

Deadbreak Apparatus Connectors

600 A 35 kV Class Deadbreak Junction

GENERAL

The Cooper Power Systems 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 pad-mounted apparatus, underground vaults, and other installations to establish loops, taps and splices, and facilitate apparatus change-outs.

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 **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.

900 AMP RATING

The deadbreak junction is rated for 900 A continuous when the copper junction and copper mating components are specified (see Table 4).

ADDITIONAL AVAILABLE OPTIONS

For additional available options, refer to catalog section 650-10. Options include:

- In-line junctions with up to 6 positions
- Junctions with combinations of 200 A wells and 600 A bushings.
- “L” splice configurations.
- “Y” splice configurations. Single-phase and three-phase.
- Stacked configuration.

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



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

Instruction Sheet S600-22-1 (5000050607) for junction dimensions and mounting details.

PRODUCTION TESTS

Tests are conducted in accordance with **IEEE Standard 386™**.

- AC 60 Hz 1 Minute Withstand – 50 kV
- Minimum Corona Voltage Level – 26 kV

Tests are conducted in accordance with Cooper Power Systems requirements.

- Physical Inspection
- Periodic Dissection
- Periodic X-ray 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 **IEEE Standard 386™**.

TABLE 2
Current Ratings and Characteristics

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

Current ratings and characteristics are in accordance with **IEEE Standard 386™**.

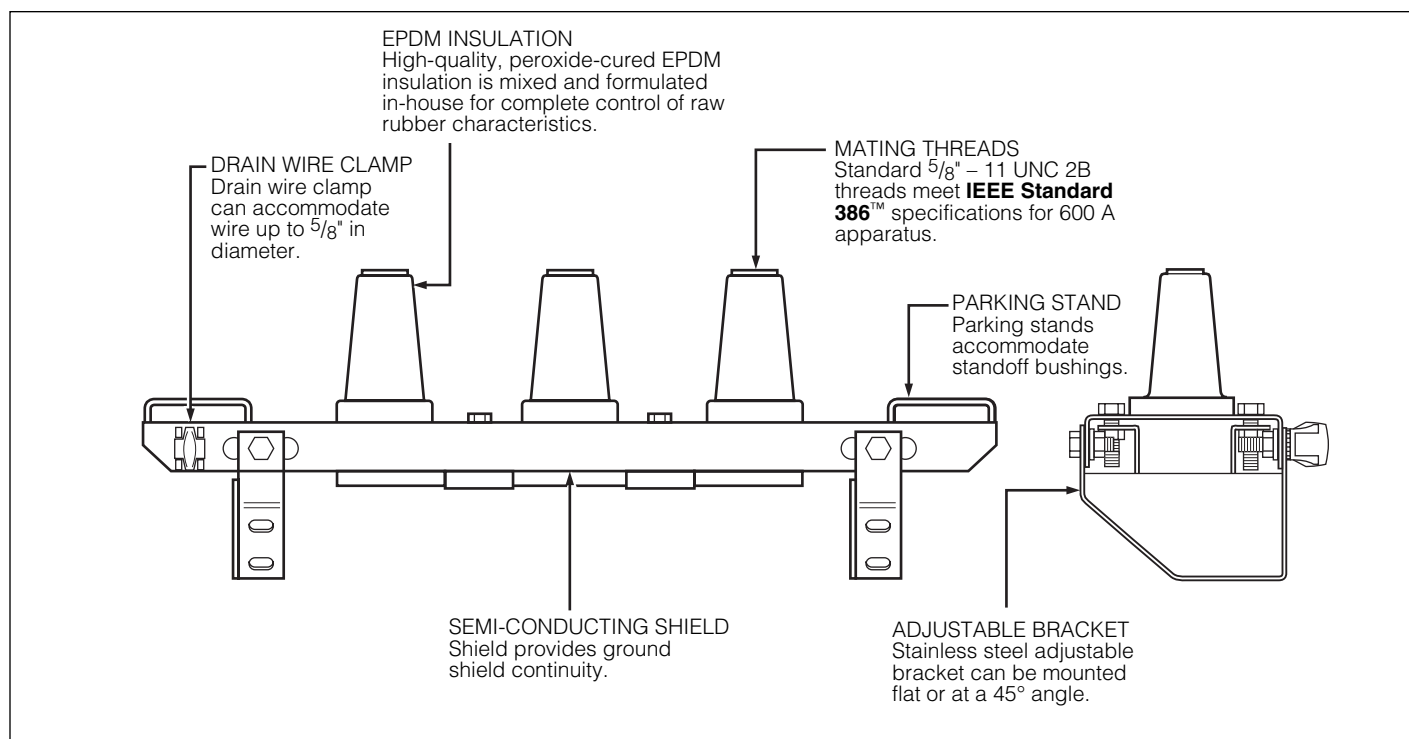


Figure 2.
Welded Current Path ensures cool operating temperatures. Bus bar and taps are welded together for high electrical and mechanical reliability.

ORDERING INFORMATION

To order a 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 $\frac{5}{8}$ " – 11 threaded stud is required for assembly, specify STUD635-A. For copper threaded stud specify STUD635-C. For the T-OP™ II stud, specify STUD-T.

TABLE 3
Aluminum Deadbreak Junction Selection Chart

Number of Interfaces	Junction Only	Junction with U-Straps	Junction with Bracket
2	DJ635A2	DJ635A2U	DJ635A2B
3	DJ635A3	DJ635A3U	DJ635A3B
4	DJ635A4	DJ635A4U	DJ635A4B

TABLE 4
Copper Deadbreak Junction Selection Chart

Number of Interfaces	Junction Only	Junction with U-Straps	Junction with Bracket
2	DJ635C2	DJ635C2U	DJ635C2B
3	DJ635C3	DJ635C3U	DJ635C3B
4	DJ635C4	DJ635C4U	DJ635C4B

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

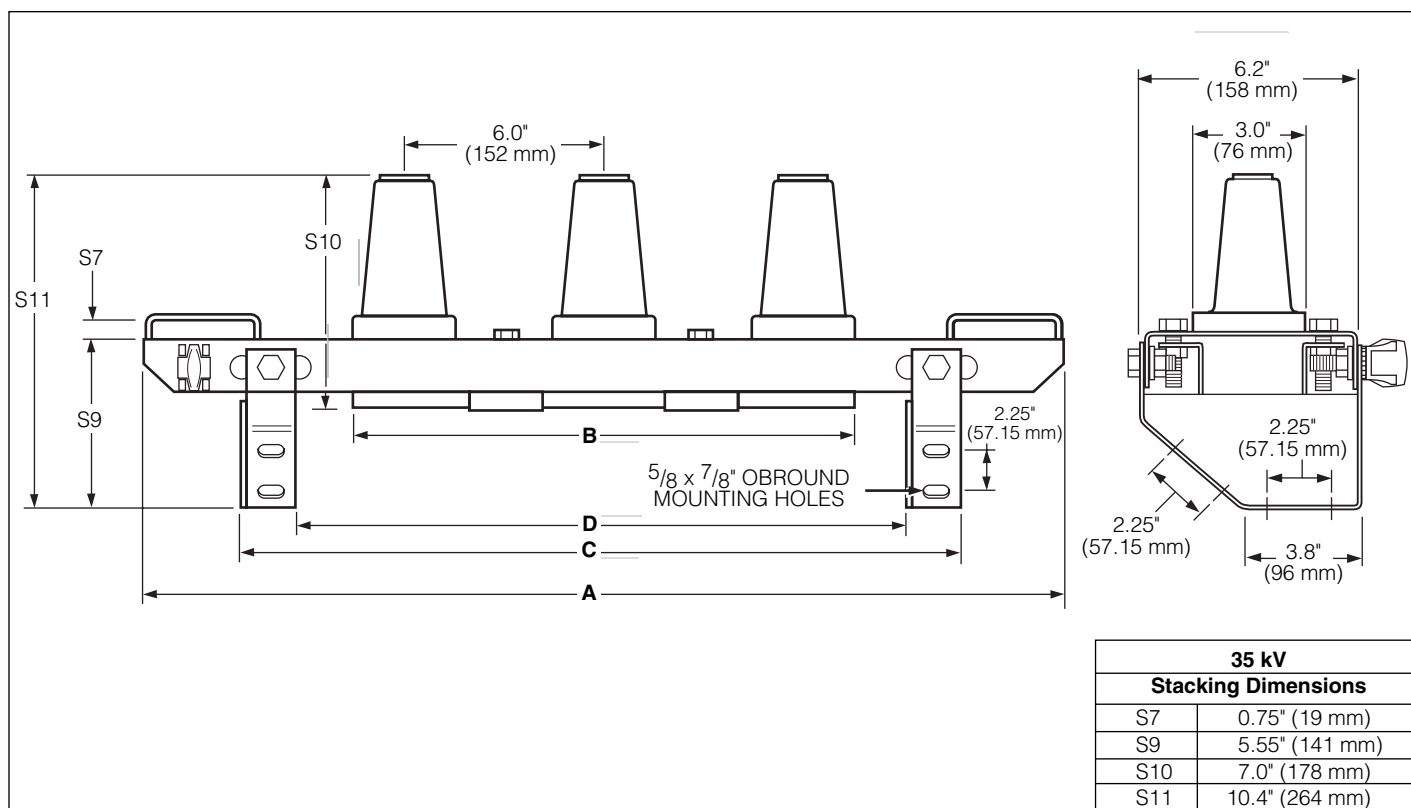


Figure 3.
Dimensional drawing shows mounting configuration.

Note: Dimensions given are for reference only.

TABLE 6
Dimensional Information

Number of Interfaces	Physical Dimensions in. (mm)		Mounting 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 (533)	27.5 (699)	24.5 (622)

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

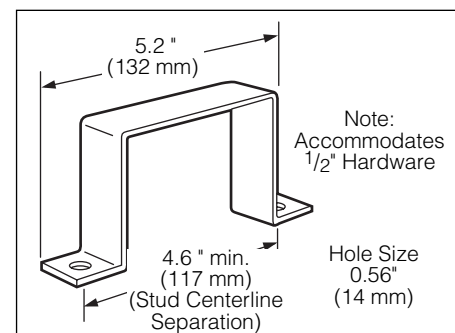


Figure 4.
Stainless Steel U-Strap for direct wall mount.

Note: Dimensions given are for reference only.

ISO 9001:2000-Certified Quality Management System



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