

<b>Electrical Specification for:</b>	<b>eF175-248</b>
<b>Telkoor Part number:</b>	<b>900-0248-0000</b>
<b>Product Description:</b>	<b>Dual Output 175W open frame power supply</b>

<b>CUSTOMER</b>	<b>SIZE</b>	<b>CAGE CODE</b>	<b>S5417</b>	<b>DWG. NO.</b>	<b>0248-DOC1-10</b>	<b>REV</b>	<b>A</b>
<b>GENERAL</b>	<b>SCALE</b>	<b>RELEASE DATE</b>	<b>10/11/2005</b>	<b>SHEET</b>	<b>1</b>	<b>OF</b>	<b>5</b>

REVISION HISTORY				
Rev Level	Rev Date	Change Made	Reason for Change	Effective
A	10/11/05	Initial Release		10/11/05

Approvals		
	Name	Date
<b>Written by:</b>	<b>Sam Sadot</b>	<b>10/11/05</b>
<b>Engineering:</b>	<b>Sam Sadot</b>	<b>10/11/05</b>
<b>Sales &amp; Marketing:</b>	<b>Mor Allon</b>	<b>10/11/05</b>
<b>Management:</b>	<b>Yossi Ben Ami</b>	<b>10/11/05</b>

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### **Input:**

Input Voltage: 90-264VAC  
 Frequency: 47-63Hz  
 Inrush Current: 60A maximum, cold start at 25°C, 250Vac  
 Power Factor: 0.96 typical at 230Vac, full load  
 Efficiency: 0.98 typical at 115Vac, full load  
 80% typical at 230Vac, full load  
 75% typical at 115Vac, full load  
 Input Protection: Internal Line Fuse: IEC type 5A 250Vac Normal BLO  
 Brown – Out: 75 to 300Vac

### **Output Voltages & Currents:**

<i><b>Output</b></i>	<i><b>Output Voltage</b></i>	<i><b>I Min</b></i>	<i><b>I Max</b></i>	<i><b>I Peak</b></i>
V1	48.0V	0.5A	2.9A	3A
V2	+12.0V	0	5A	5.5A

Output Power: 175W  
 Line Regulation:  $\pm 0.5\%$  for Vin (Min) to Vin (Max).  
 Load Regulation:  
     V1  $\pm 2\%$  for load change from zero to full load  
     V2  $\pm 4\%$  for load change from 10% to 100% load  
 Ripple & Noise  
     V1 75mV P-P  
     V2 120mV  
 Output Voltage Adjustment Range: V1 only  $\pm 5\%$   
 Initial Set Point Tolerance: V2  $\pm 1\%$   
 Overshoot & Undershoot: Less than 5% at turn ON-OFF  
 Transient Load Response:  $\pm 5\%$  Max. Deviation for load change of 25% to 75% , at slew rate of 1A/usec, recovery time less then 500Msec  
 Turn On Delay: 2 sec. Maximum.  
 Hold-up Time: 16msec minimum at any input voltage in range and full load  
 Turn-On Rise Time: V1- 50Msec Max . V2-250Msec Max.  
 Over-current Protection: V1 105 to 130% of Im, constant current limit, automatic recovery (V2 SD)  
 V2 110 to 150% of Im constant current limit, automatic recovery  
 Over-voltage Protection: Outputs shut down at 125% Max. of nominal, AC input must Recycled to reset.  
 Temperature Protection: Shutdown due to excessive internal temperature 90 to 97°C (base plate), automatic recovery.  
 Remote Sense: Available on V1  
 Current Share: Yes on V1- N+1 single wire. V2- Natural current sharing  
 Hot Swap: Internal O-Ring diode on V1 Only

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### **Signals & Commands**

Inhibit: Active low, all output shut down.  
 Power OK: Open collector, active low when any of V1, V2 outputs drop 10% below rated output.

### **Environmental Specifications:**

Temperature: Operating: -5°C to +50°C (de-rating linearly to 70 °C with 50% de-rating).  
 Storage: -25°C to +85°C.  
 Temperature Coefficient: 0 to 70°C ± 0.005%/°C  
 Cooling: 100W free convection cooling (base plate cooling). 175W continuous forced air cooling 250 LFM  
 Humidity: Maximum 5% to 95% RH non-condensating.  
 Altitude: Operating 3,000 ft. Non- operating 40,000 ft.  
 Vibration: Three orthogonal axes at 1 octave/min, 5 min dwell at four major resonances at 0.75G peak, 5Hz to 500Hz.

### **Safety Regulatory & EMC Specifications:**

MEETS FCC CLASS B, CISPR 22 CLASS B, EN55022 CLASS B – With an external input line filter  
 EN61000-3-2 HARMONICS  
 EN61000-3-3 VOLTAGE FLUCTUATION  
 EN6000-4-2 ESD +8KV AIR +4KV CONTACT DISCHARGE, performance criteria B  
 EN61000-4-3 RADIATED IMMUNITY: 80-1000Mhz 3V/m, AM 80% (1KHz), criteria A  
 EN61000-4-4 FAST TRANSIENT: 1KV for AC power port, 0.5KV for DC power I/O and signals Port, performance criteria B  
 EN61000-4-5 SURGE: 2KV common mode and 1KV differential mode  
 EN61000-4-6 3VRMS, 80% A.M. BY 1kHz  
 EN61000-4-8 3A /m at 50Hz, performance criteria A.  
 EN61000-4-11 VOLTAGE Dips and interruption: 30% reduction for 10mSec –Criteria B, 60% For 100mSec. Criteria C, 95% reduction for 5000mSec Criteria C.  
 RoHS In full compliance with the RoHS directive #2002/69/EC

### **Dielectric Withstand:**

Input to Case: Input to case: 1500VAC.  
 Input to Output: Input to output: 3000VAC  
 Output to Case: Output to case: 100VDC.

### **Safety Agency Compliance:**

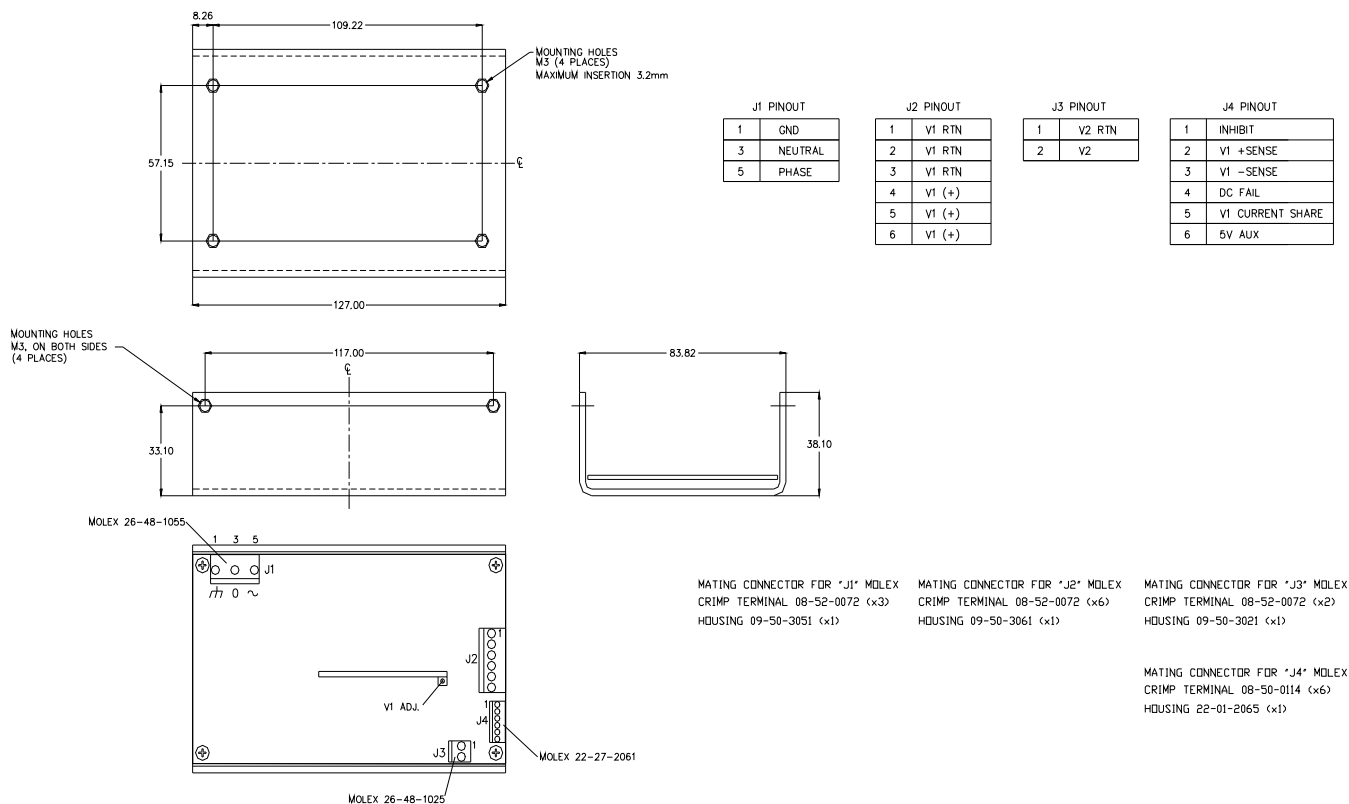
UL 60950  
 CSA C22.2 -234, LEVEL 3.  
 EN-60950  
 CE - MARK  
 Leakage Current: 2mA @50/60 Hz , 264Vac input.  
 MTBF: 300,000 hours minimum per BELCOR 332, issue 6 specification @30 degrees C (Max. junction temperature 110°C , Capacitors 105°C)

### **Mechanical Dimensions**

Size 127mm x 84mm x 38.0mm  
 Weight 650 Gr.  
 Input AC Connector (J1) 3 Pin Molex 26-48-1055  
 Output Connector V1 (J2) 6 Pin Molex Type 26-48-10xx  
 V2 (J3) 2 Pin Molex Type 26-48-1025  
 Command & Control Connector (J4) 6 Pin Molex Type 22-27-2061

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## Outline Drawing



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