

# MINT1065

65W Single Output Series

Medical & ITE – Universal Input Power Supply



3 Year Warranty

- 65W Convection Cooled AC-DC Power Supply
- Universal Input 90-264 VAC
- Less than 0.5W No Load Power Dissipation
- Rugged EMC Compliant Design
- 2" x 4" x 1.2" Package
- Approved to EN/IEC/UL60601-1, 2<sup>nd</sup> Edition
- Approved to EN/IEC/UL60950-1, 2<sup>nd</sup> Edition
- Meets Efficiency Level IV Efficiency
- CE Compliant (LVD, RoHS)



## International Safety Standard Approvals



## Specifications

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

<b>AC Input</b> 100-240VAC +/- 10%, 47-63 Hz single phase.	<b>Turn On Time</b> Less than 1 second under all rated load conditions.
<b>Input Current</b> 115VAC: 0.7A, 230VAC: 1.5A.	<b>Hold-up Time</b> <17 ms at 65W, nominal input (120VAC).
<b>Inrush Current</b> The inrush at 264VAC, at a cold start, will not exceed 40A.	<b>Overvoltage Protection</b> Built-in
<b>Input Fuses</b> F1, F2: 2.5A, 250VAC fuses provided on all models.	<b>Overload Protection</b> Hiccup Mode
<b>Earth Leakage Current</b> <300µA @ 264Vac, 60Hz, normal; <500µA SFC.	<b>Short Circuit Protection</b> Hiccup Mode
<b>Efficiency</b> Up to 90% typical.	<b>Switching Frequency</b> Variable 50-75kHz typical.
<b>Output Power</b> 65W continuous.	<b>Medical Safety Standards</b> EN/IEC/UL 60601-1, 2 <sup>nd</sup> Edition, EN/IEC/UL60950-1, 2 <sup>nd</sup> Edition
<b>Ripple and Noise</b> 1% pk-pk max., 20MHz BW, differential mode. Measured with noise probe directly across output terminals.	<b>Isolation</b> Input-Output: 4000VAC, Input-Ground: 1800VAC, Output-Ground: 500VAC
<b>Output Voltage</b> See chart.	<b>Operating Temperature</b> 0° to 70°C (derate from full rated power above 40°C).
<b>Voltage Adjustability</b> Voltage pre-set by fixed resistance.	<b>Cooling</b> Convection
<b>Minimum Load</b> Not required.	<b>Output Power Derating</b> See derating chart
<b>Total Regulation</b> +/- 2%. See chart.	<b>Storage Temperature</b> -40 to +85°C.
<b>Transient Response</b> 500µs max., 50% load step, typical.	<b>Relative Humidity</b> 5% to 95%, non-condensing

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Model Number	Volts (V)	Output Parameters			Total Regulation	OVP Threshold
		Open Frame	Output Current w/cover	Ripple & Noise		
MINT1065X1275C01	12V	5.25A	4.00A	120mV	±2%	15.0 ± 1.5V
MINT1065X1375C01	13.2V	4.80A	3.63A	140mV	±2%	16.0 ± 1.5V
MINT1065X1575C01	15V	4.33A	3.20A	150mV	±2%	18.0 ± 1.5V
MINT1065X1875C01	18V	3.50A	2.66A	180mV	±2%	21.0 ± 2.0V
MINT1065X2075C01	20V	3.25A	2.40A	200mV	±2%	23.0 ± 2.0V
MINT1065X2475C01	24V	2.70A	2.00A	240mV	±2%	27.0 ± 2.0V
MINT1065X4875C01	48V	1.35A	1.00A	480mV	±2%	55.0 ± 4.0V

## Specifications (continued)

### Vibration

Operating: 0.003 g<sup>2</sup>/Hz, 1.5 g<sub>rms</sub> overall, 3 axes, 10 min. / axis  
Non-Operating: 0.026 g<sup>2</sup>/Hz, 5.0 g<sub>rms</sub> overall, 3 axes, 1 hr. / axis

### Dimensions

W 2.0" x L 4.0" x H 1.17". See outline drawing.

### Weight

150 grams

### Shock

Operating: Half-sine, 20 g<sub>pk</sub>, 10 ms, 3 axes, 6 shocks total  
Non-Operating: Half-sine, 40 g<sub>pk</sub>, 10 ms, 3 axes, 6 shocks total

### Operating Altitude

-500 to 10,000 ft.

### Non-operating Altitude

-500 to 40,000 ft.

## EMI/EMC Compliance

### Conducted Emissions

EN55011 Class B, FCC Part 15, Class B.

### Radiated Emissions

EN55011 Class A, FCC Part 15, Class A.

### Static Discharge Immunity

EN61000-4-2, 6kV Contact Discharge, 8kV air discharge

### Radiated RF Immunity

EN61000-4-3, 3V/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

## Model Number Key

MINT 1 065 X 12 75 C 01

01 = Standard Model, 02 and higher indicates a modified model.

Input Connector - "C" = 2 pin header

"75" = Output Connector - 4 pin header

Output Voltage: "12" = 12V output, "24" = 24V output, etc.

Model Configuration: "A" = Class I (grounded); "B" = Class II (ungrounded); "C" =

Chassis/cover provided (class I only)

Output Power (Watts) - "065" = 65W

# of Outputs

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

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## Mechanical Drawings and Connector Information

### MINT1065 Series Connectors

#### INPUT:

**J1 AMP P/N 641937-1**

PIN 1) AC LINE

PIN 2) AC NEUTRAL

#### OUTPUT:

**J2 AMP P/N 640445-4**

PIN 1) +Vout      PIN 3) -Vout

PIN 2) +Vout      PIN 4) -Vout

#### MATING CONNECTORS:

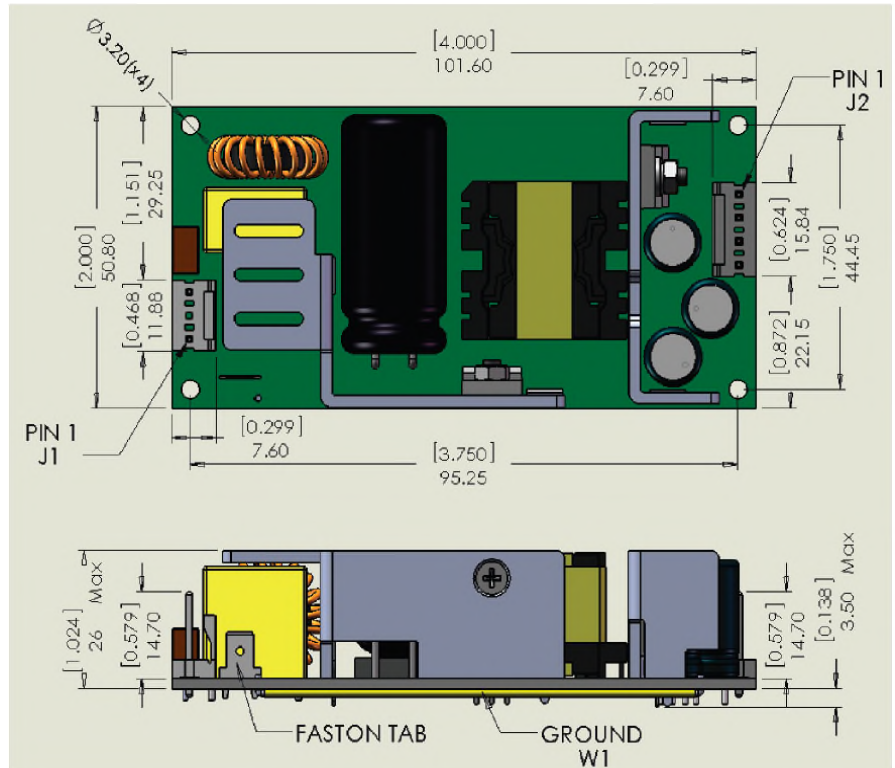
**P1 Molex 09-50-3031**

**P2 Molex 09-50-3041**

**Pins: Molex 08-50-0105**

#### GND CONNECTION (Class I version)

**0.187" FASTON TAB**



## Output Power Derating Curve

