

800 A Deadbreak Tee Connector (M16)

DT608
800 A, 24 kV Class

Electrical Apparatus
1550-40



Figure 1.
DT608 Deadbreak Tee Connector.

APPLICATION

- For connection of polymeric cable to transformers, switchgear, motors, and other equipment with a premoulded separable connector.
- For indoor and outdoor installation.
- Continuous current 800 A (900 A overload for 8 hours).
- For system voltage (U_m) to 24 kV.
- Conductor size: 12 kV 70-630 mm²
24 kV 25-630 mm²
- An optional adapter kit is available for use with PILC cables.

FEATURES

- Provides a fully screened and fully submersible connection when mated with the proper bushing or plug.
- Optional capacitive test point on moulded connector 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 CENELEC HD 629.1 S1, IEC 60502-4, and ANSI/IEEE 386.

QUALITY

- Manufacturing facility is registered to ISO-9001-1994 by third party audit.
- Routine tests.
- X-ray audit of random samples.

RELATED PRODUCTS

- DPC608 Connecting Plug
- DRC600 Receptacle Cap
- DPS600 Standoff Plug
- DPE600 Earthing Plug
- DPR600 Reducing Tap Plug

INSTALLATION

- No special tools, heating, taping, or potting are required.
- Connector may be energised immediately after installation on its mating part.
- Mates with bushings, plugs, and junction devices complying with the listed standards.

TABLE A
Electrical Ratings

Maximum System Voltage (U_m)	24 kV
Partial Discharge Extinction (<3 pC)*	20 kV
Impulse Withstand	125 kV
AC Withstand*	54 kV
Continuous Current	800 A
Overload (8 hrs)	900 A
Short Circuit Withstand, 1 sec. (rms sym.)	48 kA

*Denotes routine tests on 100% of production.

Features and Detailed Description

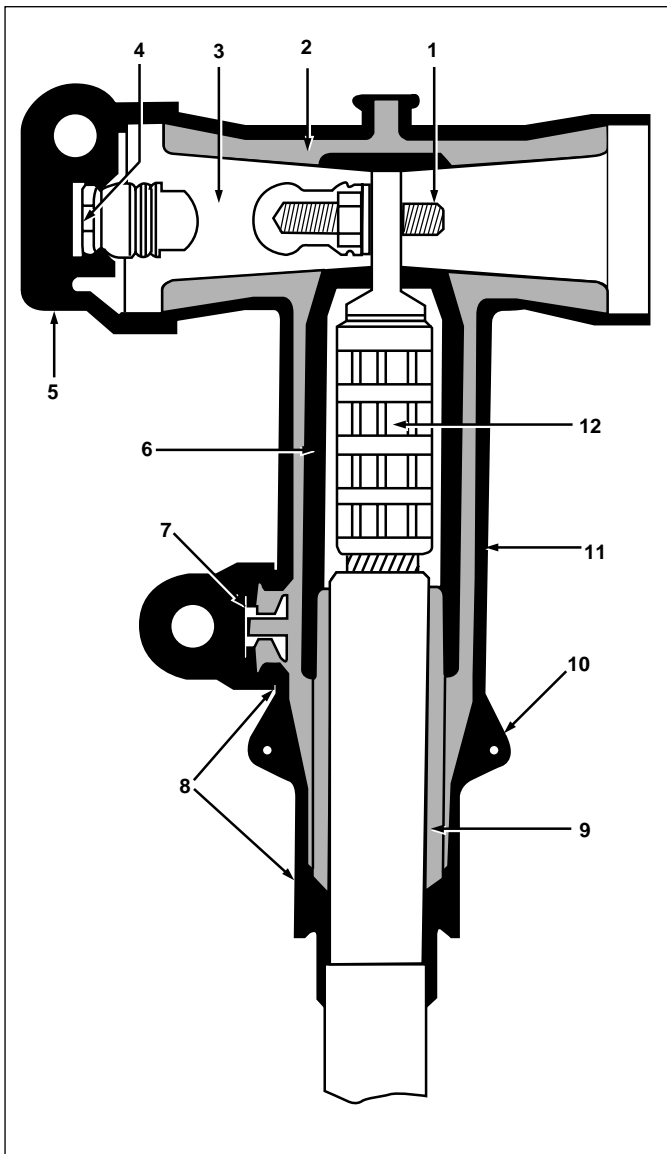


Figure 2.
800 A, 24 kV Class DT608 Deadbreak Tee Connector

1. Clamping Screw (M16)

Tin-plated aluminum stud and nut secure the 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. Capacitive Test Point

Capacitive test point provides means to check circuit status.

5. Rubber Cap

Moulded EPDM semi-conducting rubber cap protects and earths the test point during normal operation.

6. Internal Screen

Moulded EPDM semi-conducting rubber screen controls electrical stress.

7. Capacitive Test Point (Optional)

Provides a means to mount a fault indicator or a voltage indicator. A moulded semi-conducting EPDM rubber cap earths the test point when not in use.

8. Built-in Stress Relief

The configuration of the external screen and the cable adapter provides cable stress relief.

9. Cable Adapter

The sized opening maintains a watertight seal on the cable and provides the initial cable stress relief.

10. Earthing Eyes

Moulded into the external screen for connection of one or more earthing wires.

11. External Screen

Moulded semi-conducting EPDM rubber maintains screen continuity and ensures that the assembly is at earth potential.

12. Conductor Contact

Compression connector accepts copper or aluminum conductors.

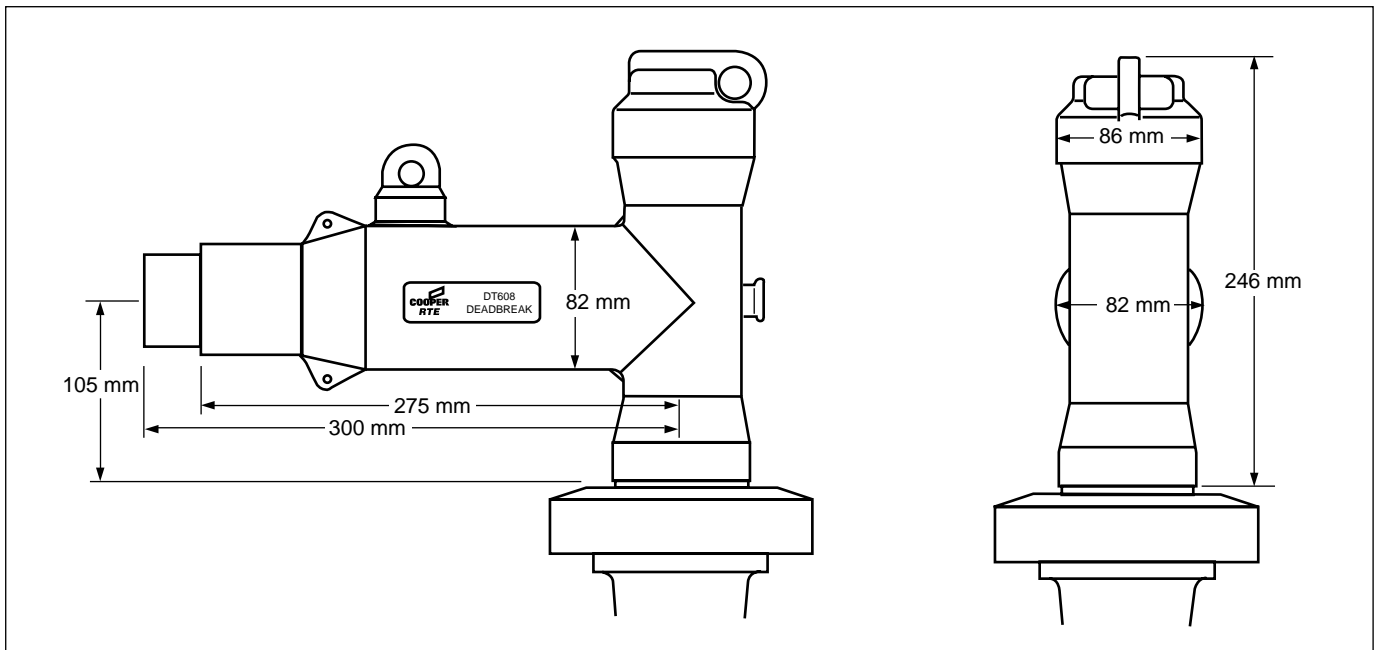


Figure 3.
DT608 Deadbreak Tee Connector.

ORDERING INFORMATION

The ordering formula is **DT608-R-C**. Substitute for **R** and **C** as follows. Select the range from Table R that fits the diameter of the core insulation. Select the code from Table C for the conductor size and type of compression connector required.

Ordering Example: For 20 kV cable, 240 mm² aluminum conductor, 31.0 mm core insulation diameter, DIN connector, specify **DT608-F-240**.

Cable seal adapters are ordered separately.

TABLE R
Core Insulation Range

Insulation Range Designation	Core Insulation Range (mm)	
	Minimum	Maximum
A	16.3	19.3
B	18.3	21.5
C	19.9	24.6
D	23.1	27.1
E	24.9	29.0
F	27.4	32.5
G	31.0	36.1
H	34.5	39.6
J	37.6	43.2
K	41.6	46.7
L	45.2	49.9

TABLE C
Conductor Code

Stranded Conductor Size (mm ²)	DIN type	EDF type	DIN All Copper
25	25	E25	C25
35	35	E35	C35
50	50	E50	C50
70	70	E70	C70
95	95	E95	C95
120	120	E120	C120
150	150	E150	C150
185	185	E185	C185
240	240	E240	C240
300	300	E300	C300
400	400	E400	C400
500	500	E500	C500
630		E630	C630

Optional Test Point

If a test point on the tee body is required, add a "T" before the insulation range designation.
Example: DT608TF240



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