CCH400 & CCH600 Series

- 400 W & 600 W – Baseplate Cooled
- Compact 8.4” (214 mm) x 4” (102 mm) x 1.69” (43 mm) Package
- High Efficiency up to 90%
- –40 °C to +85 °C Baseplate Operating Temperature
- No Fan, Quiet Operation
- MIL–STD–461 EMC
- MIL–STD–810F Shock & Vibration
- Remote Sense
- 5 V Standby Output
- Remote On/Off & AC OK Signal
- Current Share for Parallel Operation
- Overtemperature Warning/Shutdown
- 3 Year Warranty

The CCH series has been designed for use in electronic systems which need to operate in the harshest of environments.

These electronic systems are typically sealed to protect them from the elements, thus making thermal management very challenging. The CCH power supplies are designed with the heat generating components directly attached to a baseplate which allows conducted heat to be easily passed from the equipment through a heatsink to the outside environment.

This AC-DC single output product family, fitted with a 5 V standby rail and interface signals also features efficiencies in excess of 90%. The discrete design of the CCH allows for all heat dissipating components to be connected to the baseplate, optimising efficiency and resulting in a very compact 8.4” (214 mm) x 4” (102 mm) x 1.69” (43 mm) package and smaller heatsinking requirements.

The addition of MIL-STD-461 EMC and MIL-STD-810 shock and vibration requirements mean that the product is suitable not only for a wide range of Industrial equipment but can also be used in Military COTS applications.

Models and Ratings

Output Voltage V1	Output Current V1	Standby Supply V2	Output Power	Model Number
12.0 VDC	34.0 A	5.0 V/0.5 A	411 W	CCH400PS12
24.0 VDC	17.0 A	5.0 V/0.5 A	411 W	CCH400PS24
28.0 VDC	14.5 A	5.0 V/0.5 A	409 W	CCH400PS28
48.0 VDC	8.5 A	5.0 V/0.5 A	411 W	CCH400PS48
12.0 VDC	50.0 A	5.0 V/0.5 A	603 W	CCH600PS12
24.0 VDC	25.0 A	5.0 V/0.5 A	603 W	CCH600PS24
28.0 VDC	21.5 A	5.0 V/0.5 A	605 W	CCH600PS28
48.0 VDC	12.5 A	5.0 V/0.5 A	603 W	CCH600PS48

Input Characteristics

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Input Voltage - Operating	90	115/230	264	VAC	
Input Frequency	47	50/60	400	Hz	Agency approval 47-63 Hz
Power Factor		>0.9			230 VAC, 100% load EN61000-3-2 class A compliant
Input Current - No Load		0.4		A	
Input Current - Full Load		4.3/2.1		A	115/230 VAC CCH400
		6.3/3.1			115/230 VAC CCH600
Inrush Current			60	A	230 VAC
Earth Leakage Current		0.7/1.1	1.8	mA	115/230 VAC/50 Hz (Typ.), 264 VAC/60 Hz (Max.)
		7.5/15.0		mA	115/230 VAC/400 Hz
Input Protection	F10 A/250 V internal fuse				

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) & ±3(V2)	%	50% load, 115/230 VAC
Output Voltage Adjustment	±10			%	V1 only via potentiometer. See mech. details (p.7).
Minimum Load	0			A	
Start Up Delay		1.0		s	230 VAC full load (see fig.X)*
Hold Up Time	20			ms	
Drift			±0.2	%	After 20 min warm up
Line Regulation			±0.5	%	90-264 VAC
Load Regulation			±1 (V1), ±5 (V2)	%	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		1		%	
Ripple & Noise		1		% pk-pk	20 MHz bandwidth
Overvoltage Protection	110		140	%	Vnom DC. Output 1, recycle input to reset
Overload Protection	105		140	% I nom	Output 1, auto reset (see fig.1)
Short Circuit Protection					Continuous, approx. constant current (see fig.1)
Temperature Coefficient			0.05	%/°C	
Overtemperature Protection		90		°C	Fitted to Baseplate