

**Electrical  
Specification for:**

**eFO306-248**

Wide range AC/DC Dual Output 350W Power Supply

**TelkooR Part  
Number:**

900-3248-0000

CUSTOMER	SIZE	CAGE CODE	S5417	DWG. NO.	3248-DOC1-10	REV	A1
GENERAL	SCALE	RELEASE DATE	20/09/2005	SHEET	1	OF	5

REVISION HISTORY				
Rev Level	Rev Date	Change Made	Reason for Change	Effective
A1	1/10/06	Update to outline drawing	Reflect correct product configuration	1/10/06

Approvals		
	Name	Date
<b>Written by:</b>	<b>S. Sadot</b>	<b>20/9/05</b>
<b>Engineering:</b>	<b>S. Sadot</b>	<b>20/9/05</b>
<b>Sales &amp; Marketing:</b>	<b>M. Allon</b>	<b>20/9/05</b>
<b>Management:</b>	<b>Y. Ben-Ami</b>	<b>20/9/05</b>

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**Input:**

Input Voltage: 85-264Vac  
 Frequency: 47-440Hz  
 Inrush Current: 60A maximum, cold start at 25°C, 250Vac  
 Efficiency: 85% typical at 230Vac, full load  
 82% typical at 115Vac, full load  
 Power Factor: 0.98 typical at 230Vac, full load  
 0.99 typical at 115Vac, full load  
 Input Protection: Internal Line Fuse: Replaceable subminiature type 6.3A 250Vac Normal Blow  
 Brown – Out: 75 to 300Vac

**Output Voltages & Currents:**

Output	Output Voltage	Min. Load	Max. Load	Peak Load
*V1	+48V	0	7.2A	7.2A
V2	12V	0	4A	5A
Standby	+5V		5mA	5mA

\*V1 - Floating

Output Power: Maximum output power at any combination within the above table is 350 watts.

Load & Line Regulation:

V1 ±0.4% for load changes from zero to full load & over the entire line range  
 V2 ±1 % for load changes from zero to full load & over the entire line range

Ripple & Noise

V1 1% Max. Vp-p 20Mhz BW  
 V2 1% Max. Vp-p 20Mhz BW

Initial Set Point Tolerance:

V1 Factory pre-set at 48.0V ±0.4V  
 V2 Factory pre-set at 5.0V ±0.1V

Overshoot & Undershoot: Less than 1% at turn ON and OFF

Transient Load Response: ±5% Max. Deviation for load change of 25% to 75%, at slew rate of 1A/µsec, recovery time less then 500Msec

Turn On Delay: 2 sec. Maximum

Hold-up Time: 20Msec minimum at full load

Turn-On Rise Time: 50Msec Typical

Over-current Protection: 105 to 130% of I Max, constant current limit, automatic recovery.

Over-voltage Protection: Outputs shut down at 125% of nominal (Latched Shut-Down) AC input must recycle to re-start.

Temperature Protection: Shutdown due to excessive internal temperature 95+/-5°C automatic recovery.

Current Share: Yes – Single wire active current share for V1, natural current share for V2

Hot Swap: Build in Oring Diodes on V1

Remote Sense: V1 only compensates for voltage drop of up to 0.5V to the load.  
 Outputs are internally sensed if loads are opened.

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**Signals & Commands**

Inhibit: Active low, V1 & V2 shut down, standby output available.  
 Power OK (DC Fail): Open collector active low when any of the outputs drop below 15% of its nominal value.

**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 ± 0.02%/°C  
 Cooling: 150W free convection cooling (base plate cooling). 350W forced air cooling (250 LFM min.)  
 Humidity: Maximum 5% to 95% RH non-condensing  
 Altitude: Operating 10,000 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 external line filter  
 EN61000-3-2 Harmonics  
 EN61000-3-3 Voltage fluctuations  
 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.

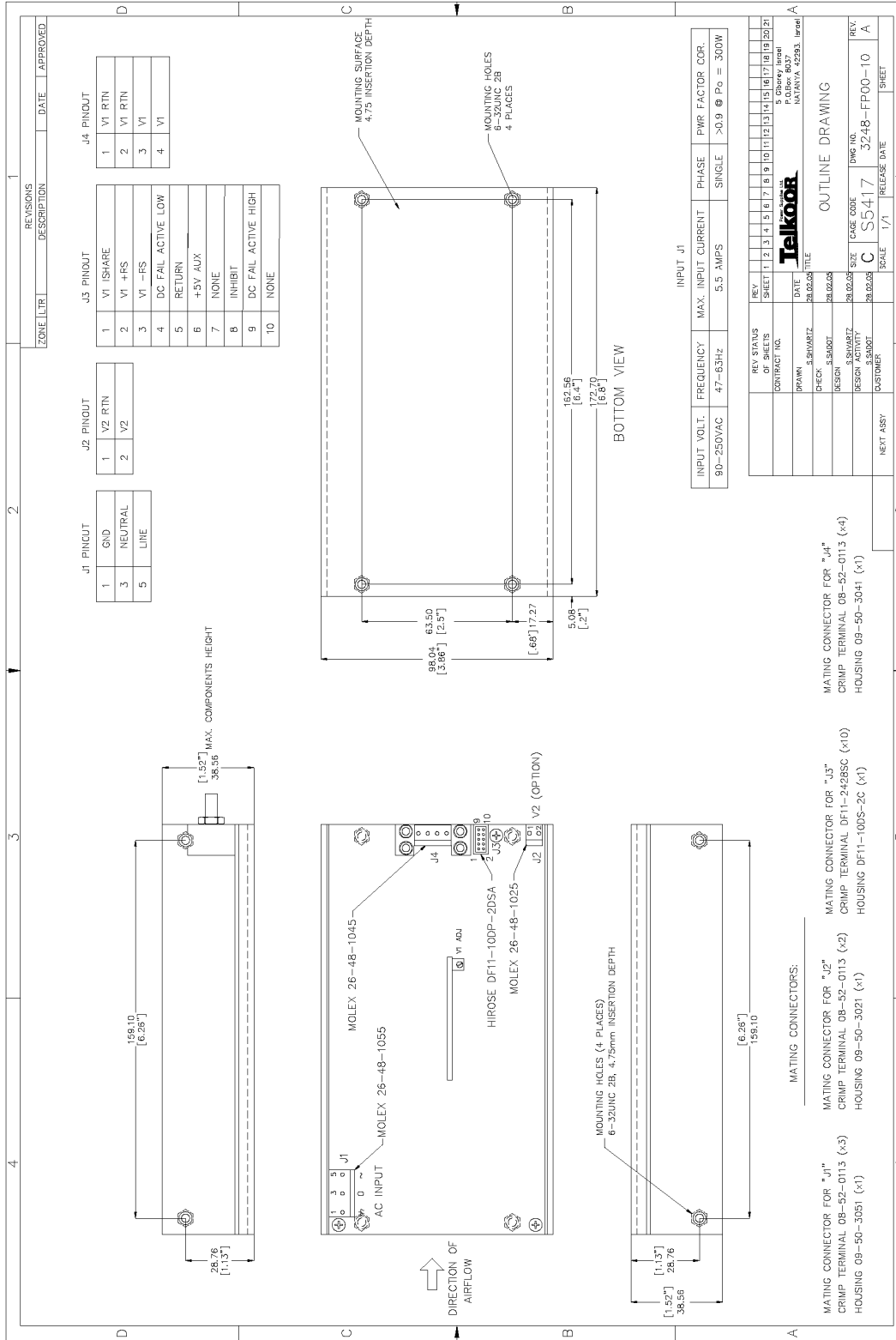
Dielectric Withstand:  
 Input to Case: 1500VAC  
 Input to Output: 3000VAC  
 Output to Case: 500 VDC for V1 & 50VDC for V2.  
 Safety Agency Compliance: UL 60950, VDE, CSA C22.2 -234, LEVEL 3.EN-60950, CLASS 1, SELV CE - MARK  
 Leakage Current: 1mA @50/60 Hz, 264Vac input  
 MTBF: 300,000 hours minimum per BELCOR 332,issue 6 specification @30 degrees C.

**Mechanical Dimensions:**

Size: 700 gr. Max. (26 oz)  
 Weight: 173 x 98 x 38.5(mm) (6.8" x 3.85" x 1.52")

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### Outline Drawing:



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