

NEW!

from

EXACTPOWER[®]

Middle Atlantic Products

POWERCORE™ Isolation Transformer System

This multifunctional unit provides conditioned and protected “same-phase” power, and a new separately derived reference ground for a residential home theaters and AV systems. PowerCore™ Systems eliminate most common causes of hum and buzz -including lighting system dimming noise, removes ground loop problems and prevents most control system reboots and lockups. Properly installed, PowerCore Systems eliminate the need for expensive rackmount surge/spike protection and power conditioners while providing dedicated power circuits for not only A/V in the rack, but also for phone and security systems and TV’s in bedrooms.

Key Features

- True single-phase output – not “center tapped split-single phase”
- Creates new reference single-point ground (SPG)
- All circuits on same phase, eliminating cross phase interference
- Double electrostatic (Faraday) shields for voltage spike and noise attenuation
- Advanced transformer winding techniques compensate for harmonic voltage distortion



(see inside for dimensions)

- Proprietary core minimizes eddy currents and stray losses, reducing heat
- Wound with flat-ribbon wire for high energy efficiency
- 146dB common-mode noise rejection before additional filtering/conditioning
- Passively vented – no fans required
- Heavy-duty components and construction for long life
- UL Listed in USA and Canada

Basic Operation

A standard 240V feed is transformed into all in-phase 120V outputs with a new reference ground. PowerCore comes with an integrated main breaker/disconnect, and integrated branch circuit load center. StrikeShield™ surge protection and integrated power conditioning filter are pre-installed at the factory. Four standard sizes are available: 62A to 208A output (at 120V). Prewired, this compact unit is ready to be quickly installed.

NOTE

The technology used in this system is more effective than “balanced” power systems, which are prohibited in residential installations by the 2008 National Electrical Code. (Article 647.3).



Installation Location

PowerCore™ is compact in size and flexible in installation. The unit is housed in a magnetically shielded steel NEMA Type I enclosure that is floor mounted.

For optimal performance, it is desirable to locate the unit as closely as practical (80' typical effective range; the closer the better) to the equipment rack in a dry, ventilated area.

Electrical Requirements and Weights

The PowerCore™ unit requires a 240VAC feeder circuit from the house main panel. (208V versions are also available)

Unit Capacity	Feeder 2 Pole CB	Feeder Conductors	Total Max Primary Load at 240V	Total Max Secondary Load at 120V	Branch Circuit Breakers Included	Shipping/Net Weight
7.5 kVA	40 Amp	#8	31 Amps	62 Amps	Yes	325/220 lbs.
10 kVA	60 Amp	#4	42 Amps	83 Amps	Yes	350/240 lbs.
15 kVA	80 Amp	#3	62 Amps	125 Amps	Yes	400/285 lbs.
25kVA	150 Amp	#1/0	104 Amps	208 Amps	Yes	500/380 lbs.

Notes: National and local codes and field conditions must take precedence over these guidelines.



Feeder Hookup

Connect the 240V feeder using the appropriate wiring method and connector, using the combination knockouts provided. Cable management tie points have been provided for easy and effective conductor routing. There is also a separate knockout for a local grounding electrode conductor.

Branch Circuit Hookups

Because all the hot legs are in-phase, this unit cannot be used with 3-wire branch circuits that share a neutral. ½" branch circuit knockouts are provided. Inside the unit, cable management tie points provide a means of separation between the feeder line and load conductors.



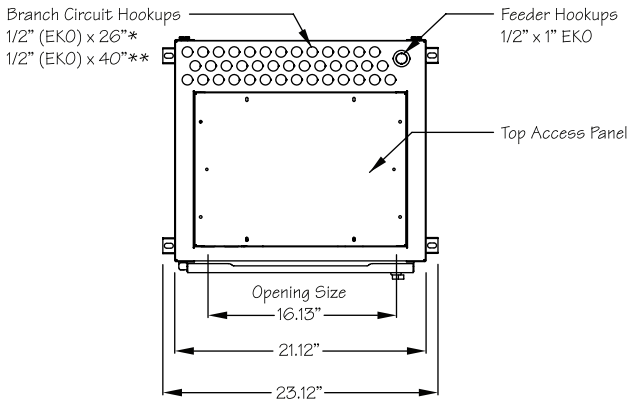
Built-in Surge/Spike Protection

StrikeShield™ surge protection is pre-installed at the factory. StrikeShield protects branch circuits and connected equipment from voltage surges, such as power grid switching and house load spikes. LED indicators provide visual notification to indicate proper operation and protection status. Terminals provided to connect notification to control systems. Surge capacity current rating is 100,000 Amps, <1 nanosecond response time, UL 1449 3rd Edition.

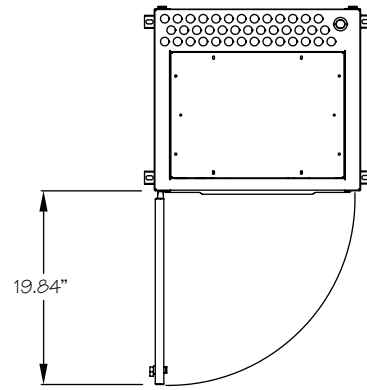
Integrated Power Conditioner

The integrated Power Conditioning module is pre-installed at the factory. The conditioner is an optimized third-order, low-pass filter, constructed using efficient passive components to reject high frequency line noise.

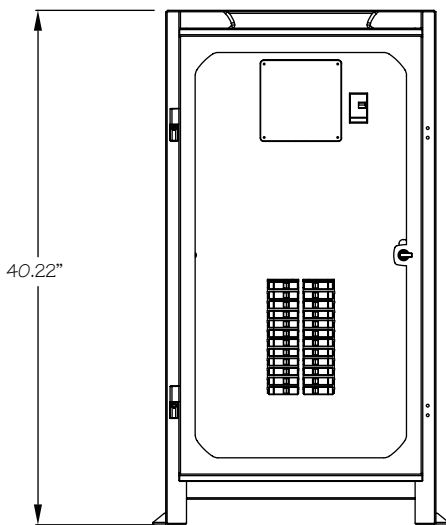




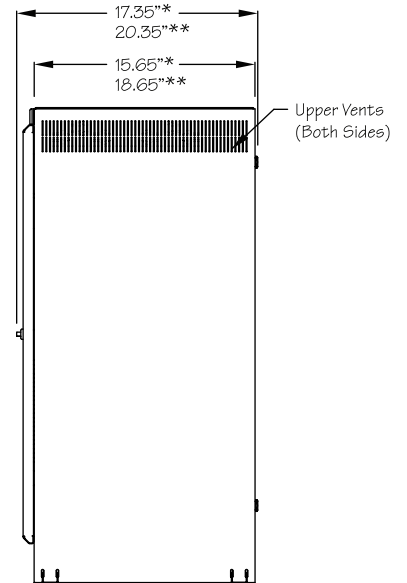
Top View



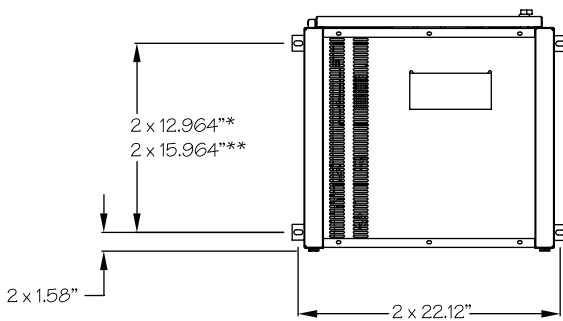
Door Swing



Front View

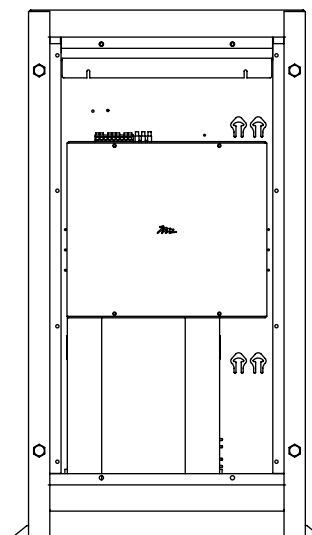


Side View



Bottom View

(Floor mounting locations - feet are removable)



Rear View

(Panel removed for clarity)

* for 7.5 and 10 kVA models ** for 15 and 25 kVA models

Industry-Standard SquareD® Breakers



Integrated Load Center

Circuit breaker quantity varies according to size (kVA)



**240V Main
Disconnect**

Integrated Surge & Spike Protection & Power Conditioner



**StrikeShield™ Surge
Protection Device (SPD)**



**Integrated Power
Conditioner**

WARRANTY INFORMATION

All PowerCore™ systems are backed by a 5 (five) year transferable warranty. Exact Power warrants these products to be free of any defects in parts or labor in manufacture and fully functional for their intended purpose. Exact Power cannot be responsible for errors in installation or misuse. PowerCore™ systems must be installed by qualified electrical contractors to secure warranty coverage.

EXACTPOWER®

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