## **OCC-VAR**

# One-Cycle Control, Inc. The Art of Power Processing

# **Reactive Power Supply**

Supply leading or lagging reactive power with ultrafast and precise control

www.onecyclecontrol.com



#### **BENEFITS**

- Hardware enabled control
  - Ultrafast, precise, and stable
- High efficiency
  - Energy saving
- Simple user interface
  - Low maintenance & low service
- Modular plug & play architecture
  - Scalable
- · Long life design
  - Low logistics & installation cost
- Light weight minimum raw material usage
  - Environmentally friendly
- Small size
  - Space saving
- ETL listed
  - Safe and high quality
- Department of Energy sponsored and award winning
  - Highly competitive

#### **FEATURES**

One-Cycle Control Technology

Precise step or continuous VAR control

Inductive or capacitive VAR

Uncompromised VAR @ low voltage

Current harmonics < 3%

Efficiency > 97%

Leading response speed (100s of microsec)

Leading light weight < 29 kg (65 lbs)

400Hz or variable frequency by custom order

Single unit 35kVAR scalable to MVAR

### **OVERVIEW**

OCC-VAR leverages unique patented technology invented at Caltech & University of California and developed by the world leading power electronic experts under the sponsorship of U.S. Department of Energy. OCC-VAR is the first hardware-enabled 3-phase Reactive Power Supply with high reliability, extremely fast dynamics, and simple user interface, enabling reactive power compensation, voltage support, and/or power grid stabilization in real-time. OCC-VAR supplies reactive power wherever, whenever, and however on demand

### **APPLICATIONS**

- Supply VAR locally to free up reactive occupied capacity and minimize transmission losses
- Regulate the terminal voltage to maintain high power quality
- Stabilize the grid against intermittency to increase renewable penetration
- Support voltage, prevent blackout, and protect the power grid and customers



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	VAR3050A6480/XXXXIR	VAR3050A5380/XXXXIR	VAR3100A6208/XXXXIF	
	VAR3075A6480/XXXXIR	VAR3075A5380/XXXXIR		
Electrical Specification				
AC Phase / Wires		3 phase / 3 wires		
AC Freq Range (Hz)	57 - 63	47 - 53	57 - 63	
AC Voltage Range (V, rms) Line-to-Line	400 - 552	320 - 440	175 - 240	
Max AC Current (A, rms)	75	75 / 50		
Efficiency @ Full Power		>98.3% / >97%		
AC Current THD @ Full Power		< 3%		
Power Factor @ Full Power		> 0.99		
Mechanical Specifications				
Weight kg (lb)	29 (65)			
Size (L × W × H) cm (inch)	5	58 x 45 x 13 (23 x 17.5 x 5.25)		
<b>Environment Specifications</b>				
Operating Temp. (°C)		0 to 40		
Operating Relative Humidity w/o Condensation		0 - 95%		
Storage Temp. (°C)		-10 to 55		
Audible Noise (dBA) @ 1m (3ft)		< 80		
Safety				
UL 508C		ETL Listed		

