

Features:

- Compact 1U Profile with only 8.73" Depth
- High Efficiency design optimized for mid to light load applications
- Constant Current Characteristic
- N+1 Redundancy with Warm Plug Capability (IEC-320 AC Inlet)
- High Power Density (18W/in³)
- 3.3VSB, Active Load Sharing, I²C and PMBus standard Interface
- Remote On/Off and Remote Sense functions



FEATURES	BENEFITS
High Power Density 18W/in ³	More system space for application circuits and hardware
>92% Efficiency @ 50% Load	Reduced Total Cost of Ownership
>90% Efficiency @ 20% Load	High efficiency under typical customer loads
Load Sharing & Fault Tolerant	Excellent reliability in N+1 operation
Automatic Fan Speed Control	Reduces audible noise and increases reliability
System Scalability up to 3.4kW	Allows flexibility with minimum investment
Digital Supervisory & Control	Supports light load efficiency optimization

KEY MARKET SEGMENTS & APPLICATIONS	
■ Distributed Power	■ Blade Servers
■ Mid-End Servers	■ Network Equipment
■ Network Attached Storage	
■ Storage Area Networks	

SPECIFICATIONS	850 Watt +12V Front End Power Supply
Input Voltage Range	85-264 VAC, 47-63 Hz, derate to 750W for <90VAC Input
Input Current Maximum	11A (full load, Vin = 100Vac) / 12A (full load, Vin = 90Vac)
Inrush Current	40A max. cold start (Measured at 25°C for all line conditions typical duration 10ms)
Input Protection	Single fuse (line) – 15A & 250Vac (Type 3AB Axial)
Power Factor	0.99 typical at full load, complies with IEC555, EN60555-2, EN61000-3-2
Efficiency	Up to 92.6% Efficiency at 75% Load and 230 VAC Operation (typical)
Output Power	850W derate to 750W for <90VAC Input
Output Voltage Range	10.8~13.2 VDC with remote programming
Output Current	71.0A @ 12V (no minimum load required)
Standby Bias Voltage	3.3VSB@1A (optional 5Vsb)
Voltage Regulation	±2% of Vnom for any combination of line, load and temperature
Output Ripple & Noise	1% (pk-pk) @ 20MHz with 0.1µF ceramic and 10µF electrolytic caps at the output
Transient Response	5% max deviation Recovery time 500µs @ 50% load step and di/dt < 1A/µs (for system loads >10%)
Hold-Up Time	12ms at 850W typical (Early Warning: 2ms)
Remote On/Off	ON if >3V or open; OFF if <1V (max. sink 1mA) Open collector type
Current Limit Protection	Adjustable via I ² C interface or PMBus, Constant current characteristic & power limited to 850W
Short Circuit Protection	Self protected with auto recovery
Over Voltage Protection	Trip level >+14.8Vdc ± 1V, Reset condition by recycling the AC input or applying Remote ON/OFF
Operating Temperature	-10°C to +70°C. power derating above 50°C at 2.5%/°C (startup -40° C, meet specified spec with 30min. warm period)
Over Temperature Protection	Non-Latching, thermal shutdown point is set for 125°C and recovery point is 110°C
EMI	FCC-B & EN55022-B with specified filter or at rack level, GR-1089-CORE
LED Indicators	AC OK (Green) / DC OK (Green) / Thermal Alarm (Orange) / Fault (Red), "All on one LED" Tri-color LED
Analog Status & Control	Voltage Programming (V Prog), Load sharing (I Share), Remote On/Off, Current Monitor (I Monitor), AC OK, DC OK, Temperature Warning, Fault, PS Present, Module Enable
Digital Status & Control	I ² C Option and PMBus, see detailed specification for details
Shock & Vibration	NEBS GR-63-CORE Level 3
Dimensions	8.73 x 3.38 x 1.61" / 221.7 x 85.9 x 40.9mm (1.65" max height with optional bezel)
Weight	2.73lb/1.24kg
Safety Approvals	IEC/UL/CSA/EN60950-1, CE Mark (LVD), TUV
Options	5VSB Output, Bezel

rev 090811

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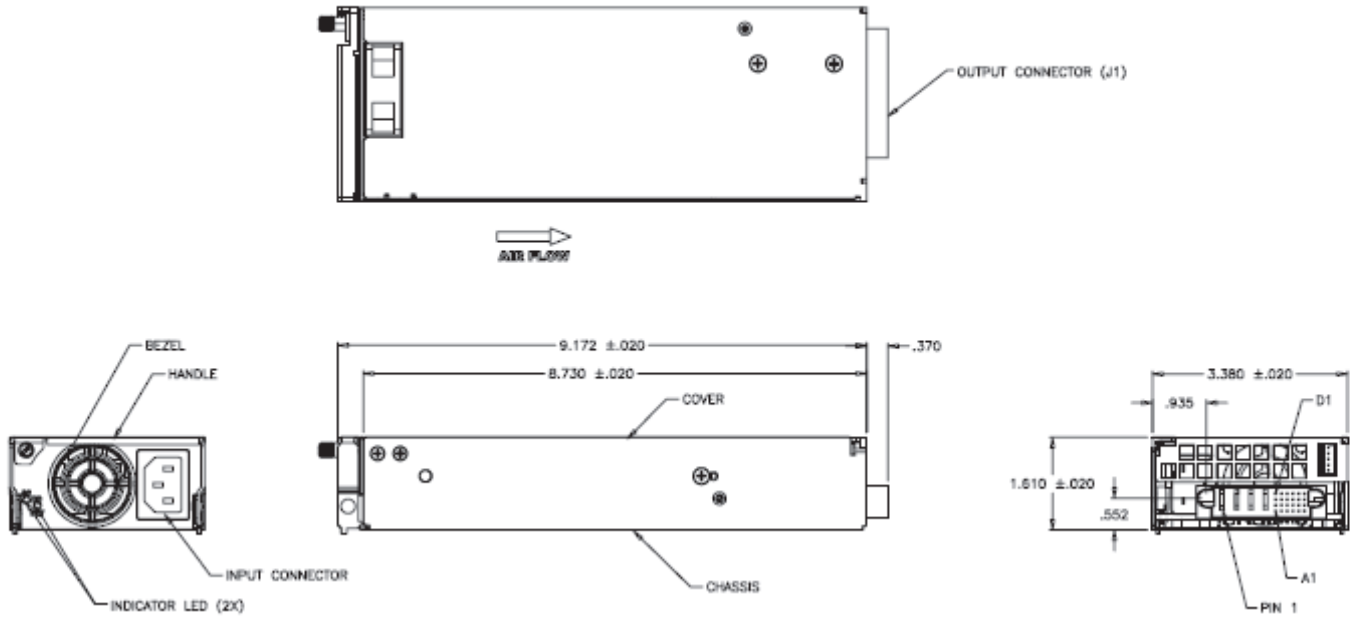
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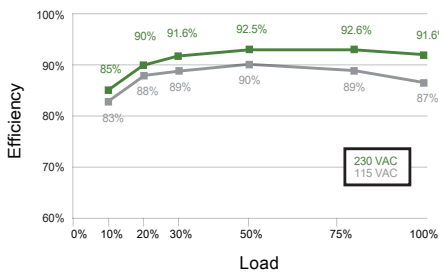


OUTLINE DRAWING

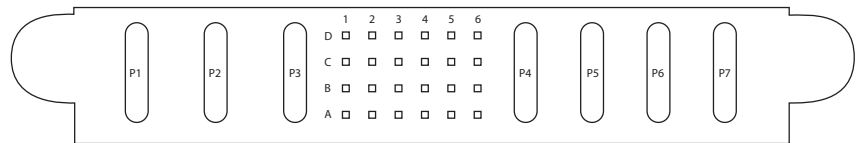


All Dimensions in Inches (mm)
 Tolerance: .XX = ± .02 in (.50 mm)
 .XXX = ± .010 in (.254 mm)

EFFICIENCY CURVE:

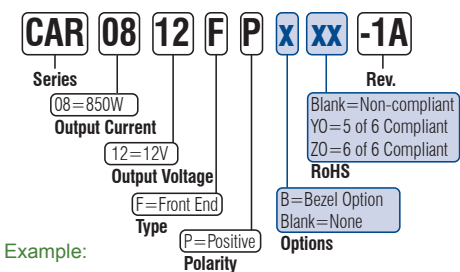


CONNECTOR DRAWING:



FCI Berg Pt # 51732-021 or equivalent
 Suggested mating connector part # 51762-10802400ABLF (Right Angle Mounting)

PART NUMBER DEFINITION GUIDE:



Example: **CAR0812FPBZ0-1A**
 850W/12V Front End, Bezel, 6 of 6 RoHS

PIN OUT INFORMATION

A1	VSB 3.3V	B4	PS Present	D1	V Prog	P4	Vout
A2	VSB 3.3V Return	B5	SDA	D2	OVP Test Point	P5	Vout
A3	Signal RTN	B6	SCL	D3	Remote On/Off	P6	Vout Return
A4	Write Protect	C1	I Share	D4	DC OK	P7	Vout Return
A5	Remote Sense (+)	C2	Not Connected	D5	AC OK		
A6	Remote Sense (-)	C3	Temp Warning	D6	Interrupt		
B1	Fault	C4	I2C Address (A0)	P1	Not Connected		
B2	I Monitor	C5	I2C Address (A1)	P2	Not Connected		
B3	Enable (Short Pin)	C6	I2C Address (A2)	P3	Not Connected		