

630A Deadbreak Bolted Tee Connector

DTS624S - 24 kV Applications



Installation

- No special tools or heating are required
- Connector may be energized immediately after installation on its mating part
- Mates with bushings, plugs, and junction devices complying with interface C per CENELEC 50180 and 50181

Application

- For connection of polymeric cable to transformers, switchgear, motors and other equipment with a premoulded separable connector
- For indoor and outdoor installations
- System voltage up to 24 kV
- Continuous current 630 A
- Cable particulars:
 - Extruded polymeric cable (XLPE, EPR, etc.)
 - Copper or aluminum conductors
 - Semiconducting or metallic screens
- Conductor size: 24 kV 35-400mm²

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.

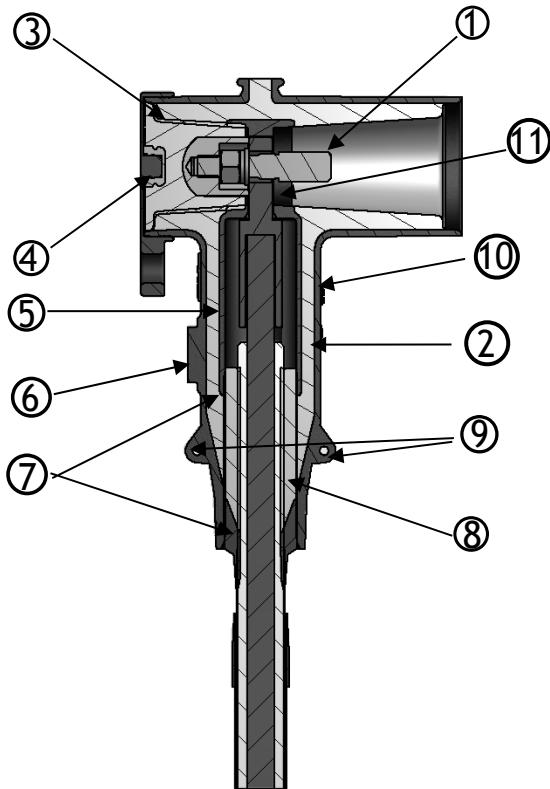
Standards

- Meets the requirements of IEC 60502-4-2005 and GB/T 12706.4-2008 and HD 629.1 S2:2006

Quality assurance

- Our manufacturing facility is registered to ISO 9001-2000 by third party audit
- Required Production Tests
- Periodic X-Ray Analysis

Features and detailed description



1. Clamping Screw
Tin-plated copper screw secures the conductor contact to the bushing
2. Insulation
Moulded EPDM insulating rubber is formulated and mixed in-house to ensure high quality
3. Basic Insulating Plug
Moulded epoxy part has a threaded metal insert to accept the clamping screw
4. Rubber Cap
Moulded EPDM conducting rubber cap protects and earths the test point during normal operation
5. Internal Screen
Moulded EPDM conducting rubber screen controls electrical stress
6. Capacitive Test Point (Optional)
Provides a means to mount a fault indicator. A moulded EPDM conducting rubber cap provides a watertight seal.
7. Stress Relief
The configuration of the outer screen and the cable adapter provide cable stress relief
8. Cable Adapter
The sized opening provides an interference fit to maintain a watertight seal and provides the initial cable stress relief
9. Earthing Eyes
Moulded into the external screen for connection of an earthing wire
10. External Screen
Moulded EPDM conducting rubber mates with the cable screen to maintain screen continuity and ensure that the assembly is at earth potential
11. Conductor Contact
Inertia welded bimetallic compression connector accepts copper or aluminum conductors

Figure 1. 630 A, 24kV Class DTS624S Deadbreak Tee Connector.

Packaging

- Supplied in a kit with all necessary parts, approximate weight 6.5 kg

Table1. Electrical Ratings

DTS624S	
Maximum System Voltage (U_m)	24 kV
Impulse	125 kV
AC Withstand (5 min.)	57 kV
Continuous Current	630 A
Short Circuit Withstand, 2 sec. (rms sym)	23 kA

Notes: Ratings are based on HD 629.1 S2:2006, IEC Standards and China GB standard do not reflect maximum capability.

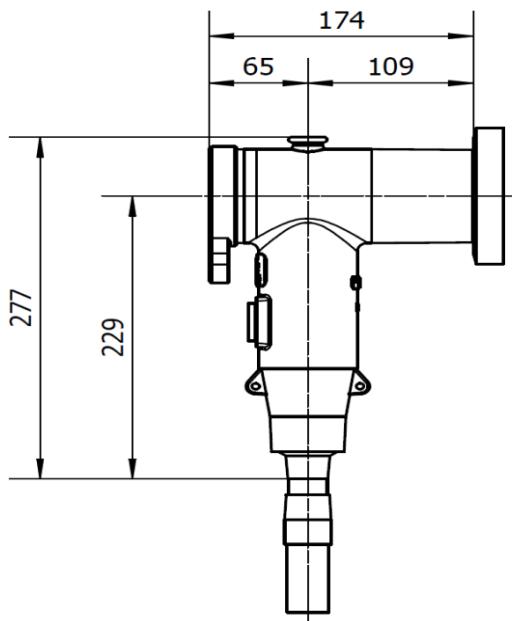


Figure 2. DTS624S Deadbreak Tee Connector dimensional information.

Kit contents

The complete kit includes:

- 3 Moulded Tee Housing;
- 3 Cable Adapter;
- 3 Conductor Contact;
- 3 Insulating Plug;
- 3 Rubber Cap;
- 3 Clamping Screw;
- 1 Basic Accessories Kit;
- Installation Instructions.

Ordering Information

The complete catalog number for the tee connector is as below table2 and table3.

Ordering Example: For 24 kV cable, 300 mm² aluminum conductor, 32.8 mm insulation diameter, without test point, export package, specify DTS624SGU300P3E.

Cable seal adapters are ordered separately.

Table 2

630A Short Tee with Insulating Plug, Copper Connector, Heat Shrink Trifurcation Kit Selection List			
Part Number	Insulation O.D. (mm)	Cross Section (mm ²)	HS Kit (Optional)
DTS624SBC35P3E	18.3–21.0	35	HS01
DTS624SBC50P3E	18.3–21.0	50	HS01
DTS624SCC70P3E	20.0–24.1	70	HS02
DTS624SCC95P3E	20.0–24.1	95	HS02
DTS624SDC120P3E	23.1–27.0	120	HS02
DTS624SEC150P3E	25.6–29.0	150	HS03
DTS624SFC185P3E	27.7–32.6	185	HS03
DTS624SFC240P3E	27.7–32.6	240	HS03
DTS624SGC300P3E	30.9–36.2	300	HS04
DTS624SHC400P3E	34.0–39.5	400	HS04

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

Table 3

630A Short Tee with Insulating Plug, Bi-metallic Connector, Heat Shrink Trifurcation Kit Selection List			
Part Number	Insulation O.D. (mm)	Cross Section (mm ²)	HS Kit (Optional)
DTS624SBU35P3E	18.3–21.0	35	HS01
DTS624SBU50P3E	18.3–21.0	50	HS01
DTS624SCU70P3E	20.0–24.1	70	HS02
DTS624SCU95P3E	20.0–24.1	95	HS02
DTS624SDU120P3E	23.1–27.0	120	HS02
DTS624SEU150P3E	25.6–29.0	150	HS03
DTS624SFU185P3E	27.7–32.6	185	HS03
DTS624SFU240P3E	27.7–32.6	240	HS03
DTS624SGU300P3E	30.9–36.2	300	HS04
DTS624SHU400P3E	34.0–39.5	400	HS04

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Publication No. CN650032EN

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