Output Characteristics

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Output Voltage - V1	12		48	VDC	See Models and Ratings table
Initial Set Accuracy			±1 V1, ±5 V2	%	50% load, 115/230 VAC, V2 EMH350 only
Output Voltage Adjustment	±10 V1			%	Via potentiometer & PMBus control
Minimum Load	0			A	
Start Up Delay		1		s	230 VAC full load (see fig. 2, 3 & 4.)
Hold Up Time		16		ms	115 VAC full load (see fig. 5.)
Drift			±0.2	%	After 20 min warm up
Line Regulation			±0.5	%	90-264 VAC
Load Regulation			±1 V1, ±5 V2	%	0-100% load, V2 EMH350 only
Transient Response - V1			4	%	Recovery within 1% in less than 500 µs for a 50-75% and 75-50% load step
Over/Undershoot - V1		2		%	
Ripple & Noise			1	% pk-pk	20 MHz bandwidth (see fig. 6 & 7.)
Overvoltage Protection	115		140	%	Vnom DC.
Overload Protection	110		150	% I nom	Auto reset, knee point adjustable via PMBus control (see fig.8) EMH350-50 only
Short Circuit Protection					Fitted
Temperature Coefficient			0.05	%/°C	
Overtemperature Protection				°C	Fitted, auto recovery
Patient Leakage Current			100	µA	264 VAC/60 Hz

Start up delay from AC turn on

Figure 2
V1 Start up example
(115 VAC, 686 ms)

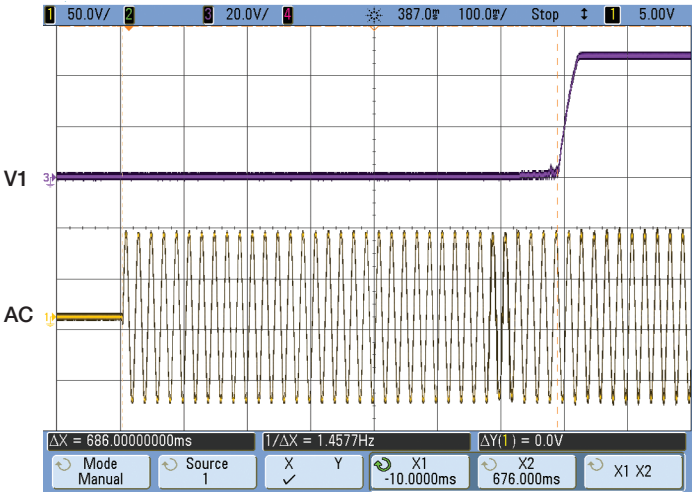
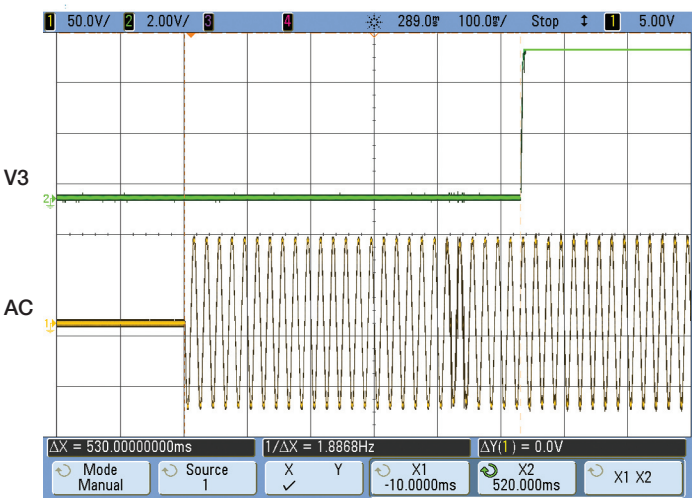


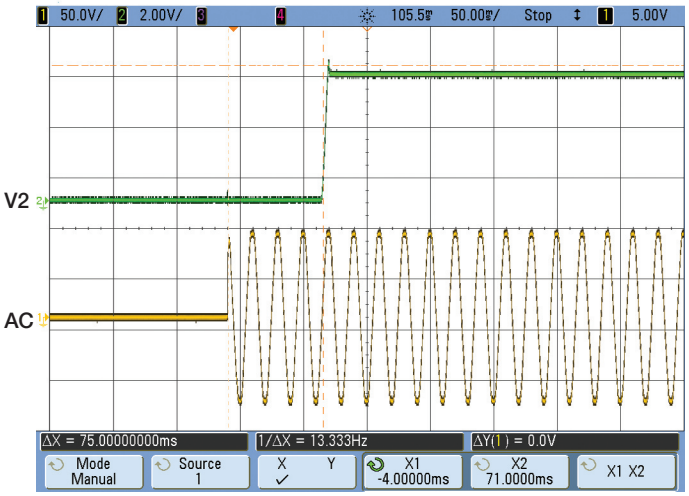
Figure 3
V3 Fan supply example
(115 VAC, 530 ms)



Output Characteristics

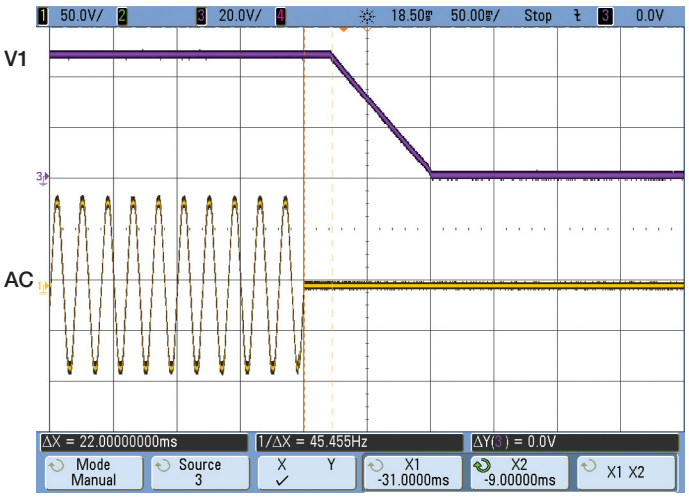
Figure 4
V2 Standby Supply example
(115 VAC, 75 ms)

EMH350 only



Hold up time from loss of AC

Figure 5
V1 Hold up time example
(115 VAC, 22 ms)



Output Ripple & Noise

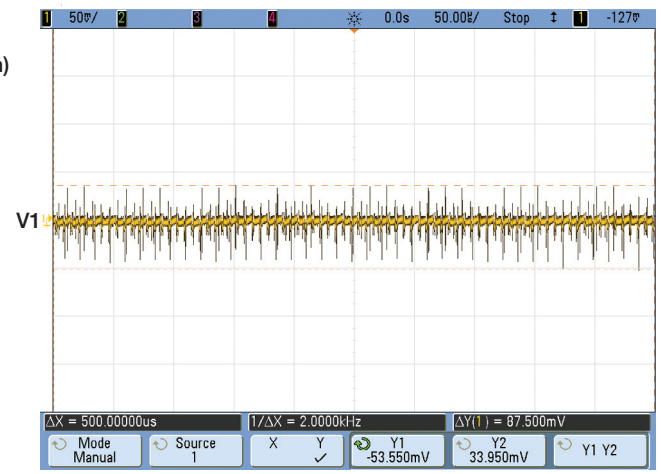



Figure 6
EMH350PS12, 350 W, (87 mV
pk-pk ripple, 20 MHz bandwidth)