

# Empowering Facilities for a truly efficient System

# ProxyVAR Power Conditioning System

## PROXYEM ProxyVAR Reactors

ProxyVAR systems are based on one or more core modules that can be combined to create the level of power conditioning required within a given system. Using a unique configuration of inductive/capacitive circuits, ProxyVAR modules are able to provide what we refer to as “True VARs” or Full-Featured VARs.



### Ordering guide

example: PVAR-F-8-300-F-N

Series	Mounting	Height	VAR	Disconnect	Options
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
PVAR PROXYVAR Reactor	W Wall Mount	4 4' Height	050 050 VAR 100 100 VAR 150 150 VAR	N NONE	N NONE
	F Floor Mount	6 6' Height	200 200 VAR 250 250 VAR 300 250 VAR	F Flange	E Meter w/Ethernet
		8 8' Height		E External	D Meter w/Data

Not all ordering configurations possible

### Ordering Notes:

- 1) Power Factor correction must be considered and calculated BEFORE correcting power factor for any alternative energy source.
- 2) If there is a Power Factor (PF) Deficiency, then more VAR capacity may be needed
- 3) To size a ProxyVAR system correctly, 12 months of electrical bills should be analyzed before submitting an order.

### Additional Information:

Historically, simple passive or switched capacitive reactance has been used to correct power factor issues. In today's environments, however, electronic loads tend to interact with simple capacitive reactance in such a way as to create harmonic destruction, not only of the capacitor banks but also of power supplies, lighting ballasts, and other electronic load configurations.

When sized correctly, the ProxyVAR systems suppress harmonic resonances, correct for harmonic distortions and stabilize voltages while providing the level of reactive power that is required to compensate for the power of your loads – regardless of the linear/non-linear mix

This is particularly important when considering the addition of alternative power sources such as PV Solar power to your electrical system. These systems are typically unable to provide reactive power. Without reactive power, commercial and manufacturing facilities will experience magnified power factor problems after installing solar PV systems. This will greatly affect how the customer is billed for power as penalties go up and savings are diminished. The ProxyVAR system compensates for the lack of reactive power in the system and maximizes the savings potential created by the addition of the alternate energy source.

## Specifications

- Environment: 480 Volt, 3-phase.
- True reactive power with resonance dampening per module: 50 kVAR
- Power factor correction: 50 kVAR
- When properly sized, power factor will be corrected to unity.
- Industry Standards - (IS2)
  - o NEMA Type 4, 12 and Type 13
  - o UL Listed Type 4 and 12
  - o CSA Type 4 and 12
  - o IEC IEC 60529 IP IP 66

## Disconnect:

ProxyVAR system breaker requirements for service protection and disconnect purposes: 100 amps per core module. Breaker can be mounted inside ProxyVAR box or ad MDP. Code may require breakers at both locations where proximity standards are not met.

## Floor mount, 8' cabinet

- Dimensions: 90" x 36" x 24"
- Dimensions with disconnect flange: 90" x 39" x 24"
- Houses up to 6 ProxyVAR core modules
- 300 kVAR maximum provided
- 900 KW of corrected alternative power maximum.



## Wall-mount, 4' cabinet

- Dimensions: 48" x 36" x 16"
- Houses up to 3 ProxyVAR core modules
- 150 kVar maximum provided
- 450 KW of corrected alternative power maximum.

# ProxyVAR

## Power Conditioning System

## Specifications

- Fan assisted ventilation standard
- Allow an additional 6 inches of side clearance (both sides) for adequate air circulation
- For sun-exposed or hot ambient temperatures additional air conditioning will be required. Sun-shades are also recommended for outdoor installations.
- All internal components are UL compliant. - Approx. 1 core covers 130KW of alternative power.
- Per ProxyVAR core module
- Boxes can be combined for bigger systems.

## Finish

All housings come fully powder coated steel construction treated for maximum corrosion resistnace and finish coat. Stainless options are available for corrosive, damp or food processing environments upon special request.

## Floor mount, 6' cabinet

- Dimensions: 48" x 36" x 16"
- Houses up to 3 ProxyVAR core modules
- 150 kVar maximum provided
- 450 KW of corrected alternative power maximum.

