500W AC-DC Medical or Industrial Power Supplies

Features

- 360W Convection rating
- High Efficiency
- IEC60601-1 or IEC60950-1 certifications
- ORing FET & Current Share
- Dual input fuses

Key Market Segments & Applications

Medical Industrial Test COMM Broadcast

RoHS

Specifications

Model		CSS500
Input Voltage range	-	90 - 264VAC (47 - 63Hz)
Inrush Current	A	<50A maximum at 230VAC input, 25°C ambient cold start
Input Current (115/230VAC)	A	6 / 3A
Power Factor Correction	-	Meets EN61000-3-2, >0.9
Leakage Current	µA	<300µA 264VAC 63Hz
Hold Up Time (Typ)	ms	20ms at 115VAC input, 360W loading
Temperature Coefficient	-	±0.04%/°C
Voltage Accuracy	%	±1% at 60% load
Adjustment Range	%	None
Regulation	-	Load Regulation ±1%, Line Regulation ±0.5%
Ripple & Noise	%	1% peak to peak (5Vsb also)
Overcurrent Protection	-	110 - 150%
Overvoltage Protection	V	110 - 130% of nominal (Cycle input power or use remote on/off to reset)
Overtemperature Protection	-	Yes (Cycle input power or use remote on/off to reset)
Remote On/Off	-	Unit on: Floating or high 3.5 - 5.25V, Unit off: Low or <0 - 0.5V
Efficiency	%	87% to 92%, model & input dependant
Standby Voltage	-	5V 1A (5V 0.25A when convection cooled or when inhibit is activated)
Fan Output	-	12V 1A
Current Share	-	Single wire, up to 4 units can be shared within 10% accuracy at full load
DC Good & Fan Fail Signals	-	Both Low on Fail
ORing FET	-	Yes, for redundant operation
Operating Temperature	°C	Convection (U channel): 0 to +70°C, derate linearly to 35% load from 40 to 70°C Forced air (or internal fan): 0 to +70°C, derate linearly to 50% load from 50 to 70°C
Storage Temperature	°C	-10 to +85°C
Humidity (non condensing)	%	10 - 95% RH
Cooling	-	Convection or forced air (30CFM or 3.1m/s). Internal fan is temperature controlled
Withstand Voltage (1)	-	Input to Ground 1.5kVAC, Input to Output 4kVAC(1), Output to Ground 500VAC for 1 min.
Isolation Resistance	-	>20M at 25°C & 70%RH, Output to Ground 500VDC
Vibration (non operating)	-	19.6m/s^2 (10~55Hz:2G Constant, X,Y,Z 60min each.)
Shock	-	< 196.1 m/s^2 (20G)
Safety Agency Approvals	-	Medical Version: UL/CSA/IEC/EN 60601-1, ANSI/AAMI ES60601-1, Industrial Version: UL/CSA/IEC/EN 60950-1, CE Mark
Conducted & Radiated EMI	-	Medical Version: EN55011-B, FCC Class B, Industrial: EN55022, FCC Class B
Immunity	-	Medical Version: EN60601-1-2, Industrial: EN55024
MTBF	-	>68,695 (MIL-217F-HDBK)
Weight (Typ)	g	860g (U channel), 980g (End Fan)
Size (WxLxH)	in	U Channel: 8 x 4.7 x 1.51”, End Fan (/S) 9 x 4.7 x 1.63”, Top Fan (/T) 8 x 4.7 x 2.85”
Warranty	yrs	Two Years

(1) Industrial version (I suffix): 3kVAC
Medical version 4kVAC (Reinforced) (2 x MOPPS 3rd Edition)

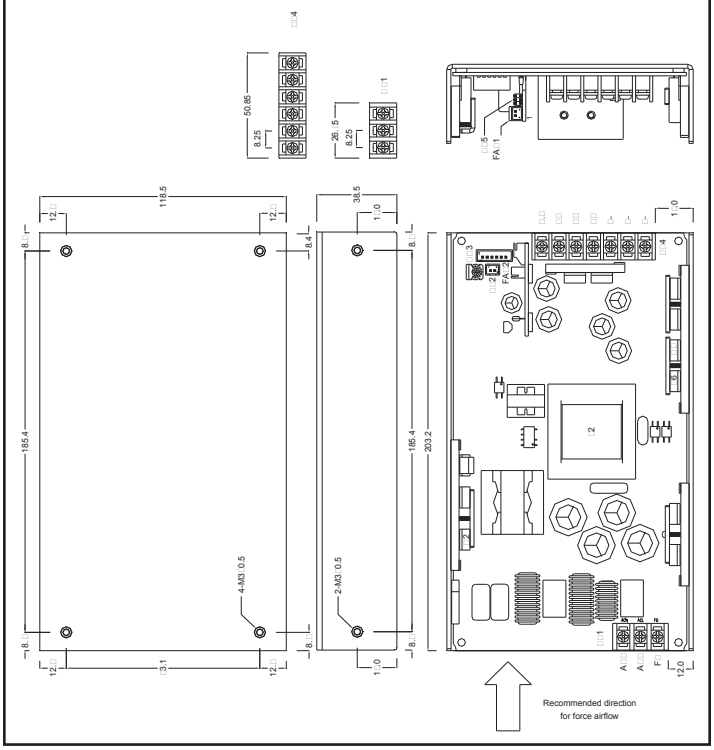
Model Selector

Model	Output Voltage (V)	Maximum Curr. Conv. (A)	Maximum Power Conv. (W)	Maximum Curr. Forced Air	Maximum Pwr Forced Air
CSS500-12	12V	30A	360W	41.67A	500W
CSS500-24	24V	15A	360W	20.84A	500W
CSS500-30	30V	12A	360W	16.67A	500W
CSS500-36	36V	10A	360W	13.89A	500W
CSS500-48	48V	7.5A	360W	10.42A	500W
CSS500-54	54V	6.67A	360W	9.26A	500W
CSS500-57	57V	6.32A	360W	8.78A	500W

Options

Suffix	Mechanical			Safety Certifications	
	U channel	End Fan	Top Fan	Medical	Industrial
Blank	Yes	-	-	Yes	-
/S	-	Yes	-	Yes	-
/T	-	-	Yes	Yes	-
I	Yes	-	-	-	Yes
/SI	-	Yes	-	-	Yes
/TI	-	-	Yes	-	Yes

Outline Drawing



Other Medical Products

KM	15 - 40W pcb mount medical
CSS65, 150	40 - 150W open frame
NV175	175 - 200W 1-4 outputs
NV300	300W 1-4 outputs

For Additional Information, please visit
us.tdk-lambda.com/lp/products/css-series.htm