

General

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency		89		%	230 VAC, 250 W
Isolation: Input to Output Input to Ground Output to Ground	4000			VAC	2 x MOPP
	1500			VAC	1 X MOPP
	1500			VAC	1 X MOPP
Switching Frequency		62-560		kHz	PFC
		59		kHz	Main converter
		50-130		kHz	Standby
Power Density			5.3	W/in ³	At Average Power Rating
Mean Time Between Failure		200		kHrs	MIL-HDBK-217F, Notice 2 +25 °C GB
Weight		2.02 (919)		lb (g)	CMP250PSxx
		2.36 (1072)			CMP250PSxx-C

Efficiency Vs Load

Figure 2
24 V Models

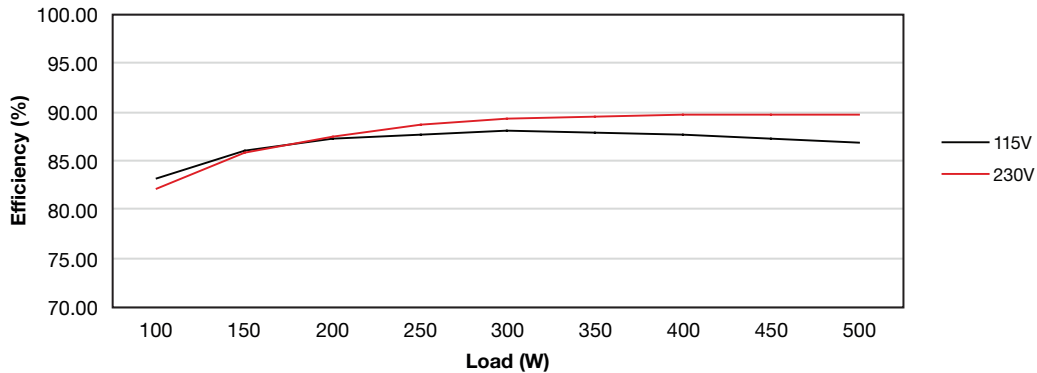


Figure 3
36 V Models

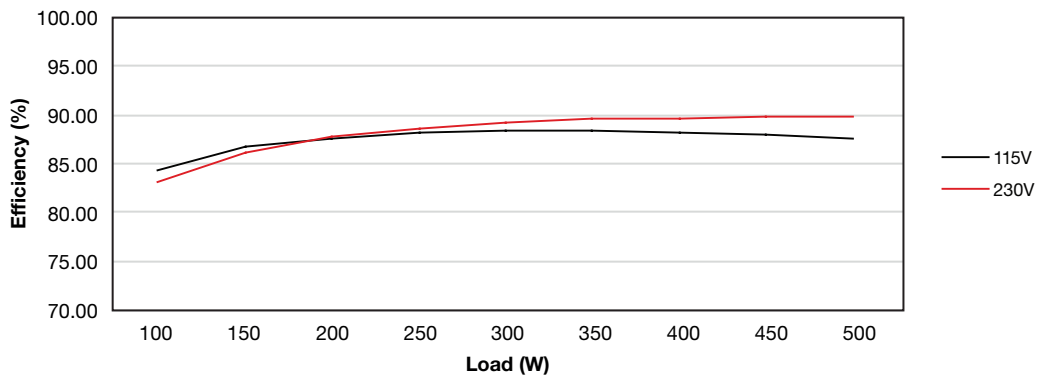
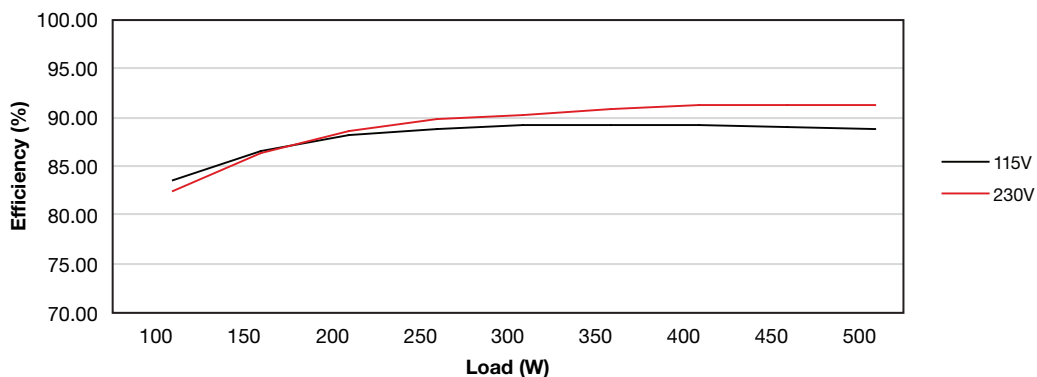


Figure 4
48 V Models

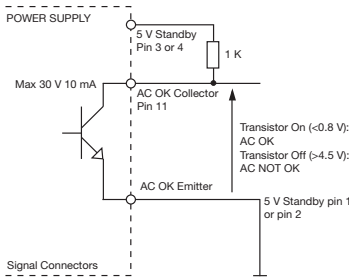


Signals & Controls - Optional

Characteristic	Notes & Conditions
Remote Sense	Compensates for 0.5 V total voltage drop.
5 V Standby Supply (V2)	5V/1.5 A supply, always present when AC supplied, isolated supply.
12 V Aux. (V3)	12V/0.6 A supply, present when AC supplied, inhibit turns supply off. Referenced to V1 return.
AC OK/Power Fail	AC OK is an open collector transistor, referenced to V1 return, providing a minimum of 3 ms warning of loss of output regulation. The transistor is normally on when AC is healthy. See fig. 5.
Inhibit	The inhibit high pin should be pulled below 0.4 V to switch V1 & V Aux (V3) off. Open circuit or 2-8 V maximum to switch the output on. See fig. 6.
Current Share	Connecting pin 9 like voltage units (3 maximum) will force the current to share between the outputs. Units share current within 10% of each other at full load. See fig. 7.

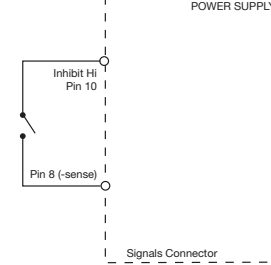
Power Fail

Figure 5



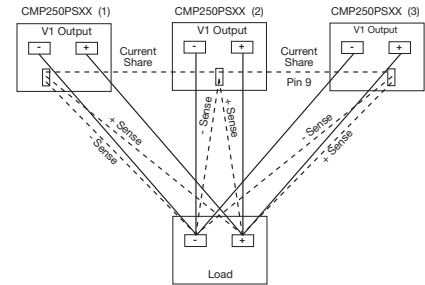
Inhibit (High)

Figure 6



Parallel & Current Share

Figure 7



Environmental

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Operating Temperature	-40		+70	°C	See derating curve, fig.8. and Thermal Considerations on page 8.
Storage Temperature	-40		+85	°C	
Cooling					Convection-cooled
Humidity			95	%RH	Non-condensing
Operating Altitude			5000	m	Information Technology
			4000		Medical
Shock	±3 x 30g shocks in each plane, total 18 shocks. 30g = 11ms (±0.5msec), half sine. Conforms to EN60068-2-27 & EN60068-2-47				
Vibration	Single axis 10 - 500 Hz at 2g sweep and endurance at resonance in all 3 planes. Conforms to EN60068-2-6				

Temperature Derating Curve

Figure 8

