

PROTEK PM1100 SERIES 1100 Watt Enclosed with Fan Power Supply

Measures: 9.25 x 5.91 x 2.40'

PM1100 SERIES



INPUT SPECIFICATIONS

Input voltage: Input frequency: Input current:

Earth leakage current:

90-264 VAC 47-63 Hz 16 A (rms) @100 VAC, 60 Hz 8 A (rms) @ 240 VAC, 50 Hz 220 µA max. @ 264 VAC, 63 Hz

OUTPUT SPECIFICATIONS

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Output voltage/current:	See rating chart.
Maximum output power:	See rating chart.
Ripple and noise:	1% peak to peak maximum
Remote sense	Compensation for cable losses up to 0.5 V
Overvoltage protection:	Set at 112-140% of nominal output voltage
Overcurrent protection:	Set at 120-140% of maximum output current
Thermal shutdown	Protected to overtemperature conditions
Temperature coefficient:	All outputs ±0.04% /°C maximum
Transient response:	Maximum excursion of 4%, recovering to
	1% of final value within 500 us after a 25% step load change
Standby power	5 V at 200 mA maximum
Fan power	12 V at 1.0 A maximum

ENVIRONMENTAL SPECIFICATIONS

Operating temperature:	-10℃ to +70℃
Storage temperature:	-40°℃ to +85°℃
Relative humidity:	5% to 95% non-condensing
Derating:	Derate from 100% at +50 $^\circ$ C linearly to
	50% at +70℃, applicable to convection
	and forced-air cooling conditions

OUTPUT VOLTAGE/CURRENT RATING CHART

		Min.	Max.	Peak		Ripple &	Max. Output	@ 1100 W
Model	V1	Current	Current	Current	Tol.	Noise ⁽²⁾	Power ⁽¹⁾	115/230 Vac
PM1100-14C	24 V	0 A	45.84 A	52.10 A	±2%	240 mV	1100 W /1250 W	87 /88%
PM1100-15C	28 V	0 A 0	39.29 A	44.65 A	±2%	280 mV	1100 W /1250 W	87 /88%
PM1100-16C	32 V	0 A	34.38 A	39.07 A	±2%	320 mV	1100 W /1250 W	87 /88%
PM1100-17-1C	34 V	0 A	32.35 A	36.77 A	±2%	340 mV	1100 W /1250 W	87 /89%
PM1100-17C	36 V	0 A	30.56 A	34.73 A	±2%	360 mV	1100 W /1250 W	87 /89%
PM1100-18-1C	42 V	0 A 0	26.20 A	29.77 A	±2%	420 mV	1100 W /1250 W	87 /89%
PM1100-18C	48 V	0 A	22.92 A	26.10 A	±2%	480 mV	1100 W /1250 W	87 /89%

NOTES:

Peak current and power possible at 170-260 VAC input, 10 seconds, 35% duty cycle. 1.

2. 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.

FEATURES

- BF Class insulation
- Operation up to 5000 meters .
- Less than 220 µA leakage current .
- EN55011 Class B conducted emissions
- Inhibit TTL low to disable output • •
- Standard PS Off and DC OK signals
- High Efficiency 89% typical
- Standby output 5 VDC at 200 mA •
- Variable speed internal fan

SAFETY STANDARD APPROVALS



UL ES 60601-1, CSA C22.2 No. 60601-1 File No. E178020 (Pending)



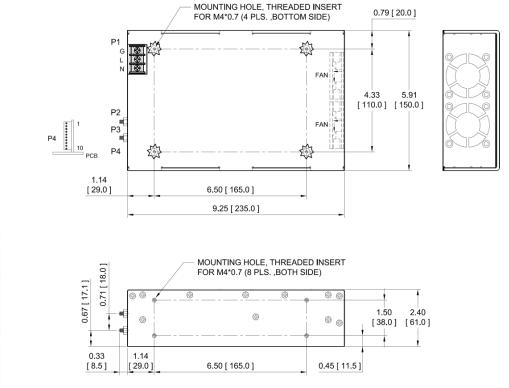
TÜV EN 60601-1 (Pending)

GENERAL SPECIFICATIONS

Switching frequency:	40 KHz to 200 KHz
Efficiency:	See rating chart
Hold-up time:	10 ms minimum at 110 VAC
Line regulation:	±0.5% maximum at full load
Inrush current:	50 A @ 115 VAC, or 100 A @ 230 VAC, at
	25℃ cold start
Withstand voltage:	4000 VAC from input to output (2MOPP)
	1500 VAC from input to ground (1MOPP)
	1500 VAC from output to ground
MTBF:	300,000 hours at full load at 25 $^\circ\!\mathrm{C}$ ambient,
	calculated per MIL-HDBK-217F
EMC Performance	
EN55011:	Class B conducted, class B radiated
FCC:	Class B conducted, class B radiated
VCCI:	Class B conducted, class B radiated
EN61000-3-2:	Harmonic distortion, class A and D
EN61000-3-3:	Line flicker
EN61000-4-2:	ESD, ±8 KV air and ±6 KV contact
EN61000-4-3:	Radiated immunity, 3 V/m
EN61000-4-4:	Fast transient/burst, ±2 KV
EN61000-4-5:	Surge, ±1 KV diff., ±2 KV com
EN61000-4-6:	Conducted immunity, 3 Vrms
EN61000-4-8:	Magnetic field immunity, 3 A/m Voltage
EN61000-4-11:	dip immunity



MECHANICAL SPECIFICATIONS



NOTES:

Dimensions shown in inches [mm] 1.

Tolerance 0.02 [0.5] maximum

2. 3. Input connector P1 is Dinkle terminal P/N DT-4C-B01W-03, with nickel plated M3.5 screws or equivalent.

4. Output connectors P2 and P3 are for M5*0.8 screw connections.

5. Output connector P4 is Molex header 22-05-7105 or equivalent, mating with Molex housing 50-37-5103 or equivalent.

Weight: 2.884 Kgs (6.35 lbs.) approx. for enclosed form.

6. 7. Maximum penetration depth of fixing screws is 4 mm from the outer surface of chassis.

PIN CHART

Connecto	r		P1 (AC)		Р	2	P3	
PIN NO.		1 2		3	1	2	1	2
Polarity		Live	Neutral	Ground	+V1		V1 R	Return

Connector	Ρ4									
PIN NO.	1	2	3	4	5	6	7	8	9	10
Polarity	common Return	+V1 Sense	-V1 Sense	PFD	Inhibit	+5V Standby	DC OK	PS OFF	+12V FAN	FAN Return