

600 A 15/25 kV class deadbreak junction



General

Eaton's Cooper Power Systems 600 A, 15/25 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 EPDM peroxide-cured semi-conductive 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 Std 386™-2006 standard – "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 at various operating angles, or with stainless steel "U" straps for direct wall mounting.

900 Amp rating

Copper deadbreak junctions are rated 900 A continuous. If a 900 A rating is desired, select a copper deadbreak junction from Table 4 on page 3.

Additional available options

For additional available options, refer to *Catalog 650-10, 200 A and 600 A, 15, 25, and 36 kV Junction Bars for Separable Connectors*. Options include:

- In-line junctions with up to six (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

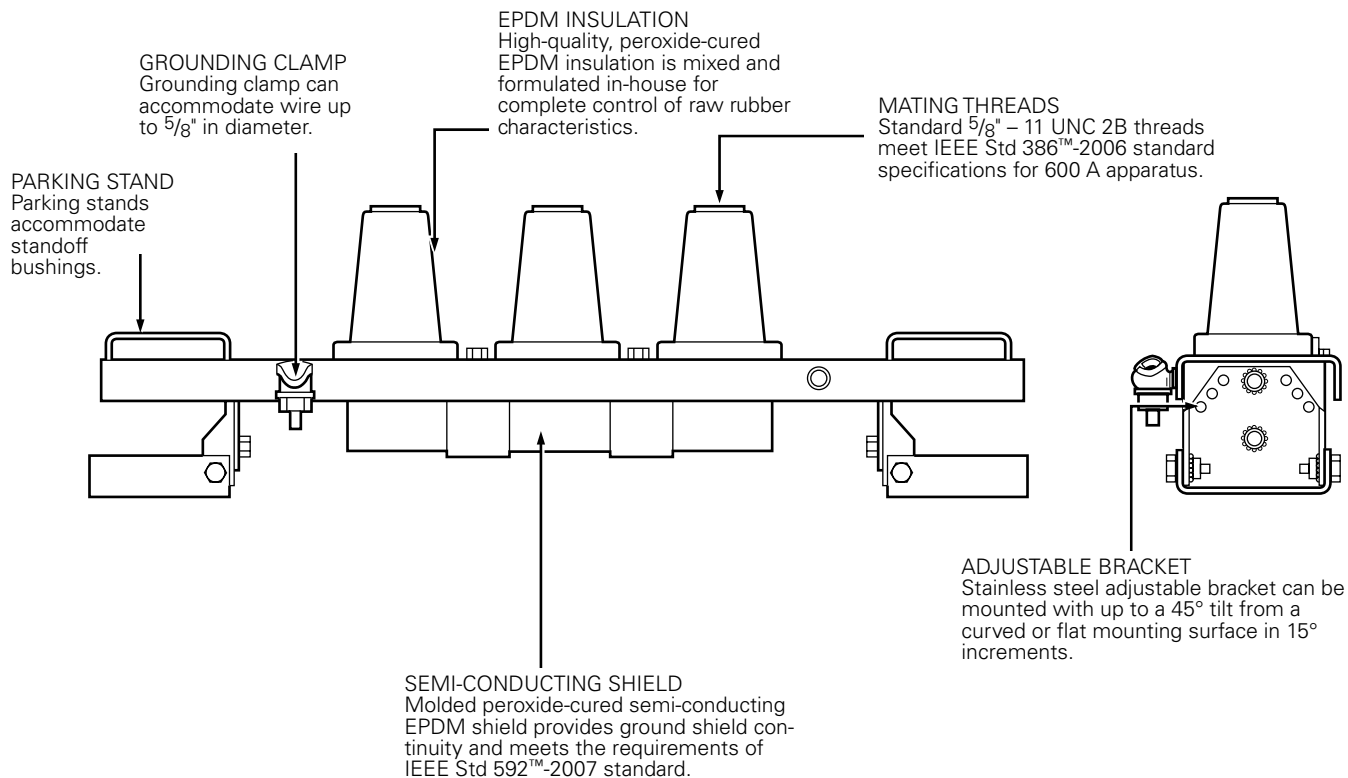


Figure 1. Welded current path ensures cool operating temperatures. Bus bar and taps are welded together for high electrical and mechanical reliability.

Table 1. Voltage Ratings and Characteristics

Description	kV
Standard Voltage Class	25
Maximum Rating Phase-to-Ground	15.2
AC 60 Hz 1 Minute Withstand	40
DC 15 Minute Withstand	78
BIL and Full Wave Crest	125
Minimum Corona Voltage Level	19

Voltage ratings and characteristics are in accordance with IEEE Std 386™-2006 standard.

Table 2. Current Ratings and Characteristics

Description	Amperes
Continuous	600 A rms (aluminum) / 900 A rms (copper)
4 Hour Overload	900 A rms (aluminum) / 1200 A rms (copper)
Short Time	25,000 A rms symmetrical for 0.17s 10,000 A rms symmetrical for 3.0 s

Current ratings and characteristics are in accordance with IEEE Std 386™-2006 standard.

Production tests

Tests conducted in accordance with IEEE Std 386™-2006 standard:

- AC 60 Hz 1 Minute Withstand
 - 40 kV
- Minimum Corona Voltage Level
 - 19 kV

Tests conducted in accordance with Eaton's Cooper Power Systems requirements:

- Physical Inspection
- Periodic Dissection
- Periodic Fluoroscopic Analysis

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 *Service Information, S600-22-1 600 A, 15, 25, and 35 kV Class Deadbreak Junction Installation Instructions* for details.

Ordering information

To order an Eaton's Cooper Power Systems 15/25 kV Class (15.2/26.3 kV) 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)
- Installation Instruction Sheet

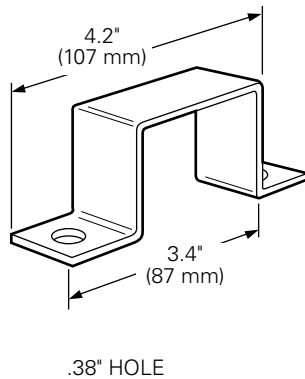


Figure 2. Stainless Steel U-strap for direct wall mount.

Note: Dimensions given are for reference only.

Table 3. Aluminum Deadbreak Junction Selection Chart

Number of Interfaces	Junction Only	Junction with U-Straps	Junction with Bracket
2	DJ625A2	DJ625A2U	DJ625A2B
3	DJ625A3	DJ625A3U	DJ625A3B
4	DJ625A4	DJ625A4U	DJ625A4B

Table 4. Copper Deadbreak Junction Selection Chart

Number of Interfaces	Junction Only	Junction with U-Straps	Junction with Bracket
2	DJ625C2	DJ625C2U	DJ625C2B
3	DJ625C3	DJ625C3U	DJ625C3B
4	DJ625C4	DJ625C4U	DJ625C4B

Table 5. Replacement Parts

Description	Catalog Number
U-Strap Kit with Hardware (1 strap)	2625439A02B
Stainless Steel Bracket Assembly (2-way)	2604670B01B
Stainless Steel Bracket Assembly (3-way)	2604670B02B
Stainless Steel Bracket Assembly (4-way)	2604670B03B

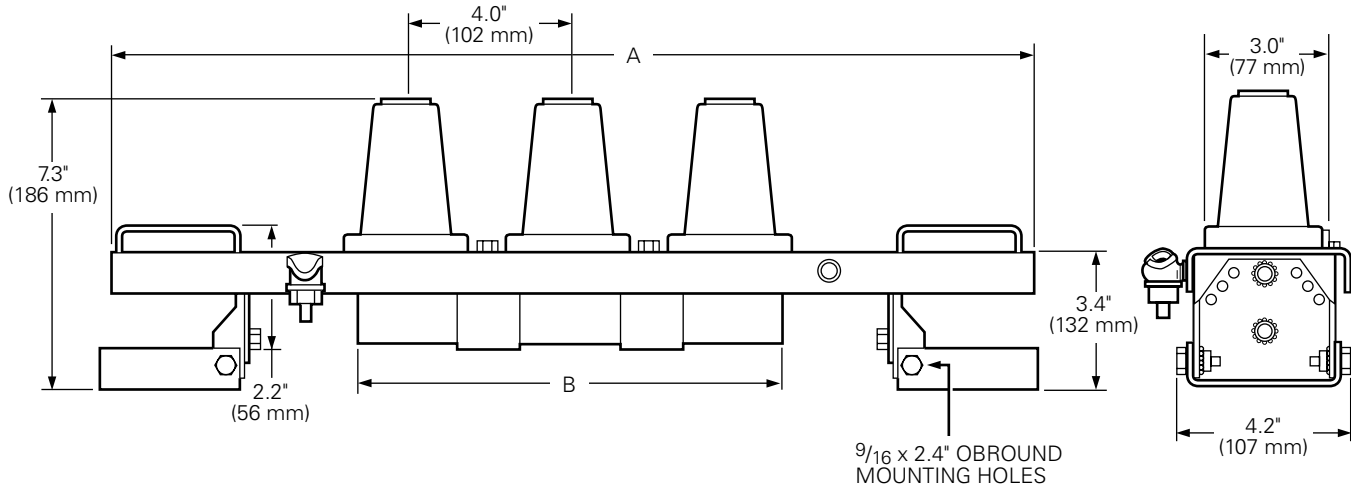


Figure 3. Dimensional drawing shows mounting configuration.

Note: Dimensions given are for reference only.

Table 6. Dimensional Information

Number of Interfaces	Physical Dimensions in./mm		Mounting Dimensions in./mm					
	A	B	Configuration 1		Configuration 2		Configuration 3	
			Min.	Max.	Min.	Max.	Min.	Max.
2	19.0	7.0	14.1	16.9	9.7	12.5	5.6	8.4
	(483)	(178)	(358)	(429)	(248)	(318)	(142)	(213)
3	23.0	11.0	18.6	21.4	14.2	17.0	10.1	12.9
	(584)	(279)	(472)	(544)	(361)	(432)	(257)	(328)
4	27.1	15.0	24.1	26.9	19.7	22.5	15.6	18.4
	(686)	(381)	(612)	(686)	(500)	(572)	(396)	(467)

Configuration 1. Both feet turned out.
 Configuration 2. One foot turned out, the other in.
 Configuration 3. Both feet turned in.

Eaton
 1000 Eaton Boulevard
 Cleveland, OH 44122
 United States
 Eaton.com

Eaton's Cooper Power Systems Business
 2300 Badger Drive
 Waukesha, WI 53188
 United States
 Cooperpower.com

© 2014 Eaton
 All Rights Reserved
 Printed in USA
 Publication No. TD650023EN

Eaton and Cooper Power Systems are valuable trademarks of Eaton in the U.S. and other countries. You are not permitted to use these trademarks without the prior written consent of Eaton. IEEE Std 592™-2007 and Std 386™-2006 standards are trademarks of the Institute of Electrical and Electronics Engineers, Inc., (IEEE). This publication is not endorsed or approved by the IEEE.

For Eaton's Cooper Power Systems deadbreak junction product information call 1-877-277-4636 or visit: www.cooperpower.com.