

Efficiency Vs Load

Figure 1
ECF40US12

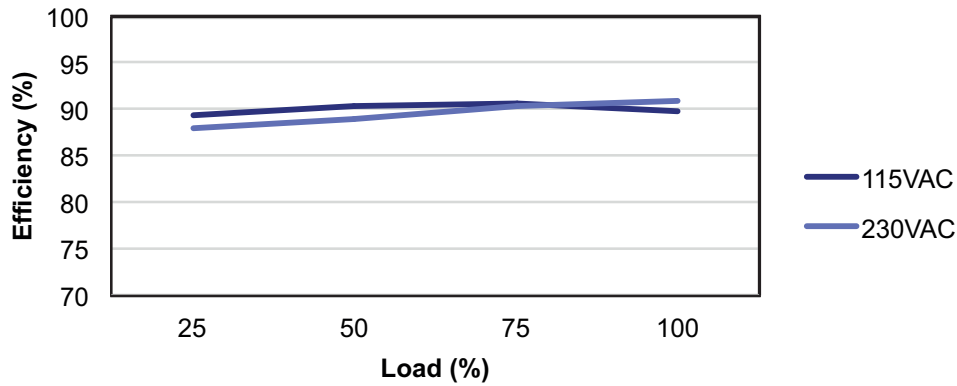
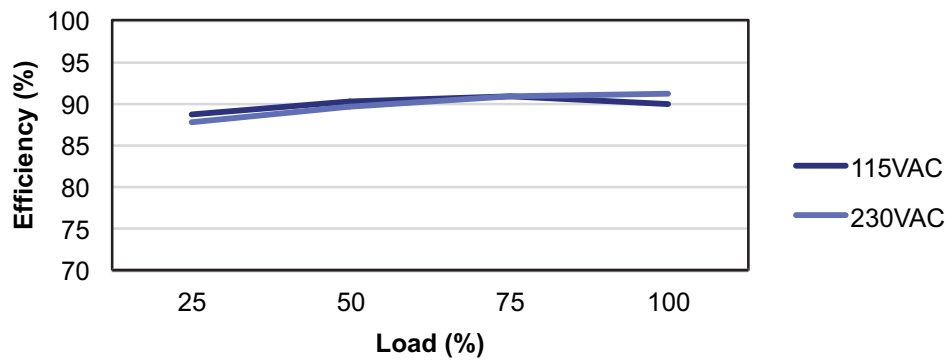


Figure 2
ECF40US24

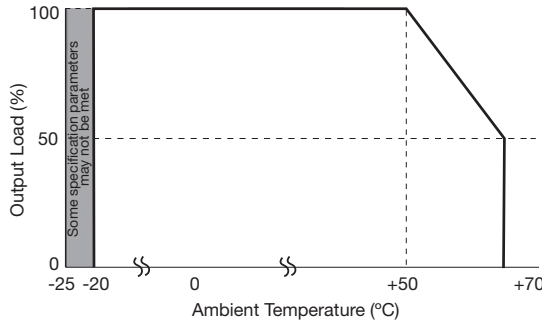


Environmental

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Operating Temperature	-25		+70	°C	See derating curve, fig.3
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 3



EMC: Emissions

Phenomenon	Standard	Test Level	Criteria	Notes & Conditions
Conducted	EN55011/32	Class B		
Radiated	EN55011/32	Class A		
Harmonic Current	EN61000-3-2	Class A		
Voltage Functions	EN61000-3-3			

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	30% derating
		Dip 100% (0 VAC), 20 ms	A	60% derating
		Dip 60% (40 VAC), 100 ms	A	75% derating
		Dip 30% (70 VAC), 500 ms	A	
	EN60601-1-2 (240 VAC)	Int 100% (0 VAC), 5000 ms	B	
		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	