

POWER DISTRIBUTION JUNCTION BARS



JUNCTION BARS

Ratings: (single or mixed configurations)

- 200 Amp
- 600 Amp
- 900 Amp

Voltage Class:

Up to 35 kV

Description:

Patton & Cooke junction bars are engineered for vault and apparatus applications requiring looping, tapping, and sectionalizing using separable insulated connectors. Designs support long-term operation in demanding electrical and environmental conditions. For L Splice or Y Splice configurations view the L&Y Splice Document or contact the factory.

Design & Compatibility:

- 200 Amp units feature a universal bushing well compatible with loadbreak or deadbreak bushing inserts
- Available in 200, 600, 900 Amp, or combination configurations
- Fully shielded and fully submersible construction
- Resistant to harsh chemicals and corrosive environments

Mounting Options:

- Universal mounting brackets with adjustable angles from 0° to 90°
- U-straps and custom mounting arrangements for sectionalizing cubicles
- Brackets manufactured from stainless steel or powder-coated mild steel
- Parking stands available in standard or custom configurations
- Parking stands constructed exclusively from stainless steel

Special Configurations:

- Stacked-style junction bars for space-constrained installations
- L Splice and Y Splice junction bars
- JBS-2B/1A/2B-19 stacked junction bar includes:
 - Central 200 Amp interface providing a ground point
 - 600 Amp interfaces that support four-point disconnect operation when equipped with vacuum switches



Stacked Style Junction Bars, JBS-2B/1A/2B-19, Functions as a Disconnect when Equipped with Vacuum Switches. Refer to page 3 for stacked-style junction bar details.



Manufactured to ANSI/IEEE Standard 386 Vault Installation using 6 Point Stacked Style Junction Bars



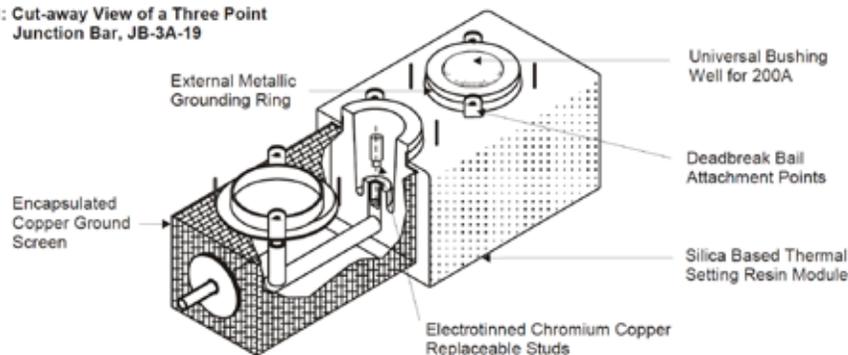
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UTILITY PRODUCTS

BENEFITS	FEATURES
All junction products are made exclusively with high conductivity copper components	<ul style="list-style-type: none"> No aluminum busbar ratings to worry about Higher current capacity than products made with aluminum components
Module vacuum cast from silica based thermal setting resin	<ul style="list-style-type: none"> Possesses high dielectric strength (600V/mil) Resistant to extreme temperatures Resistant to all acids, alkalis and solvents, e.g. cable cleaner, petro-chemicals Superior resistance to mechanical stress fracturing Reduces risk of amalgamation with rubber inserts and elbows
Integral mechanical cast design is solid	<ul style="list-style-type: none"> Module is rigid and will not deform under cable loading Provides excellent fault current withstand
Encapsulated copper screen for ground shielding	<ul style="list-style-type: none"> Solid ground between internal screen and surface of module, providing absolute ground fault protection Increases strength of module casting Internal ground system can not be damaged compared to an external system, extending the life of the module Module ground integrity is not compromised by external abuse or caustic environments Provides superior safety Reduces liability
Available with combinations of 200 Amp universal bushing wells and 600 Amp bushings	<ul style="list-style-type: none"> Saves space, all separable connectors can be mounted on one plane Saves time and money, as only one component is required Reduces inventory
Accepts both loadbreak and deadbreak inserts	<ul style="list-style-type: none"> Offers universal installation capabilities
200 Amp universal bushing wells are standard equipped with deadbreak bail attachment points	<ul style="list-style-type: none"> Prevents inadvertent removal of deadbreak elbow Increases safety
Metallic ring on 200 Amp universal bushing well	<ul style="list-style-type: none"> Ground shield is permanent Extends product life
200 Amp universal bushing well supplied with replaceable studs	<ul style="list-style-type: none"> Replaceability of individual components lengthens lifespan of unit Reduces downtime
Replaceable studs are electrotinned high strength chromium copper	<ul style="list-style-type: none"> Reduces damage resulting from over-torquing Eliminates galling between similar metals
Replaceable studs have full length internal hex	<ul style="list-style-type: none"> Allows removal of stud regardless of its size or condition
Both vault and sectionalizing cubicle mounting brackets are available	<ul style="list-style-type: none"> Adapts to all mounting requirements
Available for 200, 600 or 900 Amp current ratings	<ul style="list-style-type: none"> Product is available for any system requirement
Both inline and stacked styles available	<ul style="list-style-type: none"> Accommodates standard and limited space installations

FIGURE 1: Cut-away View of a Three Point Junction Bar, JB-3A-19



UTILITY PRODUCTS

ELECTRICAL RATINGS FOR SEPARABLE CONNECTORS

Description	15 kV Class Ratings	25 kV Class Ratings	35 kV Class Ratings
OPERATING VOLTAGE (Maximum continuous line-to-ground, 100% insulation system)	8.3 kV	15.2 kV	21.1 kV
BIL (@1.2 50 microseed	95 kV	125 kV	150 kV
WITHSTAND VOLTAGE AC (1 minute)	34 kV 53 kV	40 kV 78 kV	50 kV 103 kV
CORONA EXTINCTION LEVEL (min. @ 3pC)	11 kV	19 kV	26 kV
CURRENT 200 Amp Class Products Continuous operation Short-time 600 Amp Class Products Continuous operation Short-time		200 A* 10 kA sym. 10 Cycles 600 A* 25 kA sym. 10 Cycles	

All separable connectors are designed and manufactured to ANSI/IEEE Standard 386 and tested in accordance with IEEE #48.

Ratings are based on ANSI/IEEE standard and do not reflect maximum levels.

Application Considerations: This product is designed for use on grounded "Y" systems.

*Designed for 90°C maximum continuous operating temperature.

"STACKED STYLE" JUNCTION BAR FOR SEPARABLE CONNECTORS CATALOGUE NUMBERS

5 POINT

Illustration (not to scale)	Description	Catalogue Number	Dimensions			Weight
			Length	Width	Height	
	5 Point 5 x 200 Amp	JBS-2A/3A-X	14 1/2" 368 mm	8" 203 mm	4 3/4" 121 mm	30.0 lb 13.5 kg
	5 Point 2 x 200 Amp	JBS-2A/3B-X	14 1/2" 368 mm	8" 203 mm	8" 203 mm	39.0 lb 17.5 kg
	5 Point 2 x 600 Amp 1 x 200 Amp 2 x 600 Amp	JBS-2B/1A/2B-X	11 1/2" 292 mm	10 1/2" 267 mm	10" 254 mm	50.0 lb 23.0 kg

6 POINT

Illustration (not to scale)	Description	Catalogue Number	Dimensions			Weight
			Length	Width	Height	
	6 Point 6 x 200 Amp	JBS-3A/3A-X	17" 432 mm	8" 203 mm	4 3/4" 121 mm	36.0 lb 16.5 kg
	6 Point 3 x 200 Amp 1 x 600 Amp 2 x 200 Amp	JBS-3A/1B/2A-X	17" 432 mm	8" 203 mm	8" 203 mm	39.0 lb 17.5 kg
	6 Point 3 x 200 Amp 1 x 200 Amp 2 x 600 Amp	JBS-4A/2B-X	17" 432 mm	8" 203 mm	8" 203 mm	42.0 lb 19.0 kg



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Illustration (not to scale)	Description	Catalogue Number	Dimensions			Weight	Illustration (not to scale)	Description	Catalogue Number	Dimensions			Weight
			Length	Width	Height					Length	Width	Height	
	2 Point 200 Amp	JB-2A-x	8 1/2" 216 mm	4" 102 mm	4 3/4" 121 mm	9.0 lb 4.0 kg		3 Point 1 x 200 Amp 2 x 600 Amp	JB-1A/2B-x	13" 330 mm	4" 102 mm	8" 203 mm	21.0 lb 9.5 kg
	3 Point 200 Amp	JB-3A-x	13" 330 mm	4" 102 mm	4 3/4" 121 mm	14.0 lb 6.5 kg		3 Point 1 x 600 Amp 1 x 200 Amp 1 x 600 Amp	JB-1B/1A/1B-x	13" 330 mm	4" 102 mm	8" 203 mm	21.0 lb 9.5 kg
	4 Point 200 Amp	JB-4A-x	17" 432 mm	4" 102 mm	4 3/4" 121 mm	19.0 lb 8.5 kg		3 Point 2 x 200 Amp 1 x 600 Amp	JB-2A/1B-x	13" 330 mm	4" 102 mm	8" 203 mm	18.0 lb 8.0 kg
	5 Point 200 Amp	JB-5A-x	21" 533 mm	4" 102 mm	4 3/4" 121 mm	23.0 lb 10.5 kg		4 Point 1 x 200 Amp 3 x 600 Amp	JB-1A/3B-x	17" 432 mm	4" 102 mm	8" 203 mm	27.0 lb 12.0 kg
	6 Point 200 Amp	JB-6A-x	25" 635 mm	4" 102 mm	4 3/4" 121 mm	27.0 lb 12.0 kg		4 Point 2 x 200 Amp 2 x 600 Amp	JB-2A/2B-x	17" 432 mm	4" 102 mm	8" 203 mm	24.0 lb 11.0 kg
	2 Point 600 Amp	JB-2B-x	8 1/2" 216 mm	4" 102 mm	8" 203 mm	18.0 lb 8.0 kg		4 Point 3 x 200 Amp 1 x 600 Amp	JB-3A/1B-x	17" 432 mm	4" 102 mm	8" 203 mm	21.0 lb 9.5 kg
	3 Point 600 Amp	JB-3B-x	13" 330 mm	4" 102 mm	8" 203 mm	24.0 lb 11.0 kg		4 Point 1 x 600 Amp 2 x 200 Amp 1 x 600 Amp	JB-1B/2A/1B-x	17" 432 mm	4" 102 mm	8" 203 mm	24.0 lb 11.0 kg
	4 Point 600 Amp	JB-4B-x	17" 432 mm	4" 102 mm	8" 203 mm	30.0 lb 13.5 kg		5 Point 1 x 200 Amp 4 x 600 Amp	JB-1A/4B-x	21" 533 mm	4" 102 mm	8" 203 mm	35.0 lb 16.0 kg
	5 Point 600 Amp	JB-5B-x	21" 533 mm	4" 102 mm	8" 203 mm	38.0 lb 17.0 kg		5 Point 2 x 200 Amp 3 x 600 Amp	JB-2A/3B-x	21" 533 mm	4" 102 mm	8" 203 mm	32.0 lb 12.0 kg
	6 Point 600 Amp	JB-6B-x	25" 635 mm	4" 102 mm	8" 203 mm	45.0 lb 20.5 kg		5 Point 4 x 200 Amp 1 x 600 Amp	JB-4A/1B-x	21" 533 mm	4" 102 mm	8" 203 mm	26.0 lb 12.0 kg
	2 Point 900 Amp	JB-2H-x	8 1/2" 216 mm	4" 102 mm	8" 203 mm	18.0 lb 8.0 kg		5 Point 1 x 600 Amp 3 x 200 Amp 1 x 600 Amp	JB-1B/3A/1B-x	21" 533 mm	4" 102 mm	8" 203 mm	29.0 lb 13.0 kg
	3 Point 900 Amp	JB-3H-x	13" 330 mm	4" 102 mm	8" 203 mm	24.0 lb 11.0 kg		6 Point 3 x 200 Amp 3 x 600 Amp	JB-3A/3B-x	25" 635 mm	4" 102 mm	8" 203 mm	36.0 lb 16.5 kg
	4 Point 900 Amp	JB-4H-x	17" 432 mm	4" 102 mm	8" 203 mm	30.0 lb 13.5 kg		6 Point 1 x 600 Amp 4 x 200 Amp 1 x 600 Amp	JB-1B/4A/1B-x	25" 635 mm	4" 102 mm	8" 203 mm	33.0 lb 15.0 kg
	5 Point 900 Amp	JB-5H-x	21" 533 mm	4" 102 mm	8" 203 mm	38.0 lb 17.0 kg							
	6 Point 900 Amp	JB-6H-x	25" 635 mm	4" 102 mm	8" 203 mm	45.0 lb 20.5 kg							

SELECTION REMINDERS:

- Standard rating for all junction bars:
Voltage: to 35 kV, Impulse Voltage: 150 kV BIL,
Corona Extinction: to 26 kV BIL
- All junction bars are standard equipped with protective covers and mounting brackets or "V" straps. Parking stands are optional.
- Many combinations of 200, 600 or 900 Amp junction bars are available. Create your unique junction bar requirement, then contact factory.

ORDERING PROCEDURE:

- Determine the following: a) Maximum voltage, kV b) Current rating, Amp c) Number of positions required for installation.
- Select catalogue number of junction bar.
- Provide the maximum voltage, kV and substitute its corresponding corona extinction value for x in the catalog number.
- Specify if mounting brackets, "V" straps or parking stands are required.

Example: 25 kV (corona extinction = 19 kV), 200 Amp, 4 point
Junction Bar Catalogue Number **JB-4A-19**



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