Features, Benefits and Functions

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

Eaton 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 used over a broad spectrum of industrial, commercial and institutional applications worldwide.

Product Offering

- **Plug-In Busway**
  225–5000 A copper and 225–4000 A aluminum straight sections of plug-in busway are available in 2 ft (0.6 m) incremental lengths from a 2 ft (0.6 m) minimum to 10 ft (3 m) maximum. Plug-in busway is also available as sprinkler proof
- **Feeder Busway**
  225–5000 A copper and 225–4000 A aluminum straight sections of indoor and outdoor feeder busway available in any length in 1/8-inch (3.2 mm) increments from a 16-inch (406 mm) minimum to a 10-foot (3 m) maximum. A wide range of fittings are available in indoor sprinkler-proof, or outdoor feeder busway
- **Plug-In Units**
  A full family of busway plug-in units is available. Standard plug-in units include fusible or circuit breaker protection. Advanced plug-in units include Visor Series surge suppression, communicating IQ Energy Sentinel and OPTIM circuit breakers, and Advantage combination contactors and starters. A full line of receptacle plug-in units are available

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 improve 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, Seismic and ISO® and IEEE®
- 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 is available for every power need
- Advanced bus plugs provide protection, communication and coordination capabilities

Busway Capabilities

- The busway manufacturing plant in Greenwood, SC, is able to meet your emergency or quick ship requirements with quick ship lead-times from 3 days to 2 weeks
- Customer approval drawings can be available in *2 weeks or less* to meet your project requirements
- Eaton's final field fit program ensures accurate layout and allows for minor last-minute modifications during installation
- Advanced system tools including Bid Manager™ programs provide quick and accurate product information

Standards and Certifications

- Pow-R-Way III meets the requirements of NEMA, UL 857, CSA C22.2 No. 27-94, IEEE, ANSI, IEC 439-1 and 2, IEC 529 and is manufactured in an ISO 9001 certified facility
- Pow-R-Way III meets the International Building Code standards and is certified in the Uniform Building Code® and the California Building Code to exceed Zone 4 requirements
- ANSI, NEMA, IEEE, CSA, UL 857
- 10 kAIC rms symmetrical
- Fused duplex—40 A maximum
- Single—70 A maximum
- Quad—125 A maximum

Product Support

Busway product and application support is available from a professional team of Eaton employees that includes field sales engineers, application engineers, engineering service systems and the greenwood busway product engineering services.

Additional Programs

Final Field Fit—This program was established to effectively manage the dimensional uncertainties that are often inherent in bus duct layouts. This program provides the assurance of an exact fit the first time. It allows for bus duct runs to be released for manufacture when certain dimensions are not yet determined. It also eliminates the costly delays that can occur when sections have to be remade in order to accommodate last-minute job site changes in routing. For program details, please see publication SA01702001E.

Field Measurements—For larger and more complex projects, Eaton will provide factory assistance with taking busway layout measurements. We will take full accountability of all measurements and will ensure an exact fit. Contact your local Eaton sales office for pricing and availability.

Additional Information

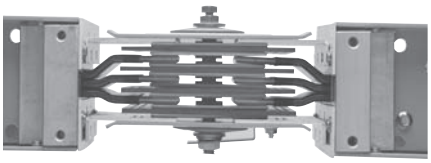
- Product Brochure: BR01701001E
- Technical Data: TD01701003E
- Consulting Application Guide: CA08104001E
- Electrical Solutions Catalog: CA08105001E
- ABCs of Planning/ Installation: IM01701002E
- Services and Solutions: BR01701002E

Pow-R-Way III

- Technical Data: TD01701003E
- ABCs of Busway: IM01701002E
- Brochure: BR01701001E

Service and Solutions

- Installation and Maintenance: IB01701001E
- Selling Policy: 25-000
- Discount Symbol: CE3-LV Busway CE4-LV Busway Devices



Bridge Joint Assembly

Catalog Number Selection

Breaker Unit

P3B HFD 3 015 G N

Bus Style
P3B = PRWIII
IBP = PRW
BP = Old line

Breaker Frame
(Ex. FD, JDC, KDB)

Three-Pole Only

Trip Rating
(Ex. 015, 060, 150, 400)

Ground Option
G = 50% internal
I = Isolated ground (PRWIII only)

Neutral Option
N = 100% neutral
N2 = 200% neutral (PRWIII only)
ZN = Low Z (old line only)

Fusible Unit

P3F 3 6 4 R G N H

Bus Style
P3F = PRWIII
ITAP = PRW
TAP = Old line

Three-Pole Only

Voltage
6 = 600 V
2 = 240 V

Amps
1 = 30
2 = 60
3 = 100
4 = 200
5 = 400
6 = 600
7 = 800

Fuse Clips
H, J, or R ≤ 600 A
T or L for 800 A

Ground Option
G = 50%
I = Isolated (PRWIII only)

Neutral Option
N = 100% neutral
N2 = 200% neutral (PRWIII only)
ZN = Low Z (old line only)

Mounting Options for P3F (30–200 A Only)
H = Horizontal
V = Vertical

SPD Series Bus Plug

P3BSPD 250 480Y 2 C

Fixed—do not change

Surge Rating (kA/Phase)

50	**200**
80	**250**
100	**300**
120	**400**
160	

Voltage Code
208Y = 208Y/120 V (4W + G)
400Y = 400Y/230 V (4W + G)
480Y = 480Y/277 V (4W + G)
600Y = 600Y/347 V (4W + G)
240D = 240 Delta (3W + G)
480D = 240 Delta (3W + G)
600D = 240 Delta (4W + G)

Fixed—do not change

Option Code
1 = Basic—Dual-colored LED per phase to indicate protection status of the N-G mode on units with a neutral wire, single-colored LED to indicate the lack of a neutral wire connection on systems with a neutral wire.
2 = Standard—Dual-colored LED per phase to indicate protection status of the N-G mode on units with a neutral wire, single-colored LED to indicate the lack of a neutral wire connection on systems with a neutral wire, audible alarm with silence button and Form C relay contact.
3 = Standard + Surge Counter—Dual-colored LED per phase to indicate protection status of the N-G mode on units with a neutral wire, single-colored LED to indicate the lack of a neutral wire connection on systems with a neutral wire, audible alarm with silence button, Form C relay contact, EMI/RFI filtering providing up to 50 dB of noise attenuation from 10 kHz to 100 MHz and surge counter with reset button.

NEMA Receptacle Configuration

L 5 15 R

Blade
Blank = Straight blade
L = Locking blade

Voltage

1 = 125 V, two-pole, two-wire	**11** = 250 V, three-pole, three-wire
2 = 250 V, two-pole, two-wire	**14** = 25/250 V, three-pole, four-wire
5 = 125 V, two-pole, three-wire	**15** = 250 V, three-pole, four-wire
6 = 250 V, two-pole, three-wire	**18** = 120/208 V, four-pole, four-wire
10 = 125/25 V, three-pole, three-wire	**21** = 120/208 V, four-pole, five-wire

Amps

15	**40**
20	**50**
30	**60**

Receptacle Type
R = Receptacle
C = Cord receptacle

Notes

"H" clips are standard for PRW and old line unless specified by adding "R" in catalog number.

Please call Greenwood low voltage busway department for help in assigning a catalog number for a specific application.

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

All plug-in units come fully assembled.

Fusible Plug-In Units

Pow-R-Way III Plug-In Opening

Fusible Plug-In Units

Ampere Rating	Three-Wire Plug 600 V Catalog Number ①	Three-Wire Plug 240 V Catalog Number ①	100% Neutral Stab Catalog Number	50% Internal Ground Stab Catalog Number	50% Isolated Ground Stab Catalog Number	200% Neutral Stab Catalog Number
30 (Horizontal)	**P3F361RGH**	**P3F321RGH**	②	②	②	②
30 (Vertical)	**P3F361RGV**	**P3F321RGV**	②	②	②	②
60 (Horizontal)	**P3F362RGH**	**P3F322RGH**	②	②	②	②
60 (Vertical)	**P3F362RGV**	**P3F322RGV**	②	②	②	②
100 (Horizontal)	**P3F363RGH**	**P3F323RGH**	②	②	②	②
100 (Vertical)	**P3F363RGV**	**P3F323RGV**	②	②	②	②
200 (Horizontal)	**P3F364RGH**	**P3F324RGH**	②	②	②	②
200 (Vertical)	**P3F364RGV**	**P3F324RGV**	②	②	②	②
400	**P3F365R**	**P3F325R**	**P3FN400**	**P3FG400**	**P3FI400**	—
600	**P3F366R**	**P3F326R**	**P3FN600**	**P3FG800**	**P3FI800**	—
800	**P3F367T**	**P3F327T**	**P3FN800**	**P3FG800**	**P3FI800**	—

- Fuses are not included
- Mechanical lugs are provided. Compression lugs are available for fusible plug-in units rated at 400 A and above. If compression lugs are required, the cable size must be specified
- Plug-in unit, neutral and ground are ordered and shipped assembled

Note: See **Page V2-T6-14** for plug assembled style number configuration.

- Housing ground connection supplied as standard at no additional charge
- R-Fuse clips are supplied as standard
- If J-Fuse clips are required, replace "R" in the catalog number with a "J" (30–600 A, 600 V only)
- 800 A, 600 V also available with L-Fuse clips; replace "T" in the catalog number with "L

Pow-R-Way III Plug (Rear View)

Special Industry Fusible Plug-In Units

Ampere Rating	Enclosure 600 V Catalog Number	100% Neutral Stab Catalog Number	50% Internal Ground Stab Catalog Number	50% Isolated Ground Stab Catalog Number	Terminal Kit Compression Lugs		
					Number Per Phase	Wire Size	Catalog Number
30	**P3F361H**	③	③	③	1	1–#12 to #10	**CTK30SC**
60	**P3F362H**	③	③	③	1	1–#8	**CTK60SC**
100	**P3F363H**	③	③	③	1	1–#4	**CTK100SC**
200	**P3F364H**	③	③	③	1	1–2/0	**CTK200BSC**
400	**P3F365H**	③	③	③	1	1–750 kcmil	**CTK400SPW**
600	**P3F366H**	③	③	③	2	2–500 kcmil	**CTK600DPM**

- Fuses are not included
- Housing ground connection supplied as standard at no additional charge
- Grounding compression lug included on 200 A and above. Lugs are ordered and shipped separately; fuses are not included
- H-Fuse clips are supplied as standard
- If J- or R-Fuse clips are required, order by description

Notes

① "H" and "V" do not denote mounting orientation of the bus plug. Horizontal (H) and Vertical (V) refer to the orientation of the bus system that the plug will be installed on.

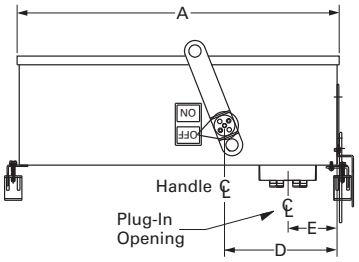
② Neutral and ground kits are not capable of being field installed in these units. Order bus plugs with fully assembled part numbers. See Catalog Number Selection on **Page V2-T6-14** for details.

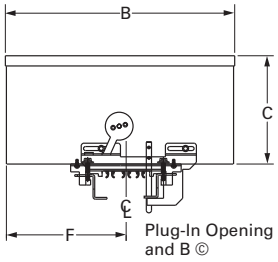
③ Grounds and neutrals must be factory assembled. Order by description. See **Page V2-T6-22.**

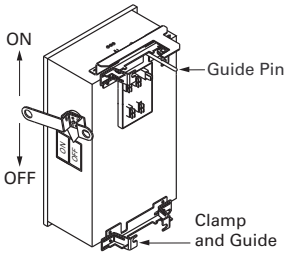
Approximate Dimensions in Inches (mm)

Plug-In Units—Physical Data

Bus Plugs







Plug-In Units

Plug-In Unit	Max. Amperes	Max. Vac	Dimensions A	B	C	D	E	F	Mechanical Terminal Wire Range Per Phase (mm²)	Approx. Weights Lbs (kg)
Circuit Breaker Plug-In Units										
P3BFD (E- & F-Frame)	225	600	21.20 (538.5)	12.36 (314.0)	5.43 (138.0)	4.00 (101.6)	6.25 (158.8)	6.06 (153.7)	100A–(1) #14–1/0 (2.5–50) 150A–(1) #4–4/0 (25–95)	25 (11.3)
P3BJD (J-Frame)	250	600	23.26 (590.8)	12.36 (314.0)	6.97 (177.0)	4.00 (101.6)	10.44 (265.2)	6.06 (153.7)	250A–(1) #14–350 kcmil (25–185) 225A–(1) 3–350 kcmil (35–185)	47 (21.3)
P3BKD (K-Frame)	400	600	34.41 (874.0)	13.29 (337.6)	7.79 (197.9)	4.00 (101.6)	12.56 (319.0)	6.64 (168.7)	350A–(1) 250–500 kcmil (120–240) 400A–(2) 3/0–250 kcmil (45–120)	53 (24.0)
P3BLD (L-Frame)	600	600	41.91 (1064.5)	19.65 (499.1)	10.15 (257.8)	4.00 (101.6)	17.38 (441.5)	9.83 (249.7)	400A–(1) 4/0–600 kcmil (120–300) 600A–(2) 400–500 kcmil (185–240)	75 (34.0)
P3BMDL (MDL-Frame)	800	600	45.89 (1165.6)	19.65 (499.1)	10.15 (257.8)	4.00 (101.6)	17.38 (441.5)	9.83 (249.7)	600A–(2) #1–500 kcmil (50–240) 800A–(2) 500–750 kcmil (300–400)	136 (61.7)
P3BND (N-Fame)	800	600	45.98 (1167.9)	19.65 (499.1)	10.15 (257.8)	4.00 (101.6)	17.38 (441.5)	9.83 (249.7)	700A–(2) # 1–500 kcmil (50–240) 800A–(3) 3/0–400 kcmil (95–185)	138 (62.6)
P3BLAP (TRI-PAC)	400	600	45.89 (1165.6)	19.65 (499.1)	10.15 (257.8)	4.00 (101.6)	13.80 (350.5)	9.83 (249.7)	225A–(1) #6–350 kcmil (16–185) 400A–(1) #4–250 kcmil and (1) 3/0–600 kcmil (25–120 and 95–300)	96 (43.5)
P3BLCL	400	600	41.86 (1063.2)	19.65 (499.1)	10.15 (257.8)	4.00 (101.6)	13.80 (350.5)	9.83 (249.7)	(1) #4–250 kcmil (25–120) and (1) 3/0–600 kcmil (95–300)	88 (39.9)
Fusible Plug-In Units										
P3F321RGH	30	240	14.72 (373.9)	13.92 (353.7)	8.46 (214.8)	3.85 (97.7)	7.95 (202.0)	5.66 (143.7)	Cu (1) #14–#3 (2.5–35)	32 (14.5)
P3F321RGV	30	240	15.85 (402.5)	14.03 (356.3)	8.46 (214.8)	3.85 (97.7)	6.72 (170.6)	5.66 (143.7)	Al (1) #12–#2 (3.2–35)	32 (14.5)
P3F361RGH	30	600	14.72 (373.9)	13.92 (353.7)	8.46 (214.8)	3.85 (97.7)	7.95 (202.0)	5.66 (143.7)	Cu (1) #14–#3 (2.5–35)	32 (14.5)
P3F361RGV	30	600	15.85 (402.5)	14.03 (356.3)	8.46 (214.8)	3.85 (97.7)	6.72 (170.6)	5.66 (143.7)	Al (1) #12–#2 (3.2–35)	32 (14.5)
P3F322RGH	60	240	14.88 (377.9)	17.92 (455.3)	8.37 (212.5)	3.85 (97.7)	11.95 (303.6)	5.66 (143.7)	Cu (1) #14–#3 (2.5–35)	40 (18.1)
P3F322RGV	60	240	19.85 (504.1)	14.16 (359.6)	8.37 (212.5)	3.85 (97.7)	6.84 (173.8)	5.66 (143.7)	Al (1) #12–#2 (3.2–35)	40 (18.1)
P3F362RGH	60	600	14.88 (377.9)	17.92 (455.3)	8.37 (212.5)	3.85 (97.7)	11.95 (303.6)	5.66 (143.7)	Cu (1) #14–1/0 (2.5–50)	40 (18.1)
P3F362RGV	60	600	19.85 (504.1)	14.16 (359.6)	8.37 (212.5)	3.85 (97.7)	6.84 (173.8)	5.66 (143.7)	Al (1) #12–1/0 (3.2–50)	40 (18.1)
P3F323RGH	100	240	14.88 (377.9)	17.92 (455.3)	8.37 (212.5)	3.85 (97.7)	11.95 (303.6)	5.66 (143.7)	Cu (1) #14–1/0 (2.5–50)	40 (18.1)
P3F323RGV	100	240	19.85 (504.1)	14.16 (359.6)	8.37 (212.5)	3.85 (97.7)	6.84 (173.8)	5.66 (143.7)	Al (1) #12–1/0 (3.2–50)	40 (18.1)
P3F363RGH	100	600	14.88 (377.9)	17.92 (455.3)	8.37 (212.5)	3.85 (97.7)	11.95 (303.6)	5.66 (143.7)	Cu (1) #4–250 kcmil (25–120)	40 (18.1)
P3F363RGV	100	600	19.85 (504.1)	14.16 (359.6)	8.37 (212.5)	3.85 (97.7)	6.84 (173.8)	5.66 (143.7)	Al (1) #4–250 kcmil (25–120)	40 (18.1)
P3F324RGH	200	240	17.42 (442.5)	21.98 (558.3)	8.52 (216.3)	3.85 (97.7)	15.44 (392.1)	6.80 (172.8)	Cu (1) #4–250 kcmil (25–120)	56 (25.4)
P3F324RGV	200	240	23.80 (604.5)	16.64 (422.8)	8.52 (216.3)	3.85 (97.7)	8.26 (209.8)	6.80 (172.8)	Al (1) #4–250 kcmil (25–120)	56 (25.4)
P3F364RGH	200	600	17.42 (442.5)	21.98 (558.3)	8.52 (216.3)	3.85 (97.7)	15.44 (392.1)	6.80 (172.8)	Cu (1) #4–600 kcmil (25–300)	56 (25.4)
P3F364RGV	200	600	23.80 (604.5)	16.64 (422.8)	8.52 (216.3)	3.85 (97.7)	8.26 (209.8)	6.80 (172.8)	Al (1) #4–600 kcmil (25–300)	56 (25.4)
P3F325R	400	240	48.85 (1242.1)	21.22 (539.0)	10.07 (255.8)	4.00 (101.6)	10.69 (271.5)	10.69 (271.5)	Cu/Al (1) 250–750 kcmil (127–380)	77 (34.9)
P3F365R	400	600	48.85 (1242.1)	21.22 (539.0)	10.07 (255.8)	4.00 (101.6)	10.69 (271.5)	10.69 (271.5)	Cu/Al (1) 250–750 kcmil (127–380)	77 (34.9)
P3F365HR	400	600	23.59 (599.2)	21.22 (539.0)	21.00 (533.4)	4.00 (101.6)	10.69 (271.5)	10.69 (271.5)	Cu/Al (2) 3/0–250 kcmil (85–127)	81 (36.7)
P3F326R	600	240	48.90 (1242.1)	26.31 (668.3)	10.59 (270.0)	4.00 (101.6)	13.16 (334.3)	13.16 (334.3)	Cu/Al (2) #2–600 kcmil (35–300)	82 (37.1)
P3F366R	600	600	48.90 (1242.1)	26.31 (668.3)	10.59 (270.0)	4.00 (101.6)	13.16 (334.3)	13.16 (334.3)	Cu/Al (3) #2–600 kcmil (25–300)	82 (37.1)
P3F327R	800	240	48.90 (1242.1)	26.31 (668.3)	10.59 (270.0)	4.00 (101.6)	13.16 (334.3)	13.16 (334.3)	Cu/Al (3) #2–600 kcmil (25–300)	108 (49.0)
P3F367R	800	600	48.90 (1242.1)	26.31 (668.3)	10.59 (270.0)	4.00 (101.6)	13.16 (334.3)	13.16 (334.3)	Cu/Al (3) #2–600 kcmil (25–300)	108 (49.0)