

Industrial

FEATURES AND BENEFITS

3" x 5" x 1.3" Package

200W with 100LFM Air

180W Convection Cooled

Fits 1U Applications

Class B Conducted EMI

Approved to CSA/EN/IEC/UL60950-1, 2nd Edition

Efficiency 90% Typical

3 Years Warranty

Universal Input 90-264 VAC

RoHS Compliant



MODEL SELECTION

Model Number	Volts	Output Current w/100LFM air	Convection*	Minimum Load	Ripple & Noise**	Total Regulation	OVP Threshold***
CINT1200A1275K01	12V	16.7A	15.0A	0A	120mV pk-pk	±3%	14.0 ± 1.1V
CINT1200A1575K01	15V	13.3A	12.0A	0A	150mV pk-pk	±3%	18.5 ± 1.2V
CINT1200A1875K01	18V	11.1A	10.0A	0A	180mV pk-pk	±3%	21.5 ± 2.0V
CINT1200A2475K01	24V	8.33A	7.50A	0A	240mV pk-pk	±3%	29.0 ± 2.5V
CINT1200A2875K01	28V	7.14A	6.40A	0A	280mV pk-pk	±3%	33.5 ± 2.5V
CINT1200A3275K01	32V	6.25A	5.62A	0A	320mV pk-pk	±3%	36.0 ± 3.0V
CINT1200A3675K01	36V	5.55A	5.00A	0A	360mV pk-pk	±3%	41.0 ± 3.0V
CINT1200A4875K01	48V	4.17A	3.75A	0A	480mV pk-pk	±3%	56.0 ± 3.0V

Notes: * Total convection power is 180 Watts.

** Measured with noise probe directly across output terminals, and load terminated with 0.1µF ceramic and 10µF low ESR capacitors.

INPUT

AC Input	100-240VAC, ±10%, 47-63Hz, 1Ø 120-370V DC
Input Current	115VAC: 1.8A, 230VAC: 0.9A
Inrush Current	264VAC, Cold start: will not exceed 55A
Input Fuses	F1, F2: 3.15A, 250VAC fuses provided on all models
Earth Leakage Current	<500µA @ 264VAC, 60Hz, NC; <1mA SFC
Efficiency	88% typical

OUTPUT

Hold-up Time	16ms at 200W, 120VAC/60Hz
Turn On Time	Less than 3sec @ 115VAC, Full Load
Switching Frequency	PFC: Fixed, 65kHz Main Converter: Variable 35-200kHz, 65-70kHz at full load
Output Power	200W continuous, with 100 lfm airflow, 180W convection cooled - See chart for specific voltage model ratings
Output Voltage	See chart
Ripple and Noise	0.5%rms, 1% pk-pk, see chart
Transient Response	500µS typical, Return to 0.5% of nominal, 50% load step Di/Dt: <0.2A/µS. Max voltage deviation = 3%
Voltage Adjustability	Fixed Output
Minimum Load	Not required
Total Regulation	+/- 3% combined line, load and initial setting

ISOLATION SPECIFICATIONS

Isolation	Input-Output: 4,000VAC Input-Ground: 1,800VAC Output-Ground: 1,500VAC
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PROTECTION

Overtemperature Protection	Sensing transformer temperature, 165°C at full load, latching type, requires input power recycling to reset
Overload Protection	120 to 150% of rating, Hiccup mode
Short Circuit Protection	Hiccup mode, Auto recovery
Overvoltage Protection	OVP latch, see models chart for trip range

SAFETY

Safety Standards	EN/CSA/UL/IEC 60950-1, 2nd edition
Shock	Operating: Half-sine, 20gpk, 10ms, 3 axes, 6 shocks total Non-operating: Half-sine, 40 gpk, 10ms, 3 axes, 6 shocks total

ENVIRONMENT

Operating Temperature	-10°C to +70°C Start up at -40°C, Full load
Temperature Derating	Derate output power linearly above 50°C to 50% at 70°C
Storage Temperature	-40°C to +85°C
Altitude	Operating: -500 to 10,000 ft Non-operating: -500 to 40,000 ft
Relative Humidity	5% to 95%, Non-condensing
Vibration	Operating: 0.003g ² /Hz, 1.5grms overall, 3axes, 10 min/axis Non-operating: 0.026g ² /Hz, 5.0grms overall, 3 axes, 1 hr/axis
Dimensions	W: 3.0" x L: 5.0" x H: 1.3"
Weight	325g

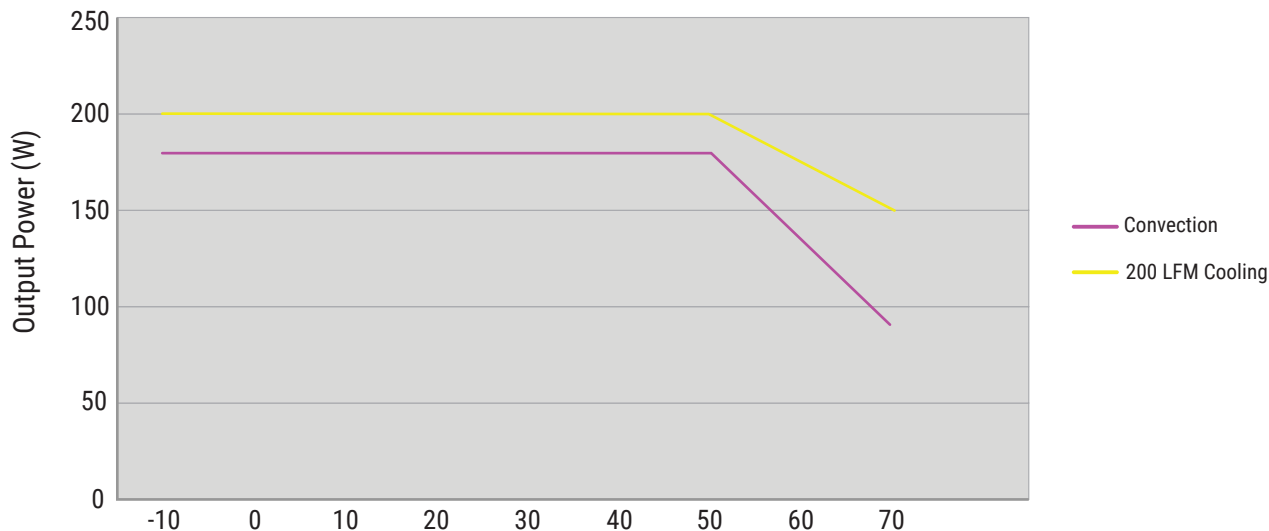
RELIABILITY

MTBF	401,000 hours, 25°C, 110VAC
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DERATING CURVE

180W convection cooled and 200W continuous with 100 LFM airflow, derate output power to 50% at 70°C.

Output Power vs. Temperature

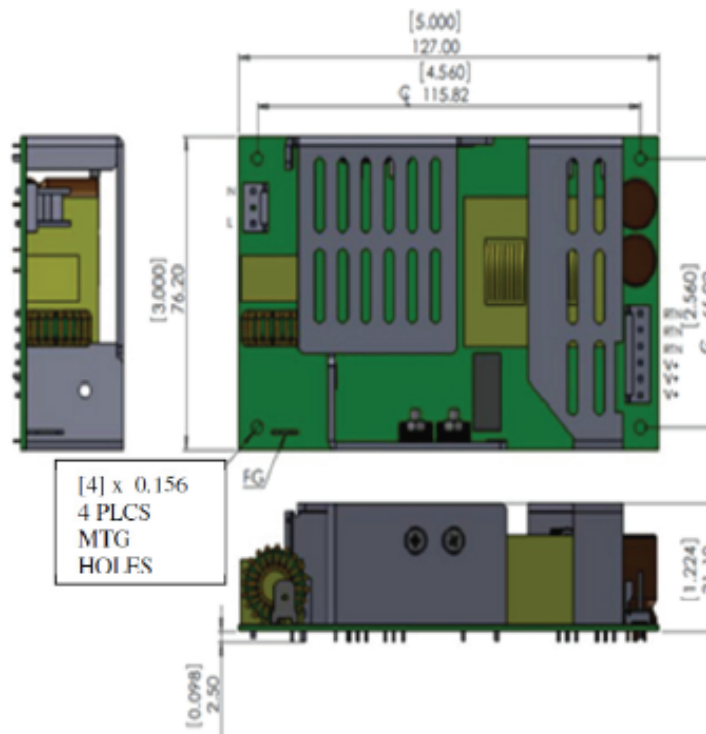




EMI/EMC COMPLIANCE

Conducted Emissions	EN55011/22 Class B, FCC Part 15, Subpart B, Class B
Radiated Emissions	EN55011/22 Class A, FCC Part 15, Subpart B, Class A w/6db margin
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, 100%, 10ms; 30%, 275ms; 60%, 100ms Performance Criteria A, A, & A at 70% load
Line Harmonic Emissions	EN61000-3-2, Class A, B, C, & D
Flicker Test	IEN61000-3-3, Complies (dmax<6%)

MECHANICAL DRAWING



- Notes :**
1. All dimensions in inches (mm), tolerance is +/-0.000".
 2. Mounting holes should be grounded for EMI purposes.
 3. FG is safety ground connection.
 4. The power supply requires mounting on metal standoffs 0.20" (5mm) in height, min.



CONNECTOR INFORMATION

Input Connector J100	Ground Connector G1	DC Output Connector J2
PIN 1) AC LINE PIN 2) EMPTY PIN 3) AC NEUTRAL	0.25" FASTON TAB	Term. 1,2,3: RTN Term. 4,5,6: +Vout
Mating Connector: AMP Molex 640250-3 Pins: 640252-2	Mating Connector: Molex 190020001	Mating Connector: AMP 640250-6 Pins: 640252-2