

MINT2270A

270W Dual Output Series

Medical – Universal Input Power Supply



2 Year Warranty

- 270W Convection Cooled AC-DC Power Supply
- Up to 90% Efficiency Typical
- Natural Interleaving Technology for PFC
- LLC Technology for DC Converter
- Remote ON/OFF by PS-ON Signal
- Approved to EN/IEC/UL60601-1 for Medical
- DC-OK, AC-OK Signal Active
- CE** Compliant (LVD, RoHS)



International Safety Standard Approvals



Specifications

All Specifications are typical at nominal input, full load at 25°C unless otherwise stated.

AC Input 100-240VAC +/- 10%, 47-63 Hz single phase.	Turn On Time Less than 2 seconds under all rated load conditions.
Input Current 115VAC: 3.0A max.	Hold-up Time 16 ms at 270W, nominal input (120VAC).
Inrush Current The inrush at 264VAC, at a cold start, will not exceed 45A.	Overvoltage Protection See chart for levels, latching type
Input Fuse T6.3A, 250VAC fuse provided on all models.	Overload Protection Hiccup Mode
Power Factor Complies with EN61000-3-2.	Short Circuit Protection Hiccup Mode
Efficiency 90% typical.	Overtemperature Protection Provided on all models, auto-recovery.
Output Power 270W continuous.	Medical Safety Standards EN/IEC/UL 60601-1, CSA22.2, No. 60601.1
Ripple and Noise 1% pk-pk max., 20MHz BW, differential mode. Measured with noise probe directly across output terminals.	Isolation Input-Output: 4000VAC, Input-Ground: 1500VAC, Output-Ground: 707VDC
Output Voltages See chart.	Earth Leakage Current 260µA typical at 264Vac, 50Hz.
Total Regulation See chart.	Operating Temperature 0° to 70°C, refer to derating curve.
Minimum Load Not required.	Storage Temperature -40 to +85°C.
Transient Response 500µs max. for a 50% load step, with 5mSec high load and 5mSec low load.	Relative Humidity 5% to 95%, non-condensing
Enclosure Dimensions & Weight 3.35"W x 7.17"L x 1.17"H. See outline drawing. Weight: 550 grams	MTBF (Mean-Time-Between-Failure): 325,000 hours at 40°C operating ambient temperature.

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Model Number	Output No.	Output Volts (V)	Output Parameters		Total Regulation	OCP Limit	OVP Limit
			Output Current	Ripple & Noise			
MINT2270A1976E0X	1	5V	0.2A	1%	5%	1.5A	7.0V
	2	24V	11.25A	1%	2%	15.5A	30.0V

Note: "X" in model number as shown above is replaced by a numeral which will signify the remote on/off configuration, or other potential modifications. See model number key below.

Specifications (continued)

Remote ON/OFF (PS-ON):

On = logic high, off = logic low or open.
Model suffix "01" will be in the normally OFF configuration. Model suffix "02" will be in the normally "ON" configuration.

AC-OK Signal

"High" when input voltage exceeds 68VAC, "Low" when input voltage is less than 68VAC.

DC-OK Signal

"High" when the 24V output is within normal range. "Low" upon an overvoltage, overcurrent, undervoltage, or short circuit condition, or when the PS-ON is disabled ("OFF").

Shock

Operating: Half-sine, 20 g_{pk}, 10 ms, 3 axes, 6 shocks total
Non-Operating: Half-sine, 40 g_{pk}, 10 ms, 3 axes, 6 shocks total

Vibration

Operating: 0.003 g²/Hz, 1.5 g_{rms} overall, 3 axes, 10 min. / axis
Non-Operating: 0.026 g²/Hz, 5.0 g_{rms} overall, 3 axes, 1 hr. / axis

Altitude

Operating: -500 to 10,000 ft. MSL
Non-Operating: -500 to 40,000 ft. MSL

EMI/EMC Compliance

Conducted Emissions	EN55011 Class B, FCC Part 15, Class B.
Static Discharge Immunity	EN61000-4-2, 6kV Contact Discharge, 8kV air discharge
Radiated RF Immunity	EN61000-4-3, 10V/m.
EFT/Burst Immunity	EN61000-4-4, 2kV/5kHz..
Line Surge Immunity	EN61000-4-5, 1kV differential, 2kV common-mode
Conducted RF Immunity	EN61000-4-6, 3Vrms
Power Frequency Magnetic Field Immunity	EN61000-4-8, 3A/m
Voltage Dip Immunity	EN61000-4-11 240VAC, 0%/0.5 cycle, 40%/5cycles, 70%/25 cycles
Line Frequency Harmonics	EN61000-3-2, Class A

Model Number Key

MINT 2 270 A 19 76 E 01

- 01 = Standard Model, Remote ON/OFF in "OFF" configuration.
- 02 = Standard Model, Remote ON/OFF in "ON" configuration.
- 03 and higher indicates a modified model.

Input Connector

Output Connector

Output Voltage Configuration, "19" = 5V, 24V outputs

Model Configuration

Output Power (Watts)

of Outputs

Product Family: "M" = Medical, "I" = Internal, "NT" = New Technology

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Outline Drawing & Connector Information

INPUT, OUTPUT and SIGNAL CONNECTORS:

CON1 M3 Screw terminals, 7.62mm pitch

- PIN 1) GND
- PIN 2) AC NEUTRAL
- PIN 3) AC LINE

CON2 M3 Screw terminals, 7.62mm pitch

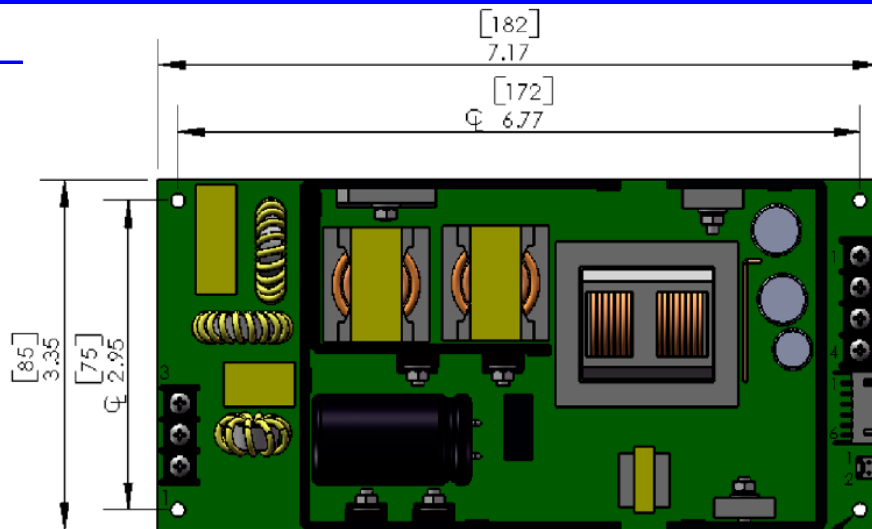
- PIN 1) RTN PIN 3) 24V
- PIN 2) RTN PIN 4) 24V

CON3 Landwin 2502P0600T

- PIN 1) RTN PIN 4) DC-OK
- PIN 2) RTN PIN 5) AC-OK
- PIN 3) 5V SB PIN 6) PS-ON

CON4 AMP 640456-2

- PIN 1) RTN PIN 2) 24V for FAN



MATING CONNECTORS:

CON1, 2: Wire Lugs - Barrier width = 6.62mm

CON3: Landwin 2500S060, PINS: 2503T012P

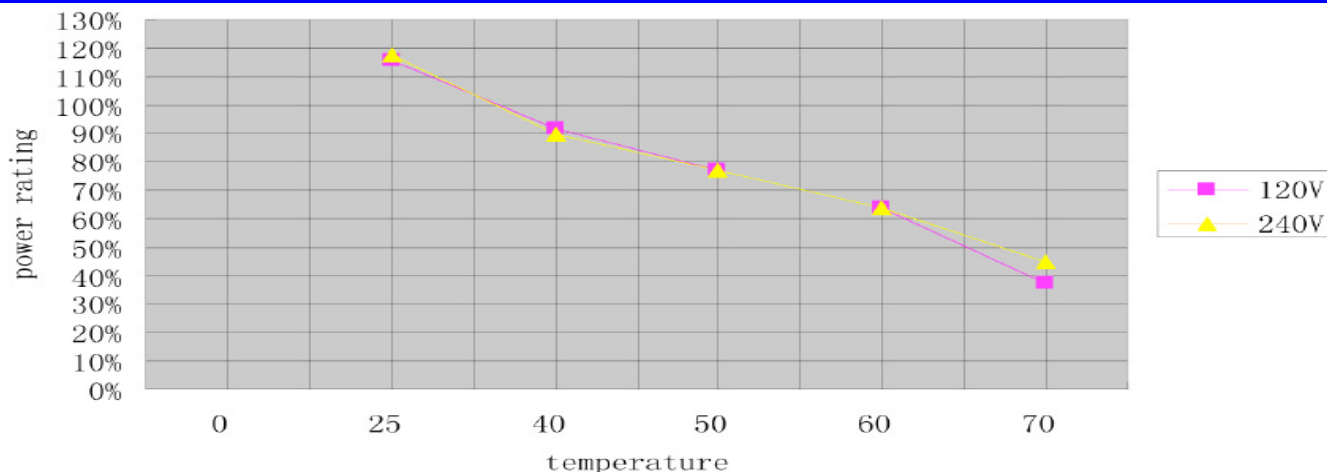
CON4: AMP 1375820-2, PINS: 1375913-3



MAX LEAD PROTRUSION

Tolerance: 0.02" [0.5mm]

Output Power Derating Curve





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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