

General

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency		90		%	230 VAC Full load (see fig.3-5)
Isolation: Input to Output Input to Ground Output to Ground	4000			VAC	
	1500			VAC	
	500			VDC	
Switching Frequency		65		kHz	PFC Converter
	50		200		Main Converter
		100			Standby Converter
Power Density			12.6	W/in ³	
Mean Time Between Failure		216		kHrs	MIL-HDBK-217F, Notice 2 +25 °C GB
Weight		1.87 (0.85)		lb (kg)	GSP500PSxx models
		1.94 (0.88)		lb (kg)	GSP500PSxx-EF models

Efficiency Vs Load

Figure 3
12 V Models

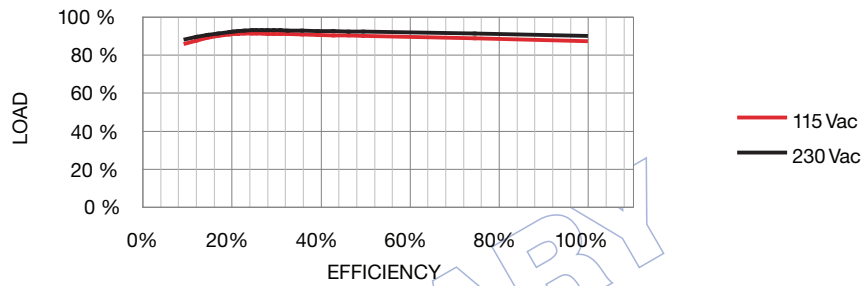


Figure 4
24 V Models

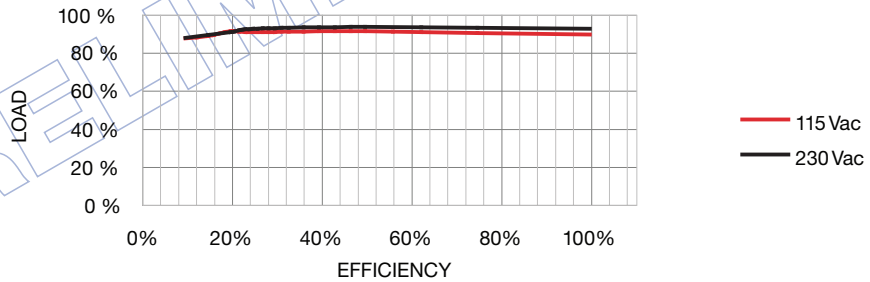
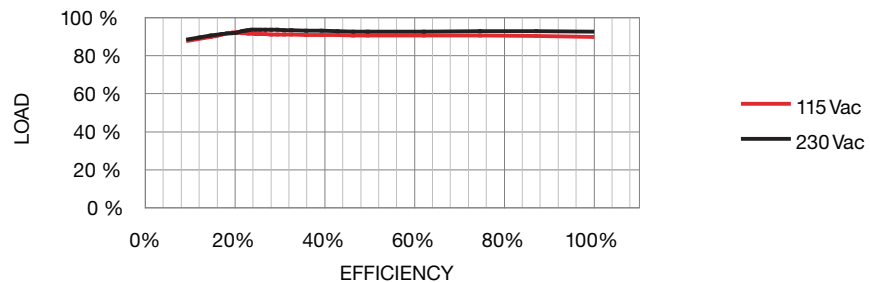


Figure 5
48 V Models

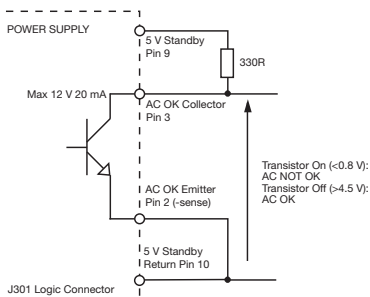


Signals & Controls

Characteristic	Notes & Conditions
Power Fail (AC-OK)	Open collector referenced to negative sense, transistor normally off when AC is good (see fig. 5) AC OK: Provides ≥ 5 ms warning of loss of output from AC failure off when AC is healthy.
Inhibit	Uncommitted isolated optocoupler diode, powered diode inhibits both V1 and fan supply (see fig. 6)
Output Good	LED Indicator
Fan Speed Control GSP500PSxx-EF Models	The fan speed is set to one of 4 states (high, mid, low & off) dependant on the internal power supply ambient temperature, input voltage and output load at any given time.
Standby Supply	5V/2A Isolated supply present when AC applied.

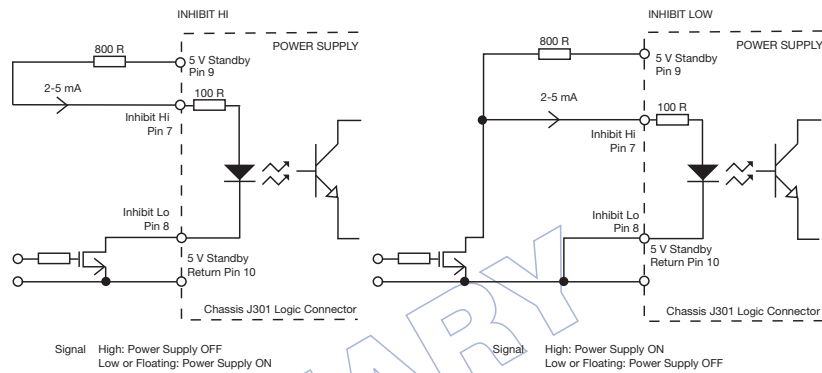
Power Fail (AC-OK)

Figure 5



Remote On/Off (Inhibit)

Figure 6



Environmental

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Operating Temperature	-40		+70	°C	See derating curve, fig. 7
Storage Temperature	-40		+85	°C	
Cooling	12			CFM	GSP500PSxx models
Humidity	5		95	%RH	Non-condensing
Operating Altitude			5000	m	
Acoustic Fan Noise GSP500PSxx-EF Models		TBA		Lw db(A)	Full Speed
		TBA		Lw db(A)	Mid Speed
		TBA		Lw db(A)	Low Speed
Shock					$\pm 3 \times 30g$ 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

Thermal Derating Curve

Figure 7

