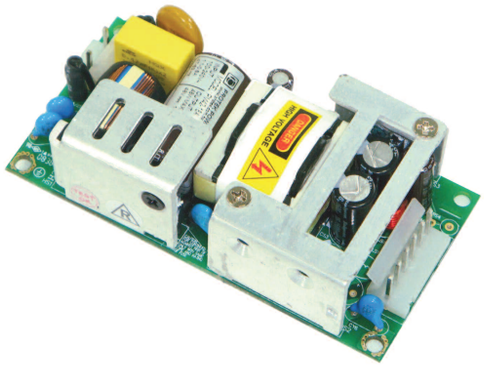
PM42 Series

30-48 WATTS - AC/DC SINGLE & MULTIPLE OUTPUT

FEATURES

- Medical and ITE approvals
- Compact size
- Single, dual and triple outputs
- Wide-range input 90-264 VAC
- Low earth leakage current
- Level B emissions
- RoHS compliant



SPECIFICATIONS

INPUT	
Voltage range	90-264 VAC
Frequency	47-63 Hz
Inrush current	25 A @ 115 VAC, or 50 A @ 230 VAC, at 25°C cold start
Input current	0.9 A (rms) for 100 VAC 0.5 A (rms) for 240 VAC
Earth leakage current	150 µA max. @ 264 VAC, 63 Hz
Isolation	Input – Output: 4000VAC Input – Case:1500VAC Output – Case: 500VAC
OUTPUT	
Output voltage	See table
Output current	See table
Ripple and noise	100 mV peak to peak on 3.3 V & 5.0 V models, 1% peak to peak on other models
Line regulation	±0.5% maximum at full load
Load regulation	See table
Minimum load current	See table
Transient response	Maximum excursion of +0.04% or better on all models, recovering to 1% of final value within 500 us after a 25% step load change
Overvoltage protection	Provided on output #1 only; set at 112–132% of its nominal output voltage
Overcurrent protection	All outputs protected to short circuit conditions
Temperature coefficient	All outputs ±0.04% /°C maximum
Hold-up time	12 ms minimum at 110 VAC

OPERATING	
MTBF	400,000 hours at full load at 25°C ambient, calculated per MIL-HDBK-217F
Efficiency	80-88% typical except PM42-31-3A and PM42-31-5A at 75% typical
Switching frequency	62 KHz typical
ENVIRONMENT	
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% to +50°C linearly to 50% at +70°C
STANDARDS AND APPROVALS	
Safety	UL 60601-1, CSA C22.2 No. 601.1, TÜV EN 60601-1, UL 60950-1, CSA C22.2 No. 60950-1, TÜV EN 60950-1
C-Tick	AS/NZS CISPR11 Group1, Class A
EMC standards	IEC60601-1-2, EN55011 / EN55022 and FCC, VCCI: Class B conducted . class B radiated
Immunity standards	EN61000-3-2, EN61000-3-3, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11
MECHANICAL	
Dimensions	101x50.8x30mm
Weight	205g

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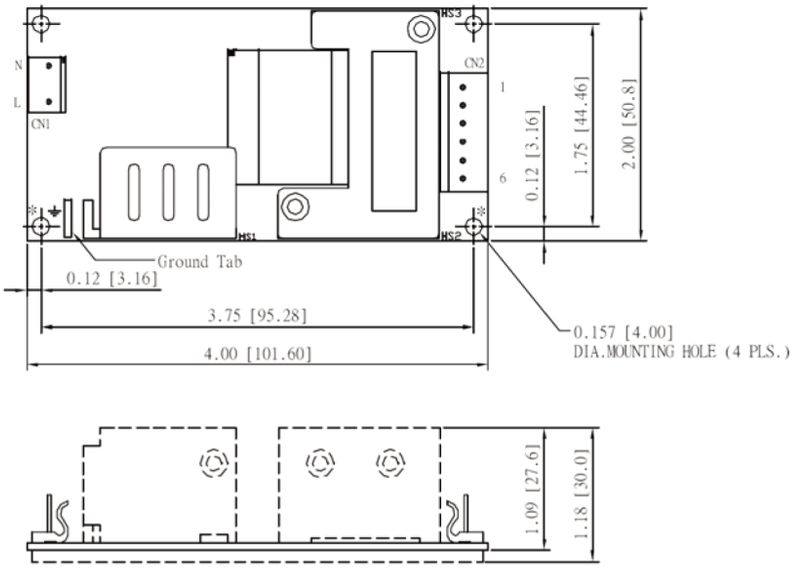
SELECTION TABLE

MODEL(1)	OUTPUT #1				OUTPUT #2				OUTPUT #3				MAX. OUTPUT POWER
CLASS I	V1	MIN. CURRENT	MAX. CURRENT	TOL.	V2	MIN. CURRENT	MAX. CURRENT	TOL.	V3	MIN. CURRENT	MAX. CURRENT	TOL.	
PM42-10A	5 V 12 V	0 A	8.0 A	±2%		(N/A)				(N/A)			40 W
PM42-12A		0 A	3.5 A	±2%		(N/A)				(N/A)			42 W
PM42-13A	15 V	0 A	3.0 A	±2%		(N/A)				(N/A)			45 W
PM42-14A	24 V	0 A	2.0 A	±2%		(N/A)				(N/A)			48 W
PM42-18A	48 V	0 A	1.0 A	±2%		(N/A)				(N/A)			48 W
PM42-23A	+5 V	0.5 A	6.0 A	±3%	+12 V	0.1 A	2.0 A	±5%		(N/A)			40 W
PM42-25A	+5 V	0.5 A	6.0 A	±3%	+24 V	0.1 A	1.0 A	±5%					40 W
PM42-31A	+5 V	0.5 A	6.0 A	±3%	+12 V	0.1 A	2.0 A	±5%	-12 V	0 A	0.3 A	±4%	40 W
PM42-31-3A	+3.3 V	0.8 A	6.0 A	±3%	+5 V	0.1 A	2.0 A	±5%	+12 V	0 A	0.3 A	±4%	30 W
PM42-31-5A	+5 V	0.5 A	6.0 A	±3%	+3.3 V	0 A	1.5 A	±5%	+12 V	0 A	0.3 A	±4%	30 W
PM42-32A	+5 V	0.5 A	6.0 A	±3%	+15 V	0.1 A	1.5 A	±5%	-15 V	0 A	0.3 A	±4%	40 W
PM42-39A	+5 V	0.5 A	6.0 A	±3%	+24 V	0.1 A	1.0 A	±5%	-12 V	0 A	0.3 A	±4%	40 W

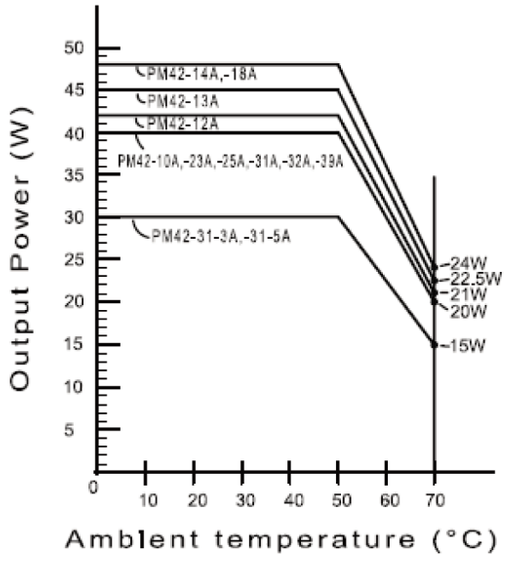
NOTES:

1. Safety approvals are for PCB form only. To order unit with cover fitted, change suffix “A” to “C”.
2. The output voltages of a multiple output model may go outside of the stated tolerance when an output load current is out of stated limits. All models may be operated at no-load without damage.
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 µF tantalum capacitor in parallel with a 0.1 µF ceramic capacitor across the output.

MECHANICAL SPECIFICATIONS



OUTPUT POWER DERATING CURVE



NOTES:

1. Tolerance 0.02 [0.5] maximum
3. Connector CN1: Molex header 09-65-2038 or equivalent, mating with Molex housing 09-50-1031 or equivalent.
4. Connector CN2: Molex header 09-65-2068 or equivalent, mating with Molex housing 09-50-1061 or equivalent.
5. Ground tab is 0.25 [6.35] x 0.032 [0.8]
6. To ensure compliance with level B emissions, connect the two “＊” marked mounting holes with metallic standoffs to chassis.
7. Weight: 205 grams (0.45 lbs.) approx.

PIN CHART

MODEL PIN	1	2	3	4	5	6
PM42-10A PM42-13A PM42-18A PM42-12A PM42-14A	+V1		V1 Return		N.C.	
PM42-23A PM42-25A	V1		Common Return		N.C	V2
PM42-31A PM42-32A PM42-39A PM42-31-3A PM42-31-5A	V1		Common Return		V3	V2