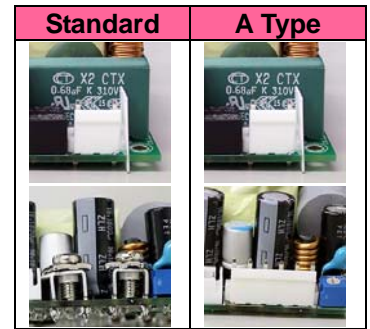


KEY FEATURES

- Enclosed Medical Switching Power Supply
- 4000VAC Input to Output 2MOPP Insulation
- High Efficiency up to 93%
- With P.F.C. Function >0.9
- <0.5W No Load Input Power
- EMI for Both Class I (with PE) and Class II (without PE) Configuration
- Suitable for BF Application with Appropriate System Consideration
- UL / IEC / EN 60601 3.1 Edition & UL / IEC / EN 60950 AM2 Safety Approvals
- 3-Year Product Warranty


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-15S	MQF240E-24S	MQF240E-48S	
Max Output Wattage (with 10CFM 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	15 V	24V	48V
	Voltage Adj Range (V.DC.)	±4% Output Voltage			
	Voltage Accuracy	±2%			
	Current (A) (max.)	20	16	10	5
	Line Regulation	±1%			
	Load Regulation (0-100%)	±1%			
	Minimum Load	0%			
	Maximum Capacitive Load	8000µF	2000µF	3000µF	470µF
	Ripple & Noise (max.) (Note 1)	1% Vout			
	Efficiency (at 230VAC) (Note 6)	92%	92%	92.5%	93%
Hold-up Time (at 115 VAC) (Note 2)	10 ms min.				
Protection	Over Power Protection	Auto recovery, Hiccup mode			
	Over Voltage Protection	Auto recovery			
	Overt Temperature Protection	Auto recovery			
	Short Circuit Protection	Protection level 1 (nominal) : Continuous, Auto recovery Protection level 2 (instantaneous high current) : Latch			
Isolation	Input-Output (Note 5)	4000VAC or 5656VDC			
	Input-PE (Note 5)	2000VAC or 2828VDC			
	Output-PE (Note 5)	1500VAC or 2121VDC			
Environment	Operating Temperature	-30°C...+70°C (with derating)			
	Storage Temperature	-30°C...+85°C			
	Temperature Coefficient	±0.05%/°C			
	Altitude During Operation	5000m			
	Humidity	20~90% RH			
	Atmospheric Pressure	56 kPa to 106 kPa			
	MTBF	>250,000 h @ 25°C (MIL-HDBK-217F, Notice 1)			
	Vibration	10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes.			

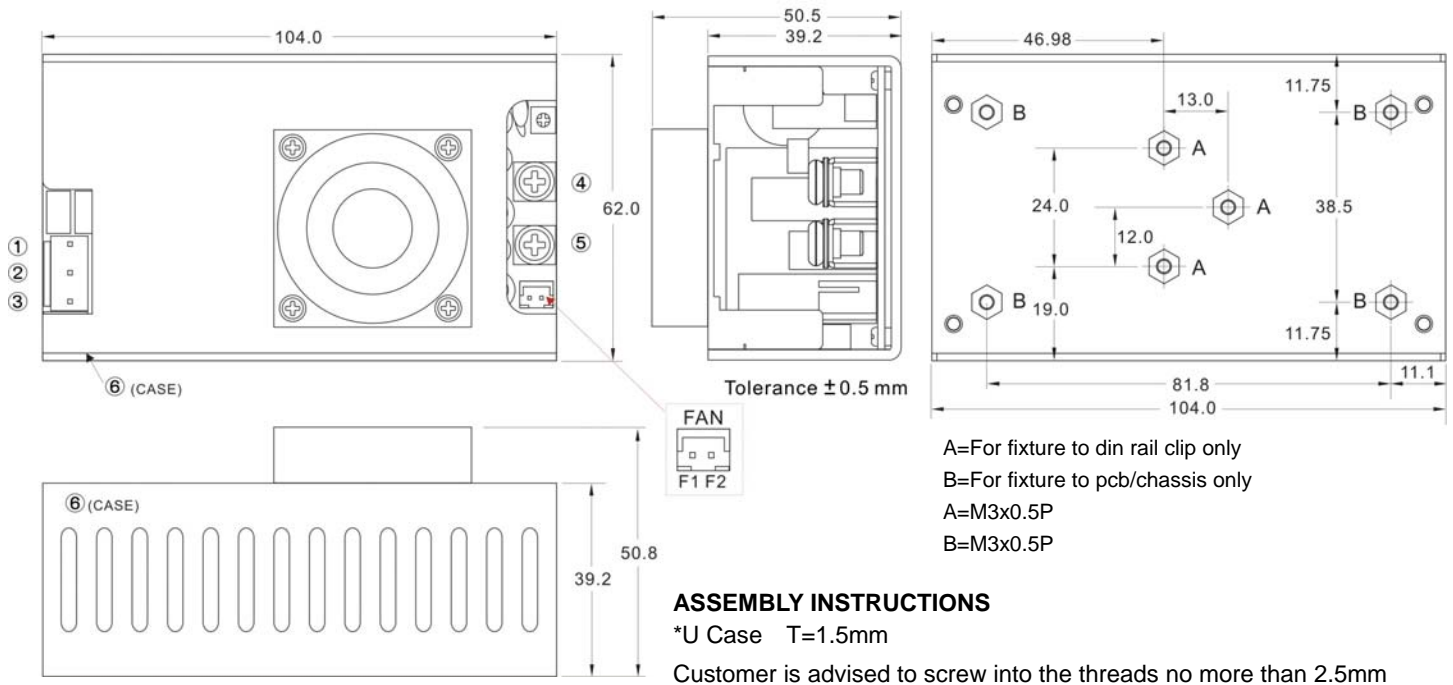
ELECTRICAL SPECIFICATIONS

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

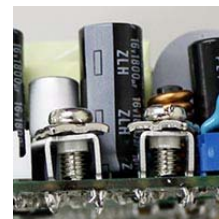
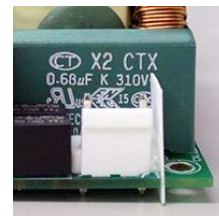
Model No.		MQF240E-12S	MQF240E-15S	MQF240E-24S	MQF240E-48S
Physical	Dimension (L x W x H)	4.1 x 2.44 x 1.99 Inches (104.0 x 62.0 x 50.5 mm) Tolerance ±0.5 mm			
	Weight	328 g			
	Cooling Method	Free convection			
Safety	Approval	Others: UL / IEC / EN 60601 3.1 st Edition & UL / IEC / EN 60950 AM2			
	Approval / Meet	15S: UL / IEC / EN 60601 3.1 st Edition / UL / IEC / EN 60950 AM2 (meet)			
EMC	Conducted EMI (Note 7)	EN55011 Conducted & Radiated Class B			
	Radiated EMI (Note 7)	EN55011 Class I class B / Class II class A			
	EMS	EN60601-1-2 4th edition			

NOTE

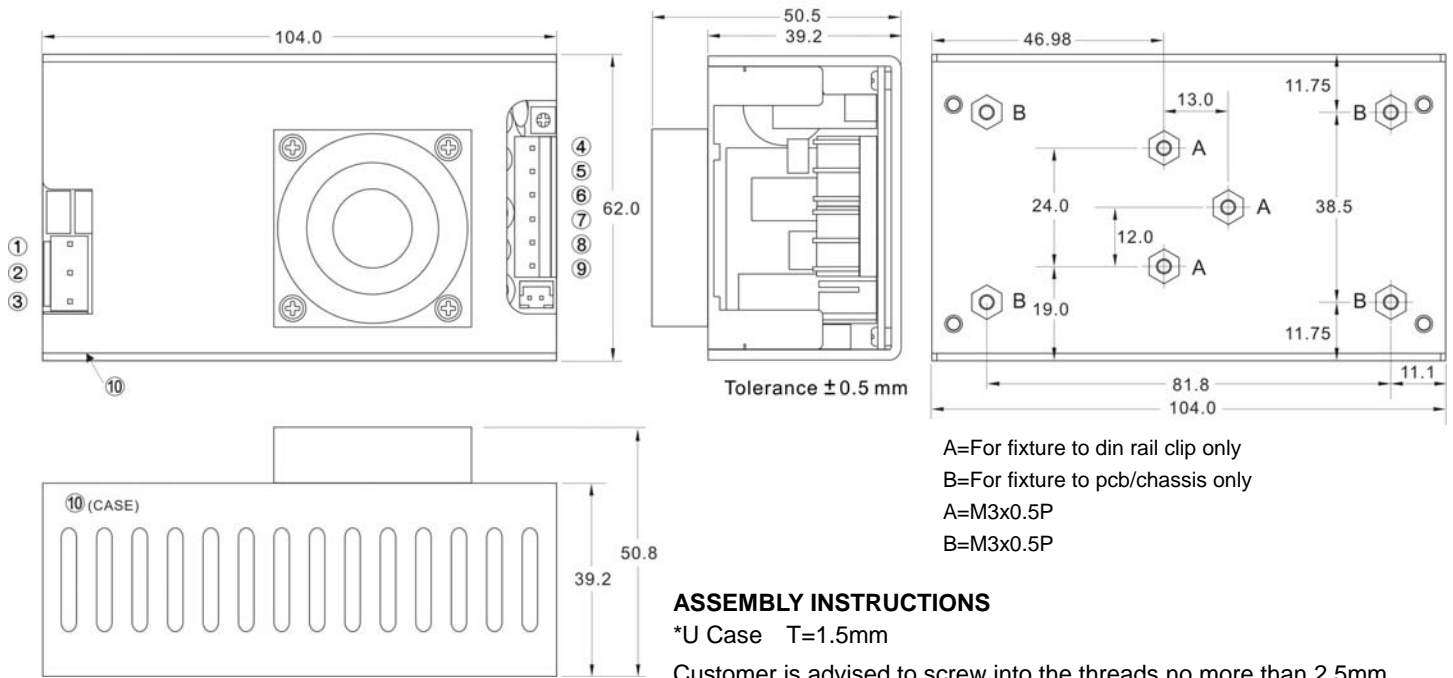
- Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
- Hold-up Time measured at 90% Vout.
- Main Vout must be >50% Load, 12V (Aux) / 0.5A.
- Please check the derating curve for more details.
- Strongly recommend to conduct this test with DC Voltage. If customer wishes to test with AC Voltage, please disconnect all Y-Capacitors within Arch power supply.
- After 30 minutes of burn-in
- Please secure the power supply unit to your metal case by using the four screw holes in the corners for either Class I or Class II equipment

MECHANICAL DIMENSION (Top View)
Standard


PIN#	Single	Mating Housing	Terminal
AC Input Connector Pin : Alex 9397-3			
1	AC IN (N)	Alex 9396-3 or equivalent	Alex 96T Series or equivalent
2	NO PIN		
3	AC IN (L)		
DC Output Connector Pin			
4	+DC OUT	M3.5 Pan HD screw in 2 positions	
5	-DC OUT	Torque to 8 lbs-in(90 cNm) max.	
Others			
6	PE		



Connector Pin (FAN) = Cherg Weei CX-W250-02			
PIN#	Single	Mating Housing	Terminal
F1	+AUX OUT	Cherg Weei CS-H250-02	Cherg Weei CS-T2501
F2	-AUX OUT	or equivalent	or equivalent

MECHANICAL DIMENSION (Top View)
A Type


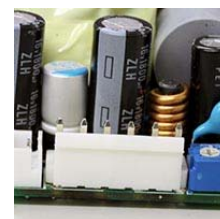
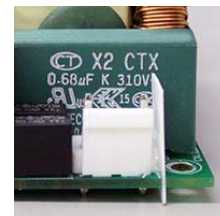
A=For fixture to din rail clip only
 B=For fixture to pcb/chassis only
 A=M3x0.5P
 B=M3x0.5P

ASSEMBLY INSTRUCTIONS

*U Case T=1.5mm

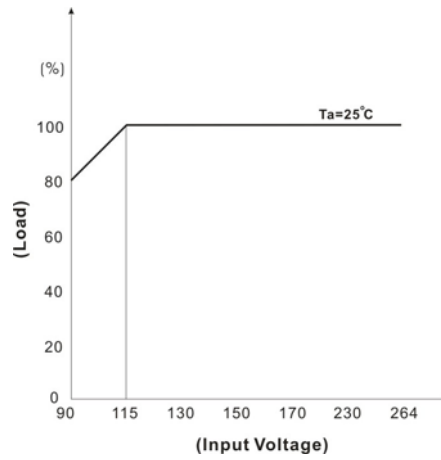
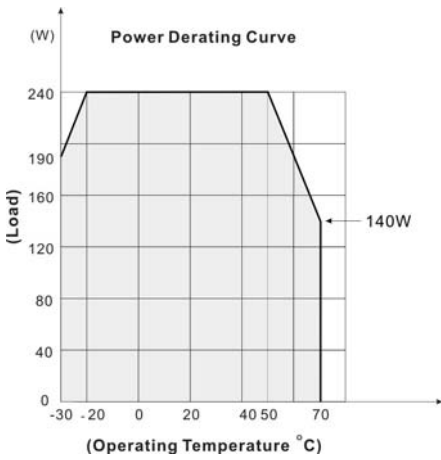
Customer is advised to screw into the threads no more than 2.5mm

PIN#	Single	Mating Housing	Terminal
AC Input Connector Pin : Alex 9397-3			
1	AC IN (N)	Alex 9396-3 or equivalent	Alex 96T Series or equivalent
2	NO PIN		
3	AC IN (L)		
DC Output Connector Pin : Alex 9397-6			
4-6	+DC OUT	Alex 9396-6 or equivalent	Alex 96T Series or equivalent
7-9	-DC OUT		
Others			
10	PE		



Connector Pin (FAN) = Cherg Weei CX-W250-02			
PIN#	Single	Mating Housing	Terminal
F1	+AUX OUT	Cherg Weei CS-H250-02 or equivalent	Cherg Weei CS-T2501 or equivalent
F2	-AUX OUT		

DERATING



BLOCK DIAGRAM

Single Output

