

600 A 35 kV Class Deadbreak Junction

GENERAL

The RTE Components 600 A, 35 kV Class Deadbreak Junction provides two, three or four deadbreak interfaces bused together and encapsulated in a precision molded peroxide cured EPDM insulated rubber body with a semiconductive outer shield. Deadbreak Junctions are used in padmounted apparatus, underground vaults, and other installations to establish loops, taps and splices, and facilitate apparatus changeouts.

Sectionalizing a cable run to find and isolate a cable fault is made easy when a deadbreak junction is used with deadbreak connectors meeting the requirements of ANSI/IEEE Standard 386—Separable Insulated Connector Systems.

When mated with a comparably rated product, the junction provides a fully shielded, submersible, threaded connection for deadbreak operation.

The deadbreak junction is available with stainless steel adjustable brackets for mounting flat or at a 45° angle. Stainless steel “U” straps are available for direct wall mounting.

INSTALLATION

Deadbreak junctions are bolted to the mounting surface. 600 A connectors are assembled onto junctions using tools as described in the appropriate installation instructions for those connectors. Refer to Installation Instruction Sheet 5000050607 for details.



Figure 1. Three-way Deadbreak Junction with adjustable bracket; also available as Two-way and Four-way interfaces.

PRODUCTION TESTS

Tests are conducted in accordance with ANSI/IEEE Standard 386.

- ac 60 Hz 1 Minute Withstand — 50 kV
- Minimum Corona Voltage Level — 26 kV

Tests are conducted in accordance with RTE Components requirements.

- Physical Inspection
- Periodic Dissection
- Periodic Fluoroscopic Analysis

TABLE 1
Voltage Ratings and Characteristics

Description	kV
Standard Voltage Class	35
Maximum Rating Phase-to-Ground	21.1
ac 60 Hz 1 Minute Withstand	50
dc 15 Minute Withstand	103
BIL and Full Wave Crest	150
Minimum Corona Voltage Level	26

Voltage ratings and characteristics are in accordance with ANSI/IEEE Standard 386.

TABLE 2
Current Ratings and Characteristics

Description	Amperes
Continuous	600 A rms
24 Hour Overload	1,000 A rms
Short Time	40,00 A rms symmetrical for 0.20 s
	10,000 A rms symmetrical for 3.0 s

Current ratings and characteristics are in accordance with ANSI/IEEE Standard 386.

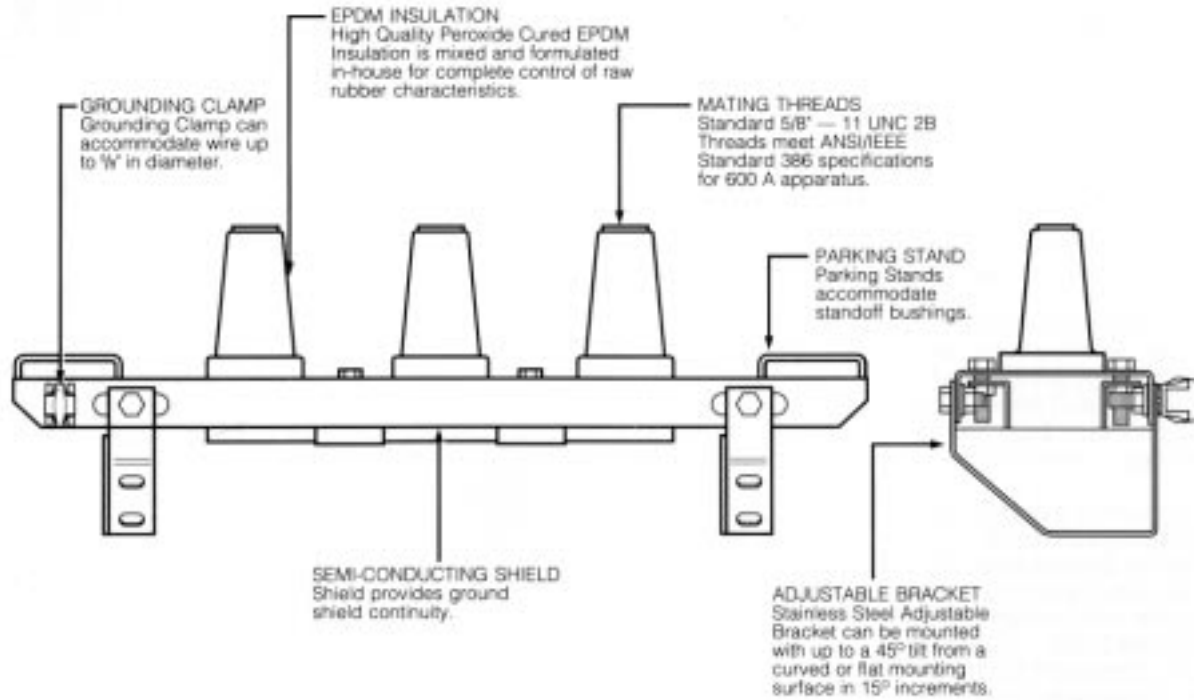


Figure 2. Welded Current Path ensures cool operating temperatures. Bus bar and taps are welded together for high electrical and mechanical reliability.

ORDERING INFORMATION

To order an RTE Components 35 kV Class Deadbreak Junction, refer to Tables 3 and 4.

Each kit contains:

- Deadbreak Junction (with mounting bracket or straps, depending on product ordered)
- Shipping Caps (not for energized operation)
- Silicone Lubricant
- Installation Instruction Sheet

If aluminum 5/8 in.—11 threaded stud is required for assembly, specify 2638100B02M. For copper threaded stud specify 2638100B06M.

TABLE 3
Aluminum Deadbreak Junction Selection Chart

Number of Interfaces	Junction only	Junction with U-Straps	Junction with Bracket
2	2637184C01M	2637184C11M	2637195C01M
3	2637184C02M	2637184C12M	2637195C02M
4	2637184C03M	2637184C13M	2637195C03M

TABLE 4
Copper Deadbreak Junction Selection Chart

Number of Interfaces	Junction only	Junction with U-Straps	Junction with Bracket
2	2637184C04M	2637184C14M	2637195C04M
3	2637184C05M	2637184C15M	2637195C05M
4	2637184C06M	2637184C16M	2637195C06M

TABLE 5
Replacement Parts

Description	Catalog Number
U-Strap Kit with Hardware (1 strap)	2637570A02B
Stainless Steel Bracket Assembly (2-way)	2637195C01B
Stainless Steel Bracket Assembly (3-way)	2637195C02B
Stainless Steel Bracket Assembly (4-way)	2637195C03B

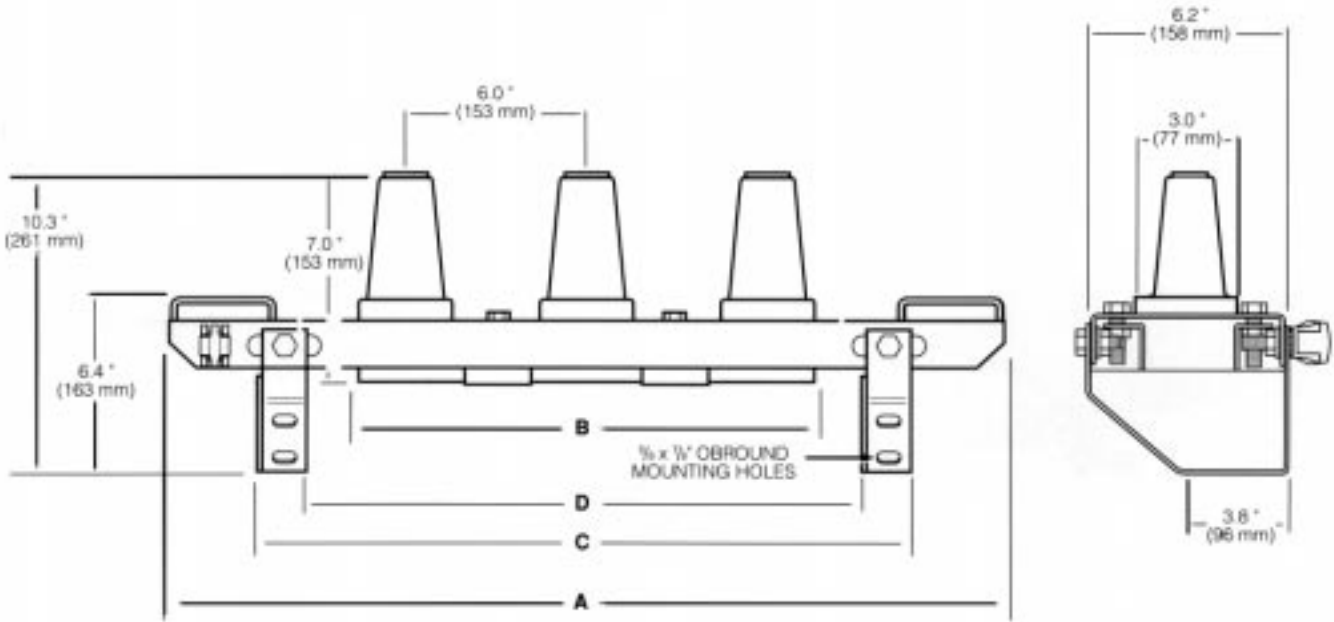


Figure 3.
Dimensional drawing shows mounting configuration.

NOTE: Dimensions given are for reference only.

TABLE 6
Dimensional Information

Number of Interfases	Physical Dimensions in./mm			
	A	B	C	D
2	21.5 (546)	9.0 (229)	15.5 (394)	12.5 (318)
3	27.5 (699)	15.0 (381)	21.5 (546)	18.5 (470)
4	33.5 (851)	21.0 (534)	27.5 (699)	24.5 (623)

NOTE: C and D are minimum and maximum stud centerline separations for mounting.

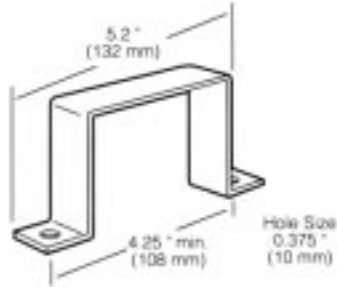


Figure 4.
Stainless Steel U-Strap for direct wall mount.

NOTE: Dimensions given are for reference only.

 **COOPER** Power Systems

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