

**Electrical  
Specification for:**

**eFOA306-148**

Wide range AC/DC Single Output 350W Power Supply

**TelkooR Part  
Number:**

900-3146-0000

<b>CUSTOMER:</b>	<b>SIZE</b>	<b>CAGE CODE</b>	<b>S5417</b>	<b>DWG. NO.</b>	<b>3146-DOC1-10</b>	<b>REV</b>	<b>B</b>
<b>GENERAL</b>	<b>SCALE</b>		<b>RELEASE DATE</b>	<b>27/6/05</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	Approved By
A	27/06/2006	Specification Release		13/03/2008	S. Sadot
B	21/12/2010	ECO 3146-018	Error corrections: - Unit Model# - Front Page - Output Voltage & Current to Min Load 0.1A – Page 3 - V1 Reg. to less than 1% - Page 3 - Over Current Protection for V1 to 140% - Page 3. - Current Share + Redundancy to YES – Page 3. - Dielectric Withstand – Page 4.	21/12/2010	G. Sela

Approvals		
	Name	Date
Written by:	S. Sadot	27/06/2005
Engineering:	S. Sadot	27/06/2005
Sales & Marketing:	M. Allon	27/06/2005
Management:	Y. Ben-Ami	27/06/2005

CUSTOMER:	SIZE	CAGE CODE	S5417	DWG. NO.	3146-DOC1-10	REV	B
GENERAL	SCALE	RELEASE DATE	27/6/05	SHEET	2	OF	5

**Input:**

Input Voltage: 85-264Vac  
 Frequency: 47-63Hz  
 Inrush Current: 60A maximum, cold start at 25°C, 220VAC  
 Efficiency: 87% typical at 230Vac, full load  
 83% typical at 115Vac, full load  
 Power Factor: 0.96 typical at 230Vac, full load  
 0.99 typical at 115Vac, full load  
 Input Protection: Internal Line Fuse: Replaceable subminiature type 6.3A 250Vac quick act  
 Brown – Out: 75 to 300Vac

**Output Voltages & Currents:**

Output	Output Voltage	Min. Load	Max. Load	Peak Load
V1	+48V	0.1	7.2A	8A
Standby	+5V		5mA	5mA

Output Power: Maximum output power at any combination within the above table is 350 watts.  
 Line Regulation:  $\pm 0.01\%$  for  $V_{in}$  (Min) to  $V_{in}$  (Max).  
 Load Regulation:  
     V1 Less than  $\pm 1\%$  for load changes from zero to full load  
 Ripple & Noise  
     V1 150mVp-p Max  
 Initial Set Point Tolerance:  
     V1 Factory pre-set at  $\pm 100\text{mV}$   
 Overshoot & Undershoot: Less than 1% at turn ON and OFF  
 Transient Load Response:  $\pm 5\%$  Max. Deviation for load change of 25% to 75%, at slew rate of 1A/ $\mu\text{sec}$ , recovery time less than 500msec  
 Turn On Delay: 2 sec. Maximum  
 Hold-up Time: 16mSec minimum at 110VAC and full load  
 Turn-On Rise Time: 30mSec Typical  
 Over-current Protection: For V1 - 110 to 140% of I Max, constant current limit, automatic recovery.  
 Over-voltage Protection: Output shut down at 125% of nominal (Latched Shut-Down) AC input must recycle to re-start.  
 Temperature Protection: Shutdown due to excessive internal temperature with automatic recovery.  
 Current Share: YES  
 Redundancy: YES  
 Remote Sense: Available

<b>CUSTOMER:</b>	<b>SIZE</b>	<b>CAGE CODE</b>	<b>S5417</b>	<b>DWG. NO.</b>	<b>3146-DOC1-10</b>	<b>REV</b>	<b>B</b>
<b>GENERAL</b>	<b>SCALE</b>	<b>RELEASE DATE</b>	<b>27/6/05</b>	<b>SHEET</b>	<b>3</b>	<b>OF</b>	<b>5</b>



**Signals & Commands**

Inhibit: Active High, all output shut down.  
 Power OK (DC Fail): Open collector active low when any of the outputs drop below 10% 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. 350W with 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.  
 ROHS compliant: YES

**Safety Regulatory & EMC Specifications:**

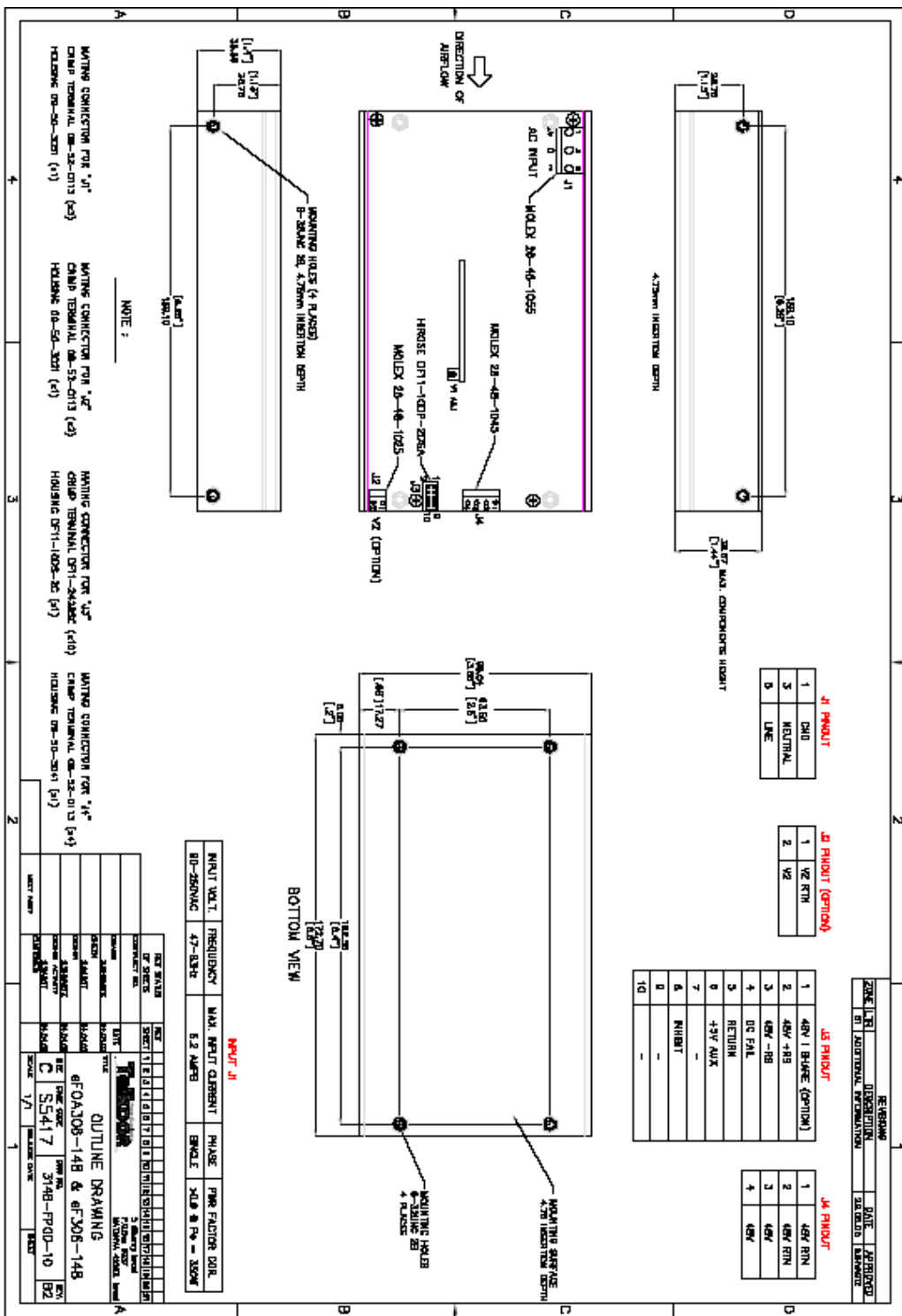
Meets FCC CLASS B,CISPR 22 CLASS B,EN55022 CLASS B with external line filter  
 EN61000-3-2 Harmonics  
 EN61000-3-3 Voltage fluctuations  
 EN6000-4-2 ESD +8KV AIR +4KV contact discharge, performance criteria B  
 EN61000-4-3 Radiated Immunity: 80-1000Mhz 3V/m, AM 80% (1KHz),criteria A  
 EN61000-4-4 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: 2200VDC  
     Output to Case: 50VDC  
 Safety Agency Compliance: UL 60950-1,CSA C22.2 -234, LEVEL 3.EN-60950-1,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: 173 x 98 x 35.5(mm) (6.8" x 3.85" x 1.4")  
 Weight: 700 gr. Max. (26 oz)

<b>CUSTOMER:</b>	<b>SIZE</b>	<b>CAGE CODE</b>	<b>S5417</b>	<b>DWG. NO.</b>	<b>3146-DOC1-10</b>	<b>REV</b>	<b>B</b>	
<b>GENERAL</b>	<b>SCALE</b>		<b>RELEASE DATE</b>	<b>27/6/05</b>	<b>SHEET</b>	<b>4</b>	<b>OF</b>	<b>5</b>

## Outline Drawing:



CUSTOMER:	SIZE	CAGE CODE	S5417	DWG. NO.	3146-DOC1-10	REV	B
GENERAL	SCALE		RELEASE DATE	27/6/05	SHEET	5	OF