

**Electrical  
Specification for:**

**eFO400-124**  
Wide range AC/DC Single 24V Output 400W Power  
Supply

**Telkoor Part  
Number:**

900-4056-0000

CUSTOMER	SIZE	CAGE CODE	S5417	DWG. NO.	4056-DOC1-10	REV	A
GENERAL	SCALE	RELEASE DATE	PRELIMINARY	SHEET	1	OF	5

REVISION HISTORY				
Rev Level	Rev Date	Change Made	Reason for Change	Effective

Approvals		
	Name	Date
<b>Written by:</b>	<b>S. Sadot</b>	<b>24/11/05</b>
<b>Engineering:</b>	<b>M. Heller</b>	<b>4/7/06</b>
<b>Sales &amp; Marketing:</b>	<b>M. Allon</b>	<b>24/11/05</b>
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**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: IEC type 6.3A 250VAC SLO BLOW  
 Brown – Out: 75 to 300Vac

**Output Voltages & Currents:**

Output	Output Voltage	Min. Load	Max. Load	Peak Load
V1	+24V	0	16.5A	17.5A
Standby	+5V		5mA	5mA

Output Power: Maximum output power is 400 watts.  
 Line Regulation:  $\pm 0.1\%$  for  $V_{in}$  (Min) to  $V_{in}$  (Max).  
 Load Regulation:  
     V1 Less than  $\pm 0.5\%$  for load changes from zero to full load  
 Ripple & Noise  
     V1 150mVp-p Max  
 Initial Set Point Tolerance:  
     V1 24.0V  $\pm$  0.1V  
 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/ $\mu$ sec, recovery time less then 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 130% 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 95  $\pm$  5°C automatic recovery.  
 Current Share: YES, built in Oring  
 Hot Swap: YES  
 Remote Sense V1 – compensates for voltage drop of up to 0.5V between the unit and the load. Outputs are internally sensed at the output connector if remote sense lines are opened.

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**Signals & Commands**

Inhibit: Active low, 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 (base plate cooling). 400W 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.

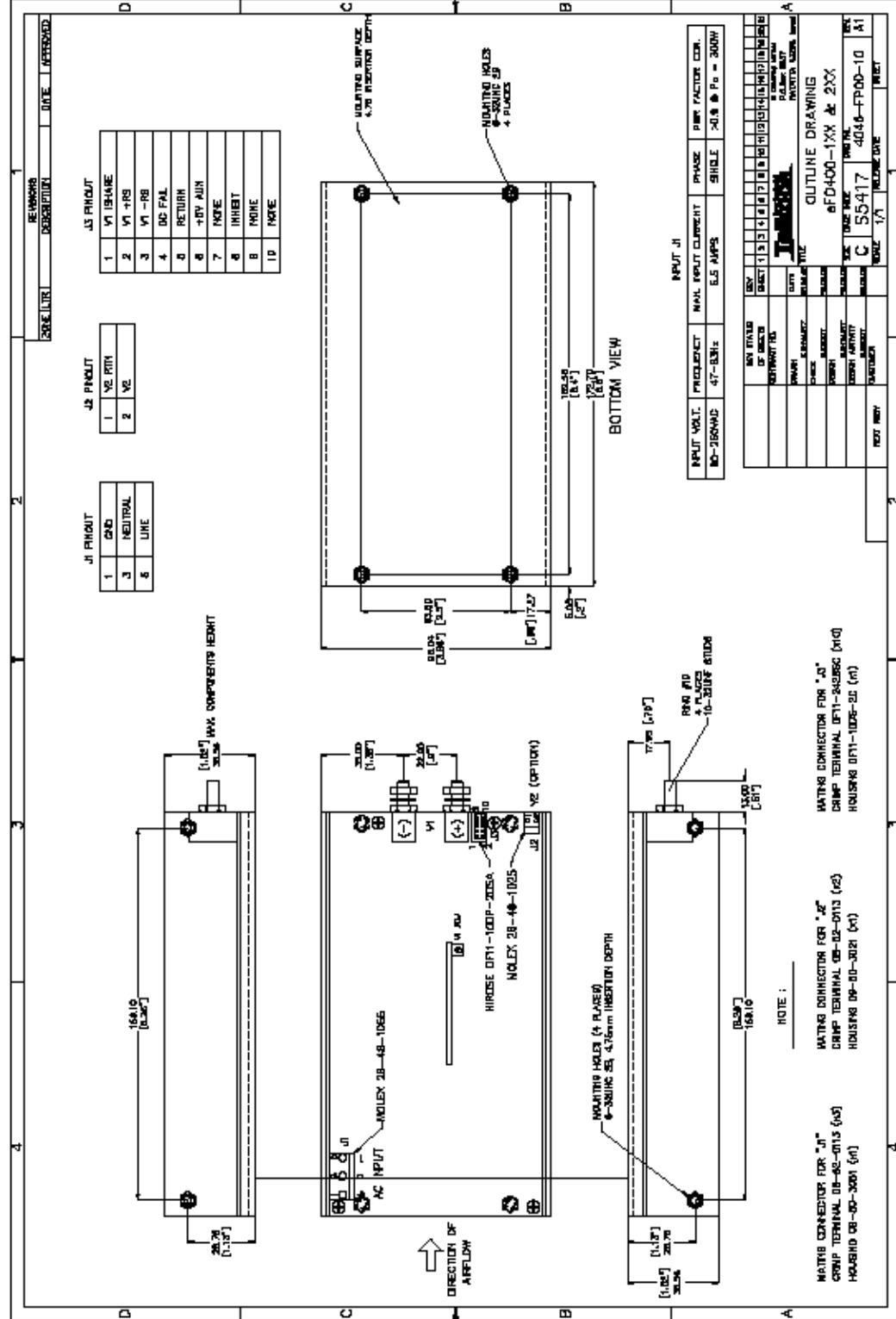
Dielectric Withstand:  
 Input to Case: 1500VAC  
 Input to Output: 3000VAC  
 Output to Case: 1500VDC  
 Safety Agency Compliance: UL 60950,CSA C22.2 -234, LEVEL 3.EN-60950, CLASS 1, SELV CE - MARK  
 Leakage Current: 1mA @50/60 Hz, 264Vac input  
 MTBF: 300,000 hours minimum per BELCOR 332,issue 6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

**Mechanical Dimensions:**

Size: 173 x 98 x 38.5(mm) (6.8" x 3.85" x 1.52")  
 Weight: 720 gr. Max. (27 oz)  
 Input Connector J1: Molex 3 Pin P/N 26-48-1055  
 Mating connector: Housing – Molex 09-50-3051 (x1)  
 Crimp terminal – 08-52-0113 (x3)  
 M&C Connector J3: HIROSE 10 Pin P/N DF11-10DP-2DSA  
 Mating connector: Housing DF11-10DS-2C (x1)  
 Crimp terminal DF11-2428SC (x10)  
 Main output V1: #10 Power ring – two lugs

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## Outline Drawing:



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