

Pow-R-Way III

Pricing — Circuit Breaker Plug-in Units

Table 17-19. Circuit Breakers

100% rated breakers are not available for use in bus plugs. Contact Product Line for guidance.

Ampere Rating	Interrupting Rating (kA Symmetrical)			Breaker Type
	240V AC	480V AC	600V AC	
15 – 60	18	14	—	EHD
70 – 100	18	14	—	EHD
15 – 60	18	14	14	FDB
70 – 100	18	14	14	FDB
110 – 150	18	14	14	FDB
15 – 60	65	25	18	FD
70 – 100	65	25	18	FD
110 – 150	65	25	18	FD
175 – 225	65	25	18	FD
15 – 60	100	65	25	HFD
70 – 100	100	65	25	HFD
110 – 150	100	65	25	HFD
175 – 225	100	65	25	HFD
15 – 60	200	100	35	FDC
70 – 100	200	100	35	FDC
110 – 225	200	100	35	FDC
15 – 100	200	150	—	FCL
100 – 225	65	—	—	ED
100 – 225	100	—	—	EDH
100 – 225	200	—	—	EDC
70 – 225	65	35	18	JD, JDB
250	65	35	18	JD, JDB
70 – 225	100	65	25	HJD
250	100	65	25	HJD
70 – 225	200	100	35	JDC
250	200	100	35	JDC
125 – 250	200	200	—	LCL
250 – 400	65	—	—	DK
100 – 400	65	35	25	KD, KDB
100 – 400	100	65	35	HKD
100 – 400	200	100	50	KDC
200 – 400	200	200	—	LCL
300 – 600	65	35	25	LD, LDB
300 – 600	100	65	35	HLD
300 – 600	200	100	50	LDC
400 – 800	65	50	25	MDL
400 – 800	100	65	35	HMDL
400 – 800	65	50	25	ND
400 – 800	100	65	35	HND
400 – 800	200	100	50	NDC
600 – 1200	65	50	25	ND
600 – 1200	100	65	35	HND
600 – 1200	200	100	50	NDC

Table 17-20. Branch Devices Earth Leakage Ground Fault Circuit Breakers (Adjustable pickup from 30 ma to 30A)

Ampere Rating	kAIC (sym).	Breaker Type
	480V AC	
35 – 60	25	ELFD
70 – 100	25	ELFD
110 – 150	25	ELFD
35 – 60	65	ELHFD
70 – 100	65	ELHFD
110 – 150	65	ELHFD
35 – 60	100	ELFDC
70 – 100	100	ELFDC
110 – 150	100	ELFDC
100 – 250	35	ELJD
100 – 250	65	ELHJD
100 – 250	100	ELJDC
200 – 400	35	ELKD
200 – 400	65	ELHKD
200 – 400	100	ELKDC

Table 17-21. Integrally Fused, Current Limiting Circuit Breaker

Ampere Rating	Interrupting Rating (kA Symmetrical)			Breaker Type
	240V AC	480V AC	600V AC	
15 – 100	200	200	200	FB-P
125 – 225	200	200	200	LA-P
250 – 400	200	200	200	LA-P
400 – 600	200	200	200	NB-P
700 – 800	200	200	200	NB-P

Table 17-22. Breaker Unit Catalog Numbering System

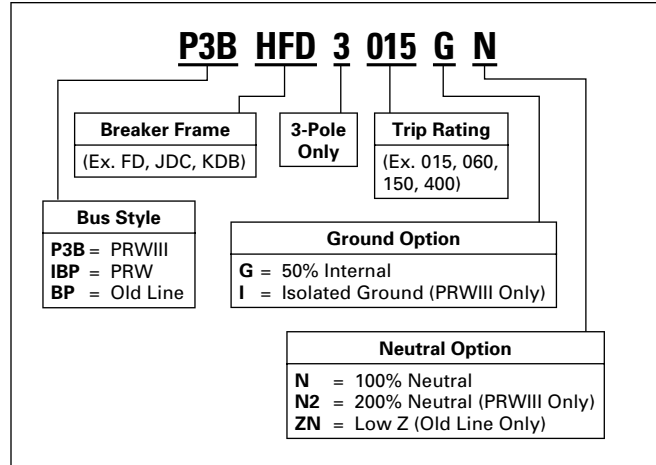
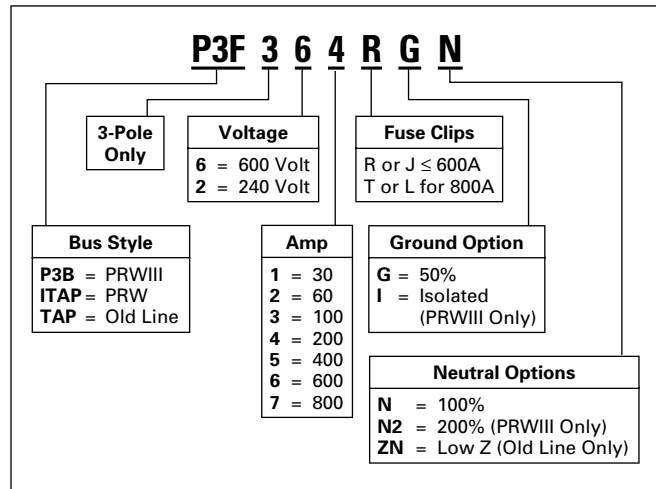


Table 17-23. Fusible Unit Catalog Numbering System



Note: "J" clips are standard for PRW and Old Line unless specified by adding "R" in catalog number.

Note: Please call Greenwood Low Voltage Busway department for help in assigning a catalog number for a specific application.

Note: Do not leave spaces between characters. Example: P3BFD3100N; ITAP361N.

Note: The enclosures for breaker plugs will no longer be available. Effective immediately, stocked enclosures will be eliminated from Vista.

Discount Symbol CE4

Pow-R-Way III

Features, Benefits and Functions

Pow-R-Way III Offers a Full Line of Low Voltage Busway to Meet the Needs of the Global Marketplace

Cutler-Hammer has combined the requirements of NEMA, UL, CSA and IEC into one design to present a world-class product in Pow-R-Way III. With standard features that include a two-piece aluminum housing, finger safe plug-in outlets, an integral ground path and high 6-cycle short circuit withstand ratings, Pow-R-Way III provides a busway system that can be utilized over a broad spectrum of industrial, commercial and institutional applications worldwide.

Product Offering

■ Plug-in Busway

225 to 5000A copper and 225 to 4000A aluminum straight sections of plug-in busway are available in 24-inch (610 mm) incremental lengths from a 2-foot (610 mm) minimum to 10-foot (3048 mm) maximum. Sprinkler-proof plug-in busway is an available option.

■ Feeder Busway

225 to 5000A copper and 225 to 4000A aluminum straight sections of indoor and outdoor feeder busway available in any length in 1/8-inch increments from a 21-inch (533 mm) minimum to a 10-foot (3048 mm) maximum. A wide range of fittings are available in indoor or outdoor feeder busway.

■ Plug-in Units

A full family of busway plug-in units are available. Standard plug-in units include fusible or circuit breaker protection. Advanced plug-in units include Clipper™ TVSS surge suppression, communicating IQ Energy Sentinel™ and OPTIM™ Circuit Breakers, and Advantage combination contactors and starters.

Product Features and Benefits

- The all aluminum two-piece housing provides durability and product integrity.
- The lightweight and compact design results in easy installation.

- The housing combined with a true sandwich design in both plug-in and feeder busway contributes to improved coordination and high short circuit ratings.
- An epoxy insulation process ensures optimum conductor and system protection.
- Silver-plated joint and contact surfaces provide high-quality connections.
- Highly automated manufacturing processes result in a superior product.
- The Pow-R-Bridge joint package and torque indicating bolt gives a rugged, yet flexible and easy-to-install connection.
- Corner Joint Elbows contribute to successful layouts and minimize space limitations.
- High 6-cycle short circuit ratings optimize coordination between busway and power equipment.
- This world-class product design and manufacturing meets the requirements of NEMA, CSA, IEC, British standards, Seismic, and ISO.
- Plug-in busway design and an enhanced bus plug-in unit facilitates installation and improves safety.
- Flexible ground and neutral options provide solutions for any application problem.
- A full family of plug-in units are available for every power need.
- Advanced bus plugs provide protection, communication and coordination capabilities.

Busway Capabilities

- Stock busway pieces and plug-in units are available for immediate shipment in select ampere ratings and system configurations.
- The busway manufacturing plant in Greenwood, SC is able to meet your emergency or quick ship requirements with quick ship leadtimes from 1 day to 2 weeks.
- Customer approval drawings can be available in 2 weeks or less to meet your project requirements.
- Cutler-Hammer's Final Field Fit program ensures accurate layout and allows for minor last-minute modifications during installation.

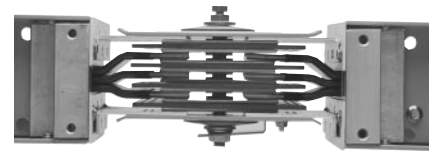
- Advanced system tools including Bid Manager, Pow-R-Designer™, and the Busway LV Expert-AI program provide quick and accurate product information.

Product Support

- Busway product and application support are available from a professional team of Cutler-Hammer employees that include Field Sales Engineers, Application Engineers, Engineering Service Systems and the Greenwood Busway Product Engineering Services.

Additional Pow-R-Way III Information

Technical Data:	TD.42A.01.T.E
Brochure:	B.42A.01.S.E
Busway vs. Cable and Conduit:	SA.42A.01.S.E
Final Field Fit Program:	SA.42A.02.S.E
Selling Policy:	25-000
Discount Symbol:	CE3-LV Busway CE4-LV Busway Devices



Bridge Joint Assembly

Standards and Certifications

- Pow-R-Way III meets the requirements of NEMA, UL857, CSA C22.2 No. 27-94, IEC 439-1, 2 and 4, British Standards 5490, IEEE, ANSI, and is manufactured in an ISO 9002 certified facility.
- Pow-R-Way III is certified in the Uniform Building Code and the California Building Code to exceed Zone 4 requirements.

Pow-R-Way III

Plug-in Busway

- A. Where required, busway shall be of the plug-in type. Plug-in busway shall be available in standard 2-, 4-, 6-, 8-, and 10-foot lengths, with plug-in openings provided on both sides of the busway sections on 24-inch (610 mm) centers. Plug-in covers shall prevent dirt and debris from entering contact plug-in openings in the busway. The design shall allow for ten (10) hinged cover outlets per ten (10) feet of plug-in length. Covers for plug-in openings shall have a positive screw close feature and provisions for the installation of power company seals. The contact surfaces for bus plug stabs shall be silver-plated of the same material, thickness, and rating as the slab bars. The tabs shall be welded to the bus bars. A standard housing ground connection shall be supplied in each plug-in opening. Positive mechanical guides for plug-in units shall be provided at each plug-in opening to facilitate unit alignment and prevent improper installation.
- B. Where required, plug-in units of the types and ratings indicated on the plans and specifications shall be supplied. Plug-in units shall be mechanically interlocked with the busway housing to prevent their installation or removal when the switch is in the ON position. The enclosure of any plug-in unit shall make positive ground connection to the duct housing before the stabs make contact with the bus bars. All plug-in units shall be equipped with a defeatable interlock to prevent the cover from being opened while the switch is in the ON position and prevent accidental closing of the switch while the cover is open. The plugs shall be provided with a means for padlocking the cover closed and padlocking the disconnect device in the OFF position. The operating handle and mechanism shall remain in control of the disconnect device at all times, permitting its easy operation from the floor by means of a hookstick or chain. For safety reasons, no projections shall extend into the busway housing other than the plug-in stabs. All plug-in units shall be interchangeable without alteration or moderation of plug-in duct.
- C. Fusible-type plugs shall have a quick-make/quick-break disconnect switch and positive pressure fuse clips
- OR –
- C. Circuit-breaker-type plugs shall have an interrupting rating of not less than — symmetrical rms amperes or be series-rated as otherwise shown in the contract document and shall meet all requirements of UL Standard 489. It shall be possible to increase the interrupting rating of a breaker plug-in device having ampere ratings through 400A up to 100 kAIC at 480V AC and 200 kAIC at 240V AC by changing out the circuit breaker only and leaving the enclosure intact. All breaker plug-in devices shall be Cutler-Hammer-type Series C.

Transient Voltage Surge Suppression

- A. Provide transient voltage surge suppression as specified in section 16671.