



FEATURES

- Medical 60601-1 Safety Approvals
- Small 6.69 X 3.86 X 1.57" U-Frame Package
- Class I Construction
- Full Load Convection Cooled Operation up to 40°C
- High Efficiency - 90% typical at full load
- Remote Sense Compensation
- Universal AC Input with Active PFC
- EN55011 / FCC Part 15J Class B Emissions
- 3 Year Warranty

INPUT SPECIFICATIONS

Input Voltage	90-264 VAC (Universal)
Input Frequency	47-63Hz
Input Current	3.5A _{RMS} at 115VAC / 1.75A _{RMS} at 230VAC
Inrush Current	<100A @ 240 VAC, Cold Start
Power Factor	>0.95
Leakage Current	<300µA @ 264VAC
Input Protection	Internal T5A / 250V Fuse (Line & Neutral)

OUTPUT SPECIFICATIONS

Output Voltage	See Table
Line Regulation	±0.5%
Load Regulation	±1%
Minimum Load	None
Transient Response	±5%, 50% step-load, slew rate 1A/µS
Ripple / Noise	1% pk-pk typical (20MHz BW, differential mode)
Turn-On Delay	3 seconds max @ 115VAC
Hold-Up Time	>10ms at 115VAC Input (Full Load)
Over-Voltage	115-135% Latching
Over-Load	120-150% (Hiccup Mode, Auto-Recovery)
Short Circuit	Continuous
Over-Temperature	Latching, recycle input and cool to reset
Remote Sense	Compensates for ≤ 500mV Drop

GENERAL SPECIFICATIONS

Efficiency	90% typical at 115/230 VAC, full load
Isolation	Input to Output 4000 VAC Input to Ground 1500 VAC
MTBF	200K Hours, Mil-217F at 25 °C, full load
Weight	520g

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0°C ~ +40°C (convection cooled)
Derating	2.5%/°C > 40°C, up to 50°C max
Storage Temperature	-20°C ~ +80°C
Operating Humidity	5~95% (non-condensing)
Operating Altitude	3000M (max)
Shock	294m/s ² , 10ms on 3 axes
Vibration	10-500 Hz, 19.6 m/s ² (2G), 20mins on 3 axes

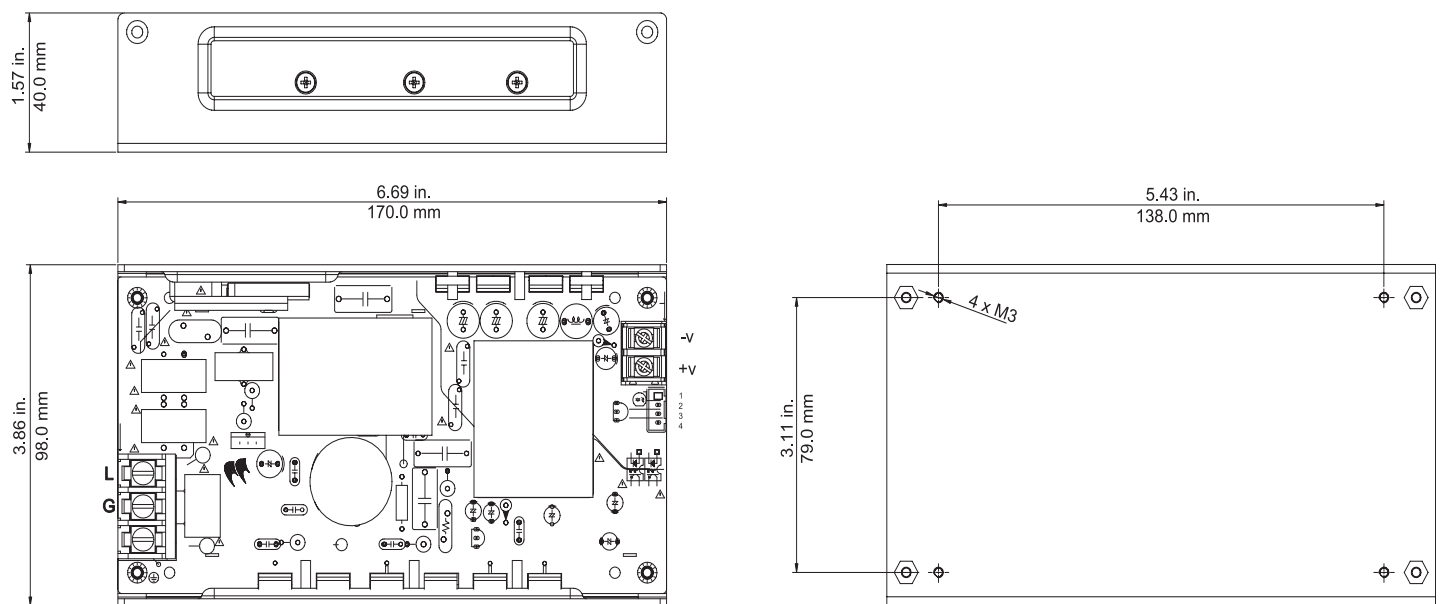
EMC & SAFETY

Emissions	EN55011, FCC Part J15, Class B, Conducted EN55011, FCC Part J15, Class B, Radiated
Harmonic Current	EN61000-3-2 Class A
Voltage Flicker	EN61000-3-3
ESD	EN61000-4-2, 6kV contact, 8kV Air Discharge
EFT/Burst	EN61000-4-4, Level 3, Criterion A
Surge	EN61000-4-5, Level 3, Criterion A
Conducted Immunity	EN61000-4-6, 3V _{RMS} , Criterion A
Radiated Immunity	EN61000-4-3, 3V/m, Criterion A
Magnetic Field	EN61000-4-8, 3A/m, Criterion A
Dips & Interruptions	EN61000-4-11, 0% 10ms, 40% 100ms, 70% 500ms, 0% 5000ms; Criterion A/B/C
Safety Approvals	UL / cUL 60601-1, 3rd Edition CE Mark (LVD)



MODELS	OUTPUT VOLTAGE	OUTPUT CURRENT	PEAK CURRENT	RIPPLE & NOISE (MAX)	MAX TOTAL REGULATION
MP03002-12V	12V	16.6A	18.0A	120mV	±2%
MP03002-24V	24V	10.0A	11.0A	200mV	±2%
MP03002-48V	48V	5.0A	5.5A	300mV	±2%

OUTLINE DRAWING



AC INPUT

Terminal Blocks

L	Line
G	Earth Ground
N	Neutral

DC OUTPUT

Terminal Blocks

+V	Output VDC
-V	Return

SENSE CONNECTOR

JST # B4B-XH-A or equivalent

1	N/C
2	N/C
3	+ Sense
4	-Sense