400 A deadbreak plug-in tee connector - interface B

DT400P – 24 kV applications

DT436P – 36 kV applications

Related products
• DPC400 Connecting Plug
• DRC400 Receptacle Cap

Installation
• No special tools, heating, taping, or potting are required
• Connector may be energized immediately after installation on its mating part
• Mates with bushings, plugs, and junction devices complying with interface B per Cenelec 50180 and 50181

Application
• For connection of extruded polymeric cable to transformers, switchgear, motors and other equipment with a premoulded separable connector
• For indoor and outdoor installations
• System voltage up to 36 kV
• Continuous current 400 A (600 A overload for 8 hours)
• Cable particulars:
  • Extruded polymeric cable (XLPE, EPR, etc.)
  • Copper or aluminum conductors
  • Semiconducting or metallic screens
• Conductor size: 12 kV 70-400 mm²
  24 kV 25-400 mm²
  36 kV 25-240 mm²

Features
• Provides a fully screened and fully submersible separable connection when mated with the proper bushing or plug
• Built-in capacitive test point allows for an easy check of the circuit status or installation of a fault indicator
• No minimum phase clearance requirements
• Mounting can be vertical, horizontal, or any angle in between
• 100% factory tested

Standards
• Meets the requirements of IEC 60502-4 and CENELEC HD 659.1 S2
Quality assurance

- Our manufacturing facility is registered to ISO 9001 by third party audit
- Required Production Tests
- Periodic X-Ray Analysis

Packaging

- Supplied in a kit with all necessary parts, approximate weight 3 kg

Features and detailed description

Table 1. Electrical Rating

<table>
<thead>
<tr>
<th></th>
<th>DT400P</th>
<th>DT436P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum System Voltage (Uₘ)</td>
<td>24 kV</td>
<td>36 kV</td>
</tr>
<tr>
<td>Impulse</td>
<td>125 kV</td>
<td>170 kV</td>
</tr>
<tr>
<td>AC Withstand (5 min.)</td>
<td>54 kV</td>
<td>81 kV</td>
</tr>
<tr>
<td>Continuous Current</td>
<td>400 A</td>
<td>400 A</td>
</tr>
<tr>
<td>Overload (8 hrs. Max.)</td>
<td>600 A</td>
<td>600 A</td>
</tr>
<tr>
<td>Short Circuit Withstand, 1 sec. (rms sym)</td>
<td>18 kA</td>
<td>18 kA</td>
</tr>
</tbody>
</table>

Notes: Ratings are based on IEC Standards and do not reflect maximum capability.

1. Pin Contact
   Tin-plated copper contact screws into the conductor contact

2. Insulation
   Moulded EPDM insulating rubber is formulated and mixed in our facility in the USA to ensure high quality

3. Basic Insulating Plug
   Moulded epoxy part has a threaded metal insert to accept the pin contact

4. Capacitive Test Point
   Capacitive test point provides means to check circuit status. A moulded EPDM conducting rubber cap provides a watertight seal.

5. Rubber Cap
   Moulded EPDM conducting rubber cap protects and earths the test point during normal operation

6. Internal Screen
   Moulded EPDM conducting rubber screen controls electrical stress

7. Capacitive Test Point (Optional)
   Provides a means to mount a fault indicator. A moulded EPDM conducting rubber cap provides a watertight seal.

8. Stress Relief
   The configuration of the outer screen and the cable adapter provides cable stress relief

9. Cable Adapter
   The sized opening provides an interference fit to maintain a watertight seal and provides the initial cable stress relief

10. Earthing Eyes
   Moulded into the external screen for connection of an earthing wire

11. External Screen
   Moulded EPDM conducting rubber mates with the cable screen to maintain screen continuity and ensure that the assembly is at earth potential

12. Conductor Contact
   Inertia welded bimetallic compression connector accepts copper or aluminum conductors
### Ordering information

For 12 kV and 24 kV applications, the ordering formula is DT400P-R-C. For 36 kV applications, the ordering formula is DT436P-R-C. Substitute the R and C as described below. Select the range from Table 2 that best fits the diameter of the core insulation. Select the code from Table 3 for the conductor size and type of connector required.

#### Table 2. Cable Insulation Range

<table>
<thead>
<tr>
<th>Insulation Range Designation</th>
<th>Cable Insulation Range Ø (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>16.3 ( \text{Min.} ) \hspace{1em} 19.3 ( \text{Max.} )</td>
</tr>
<tr>
<td>B</td>
<td>18.3 ( \text{Min.} ) \hspace{1em} 21.0 ( \text{Max.} )</td>
</tr>
<tr>
<td>C</td>
<td>20.0 ( \text{Min.} ) \hspace{1em} 24.1 ( \text{Max.} )</td>
</tr>
<tr>
<td>D</td>
<td>23.1 ( \text{Min.} ) \hspace{1em} 27.0 ( \text{Max.} )</td>
</tr>
<tr>
<td>E</td>
<td>25.6 ( \text{Min.} ) \hspace{1em} 29.0 ( \text{Max.} )</td>
</tr>
<tr>
<td>F</td>
<td>27.7 ( \text{Min.} ) \hspace{1em} 32.6 ( \text{Max.} )</td>
</tr>
<tr>
<td>G</td>
<td>30.9 ( \text{Min.} ) \hspace{1em} 36.2 ( \text{Max.} )</td>
</tr>
<tr>
<td>H</td>
<td>34.0 ( \text{Min.} ) \hspace{1em} 39.5 ( \text{Max.} )</td>
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</tbody>
</table>

#### Optional Test Point

If a test point on the tee body is required, add a "T" before the insulation range designation.

Example: DT400PTF240

**Ordering Example:** For 20 kV cable, 240 mm² aluminum conductor, 31.0 mm core insulation diameter, DIN connector, specify DT400PF240.

**Cable seal adapters are ordered separately.**

### Table 3. Conductor Code

<table>
<thead>
<tr>
<th>Stranded Conductor Size (mm²)</th>
<th>DIN Type</th>
<th>EDF Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>25</td>
<td>E25</td>
</tr>
<tr>
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<tr>
<td>400</td>
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</tbody>
</table>

**Note:** Bimetallic connectors can be used with aluminum or copper conductors.
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