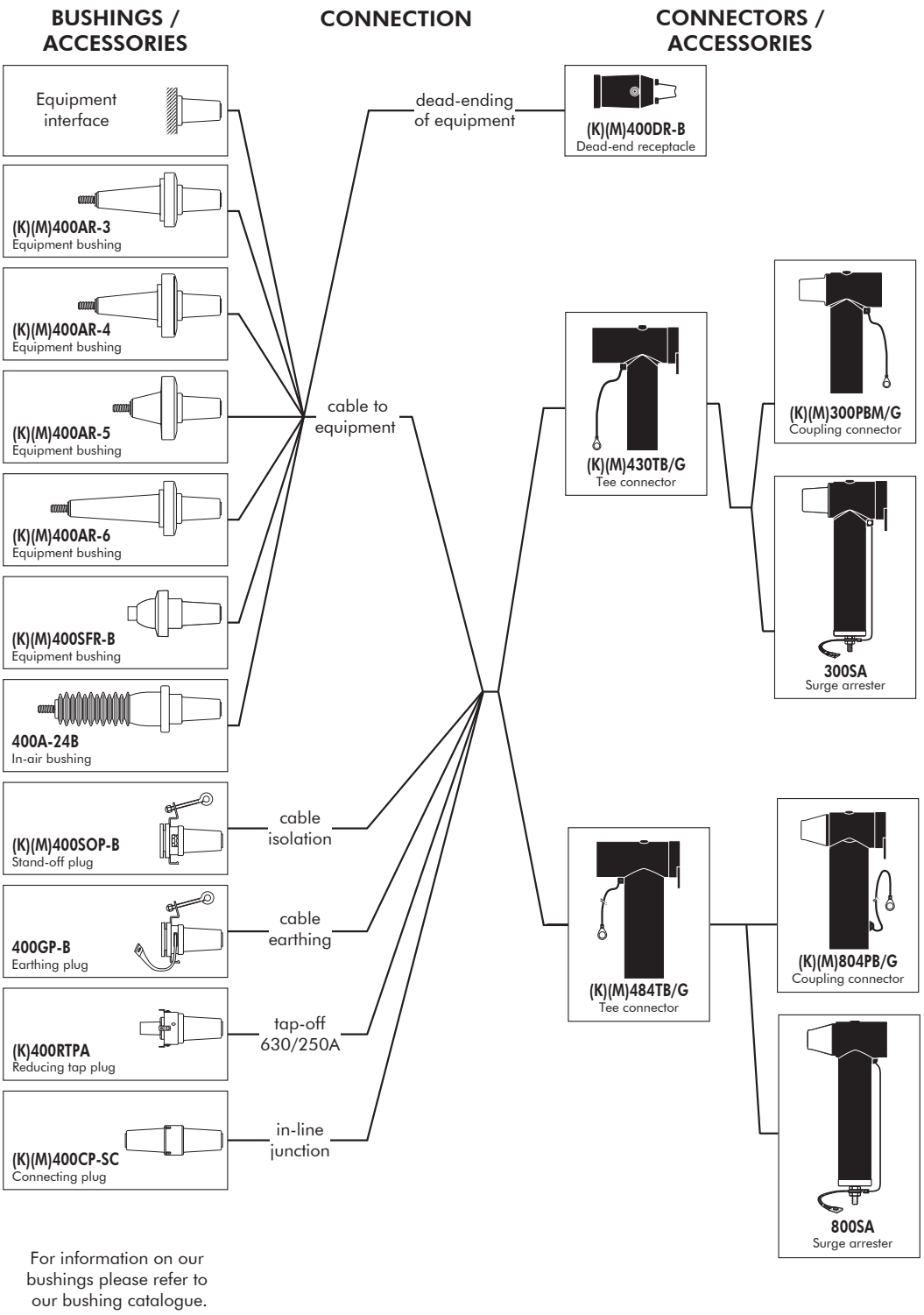
430TB - tee connector
484TB - tee connector
300PBM - coupling connector
430TBM-P2/P3 - dual/triple cable arrangement
804PB - coupling connector
300SA - surge arrester
800SA - surge arrester
400TR and 800TR - test rod
400TK and 400SW installation tools
Accessories
Possible arrangements

## Interface C1 & C2

Dimensions according to European CENELEC EN 50180 and 50181 (in mm).



# Connecting possibilities




For information on our bushings please refer to our bushing catalogue.

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# 430TB
## INTERFACE C
## TEE CONNECTOR

**Up to 36 kV**
**630 A (800 A)**

6/10 (12) kV
6.35/11 (12) kV
8.7/15 (17.5) kV
12/20 (24) kV
12.7/22 (24) kV
18/30 (36) kV
19/33 (36) kV

## Application

Separable tee shape connector (bolted type) designed to connect polymeric insulated cable to equipment (transformers, switchgear, motors, ...).
Also connects cable to cable when using the appropriate mating parts.

## Technical characteristics

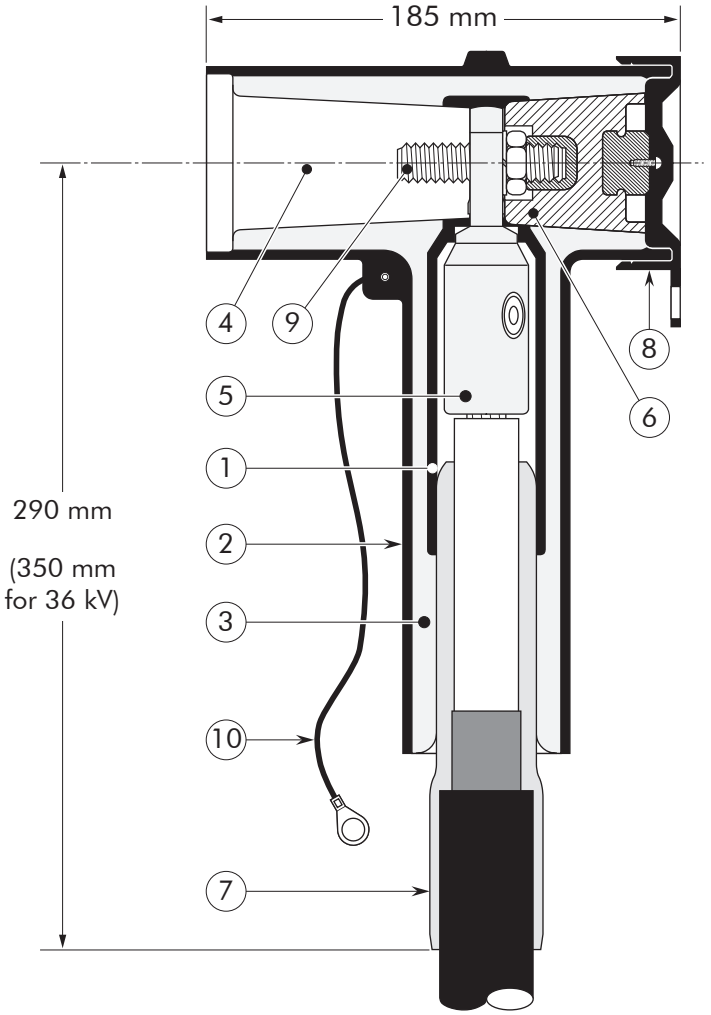
- A thick conductive EPDM jacket provides a total safe to touch screen.
- Each separable connector is tested for AC withstand and partial discharge prior to leaving the factory.

## Design

Separable connector comprising:

1. Conductive EPDM insert.
2. Conductive EPDM jacket.
3. Insulating EPDM layer moulded between the insert and the jacket.
4. Type C interface as described by CENELEC EN 50180 and 50181.
5. Conductor connector.
6. Basic insulating plug (with VD point).
7. Cable reducer.
8. Conductive rubber cap.
9. Clamping screw.
10. Earthing lead.

The screen break design enables cable outer sheath testing without removing or dismantling the connector.




## Specifications and standards

The 430TB separable connector meets the requirements of CENELEC HD 629.1.

| Separable connector type | Voltage Um (kV) | Current Ir (A) | Current Ir (A) When installed on an appropriate equipment bushing and when using a copper (-11-2) or a bolted (-12-5 or -14-5) conductor contact | Conductor sizes (mm²) | |
|---|---|---|---|---|---|
| | | | | min | max |
| 430TB/G | 12 | 630 | 800 | 35 | 300 |
| K430TB/G | 24 | 630 | 800 | 35 | 300 |
| M430TB/G | 36 | 630 | 800 | 50 | 240 |

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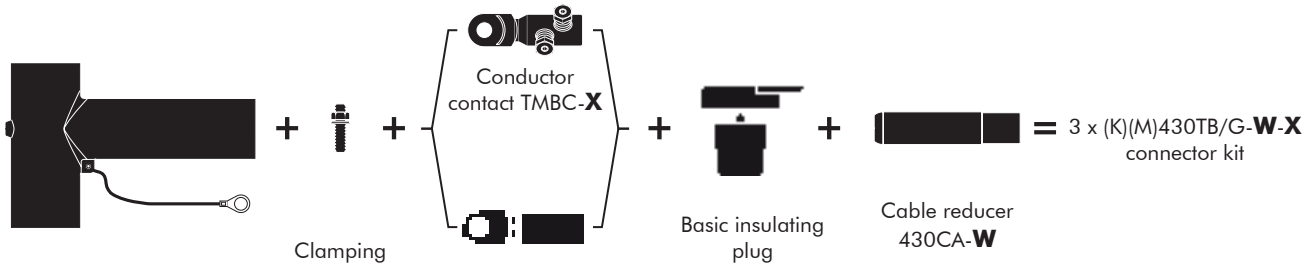
## Kit contents

The complete (K)(M)430TB/G tee connector kit comprises 3 x the following components:

The kit also comprises silicone grease, field control mastic, installation rod, installation instructions and crimp chart.




Connector housing (K)(M)430BT/G

Clamping screw 430TCS

Conductor contact TBC-**X**

Basic insulating plug (K)(M)300BIPA + rubber cap

Cable reducer 430CA-**W**

(411CA-**W** for 36 kV)

## Ordering instructions

To order the tee connector, select the ordering part number which gives you the best centring of your core insulation diameter and substitute **X** using table X, according to your conductor size and type.

**Example:**

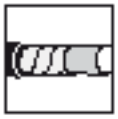
The cable is 24 kV, 150 mm$^2$ compact stranded copper with a diameter over core insulation of 27.5 mm.
Order 3 x K430TB/G-18-95.240-14-5 tee connector kit.

**Table W**

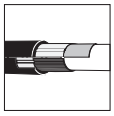
| Ordering part number | Voltage (Um) (kV) | Dia. over core insulation (mm) | |
|---|---|---|---|
| | | min | max |
| 3 x 430TB/G-11-**X** | 12 | 12.0 | 17.5 |
| 3 x 430TB/G-16-**X** | 12 | 17.0 | 23.5 |
| 3 x 430TB/G-18-**X** | 12 | 19.0 | 32.6 |
| 3 x K430TB/G-11-**X** | 24 | 12.0 | 17.5 |
| 3 x K430TB/G-16-**X** | 24 | 17.0 | 23.5 |
| 3 x K430TB/G-18-**X** | 24 | 19.0 | 32.6 |
| 3 x M430TB/G-11-**X** | 36 | 12.0 | 17.5 |
| 3 x M430TB/G-15-**X** | 36 | 16.0 | 22.0 |
| 3 x M430TB/G-19-**X** | 36 | 20.0 | 26.5 |
| 3 x M430TB/G-22-**X** | 36 | 23.5 | 31.0 |
| 3 x M430TB/G-25-**X** | 36 | 26.5 | 32.5 |
| 3 x M430TB/G-27-**X** | 36 | 28.5 | 37.5 |

**Table X**

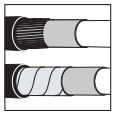
| Conductor sizes (mm$^2$) | Aluminium conductor | | Aluminium and copper conductor | Copper conductor |
|---|---|---|---|---|
| | DIN hexagonal | Deep indent | Bolted | DIN hexagonal |
| 35 | 35(K)M-10-2 | 35KM-10-1 | 16.95-14-5 | 35(K)M-11-2 |
| 50 | 50(K)M-10-2 | 50(K)M-10-1 | 50.150-14-5 | 50(K)M-11-2 |
| 70 | 70(K)M-10-2 | 70(K)M-10-1 | | 70(K)M-11-2 |
| 95 | 95(K)M-10-2 | 95(K)M-10-1 | 95.240-14-5 | 95(K)M-11-2 |
| 120 | 120(K)M-10-2 | 120(K)M-10-1 | | 120(K)M-11-2 |
| 150 | 150(K)M-10-2 | 150(K)M-10-1 | | 150(K)M-11-2 |
| 185 | 185(K)M-10-2 | 185(K)M-10-1 | 120.300-12-5 | 185(K)M-11-2 |
| 240 | 240(K)M-10-2 | 240(K)M-10-1 | | 240(K)M-11-2 |
| 300 | 300(K)M-10-2 | – | | 300(K)M-11-2 |



For use with copper tape screened cables. Order: Kit MT.



For use with Alupe or C 33-226 cables. Please contact our representative.



For use with easy strip semi-conductive screened cables. Order: Field control mastic (type MFC).

For use with other cable types. Please contact our representative.

For applications outdoors and in humid climate. Order: +MWS.

When installed on an appropriate equipment bushing: 800 A continuously

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# 484TB
## INTERFACE C
## TEE CONNECTOR

**Up to 42 kV**
**630 A (1250 A)**

6/10 (12) kV
6.35/11 (12) kV
8.7/15 (17.5) kV
12/20 (24) kV
12.7/22 (24) kV
18/30 (36) kV
19/33 (36) kV
20.8/36 (42) kV

## Application

Separable tee shape connector (bolted type) designed to connect polymeric insulated cable to equipment (transformers, switchgear, motors, ...).
Also connects cable to cable when using the appropriate mating parts.

## Technical characteristics

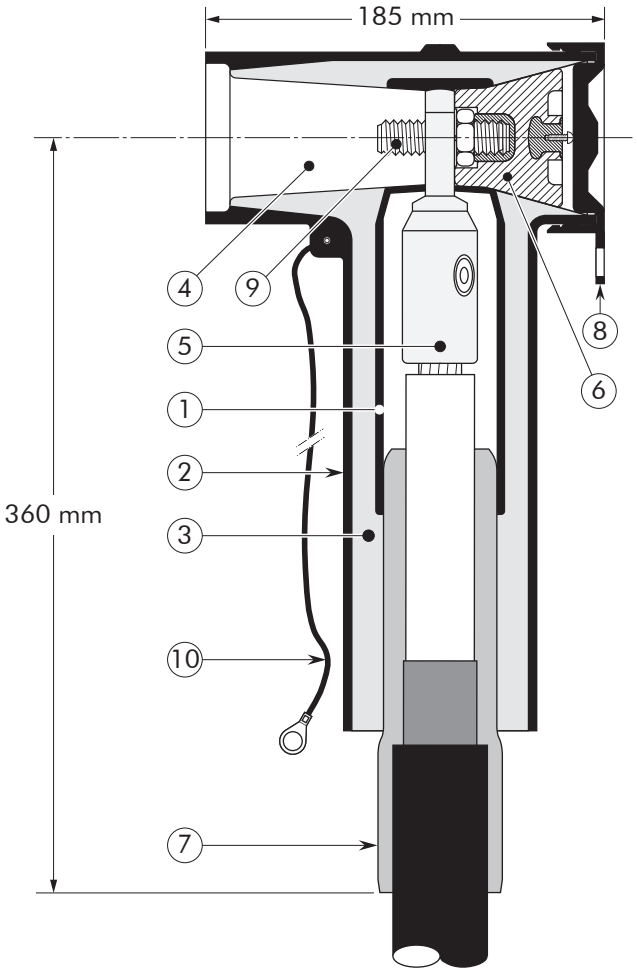
- The thick conductive EPDM jacket provides a total safe to touch screen which ensures safety for personnel.
- Each separable connector is tested for AC withstand and partial discharge prior to leaving the factory.

## Design

Separable connector comprising:

1. Conductive EPDM insert.
2. Conductive EPDM jacket.
3. Insulating EPDM layer moulded between the insert and the jacket.
4. Type C - interface as described by CENELEC EN 50180 and 50181.
5. Conductor connector.
6. Basic insulating plug (with VD point).
7. Cable reducer.
8. Conductive rubber cap.
9. Clamping screw.
10. Earthing lead.

The screen break design enables cable outer sheath testing without removing or dismantling the connector.




## Specifications and standards

The 484TB separable connector meets the requirements of CENELEC HD 629.1.

| Separable connector type | Voltage Um (kV) | Current Ir (A) | Current Ir (A) When installed on an appropriate equipment bushing | Conductor sizes ($mm^2$) | |
|---|---|---|---|---|---|
| | | | | min | max |
| 484TB/G | 12 | 630 | 1250 | 50 | 630 |
| K484TB/G | 24 | 630 | 1250 | 35 | 630 |
| M484TB/G | 36 | 630 | 1250 | 35 | 630 |
| P484TB/G | 42 | 630 | 1250 | 35 | 630 |

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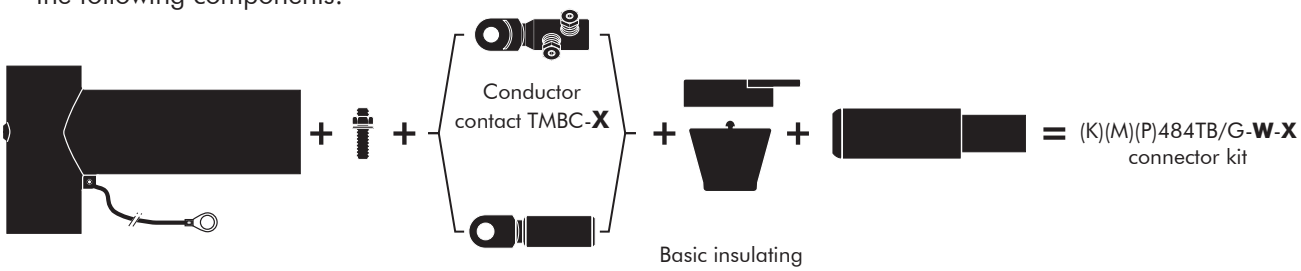
## Kit contents

The complete (K)(M)(P)484TB/G tee connector kit comprises 3x the following components:

The kit also comprises silicone grease, field control mastic, gloves, roll adhesive tape, installation instructions and crimp chart.




Connector housing (K)(M)(P)484BT/G

Clamping screw 430TCS

Conductor contact TBC-**X**

Basic insulating plug (K)(M)(P)800BIPA + rubber cap

Cable reducer 611CA-**W**

## Ordering instructions

To order the tee connector, select the ordering part number which gives you the best centring of your core insulation diameter and substitute **X** using table X, according to your conductor size and type.
Add a 'K' for use up to 24 kV, add an 'M' for use up to 36 kV, add a 'P' for use up to 42 kV.

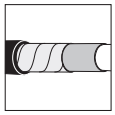
**Example:**
The copper wire screened cable is 36 kV, 240 mm$^2$ stranded aluminium with a diameter over core insulation of 37.0 mm.
Order 3 x M484TB/G-32-240(K)M-12-2 tee connector kit.

**Table W**

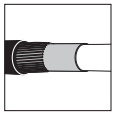
| Ordering part number | Dia. over core insulation (mm) | |
|---|---|---|
| | min | max |
| 3 x 484TB/G-15-**X** | 16.0 | 22.0 |
| 3 x 484TB/G-19-**X** | 20.0 | 26.5 |
| 3 x 484TB/G-22-**X** | 23.5 | 31.0 |
| 3 x 484TB/G-27-**X** | 28.5 | 37.5 |
| 3 x 484TB/G-32-**X** | 34.0 | 42.5 |
| 3 x 484TB/G-37-**X** | 39.0 | 48.5 |
| 3 x 484TB/G-43-**X** | 45.5 | 56.0 |

**Table X**

| Conductor sizes (mm$^2$) | Aluminium conductor | | Aluminium and copper conductor | Copper conductor |
|---|---|---|---|---|
| | DIN hexagonal | Deep indent | Bolted | DIN hexagonal |
| 35 | 35(K)M-12-2 | 35KM-12-1 | 16.95-14-5 | 35(K)M-11-2 |
| 50 | 50(K)M-12-2 | 50KM-12-1 | 50.150-14-5 | 50(K)M-11-2 |
| 70 | 70(K)M-12-2 | 70KM-12-1 | | 70(K)M-11-2 |
| 95 | 95(K)M-12-2 | 95KM-12-1 | 95.240-14-5 | 95(K)M-11-2 |
| 120 | 120(K)M-12-2 | 120KM-12-1 | 120.300-12-5 | 120(K)M-11-2 |
| 150 | 150(K)M-12-2 | 150KM-12-1 | | 150(K)M-11-2 |
| 185 | 185(K)M-12-2 | 185KM-12-1 | 185.400-14-5 | 185(K)M-11-2 |
| 240 | 240(K)M-12-2 | 240KM-12-1 | | 240(K)M-11-2 |
| 300 | 300(K)M-12-2 | 300KM-12-1 | | 300(K)M-11-2 |
| 400 | 400(K)M-12-2 | 400KM-12-1 | 400.630-14-5 | 400(K)M-11-2 |
| 500 | 500(K)M-12-2 | 500KM-12-1 | | 500(K)M-11-2 |
| 630 | – | 630KM-12-1 | | 630(K)M-11-2 |



For use with copper tape screened cables. Order: Kit MT.



For use with copper wire screened cables. No earthing device is necessary.

For use with other cable types. Please contact our representative.

For applications outdoors and in humid climate. Order: +MWS.

Components can be ordered individually.

When installed on an appropriate equipment bushing: 1250 A continuously

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# 300PBM
## COUPLING CONNECTOR FOR 430TB/G

**Up to 36 kV**
**630 A (1250 A)**

6/10 (12) kV
6.35/11 (12) kV
8.7/15 (17.5) kV
12/20 (24) kV
12.7/22 (24) kV
18/30 (36) kV
19/33 (36) kV

## Application

Separable coupling connector (bolted type) for dual cable arrangement. It has been designed to be used with 430TB separable Tee connector.

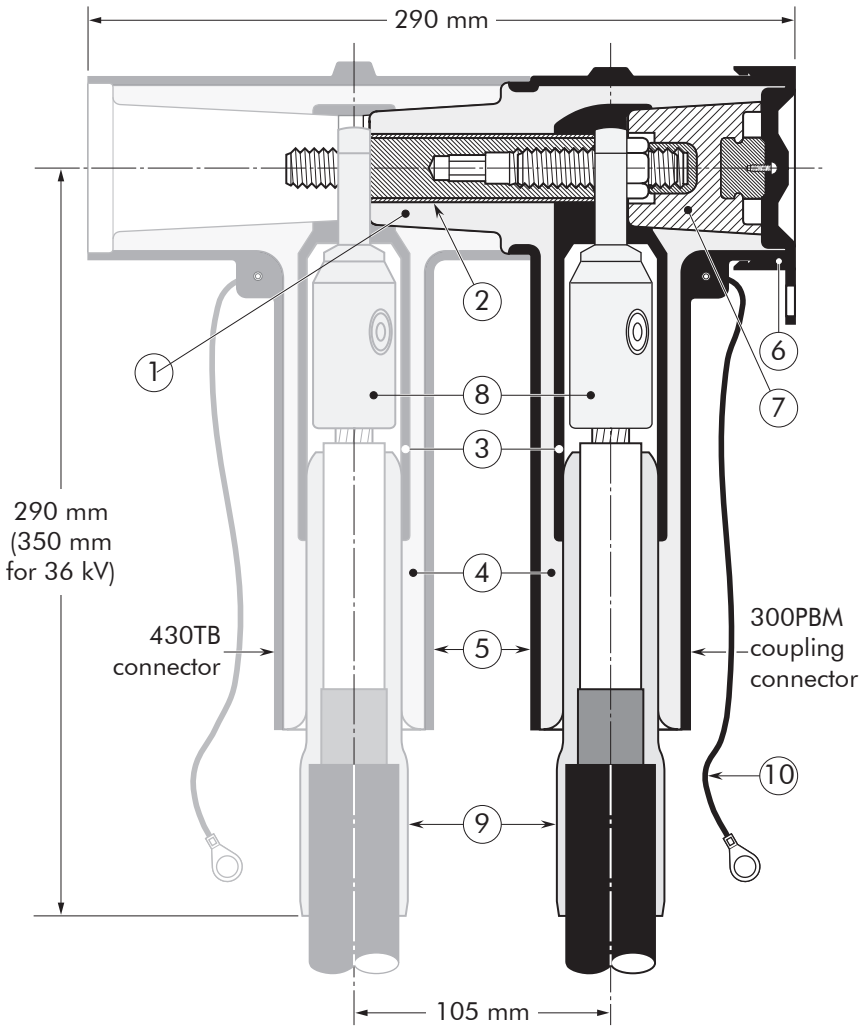
## Technical characteristics

- A thick conductive EPDM jacket provides a total safe to touch screen.
- Each separable connector is tested for AC withstand and partial discharge prior to leaving the factory.

## Design

1. Interface designed to fit 430TB connector.
2. Bus for 300PBM.
3. Conductive EPDM insert.
4. Insulating EPDM layer moulded between the insert and the jacket.
5. Conductive EPDM jacket.
6. Conductive EPDM cap.
7. Basic insulating plug (with VD point).
8. Conductor connector (hexagonal crimping, deep indent crimping or bolted).
9. Cable reducer.
10. Earthing lead.

The screen break design enables cable outer sheath testing without removing or dismantling the connector.




## Specifications and standards

The 300PBM coupling connector meets the requirements of CENELEC HD 629.1.

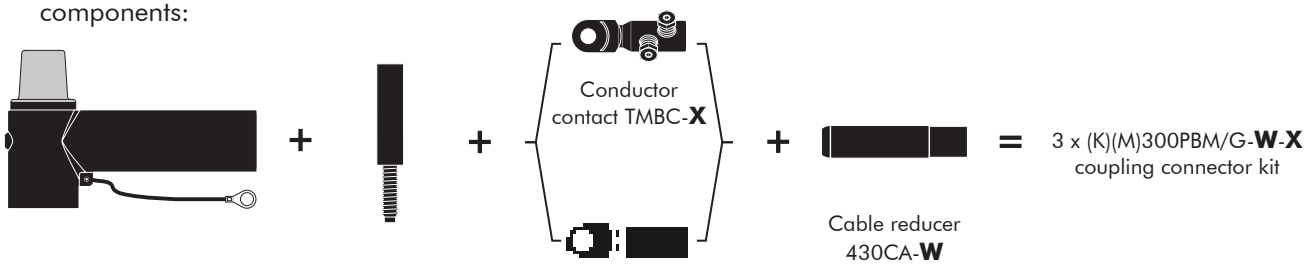
| Separable connector type | Voltage Um (kV) | Current Ir (A) | Current Ir (A) When installed on an appropriate equipment bushing and when using a copper (-11-2) or a bolted (-12-5 or -14-5) conductor contact | Conductor sizes (mm²) | |
|---|---|---|---|---|---|
| | | | | min | max |
| 300PBM/G | 12 | 630 | 1250 | 35 | 300 |
| K300PBM/G | 24 | 630 | 1250 | 35 | 300 |
| M300PBM/G | 36 | 630 | 1250 | 50 | 240 |

08/2011

## Kit contents

The complete (K)(M)300PBM/G coupling connector kit comprises 3 x the following components:

The kit also comprises silicone grease, field control mastic, installation rod, installation instructions and crimp chart.




Connector housing (K)(M)300BP/G

Contact rod 300PB-CR

Conductor contact TBC-X

(411CA-W for 36 kV)

## Ordering instructions

To order the coupling connector, select the ordering part number which gives you the best centring of your core insulation diameter and substitute **X** using table X, according to your conductor size and type.

**Example:**

The cable is 24 kV, 150 mm$^2$ compact stranded copper with a diameter over core insulation of 27.5 mm.
Order 3 x K300PBM/G-18-95.240-14-5 coupling connector kit.

**Table W**

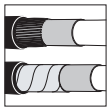
| Ordering part number | Voltage (Um) (kV) | Dia. over core insulation (mm) | |
|---|---|---|---|
| | | min | max |
| 3 x 300PBM/G-11-**X** | 12 | 12.0 | 17.5 |
| 3 x 300PBM/G-16-**X** | 12 | 17.0 | 23.5 |
| 3 x 300PBM/G-18-**X** | 12 | 19.0 | 32.6 |
| 3 x K300PBM/G-11-**X** | 24 | 12.0 | 17.5 |
| 3 x K300PBM/G-16-**X** | 24 | 17.0 | 23.5 |
| 3 x K300PBM/G-18-**X** | 24 | 19.0 | 32.6 |
| 3 x M300PBM/G-11-**X** | 36 | 12.0 | 17.5 |
| 3 x M300PBM/G-15-**X** | 36 | 16.0 | 22.0 |
| 3 x M300PBM/G-19-**X** | 36 | 20.0 | 26.5 |
| 3 x M300PBM/G-22-**X** | 36 | 23.5 | 31.0 |
| 3 x M300PBM/G-25-**X** | 36 | 26.5 | 32.5 |
| 3 x M300PBM/G-27-**X** | 36 | 28.5 | 37.5 |

**Table X**

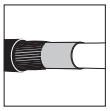
| Conductor sizes (mm$^2$) | Aluminium conductor | | Aluminium and copper conductor | Copper conductor |
|---|---|---|---|---|
| | DIN hexagonal | Deep indent | Bolted | DIN hexagonal |
| 35 | 35(K)M-10-2 | 35KM-10-1 | 16.95-14-5 | 35(K)M-11-2 |
| 50 | 50(K)M-10-2 | 50(K)M-10-1 | 50.150-14-5 | 50(K)M-11-2 |
| 70 | 70(K)M-10-2 | 70(K)M-10-1 | | 70(K)M-11-2 |
| 95 | 95(K)M-10-2 | 95(K)M-10-1 | 95.240-14-5 | 95(K)M-11-2 |
| 120 | 120(K)M-10-2 | 120(K)M-10-1 | | 120(K)M-11-2 |
| 150 | 150(K)M-10-2 | 150(K)M-10-1 | 120.300-12-5 | 150(K)M-11-2 |
| 185 | 185(K)M-10-2 | 185(K)M-10-1 | | 185(K)M-11-2 |
| 240 | 240(K)M-10-2 | 240(K)M-10-1 | | 240(K)M-11-2 |
| 300 | 300(K)M-10-2 | – | | 300(K)M-11-2 |

For use with copper tape screened cables. Order: Kit MT.

For use with fabric tape (graphite) screened cables. Order additional semi-conductive tape (type TSC).



For use with easy strip semi-conductive screened cables. Order: Field control mastic (type MFC).



For use with copper wire screened cables. No earthing device is necessary.

For use with other cable types. Please contact our representative.

For outdoor applications. Order: +MWS.

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# 430TBM-P2/P3
## DUAL/TRIPLE CABLE ARRANGEMENT FOR 430TB CONNECTOR

## Application
Separable connectors (bolted type) for dual (P2) and triple (P3) cable arrangements.

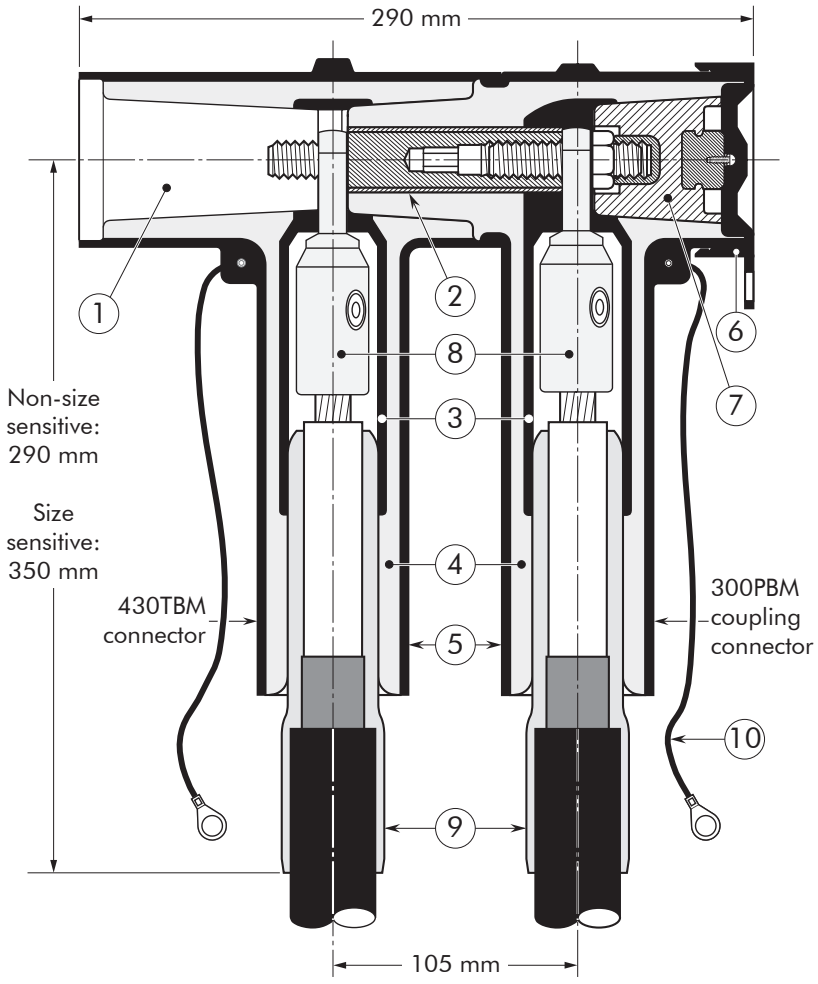
## Technical characteristics
- A thick conductive EPDM jacket provides a total safe to touch screen.
- Each separable connector is tested for AC withstand and partial discharge prior to leaving the factory.

**Up to 36 kV**
**630 A (1250 A)**

6/10 (12) kV
6.35/11 (12) kV
8.7/15 (17.5) kV
12/20 (24) kV
12.7/22 (24) kV
18/30 (36) kV
19/33 (36) kV

## Design
1. Type C interface as described by CENELEC EN 50180 and 50181.
2. Bus for 300PBM.
3. Conductive EPDM insert.
4. Insulating EPDM layer moulded between the insert and the jacket.
5. Conductive EPDM jacket.
6. Conductive EPDM cap.
7. Basic insulating plug (with VD point).
8. Conductor connector.
9. Cable reducer.
10. Earthing lead.

The screen break design enables cable outer sheath testing without removing or dismantling the connector.




## Specifications and standards
The 430TBM-P2/P3 connectors meet the requirements of CENELEC HD 629.1.

| Separable connector type | Voltage Um (kV) | Current Ir (A) | Current Ir (A) When installed on an appropriate equipment bushing and when using a copper (-11-2) or a bolted (-12-5 or -14-5) conductor contact | Conductor sizes (mm²) | |
|---|---|---|---|---|---|
| | | | | min | max |
| 430TBM-P2/P3 | 12 | 630 | 1250 | 35 | 300 |
| K430TBM-P2/P3 | 24 | 630 | 1250 | 35 | 300 |
| M430TBM-P2/P3 | 36 | 630 | 1250 | 50 | 240 |

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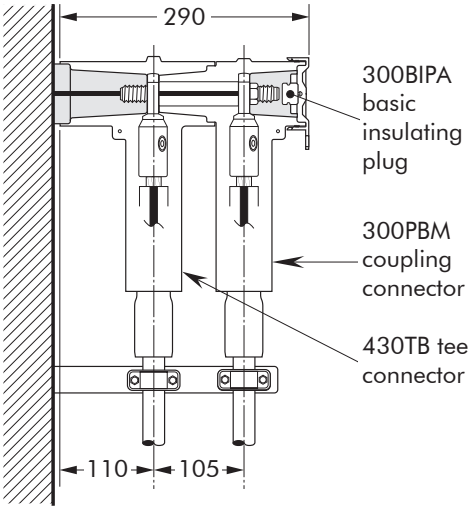
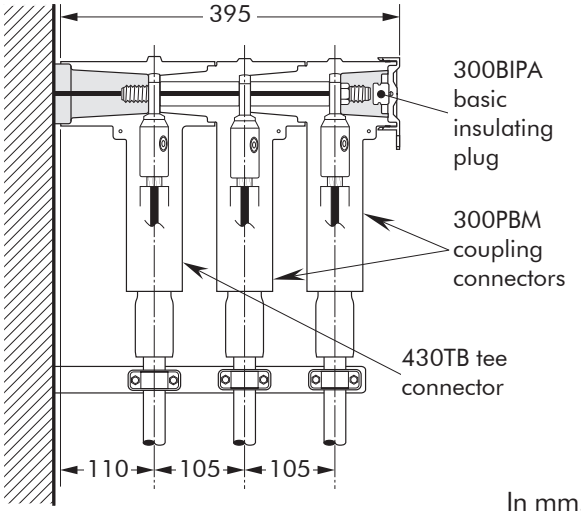
## Kit contents

The complete (K)(M)430TBM-P2 connector kit comprises 3 x the following components:




The complete (K)(M)430TBM-P3 connector kit comprises 3 x the following components:




In mm.

## Ordering instructions

To order the separable connectors for dual cable arrangement, use the tables beside to substitute for **W** and **X** in the formula:
3 x 430TBM-P2-**W**-**X**,
for use up to 12 kV.
Add a 'K' for use up to 24 kV:
3 x K430TBM-P2-**W**-**X**.
Add an 'M' for use up to 36 kV:
3 x M430TBM-P2-**W**-**X**.

For triple cable arrangement:
3 x 430TBM-P3-**W**-**X**,
for use up to 12 kV.
Add a 'K' for use up to 24 kV:
3 x K430TBM-P3-**W**-**X**.
Add an 'M' for use up to 36 kV:
3 x M430TBM-P3-**W**-**X**.

**Example:**
The two cables are 24 kV, 150 mm$^2$ stranded aluminium with a diameter over core insulation of 27.5 mm.
Order 3 x K430TBM-P2-22-150(K)M-10-2.

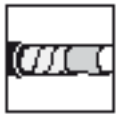
1. **From table W:** select the symbol which gives the best centring of your core insulation diameter.
2. **From table X:** according to your conductor size and type, select the designation which completes the part number.

**Table W**

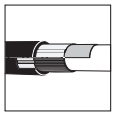
| Dia. over core insulation (mm) | | W |
|---|---|---|
| min | max | |
| 12.0 | 17.5 | 11 |
| 16.0 | 22.0 | 15 |
| 20.0 | 26.5 | 19 |
| 23.5 | 31.0 | 22 |
| 26.5 | 32.5 | 25 |
| 28.5 | 37.5 | 27 |

**Table X**

| Conductor sizes (mm$^2$) | Aluminium conductor | | Aluminium and copper conductor | Copper conductor |
|---|---|---|---|---|
| | DIN hexagonal | Deep indent | Bolted | DIN hexagonal |
| 35 | 35(K)M-10-2 | 35KM-10-1 | 16.95-14-5 | 35(K)M-11-2 |
| 50 | 50(K)M-10-2 | 50(K)M-10-1 | | 50(K)M-11-2 |
| 70 | 70(K)M-10-2 | 70(K)M-10-1 | 50.150-14-5 | 70(K)M-11-2 |
| 95 | 95(K)M-10-2 | 95(K)M-10-1 | | 95(K)M-11-2 |
| 120 | 120(K)M-10-2 | 120(K)M-10-1 | 95.240-14-5 | 120(K)M-11-2 |
| 150 | 150(K)M-10-2 | 150(K)M-10-1 | | 150(K)M-11-2 |
| 185 | 185(K)M-10-2 | 185(K)M-10-1 | | 185(K)M-11-2 |
| 240 | 240(K)M-10-2 | 240(K)M-10-1 | 120.300-12-5 | 240(K)M-11-2 |
| 300 | 300(K)M-10-2 | – | | 300(K)M-11-2 |

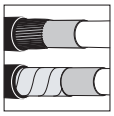


For use with copper tape screened cables. Order: Kit MT.



For use with Alupe or C 33-226 cables. Please contact our representative.

For use with other cable types. Please contact our representative.



For use with easy strip semi-conductive screened cables. Order: Field control mastic (type MFC).

For applications outdoors and in humid climate. Order: +MWS.

When installed on an appropriate equipment bushing: 1250 A continuously

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# 804PB
## COUPLING CONNECTOR FOR 484TB/G

## Application
Separable coupling connector (bolted type) for dual cable arrangement. It has been designed to be used with 484TB separable Tee connector.

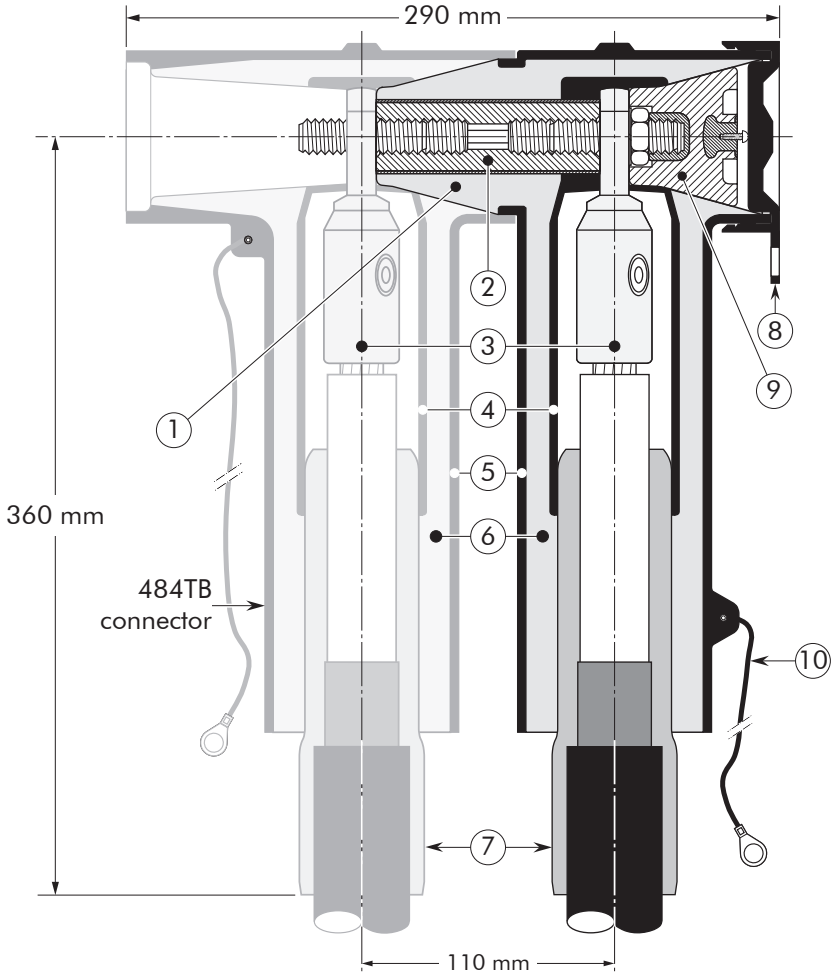
## Technical characteristics
- A thick conductive EPDM jacket provides a total safe to touch screen.
- Each separable connector is tested for AC withstand and partial discharge prior to leaving the factory.

**Up to 42 kV**
**630 A (1250 A)**

6/10 (12) kV
6.35/11 (12) kV
8.7/15 (17.5) kV
12/20 (24) kV
12.7/22 (24) kV
18/30 (36) kV
19/33 (36) kV
20.8/36 (42) kV

## Design
1. Interface designed to fit 484TB connector.
2. Bus for 804PB.
3. Conductor connector (hexagonal crimping, deep indent crimping or bolted).
4. Conductive EPDM insert.
5. Conductive EPDM jacket.
6. Insulating EPDM layer moulded between the insert and the jacket.
7. Cable reducer.
8. Conductive EPDM cap.
9. Basic insulating plug (with VD point).
10. Earth lead.

The screen break design enables cable outer sheath testing without removing or dismantling the connector.




## Specifications and standards
The 804PB coupling connector meets the requirements of CENELEC HD 629.1.

| Separable connector type | Voltage Um (kV) | Current Ir (A) | Current Ir (A) When installed on an appropriate equipment bushing | Conductor sizes (mm²) | |
|---|---|---|---|---|---|
| | | | | min | max |
| 804PB/G | 12 | 630 | 1250 | 50 | 630 |
| K804PB/G | 24 | 630 | 1250 | 35 | 630 |
| M804PB/G | 36 | 630 | 1250 | 35 | 630 |
| P804PB/G | 42 | 630 | 1250 | 35 | 630 |

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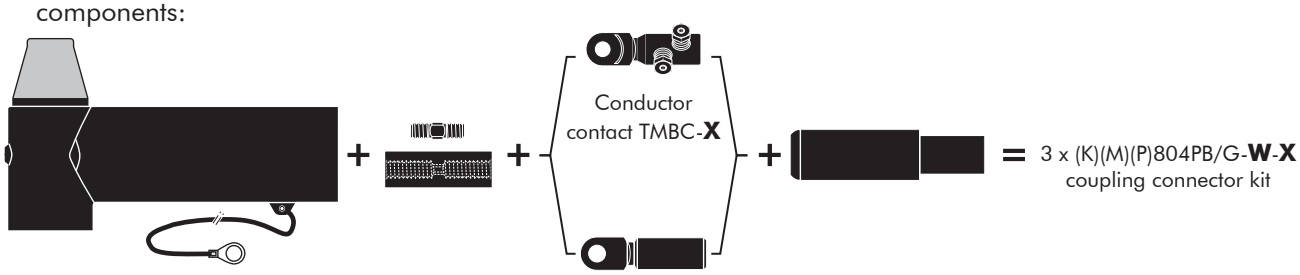
## Kit contents

The complete (K)(M)(P)804PB/G coupling connector kit comprises 3 x the following components:

The kit also comprises silicone grease, field control mastic, gloves, roll adhesive tape, installation instructions and crimp chart.




Connector housing (K)(M)(P)804BP/G

Contact rod and stud

Conductor contact TBC-**X**

Cable reducer 611CA-**W**

## Ordering instructions

To order the coupling connector, select the ordering part number which gives you the best centring of your core insulation diameter and substitute **X** using table X, according to your conductor size and type.
Add a 'K' for use up to 24 kV, add an 'M' for use up to 36 kV, add a 'P' for use up to 42 kV.

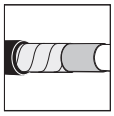
**Example:**
The copper wire screened cable is 36 kV, 240 mm$^2$ stranded aluminium with a diameter over core insulation of 37.0 mm. Order 3 x M804PB/G-32-240(K)M-12-2 coupling connector kit.

**Table W**

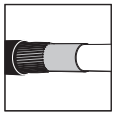
| Ordering part number | Dia. over core insulation (mm) | |
|---|---|---|
| | min | max |
| 3 x 804PB/G-15-**X** | 16.0 | 22.0 |
| 3 x 804PB/G-19-**X** | 20.0 | 26.5 |
| 3 x 804PB/G-22-**X** | 23.5 | 31.0 |
| 3 x 804PB/G-27-**X** | 28.5 | 37.5 |
| 3 x 804PB/G-32-**X** | 34.0 | 42.5 |
| 3 x 804PB/G-37-**X** | 39.0 | 48.5 |
| 3 x 804PB/G-43-**X** | 45.5 | 56.0 |

**Table X**

| Conductor sizes (mm$^2$) | Aluminium conductor | | Aluminium and copper conductor | Copper conductor |
|---|---|---|---|---|
| | DIN hexagonal | Deep indent | Bolted | DIN hexagonal |
| 35 | 35(K)M-12-2 | 35KM-12-1 | 16.95-14-5 | 35(K)M-11-2 |
| 50 | 50(K)M-12-2 | 50KM-12-1 | 50.150-14-5 | 50(K)M-11-2 |
| 70 | 70(K)M-12-2 | 70KM-12-1 | | 70(K)M-11-2 |
| 95 | 95(K)M-12-2 | 95KM-12-1 | 95.240-14-5 | 95(K)M-11-2 |
| 120 | 120(K)M-12-2 | 120KM-12-1 | | 120(K)M-11-2 |
| 150 | 150(K)M-12-2 | 150KM-12-1 | 120.300-12-5 | 150(K)M-11-2 |
| 185 | 185(K)M-12-2 | 185KM-12-1 | | 185(K)M-11-2 |
| 240 | 240(K)M-12-2 | 240KM-12-1 | 185.400-14-5 | 240(K)M-11-2 |
| 300 | 300(K)M-12-2 | 300KM-12-1 | | 300(K)M-11-2 |
| 400 | 400(K)M-12-2 | 400KM-12-1 | | 400(K)M-11-2 |
| 500 | 500(K)M-12-2 | 500KM-12-1 | 400.630-14-5 | 500(K)M-11-2 |
| 630 | – | 630KM-12-1 | | 630(K)M-11-2 |



For use with copper tape screened cables. Order: Kit MT.



For use with copper wire screened cables. No earthing device is necessary.

For use with other cable types. Please contact our representative.

For applications outdoors and in humid climate. Order: +MWS.

Components can be ordered individually.

1250 A

When installed on an appropriate equipment bushing: 1250 A continuously

Euromold
a Nexans company

# 300SA
## SURGE ARRESTER FOR 430TB CONNECTOR

**Up to 36 kV**

6/10 (12) kV
6.35/11 (12) kV
8.7/15 (17.5) kV
12/20 (24) kV
12.7/22 (24) kV
18/30 (36) kV
19/33 (36) kV

## Application

Surge arrester designed to protect 12, 24 and 36 kV class components, including transformers, equipment, cable and accessories from high voltage surges resulting from lightning or switching.
It has been designed to be used with the 430TB separable tee connector.

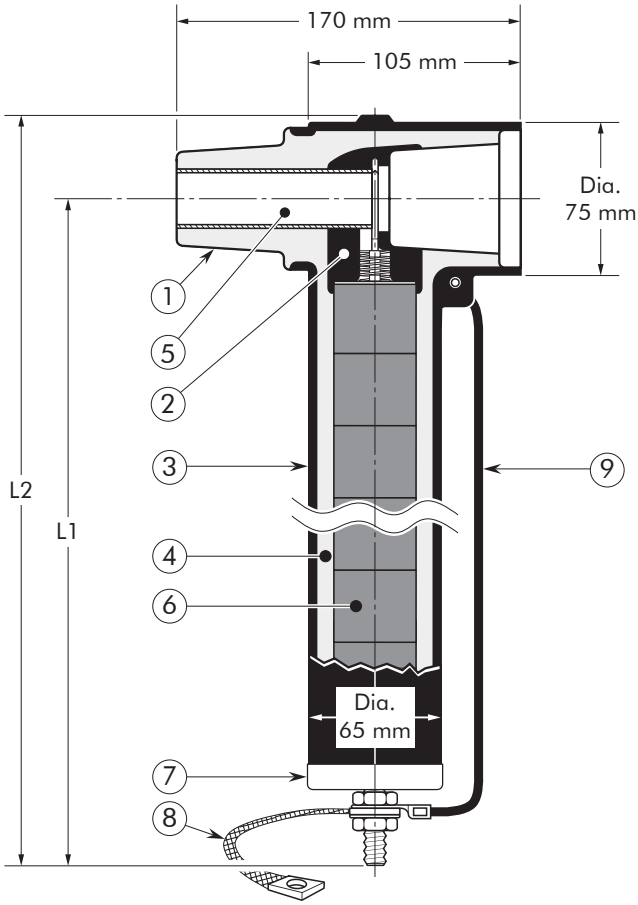
## Technical characteristics

- This surge arrester is a metal oxide varistor surge arrester in an elbow configuration.
- Each arrester is tested for AC withstand, partial discharge and critical voltage prior to leaving the factory.

## Design

Surge arrester comprising:

1. Interface designed to fit the 430TB/G tee connector.
2. Conductive EPDM insert.
3. Conductive EPDM jacket.
4. Insulating EPDM layer moulded between the insert and the jacket.
5. Receptacle for contact rod.
6. Metal oxide valve elements.
7. Steel cap.
8. Earth connection.
9. Earth lead.




## Specifications and standards

The 300SA surge arresters meet the test requirements of IEC 60099-4.

| Surge arrester type | Nominal discharge current In (kA) | Rated voltage Ur (kV) | Max. continuous operating voltage Uc (kV) | Dimensions (mm) | |
|---|---|---|---|---|---|
| | | | | L1 | L2 |
| 300SA-10-15N | 10 | 15 | 12.0 | 250 | 290 |
| 300SA-10-18N | 10 | 18 | 14.4 | 250 | 290 |
| 300SA-10-22N | 10 | 22 | 17.6 | 250 | 290 |
| 300SA-10-24N | 10 | 24 | 19.2 | 350 | 390 |
| 300SA-10-30N | 10 | 30 | 24.0 | 350 | 390 |
| 300SA-10-36N | 10 | 36 | 28.8 | 350 | 390 |
| 300SA-10-45N | 10 | 45 | 36.0 | 450 | 490 |

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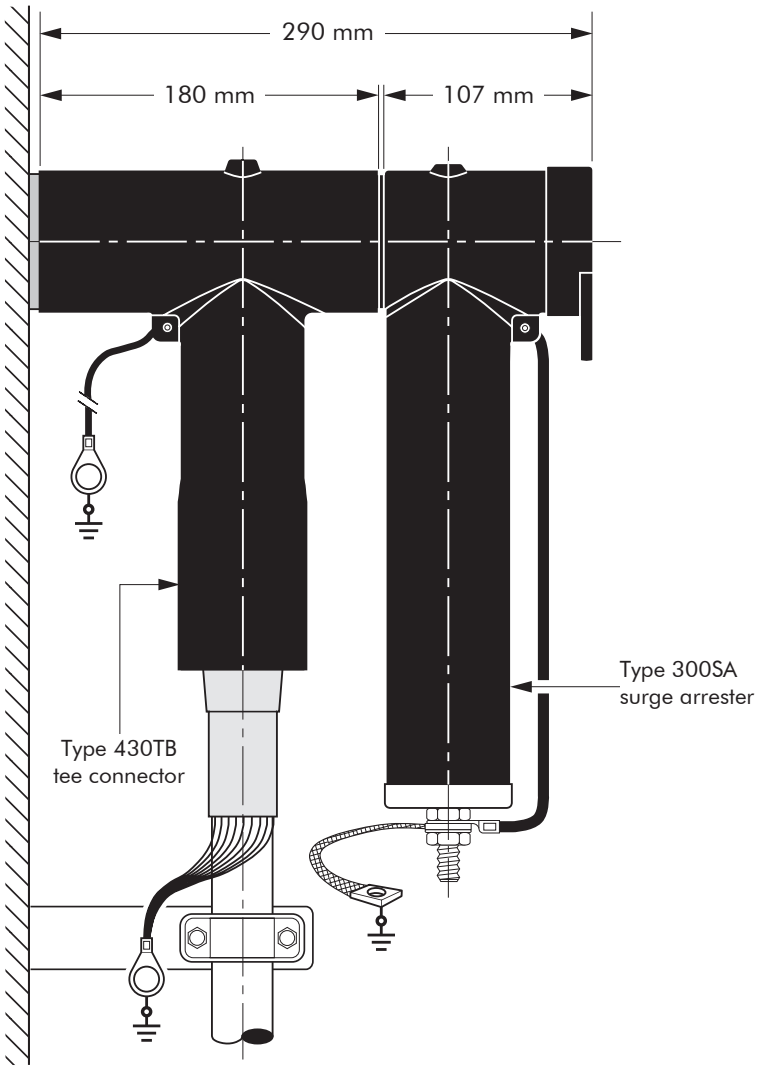
## Typical application and dimensions




## Ordering instructions

To order the surge arrester, specify the surge arrester type, as described on previous page.

**Example:**
For a maximum continuous operating voltage (r.m.s.) of 24 kV and a nominal discharge current of 10 kA.
Order a 300SA-10-30N surge arrester.

## Technical data

| Surge arrester type | Steep current residual voltage @ 10 kA [1/20 µs] (kV) | Lightning current residual voltage [8/20 µs] (kV) | | | Switching impulse residual voltage [36/90 µs] (kV) | | High current impulse withstand (kA) |
|---|---|---|---|---|---|---|---|
| | | @ 5 kA | @ 10 kA | @ 20 kA | @ 125 A | @ 500 A | |
| 300SA-10-15N | 48.1 | 39.7 | 43.2 | 48.4 | 30.5 | 32.5 | 100 |
| 300SA-10-18N | 58.1 | 48.0 | 52.2 | 58.5 | 36.8 | 39.2 | 100 |
| 300SA-10-22N | 70.1 | 57.9 | 63.0 | 70.6 | 44.4 | 47.3 | 100 |
| 300SA-10-24N | 77.0 | 63.6 | 69.2 | 77.6 | 48.8 | 52.0 | 100 |
| 300SA-10-30N | 97.0 | 80.1 | 87.2 | 97.7 | 61.5 | 65.5 | 100 |
| 300SA-10-36N | 115.9 | 95.7 | 104.2 | 116.8 | 73.5 | 78.3 | 100 |
| 300SA-10-45N | 144.1 | 119.0 | 129.5 | 145.1 | 91.3 | 97.3 | 100 |

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# 800SA
## SURGE ARRESTER FOR 484TB CONNECTOR

**Up to 42kV**

6/10 (12) kV
6.35/11 (12) kV
8.7/15 (17.5) kV
12/20 (24) kV
12.7/22 (24) kV
18/30 (36) kV
19/33 (36) kV
20.8/36 (42) kV

## Application

Surge arrester designed to protect 12, 24, 36 and 42 kV class components, including transformers, equipment, cable and accessories from high voltage surges resulting from lightning or switching.
It has been designed to be used with the 484TB separable tee connector.

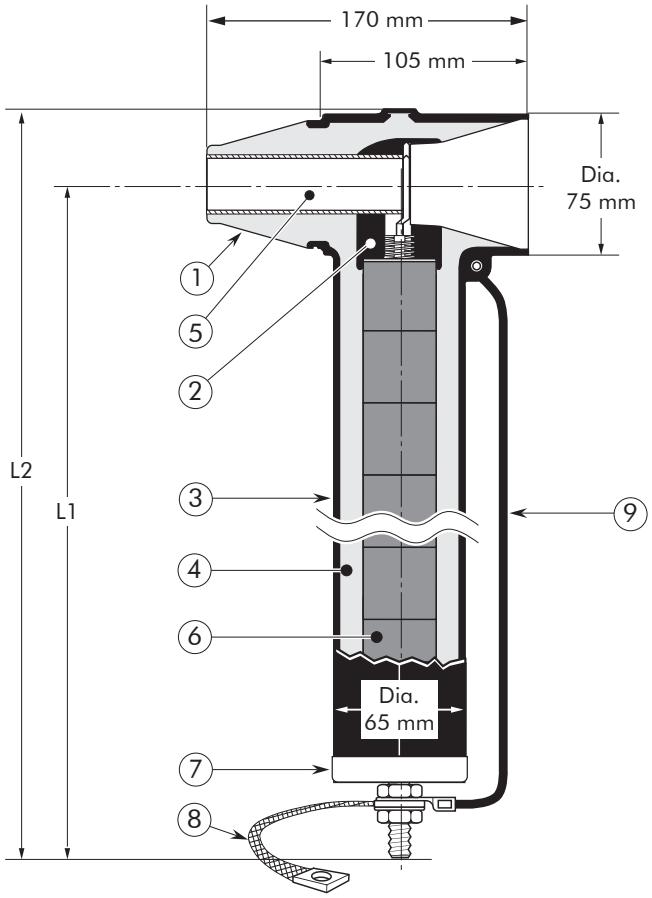
## Technical characteristics

- This surge arrester is a metal oxide varistor surge arrester in an elbow configuration.
- Each arrester is tested for AC withstand, partial discharge and critical voltage prior to leaving the factory.

## Design

Surge arrester comprising:

1. Interface designed to fit the 484TB tee connector.
2. Conductive EPDM insert.
3. Conductive EPDM jacket.
4. Insulating EPDM layer moulded between the insert and the jacket.
5. Receptacle for contact rod.
6. Metal oxide valve elements.
7. Steel cap.
8. Earth connection.
9. Earth lead.



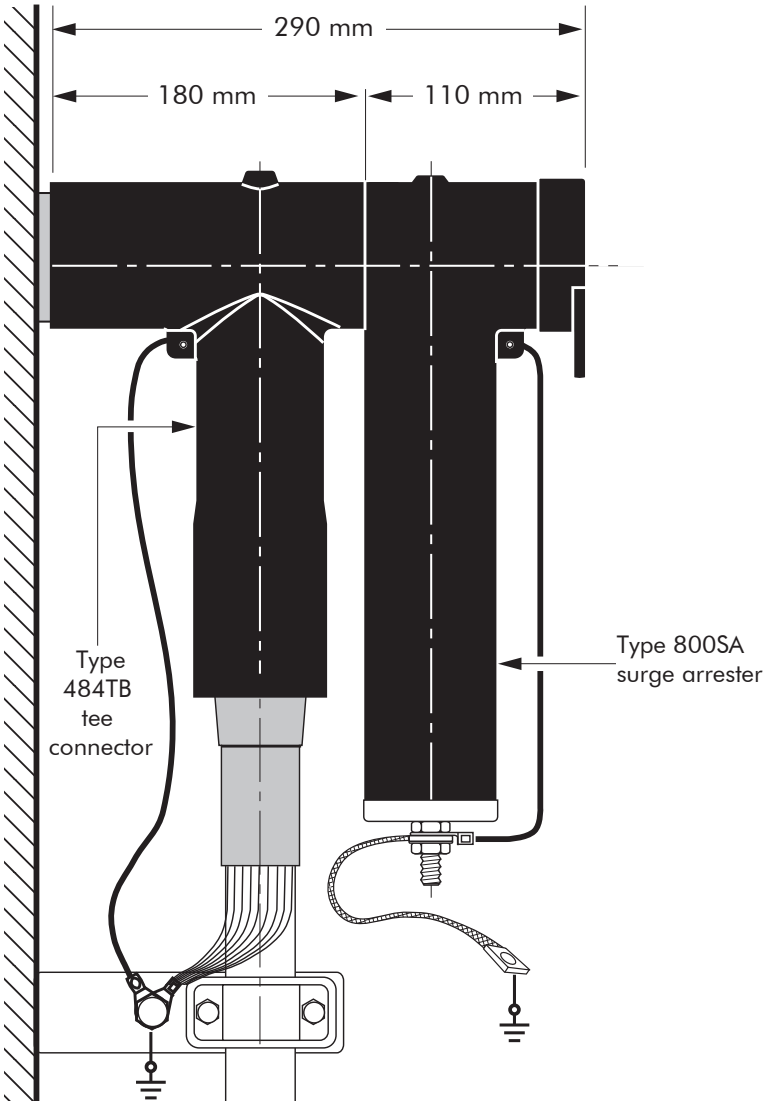

## Specifications and standards

The 800SA surge arresters meet the test requirements of IEC 60099-4.

| Surge arrester type | Nominal discharge current In (kA) | Rated voltage Ur (kV) | Max. continuous operating voltage Uc (kV) | Dimensions (mm) | |
|---|---|---|---|---|---|
| | | | | L1 | L2 |
| 800SA-10-15N | 10 | 15 | 12.0 | 250 | 290 |
| 800SA-10-18N | 10 | 18 | 14.4 | 250 | 290 |
| 800SA-10-22N | 10 | 22 | 17.6 | 250 | 290 |
| 800SA-10-24N | 10 | 24 | 19.2 | 350 | 390 |
| 800SA-10-30N | 10 | 30 | 24.0 | 350 | 390 |
| 800SA-10-36N | 10 | 36 | 28.8 | 350 | 390 |
| 800SA-10-45N | 10 | 45 | 36.0 | 450 | 490 |

08/2011

## Typical application and dimensions




## Ordering instructions

To order the surge arrester, specify the surge arrester type, as described on previous page.

**Example:**
For a maximum continuous operating voltage (r.m.s.) of 24 kV and a nominal discharge current of 10 kA.
Order a 800SA-10-30N surge arrester.

## Technical data

| Surge arrester type | Steep current residual voltage @ 10 kA [1/20 µs] (kV) | Lightning current residual voltage [8/20 µs] (kV) | | | Switching impulse residual voltage [36/90 µs] (kV) | | High current impulse withstand (kA) |
|---|---|---|---|---|---|---|---|
| | | @ 5 kA | @ 10 kA | @ 20 kA | @ 125 A | @ 500 A | |
| 800SA-10-15N | 48.1 | 39.7 | 43.2 | 48.4 | 30.5 | 32.5 | 100 |
| 800SA-10-18N | 58.1 | 48.0 | 52.2 | 58.5 | 36.8 | 39.2 | 100 |
| 800SA-10-22N | 70.1 | 57.9 | 63.0 | 70.6 | 44.4 | 47.3 | 100 |
| 800SA-10-24N | 77.0 | 63.6 | 69.2 | 77.6 | 48.8 | 52.0 | 100 |
| 800SA-10-30N | 97.0 | 80.1 | 87.2 | 97.7 | 61.5 | 65.5 | 100 |
| 800SA-10-36N | 115.9 | 95.7 | 104.2 | 116.8 | 73.5 | 78.3 | 100 |
| 800SA-10-45N | 144.1 | 119.0 | 129.5 | 145.1 | 91.3 | 97.3 | 100 |

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# 400TR and 800TR
## INTERFACE C
## TEST RODS

## Application

- The test rod can be used for:
  - cable fault location
  - cable testing
  - phasing checks, etc.
- Connections may be made with a cable lug, a 4 mm plug or spring clips.

## Technical characteristics

- The 400TR test rod can be used with 430TB connectors.
- The 800TR is for use with the 484TB.

## Design

1. Insulating shroud.
2. Threaded rod for test connection.
3. Two nuts M12.
4. Insulation.
5. Copper test rod stem.
6. Wing nut.

An insulating shroud is provided to allow the application of test voltages when bushings are closely spaced.

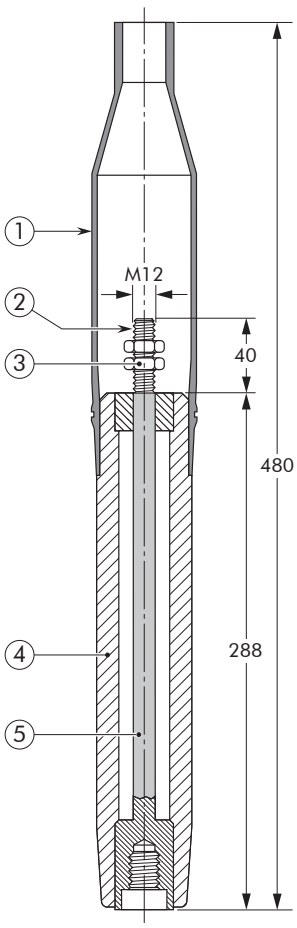
## Installation

The test rod is mounted on to the clamping screw in the type C interface tee and coupling connectors. The test cable is connected to the threaded stem and the insulating shroud moved to its final position over the end of the test rod.

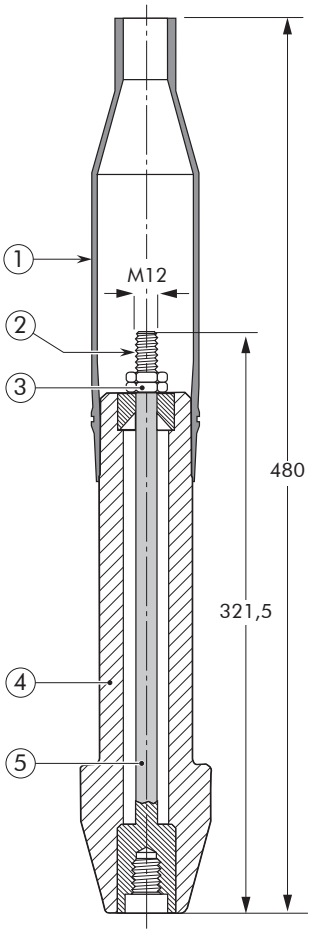
## Ordering instructions

Simply specify:
400TR or 800TR test rod.

**400TR**




**800TR**




In mm.

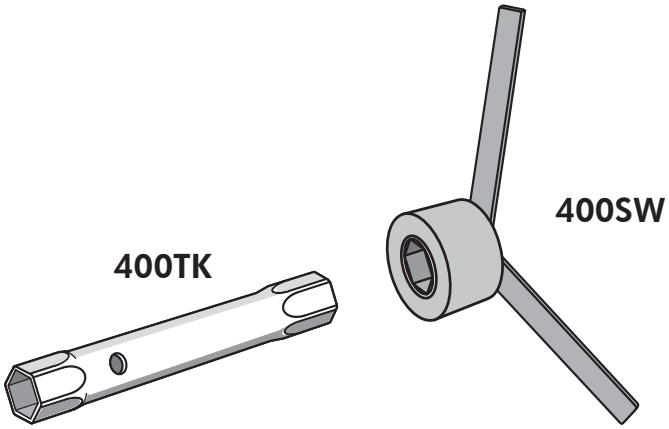
| Test rod type | Maximum A.C. test voltage (50 Hz - 1 min) | Maximum D.C. test voltage (8 x $U_0$ - 30 min) | Impulse voltage (1.2 x 50 µs) min |
|---|---|---|---|
| 400TR | 36 kV | 96 kV | 95 kV |
| 800TR | 36 kV | 96 kV | 95 kV |

08/2011

# 400TK and 400SW
## INSTALLATION TOOL

## Application

- The box spanner and box spanner key are designed to facilitate assembly of 400TE, 400TB and 440TB connectors.
- The 400TK box spanner is used to install the 400TEF clamping pin contact or 400TCS clamping screw.
- The 400SW box spanner key fits on the hex nut of the 400BIPA basic insulating plug.




## Ordering instructions

Simply specify:
- 400TK box spanner
- 400SW box spanner key

Euromold
a Nexans company

# ACCESSORIES
## INTERFACE C

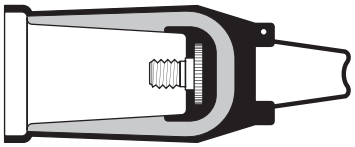
### Application
For use with connectors and bushings with an interface C as described by CENELEC EN 50180 and 50181.

### Technical characteristics
All these products, except the earthing plugs, are tested for AC withstand and partial discharge prior to leaving the factory.

**Up to 36 kV**

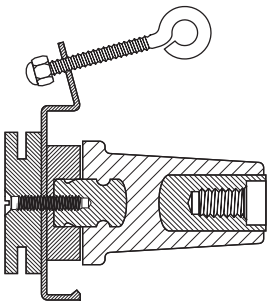
**6/10 (12) kV**
**6.35/11 (12) kV**
**8.7/15 (17.5) kV**
**12/20 (24) kV**
**12.7/22 (24) kV**
**18/30 (36) kV**
**19/33 (36) kV**
**20,8/36 (42) kV**

### 400DR-B
### Dead-end receptacle
Fits over a bushing with a type C interface to provide 'dead-end' facility.



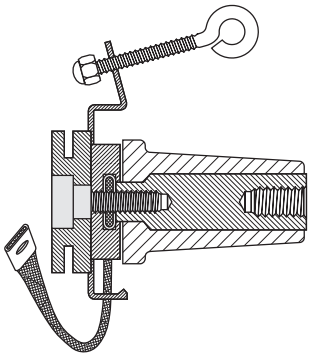
### Ordering instructions
Order
400DR-B for 12 kV,
K400DR-B for 24 kV or
M400DR-B for 36 kV applications.
The dead-end receptacle can be supplied with an earth lead.
Order with suffix -/G.
E.g. K400DR-B/G.

### 400SOP-B
### Stand-off plug
Is designed to support and 'dead-end' connectors with a type C interface when removed from equipment.



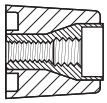
### Ordering instructions
Order
400SOP-B for 12 kV,
K400SOP-B for 24 kV,
M400SOP-B for 36 kV or
P400SOP-B for 42 kV applications.

### 400GP-B
### Earthing plug
Is designed to support and earth connectors with a type C interface when removed from equipment.



### Ordering instructions
Order
400GP-B for 12, 24, 36 or 42 kV applications.

### 300GP-B
### Earthing plug
Is designed to earth the 430TB connectors when it is fixed-mounted to the equipment (maintenance earthing).

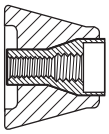


### Ordering instructions
Order
300GP-B for 12, 24, 36 or 42 kV applications.

08/2011

## 800GP-B
## Earthing plug

Is designed to earth the 484TB connectors when it is fixed-mounted to the equipment (maintenance earthing).

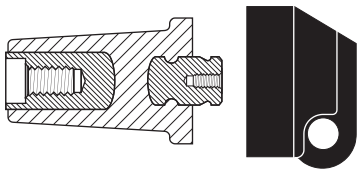


### Ordering instructions

Order
800GP-B for 12, 24, 36 or 42 kV applications.

## 400BIPA
## Basic insulating plug

Acts as a tightening nut for the 400TB and 440TB tee connector kits.
The plug contains a voltage detection point.
The conductive rubber protection cap is included.

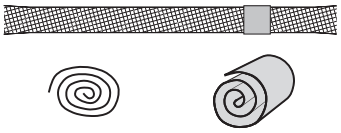


### Ordering instructions

Order
400BIPA for 12 kV,
K400BIPA for 24 kV
M400BIPA for 36 kV or
P400BIPA for 42 kV
applications.

## Kit MT
## Earthing kit for copper tape screened cables

Contains a tinned copper braid (25 $mm^2$ - L = 500 mm), a tinned copper wire for cleating and some water sealing mastic.

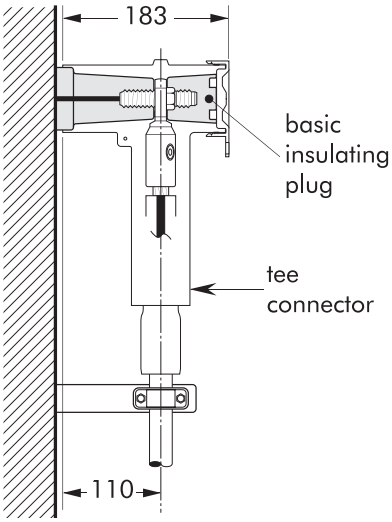


### Ordering instructions

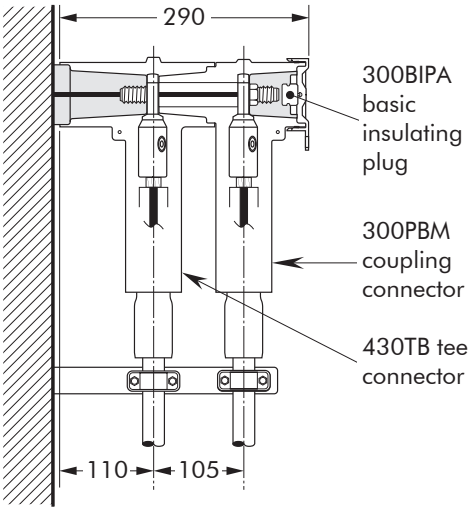
Order
Kit MT for 12 kV, 24 kV
36 kV or 42 kV applications.

# POSSIBLE ARRANGEMENTS
## INTERFACE C

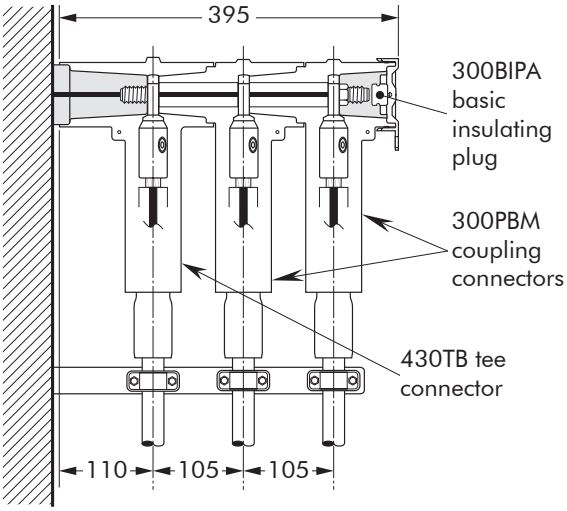
### 430TB
Single cable arrangement.
Order 430TB for 12 kV,
K430TB for 24 kV or M430TB
for 36 kV applications.



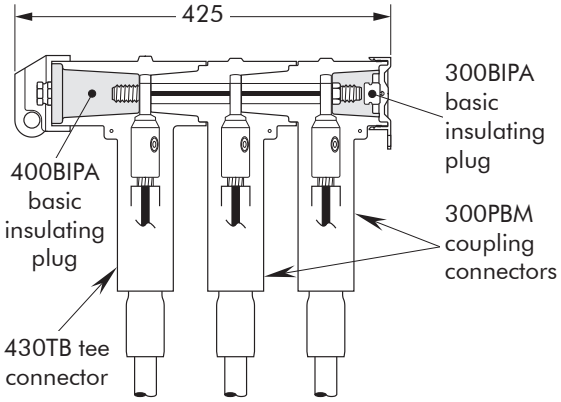

### 430TBM-P2
Dual cable arrangement.
Order 430TBM-P2 for 12 kV,
K430TBM-P2 for 24 kV or
M430TBM-P2 for 36 kV
applications.




### 430TBM-P3
Triple cable arrangement.
Order 430TBM-P3 for 12 kV,
K430TBM-P3 for 24 kV or
M430TBM-P3 for 36 kV
applications.



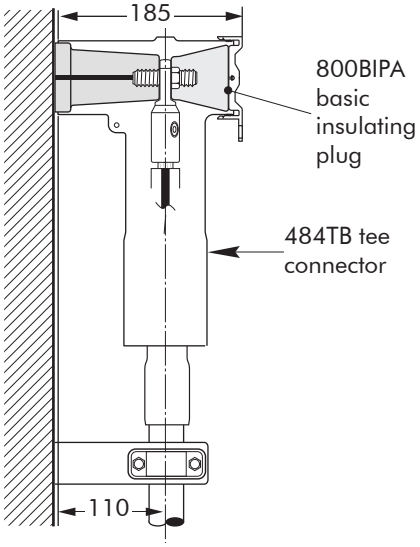

### 430TBM-L3
3-way connection.
Order 430TBM-L3 for 12 kV,
K430TBM-L3 for 24 kV or
M430TBM-L3 for 36 kV
applications.




In mm.

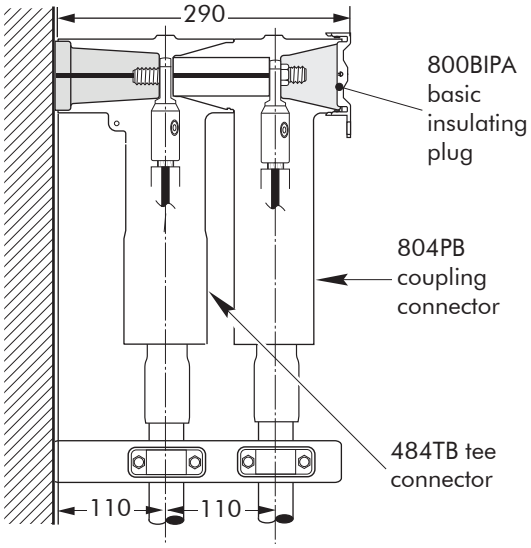
## 484TB

Single cable arrangement.
Order 484TB for 12 kV, K484TB for 24 kV, M484TB for 36 kV or P484TB for 42 kV applications.



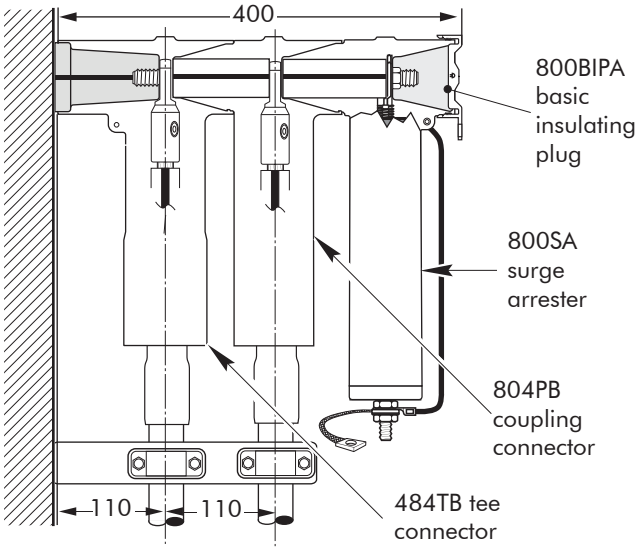

## 484TB-P2

Dual cable arrangement.
Order 484TB-P2 for 12 kV, K484TB-P2 for 24 kV or M484TB-P2 for 36 kV or P484TB-P2 for 42kV applications.



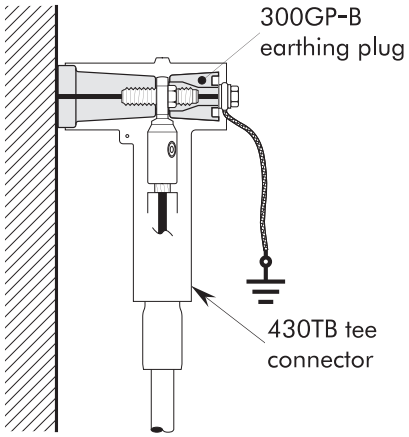

## 484TB-P2 + 800SA

Dual cable arrangement with surge arrester.
Order 484TB-P2+800SA for 12 kV, K484TB-P2+800SA for 24 kV, M484TB-P2+800SA for 36 kV or P484TB-P2+800SA for 42 kV applications.

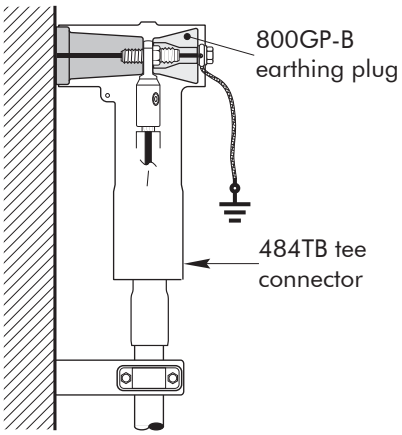


## Earthing plug on connector

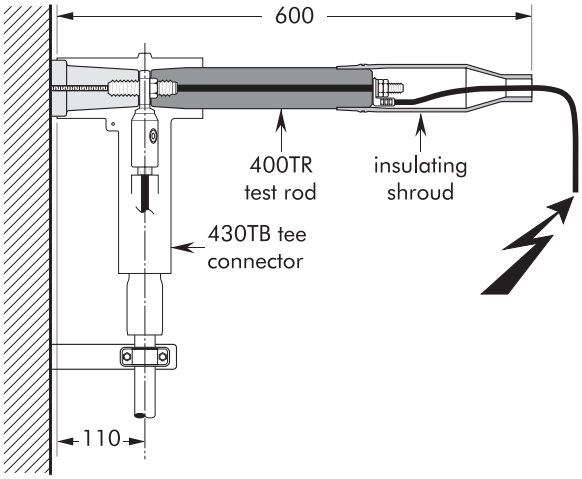
Order 300GP-B for 12 kV, 24 kV and 36 kV applications.

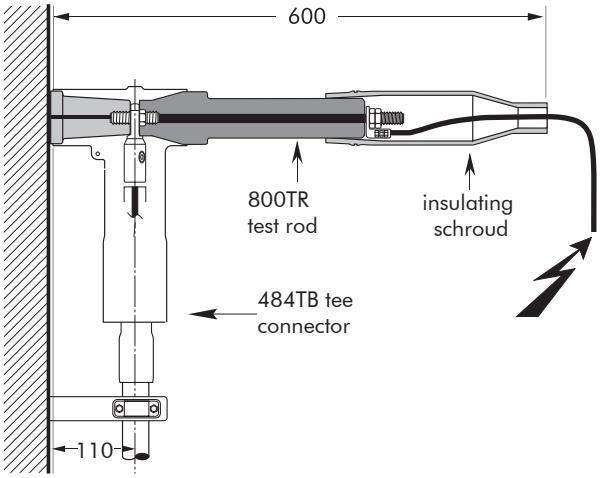



Order 800GP-B for 12 kV, 24 kV, 36 kV or 42 kV applications.




## Cable and equipment testing




In mm.

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