COOPER POWER SERIES

1250 A deadbreak tee connector (M16) - interface D

Effective April 2015

Supersedes I550-50 July 1999





Related products

- DPC612 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 energized immediately after installation on its mating part.
- Mates with bushings, plugs, and junction devices complying with the listed standards.

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 1250 A (1800 A overload for 8 hours).
- For system voltage (Um) 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 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, andIEEE Std 386[™]-2006 standard.

Quality

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

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Features and detailed description



Table 1. 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	1250 A
Overload (8 hrs.)	1800 A
Short Circuit Withstand, 1 sec. (rms sym.)	75 kA

* Denotes routine tests on 100% of production.

1. Clamping Screw (M16)

Tin-plated copper 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 2. DT612 deadbreak tee connector.

Ordering information

The standard kit is packaged individually in a carton with elbow housing, conductor contact, pin contact and other necessary parts to complete the installation. Cable sealing kits must be ordered separately.

Step 1

Select the insulation diameter code which best centers the insulation diameter of the cable from Table 2.

Step 2

Identify the conductor size and determine the desired connector type from Table 3.

Table 2. Core Insulation Range

	Core Insula (mm)	
Designation	Minimum	Maximum
A	16.3	19.3
В	18.3	21.5
С	19.9	24.6
D	23.1	27.1
E	24.9	29.0
F	27.4	32.5
G	31.0	36.1
Н	34.5	39.6
J	37.6	43.2
К	41.6	46.7
L	45.2	49.9

Optional test point

If a test point on the tee body is required, add a "T" before the insulation range designation. Example: DT612TF240

Ordering Example: For 20 kV cable, 240 mm² aluminum conductor, 31.0 mm core insulation diameter, DIN connector, specify **DT612F240**.

Cable seal adapters are ordered separately.

Table 3. Conductor Code

Stranded Conductor Size (mm2)	DIN type	EDF type
25	25	E25
35	35	E35
50	50	E50
70	70	E70
95	95	E95
120	120	E120
150	150	E150
185	185	E185
240	240	E240
300	300	E300
400	400	E400
500	500	E500
630		E630

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