# One-Cycle Control, Inc.

## **OCC-APF Active Power Filter**

Eliminate harmonic and reactive current



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
- California government sponsored and award winning
  - Highly competitive

#### **FEATURES**

One-Cycle Control Technology

Reduce current harmonics to < 5%

Correct power factor to ~ 0.99
Lower apparent power by ~ 20%

Efficiency > 97%

Leading light weight < 29 kg (65 lbs)

Leading power density ~ 20 W/inch<sup>3</sup> to 30 W/inch<sup>3</sup>

400Hz or variable frequency by custom order

Single unit 40kW or 60kW, scalable to MW

### **OVERVIEW**

OCC-APF leverages unique patented technology invented at Caltech & University of California and developed by the world leading power electronic experts under partial sponsorship of California Energy Commission and California Institute for Energy & Environment. OCC-APF is the first hardware-enabled 3-phase Active Power Filter with high reliability, stable dynamics, and simple user interface, enabling harmonics cancellation and power factor correction in real-time.

#### **APPLICATIONS**

- Eliminate harmonic pollution to protect equipment and transformers and extend equipment life
- Correct power factor avoid penalty
- Free up reactive occupied capacity and reduce transformer loading



The Art of Power	Processing
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	The Art of Power Processing			
	APF3050A6480/XXXXIR	APF3050A5380/XXXXIR	APF3100A6208/XXXXIR	
	APF3075A6480/XXXXIR	APF3075A5380/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 / 50		100	
Efficiency @ Full Power	>98.3% / >97%		>97%	
AC Current THD @ Full Power	5%			
Power Factor @ Full Power	0.99			
Mechanical Specifications				
Weight kg (lb)	29 (65)			
Size (L × W × H) cm (inch)	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			

