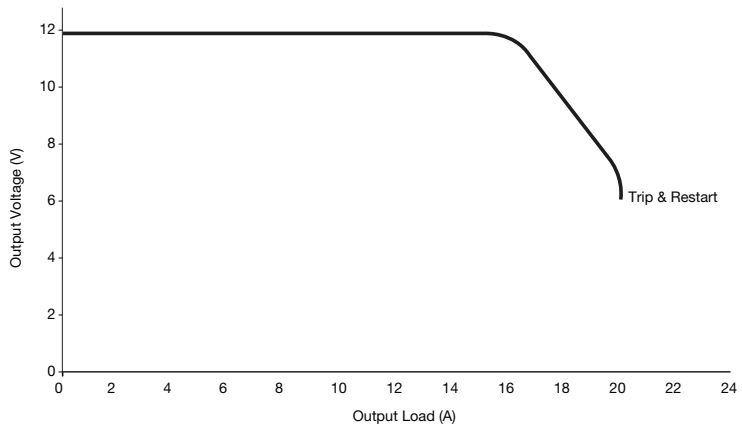
Output

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Output Voltage - V1	12		56	VDC	See Models and Ratings table
Initial Set Accuracy			±1 (V1) & ±5(Vfan)	%	50% load, 115/230 VAC
Output Voltage Adjustment -V1			±2	%	Via potentiometer. See mech. details, Vfan will track
Minimum Load	0			A	
Start Up Delay			2	s	115/230 VAC full load
Hold Up Time		20		ms	GCS150 Models
		16/18			GCS180 Models
		25			GCS250PS12 (225W)
		17			GCS250 Other Models (250W)
		17			GCS350
Drift			±0.2	%	After 20 min warm up
Line Regulation			±0.5	%	90-264 VAC
Load Regulation			±0.5 (V1), ±5(Vfan)	%	0-100% load
Transient Response - V1			4	%	Recovery within 1% in less than 500 µs for a 50-75% and 75-50% load step
Over/Undershoot - V1		0		%	
Ripple & Noise - V1			1	% pk-pk	20 MHz bandwidth, 12V Models 1.5% max
Overvoltage Protection - V1	110		140	%	Vnom DC. Output 1, recycle input to reset
Overload Protection - V1	110		150	% I nom	See fig. 2. Trip and Restart
Short Circuit Protection - V1					Continuous
Temperature Coefficient			0.05	%/°C	
Overtemperature Protection			110	°C	At measurement point. Present on GCS350 only. Measurement internally, auto resetting.

Output Overload Characteristic

Figure 2
GCS180PS12 example (other similar).



General

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency		93		%	230 VAC Full load (see fig.3-5)
	80 Plus Silver				All models except 12 V models
	80 Plus Bronze				12 V models
Isolation: Input to Output	4000			VAC	
Input to Ground	1500			VAC	
Output to Ground	1500			VAC	
Switching Frequency	60		200	kHz	PFC Converter
	90		150		Main Converter
Power Density			7.4	W/in^3	GCS150
			8.8		GCS180
			12.1		GCS250
			16.4		GCS350
Mean Time Between Failure		569		kHrs	MIL-HDBK-217F, Notice 2 +25 °C GB
Weight: Open Frame		0.65 (0.29)		lb (kg)	
End Fan Unit		1.30 (0.59)		lb (kg)	
Top Fan Unit		1.15 (0.52)		lb (kg)	
Covered Unit		1.05 (0.48)		lb (kg)	

Efficiency Vs Load

Figure 3
12 V Models

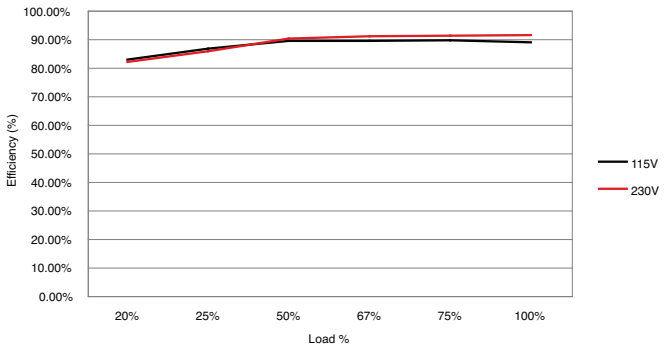


Figure 4
24 V Models

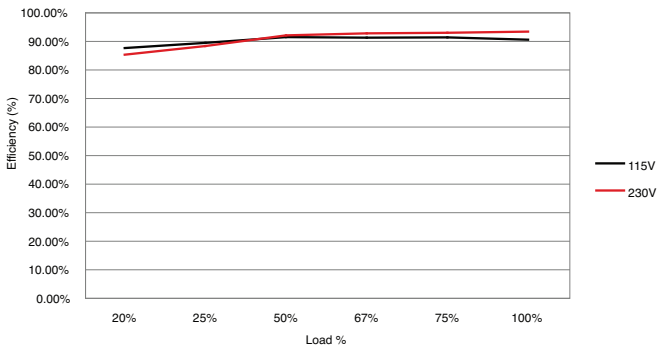
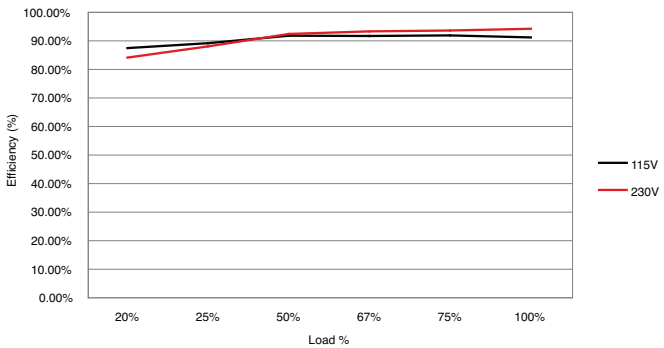



Figure 5
48 V Models