

MINT1065D

65W Single Output Series

Medical, 3rd Edition Certified Universal Input Power Supply



3 Year Warranty

- 65W Convection Cooled AC-DC Power Supply
- Universal Input 90-264 VAC
- Class I or Class II input versions
- Less 0.5W No Load Power Dissipation
- Rugged EMC Compliant Design
- 2" x 4" x 1.2" Package
- ANSI AAMI ES/CSA/EN/IEC 60601-1, 3rd Edition Certified
- Meets Efficiency Level IV Efficiency
- CE Compliant (LVD, RoHS)



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 1 second under all rated load conditions.
Input Current 115VAC: 1.5A, 230VAC: 0.7A.	Hold-up Time <17 ms at 65W, nominal input (120VAC).
Inrush Current The inrush at 264VAC, at a cold start, will not exceed 50A.	Oversvoltage Protection Built-in
Input Fuses F1, F2: 2.5A, 250VAC fuses provided on all models.	Overload Protection Hiccup Mode
Efficiency Up to 90% typical.	Short Circuit Protection Hiccup Mode
Earth Leakage Current Earth Leakage Current <300µA, NC; <500µA SFC @ 264Vac, 60Hz Touch Current is <100µA NC, <500µA SFC @ 264Vac, 60Hz, measured from output to ground	Isolation Input-Output: 4000Vac/2 MOOP Input-Ground: 1500Vac/1MOOP
Output Power 65W continuous.	Medical Safety Standards ANSI AAMI ES/CSA/EN/IEC 60601-1, 3rd Edition
Ripple and Noise 1% pk-pk max., 20MHz BW, differential mode. Measured with noise probe directly across output terminals.	Switching Frequency Variable 50-75kHz typical.
Output Voltage See chart.	Operating Temperature 0° to 70°C (derate from full rated power above 40°C).
Voltage Adjustability Voltage pre-set by fixed resistance.	Cooling Convection
Minimum Load Not required.	Output Power Derating See derating chart
Total Regulation +/- 2%. See chart.	Storage Temperature -40 to +85°C.
Transient Response 500µs max., 50% load step, typical.	Relative Humidity 5% to 95%, non-condensing

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Model Number	Output Parameters				Total Regulation	OVP Threshold
	Volts (V)	Output Current Open Frame	Output Current w/cover	Ripple & Noise		
MINT1065D1275K01	12V	5.25A	4.00A	120mV	±2%	15.0 ± 1.5V
MINT1065D1375K01	13.2V	4.80A	3.63A	140mV	±2%	16.0 ± 1.5V
MINT1065D1575K01	15V	4.33A	3.20A	150mV	±2%	18.0 ± 1.5V
MINT1065D1875K01	18V	3.50A	2.66A	180mV	±2%	21.0 ± 2.0V
MINT1065D2475K01	24V	2.70A	2.00A	240mV	±2%	27.0 ± 2.0V
MINT1065D4875K01	48V	1.35A	1.00A	480mV	±2%	55.0 ± 4.0V

Specifications (continued)

Vibration Operating: 0.003 g ² /Hz, 1.5 g _{rms} overall, 3 axes, 10 min. / axis Non-Operating: 0.026 g ² /Hz, 5.0 g _{rms} overall, 3 axes, 1 hr. / axis	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
Pollution Degree 2	Overvoltage Category OVCI (2500V for Mains), OVCI (1500V for Secondary)
Dimensions W 2.0" x L 4.0" x H 1.17". See outline drawing.	Operating Altitude Up to 4000m.
Weight 150 grams	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 K 01

Model:	"01" = Standard Model, 02 and higher indicates a modified model.
Input Connector:	"K" = 3 pin Header (class I input); "C" = 2 pin Header (class II input).
Output Connector:	"75" = Output Connector, 4 pin header. Other options available, consult factory.
Output Voltage:	"12" = 12V, "24" = 24V, etc.
Configuration:	"D" = EN60601-1 3rd Edition Certified, "C" = Optional chassis & cover (class I only).
Output Power:	"065" = 65W
# of Outputs:	"1" = Single output
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:

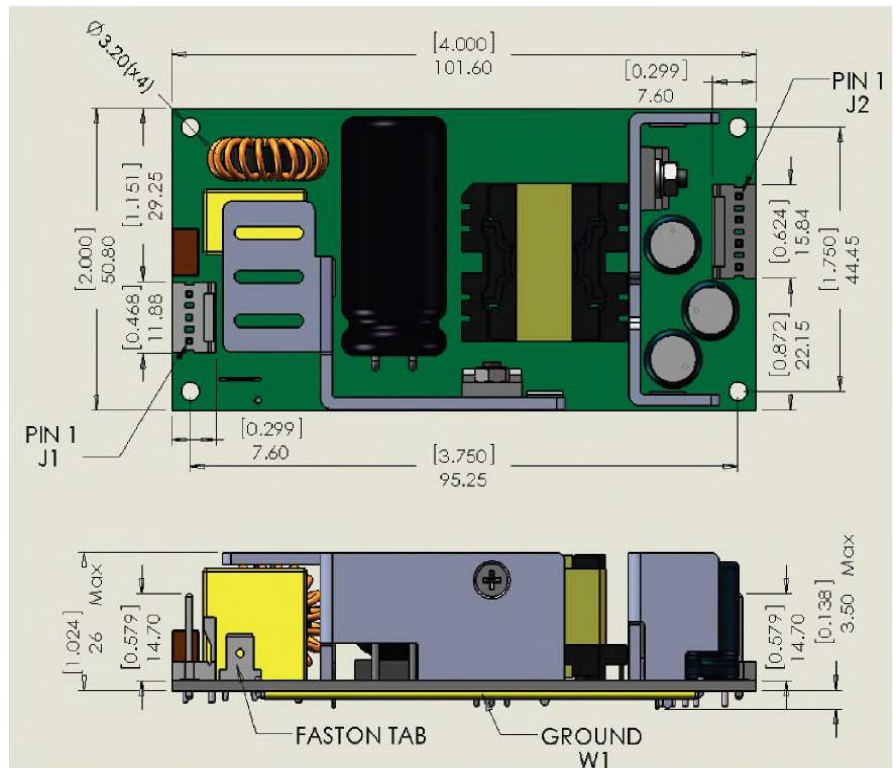
P1 Molex 09-50-3031

P2 Molex 09-50-3041

Pins: Molex 08-50-0105

GND CONNECTION (Class I version)

0.250" FASTON TAB



Output Power Derating Curve

