

300 ~ 400 Watts Single Output U-Bracket / Enclosed Type Medical Power



FEATURES

- ◆ 4 x 7 inches footprint with 1.58 inches low profile
- ◆ Standby output 5VDC at 100mA
- ◆ Inhibit - TTL low to disable output
- ◆ Standard PS Off and DC OK signals



SPECIFICATIONS

Input voltage.....	90-264 VAC
Input frequency.....	47-63 Hz
Input current.....	4.2 A (rms) @115 VAC, 60Hz; 2.1 A (rms) @230VAC, 50 Hz
Earth leakage current.....	300 μ A max. @ 264 VAC, 63 Hz
Ripple and noise.....	1% peak to peak maximum
Remote sense.....	Compensation for cable losses up to 0.5V
Overvoltage protection.....	Set at 115-140% of nominal output voltage
Overcurrent protection.....	Protected to output short circuit conditions
Thermal shutdown.....	Protected to overtemperature conditions
Standby power.....	5V at 100mA maximum
Fan power.....	12V at 250mA maximum
Operating temperature.....	-10°C to +70°C
Storage temperature.....	-40°C to +85°C
Relative humidity.....	5% to 95% non-condensing
Derating.....	Derate from 100% at +50°C linearly to 50% at +70°C, applicable to convection and forced-air cooling conditions
Switching frequency.....	85 KHz (typical)
Efficiency Typical.....	89% @ 115 VAC, 92% @ 230 VAC
Hold-up time.....	12 ms minimum at 110 VAC & 400 W
Inrush current.....	20 A @115 VAC, or 40 A @230 VAC, at 25°C cold start
Withstand voltage.....	I/P-O/P: 4000KVAC, I/P-F.G: 1500VAC, O/P-F.G: 500VAC
Safety standards.....	UL60601-1/UL60950-1, CSA C22.2, TÜV EN60601-1/ EN60950-1
EMC Performance...Class B conducted, class A radiated, EN55011/EN55022, FCC/VCCL; EN61000-3-2,3; EN61000-4-2, 3, 4, 5, 6, 8, 11	

Model ⁽¹⁾ Number	Output						Efficiency (typical)		
	Vnom (VDC)	Min. Current (A)	Max. Current at convection (A)	Max. Current at forced air (A)	Tol.	Ripple & Noise ⁽³⁾ (mV)	Max. Output Power ⁽²⁾	@ 300 W 115/230 VAC	@ 400 W 115/230 VAC
PM400-12B	12	0	25	33.34	±2%	120	300 W / 400 W	90/92 %	88/91 %
PM400-13B	15	0	20	26.67	±2%	150	300 W / 400 W	90/92 %	88/91 %
PM400-13-1B	18	0	16.67	22.23	±2%	180	300 W / 400 W	90/92 %	88/91 %
PM400-14B	24	0	12.5	16.67	±2%	240	300 W / 400 W	90/92 %	89/92 %
PM400-15B	28	0	10.72	14.29	±2%	280	300 W / 400 W	90/92 %	89/92 %
PM400-17B	36	0	8.34	11.12	±2%	360	300 W / 400 W	90/92 %	89/92 %
PM400-18B	48	0	6.25	8.34	±2%	480	300 W / 400 W	90/92 %	89/92 %

NOTES:

1. Change suffix "B" for U-Bracket form to "C" for enclosed form with cover-and-fan assembly, e.g. PM400-14C.
2. 300 W without moving air or 400 W with 7 CFM forced air provided by user for "B" version, 400 W for "C" version with cover-and-fan assembly.
3. Ripple and noise is maximum peak-to-peak voltage value measured at output within 20 MHz bandwidth, at rated line voltage and output load ranges, and with a 10 μ F tantalum capacitor in parallel with a 0.1 μ F ceramic capacitor across the output.

INTERFACE SIGNALS		OUTPUT POWER DERATING CURVE
P F D	TTL high for normal operation, low upon loss of input power, turn-on delay time 100-500 ms, turn-off delay time 5 ms minimum	
Inhibit	TTL low to turn off output	
DC OK	TTL high when output voltage > 95%	
PS OFF	TTL high to turn off output	

PIN ASSIGNMENT

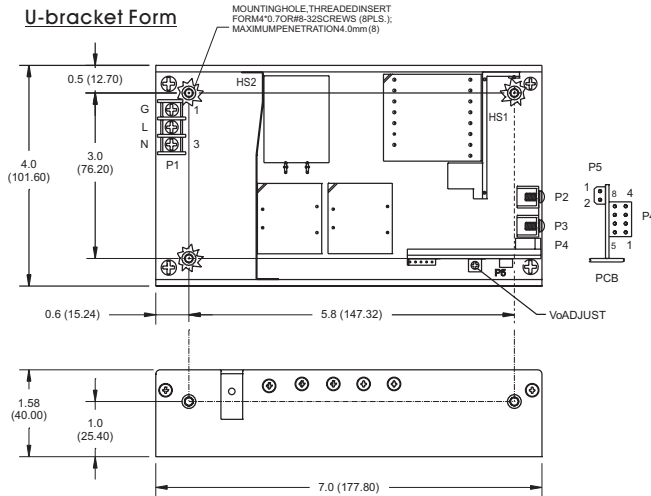
Single Output Models

Model Number	CONN PIN	P1(AC)			P2	P3	P4								P5	
		1	2	3			1	2	3	4	5	6	7	8	1	2
PM400-12B	PM400-15B	GROUND	LIVE	NEUTRAL	OUTPUT +V	RETURN	SIGNAL RETURN	+SENSE	-SENSE	PFD	INHIBIT	STANDBY 5V	DC OK	PS OFF	Fan +12V	RETURN
PM400-13B	PM400-17B															
PM400-13-1B	PM400-18B															
PM400-14B																

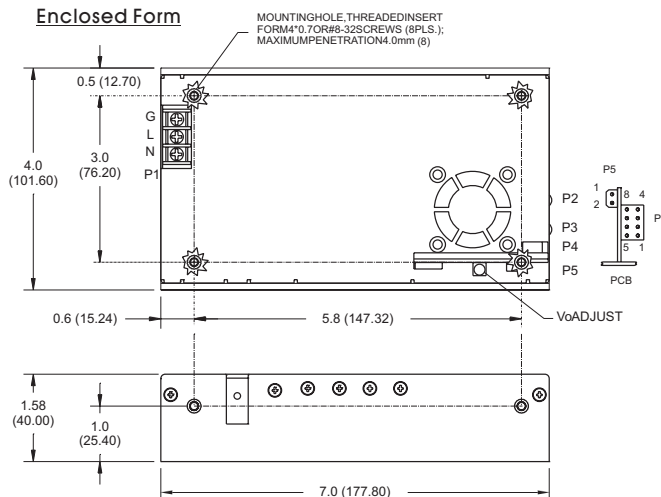
Medical Power

MECHANICAL DRAWING (Unit: Inches (mm))

U-bracket Form



Enclosed Form



NOTES:

1. Tolerance 0.02 [0.5] maximum.
2. Input connector P1 is Dinkle terminal P/N DT-35-B01W-03, with nickel plated M3 screws.
3. P2, P3: M3*0.5 screw connectors
4. Connector P4: Molex header 87833-08 or equivalent, mating with Molex housing 51110-0850 or equivalent.
5. Fan connector P5: Molex header 53048-0210 or equivalent, mating with Molex housing 51021-0200 or equivalent.
6. Weight: 1.0 Kg (2.23 lbs.) approx. for U-bracket form, 1.14 Kg (2.52 lbs) approx. for enclosed form
7. Maximum penetration depth of fixing screws is 4 mm from the outer surface of chassis.