

### General

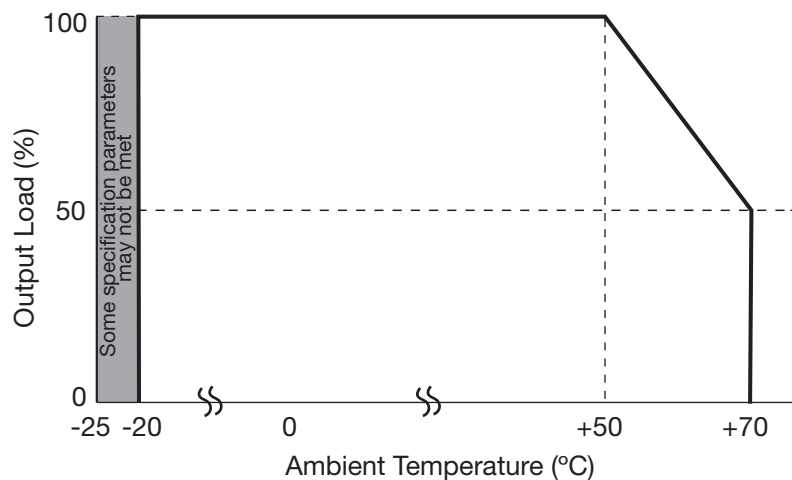
Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency		84		%	115/230 VAC, 100% load
Isolation: Input to Output Input to Ground Output to Ground	4000			VAC	2 MOPP
	1500			VAC	1 MOPP
	500			VAC	1 MOPP at output voltage
Power Density			6.4	W/in <sup>3</sup>	
Mean Time Between Failure	500			kHrs	MIL-HDBK-217F, Notice 2 +25 °C GB
Weight		0.19 (86.0)		lb(g)	

### Environmental

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Operating Temperature	-25		+70	°C	See derating curve, fig.1
Storage Temperature	-40		+85	°C	
Humidity	5		95	%RH	Non-condensing
Operating Altitude			5000/4000	m	ITE/Medical
Shock	±3 x 30g shocks in each plane, total 18 shocks. 30g = 11ms (+/- 0.5msecs), half sine. Conforms to EN60068-2-27				
Vibration	Single axis 10-500 Hz at 2g sweep and endurance at resonance in all 3 planes. Conforms to EN60068-2-6				

### Temperature Derating Curve

Figure 1



### Notes

FCS40US12 ripple and noise is <1.5% from -25 °C to 0 °C reducing to <1% after 1 minute warm up.

### EMC: Emissions

Phenomenon	Standard	Test Level	Notes & Conditions
Conducted	EN55011/32	Class B	See note 1.
Radiated	EN55011/32	Class A	Class B with Wurth Electronics 742 700 91 with 4 turns on AC Input. See note 1.
Harmonic Current	EN61000-3-2	Class A	
Voltage Fluctuations	EN61000-3-3		

### Notes

1. For class I applications, ensure the two mounting holes marked with  are connected together and to safety earth to meet conducted and radiated emissions.

### EMC: Immunity

Phenomenon	Standard	Test Level	Criteria	Notes & Conditions
Medical Device EMC	IEC60601-1-2	Ed.4.0 : 2014	as below	
Low Voltage PSU EMC	EN61204-3	High severity level	as below	
ESD	EN61000-4-2	±8kV contact, ±15kV air	A	
Radiated	EN61000-4-3	3	A	
EFT	EN61000-4-4	3	A	
Surge	EN61000-4-5	Installation class 3	A	
Conducted	EN61000-4-6	3	A	
Magnetic Fields	EN61000-4-8	4	A	
Dips and Interruptions	EN61000-4-11 (100 VAC)	Dip 100% (0 VAC), 8.4 ms	A	25% derating
		Dip 100% (0 VAC), 16.7 ms	B	
		Dip 60% (40 VAC), 200 ms	B	
		Dip 30% (70 VAC), 500 ms	B	
		Dip 20% (80 VAC), 5000 ms	B	
		Int 100% (0 VAC), 5000 ms	B	
	EN61000-4-11 (115 VAC)	Dip 100% (0 VAC), 8.4 ms	A	
		Dip 100% (0 VAC), 16.7 ms	B	
		Dip 60% (40 VAC), 200 ms	B	
		Dip 30% (70 VAC), 500 ms	B	
		Dip 20% (80 VAC), 5000 ms	B	
		Int 100% (0 VAC), 5000 ms	B	
	EN61000-4-11 (240 VAC)	Dip 100% (0 VAC), 10 ms	A	
		Dip 100% (0 VAC), 20 ms	B	
		Dip 60% (96 VAC), 200 ms	B	
		Dip 30% (168 VAC), 500 ms	B	
		Dip 20% (192 VAC), 5000 ms	B	
		Int 100% (0 VAC), 5000 ms	B	
	EN60601-1-2 (100 VAC)	Dip 100% (0 VAC), 10 ms	A	20% derating
		Dip 100% (0 VAC), 20 ms	A	50% derating
		Dip 60% (40 VAC), 100 ms	A	75% derating
		Dip 30% (70 VAC), 500 ms	A	
		Int 100% (0 VAC), 5000 ms	B	
	EN60601-1-2 (240 VAC)	Dip 100% (0 VAC), 10 ms	A	
Dip 100% (0 VAC), 20 ms		A		
Dip 60% (96 VAC), 100 ms		A		
Dip 30% (168 VAC), 500 ms		A		
Int 100% (0 VAC), 5000 ms		B		

### Safety Approvals

Safety Agency	Safety Standard	Notes & Conditions
CB Report	IEC60950-1:2005, IEC62368-1:2014	Information Technology
UL	cUL62368-1	Information Technology
TUV	EN62368-1	Information Technology
CE	LVD	

Safety Agency	Safety Standard	Notes & Conditions
CB Report	IEC60601-1 Ed 3.1 Including Risk Management	Medical
UL	ANSI/AAMI ES60601-1: & CSA C22.2 No.6061-1:08	Medical
CE	EN60601-1	Medical

Safety Agency	Safety Standard	Notes & Conditions
CB Report	IEC60335-1	Household

Isolation	Safety Standard	Notes & Conditions
Primary to Secondary	2 x MOPP (Means of Patient Protection)	IEC60601-1 Ed 3.1
Primary to Earth	1 x MOPP (Means of Patient Protection)	
Secondary to Earth	1 x MOPP (Means of Patient Protection at output voltage)	