

KEY FEATURES

- Enclosed Medical Switching Power Supply
- 240 Watt with 15CFM FAN
- 4000VAC Input to Output 2MOPP Insulation
- High Efficiency up to 94%
- With P.F.C. Function >0.9
- Low Leakage Current under 100uA
- ANSI/AAMI ES60601-1, EN60601-1, & IEC60601-1 3.1st Edition Safety Approvals
- 3-Year Product Warranty



(Pending)

ELECTRICAL SPECIFICATIONS

All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Model No.	MQF240E-12S	MQF240E-24S	MQF240E-48S	
Max Output Wattage (with 15CFM FAN) (W)	240 W			
Input	Voltage (Note 4)	90-264 VAC		
	Frequency (Hz)	47-63 Hz		
	Current (Full load)	< 3.0 A max. (115 VAC) / < 1.5 A max. (230 VAC)		
	Inrush Current (<2ms)	< 45 A max. (115 VAC) / < 90 A max. (230 VAC)		
	Leakage Current	< 0.1mA / 264 VAC (Touch Current)		
	Power Factor	PF>0.9 at Full Load		
Output	Voltage (V.DC.)	12V	24V	48V
	Voltage Adj Range (V.DC.)	±5% Output Voltage		
	Voltage Accuracy	±2%		
	Current (A) max	20	10	5
	Line Regulation	±1%		
	Load Regulation (0-100%)	±1%		
	Minimum Load	—		
	Maximum Capacitive Load (Note 1)	Pending	Pending	Pending
	Ripple & Noise max.	150mV	1% Vout	
	Efficiency (at 230VAC) (Note 2)	92%	92%	93%
	Hold-up Time (at 115 VAC)	10 ms min.		
Protection	Over Power Protection	Auto recovery, Hiccup mode		
	Over Voltage Protection	Zener diode clamp		
	Short Circuit Protection	Auto recovery, Hiccup mode		
Isolation	Input-Output	4000VAC or 5656VDC		
	Input-FG	2000VAC or 2828VDC		
	Output-FG	1500VAC or 2121VDC		
Environment	Operating Temperature	-30°C...+70°C (with derating)		
	Storage Temperature	-30°C...+85°C		
	Temperature Coefficient	±0.05%/°C		
	Humidity	95% RH		
	MTBF	>250,000 h @ 25°C (MIL-HDBK-217F, Notice 1)		
Physical	Vibration	10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes.		
	Dimension (L x W x H)	4.29 x 2.44 x 1.89 Inches (109.0 x 62.0 x 48.1 mm) Tolerance ±0.5 mm		
	Weight	Pending		
	Cooling Method	Free convection		

ELECTRICAL SPECIFICATIONS

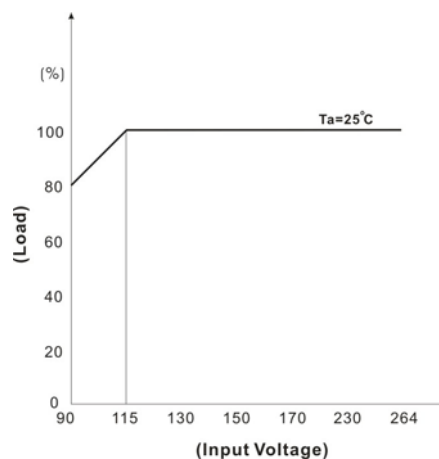
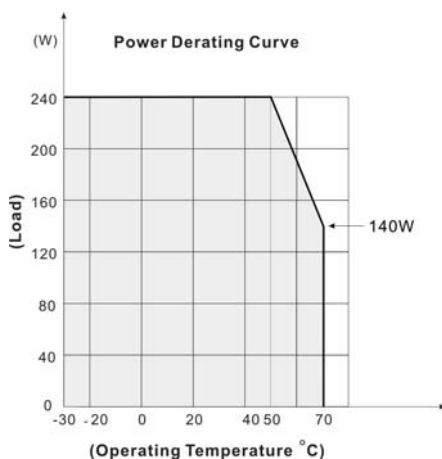
All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Model No.		MQF240E-12S	MQF240E-24S	MQF240E-48S
Safety	Approval	cUL / UL Standard: UL 60950-1, CAN/CSA C22.2 No. 60950-1-07 ANSI/AAMI ES60601-1 (2005 + C1:09 + A2:10), CAN/CSA-C22.2 No. 60601-1 (2008), 2 x MOPP (Input to Output)		
	Conducted and radiated EMI	EN55011 class B (Pending)		
EMC	ESD	EN61000-4-2 air ± 8kV , Contact ± 4Kv (Pending)		
	Radiated Immunity	EN61000-4-3 10V/m (Pending)		
	Fast Transient	EN61000-4-4 ± 2kV (Pending)		
	Surge	EN61000-4-5 ±1kV (Pending)		
	Conducted Immunity	EN61000-4-6 10Vrms (Pending)		
	PFMF	EN61000-4-8 30A/m (Pending)		
	Dips	EN61000-4-11 30% 10ms (Pending)		
	Interruption	EN61000-4-11 >95% 5000ms (Pending)		

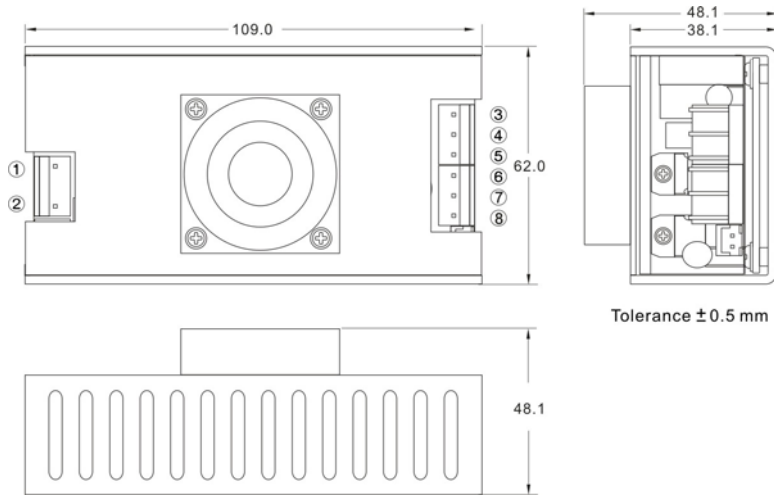
NOTE

- Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
- Hold-up Time measured at 90% Vout.
- Main Vout must be >50% Load, 12V (Aux) / 0.5A.
- Please check the derating curve for more details.
- Strongly recommend to conduct this test with DC Voltage. If customer wishes to test with AC Voltage, please disconnect all Y-Capacitors within Arch power supply.

DERATING



MECHANICAL DIMENSION (Top View)



PIN#	Single
1	AC IN (N)
2	AC IN (L)
3	+DC OUT
4	+DC OUT
5	-DC OUT
6	-DC OUT
7	-AUX OUT
8	+AUX OUT

BLOCK DIAGRAM

Pending