

DRAFT

**Electrical
Specification for:**

eF306-487

Wide range AC/DC Quad Output 300W Power Supply

**TelkooR Part
Number:**

900-3026-0000

CUSTOMER GENERAL	SIZE	CAGE CODE	S5417	DWG. NO.	3026-DOC1-10	REV	A
	SCALE		RELEASE DATE	2/8/05	SHEET	1	OF
							1

PRODUCT REVISION HISTORY				
Rev Level	Rev Date	Change Made	Reason for Change	Effective
D11	6/4/05	Component modification	Improve reliability	6/4/05

CUSTOMER GENERAL	SIZE	CAGE CODE	S5417	DWG. NO.	3026-DOC1-10	REV	A	
	SCALE		RELEASE DATE	2/8/05	SHEET	2	OF	2

Input:

Input Voltage: 85-264VAC
 Frequency: 47-63Hz
 Inrush Current: 60A maximum, cold start at 25°C, 220VAC
 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
 Broun – Out: 75 to 300Vac

Output Voltages & Currents:

Output	Output Voltage	Min. Load	Max. Load	Peak Load
V1	+2.5V	0	40A	45A
V2	+3.3V	0	40A	45A
V3	+12V	0	1.5A	3A
V4	5V	0	3A	3.5A
Standby	+5V	0	5mA	10mA

Notes:

- Maximum output power at any combination within this table is 300 watts
- V4 return is floating

Line & Load Regulation:

V1 & V2 ±0.5% for load changes from zero to full load
 V3 & V4 ±2% for load changes from zero to full load

Ripple & Noise

V1 & V2 1% Max. Vp-p 20Mhz BW
 V3 & V4 120mVp-p Max

Initial Set Point Tolerance:

V1 & V2 Factory pre-set at ±100mV
 V3 & V4 Factory pre-set at ±0.5V

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:

16Msec minimum at full load

Turn-On Rise Time:

20Msec Typical

Over-current Protection:

For V1&V2 - 105 to 130% of I Max, constant current limit, automatic recovery.
 For V3&V4- 125 to 175% 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:

N/A

Hot Swap:

N/A

Remote Sense

V1 & V2 compensates for voltage drop of up to 0.5V to the load.
 Output is internally sensed if remote sense lines are not connected.

CUSTOMER GENERAL	SIZE	CAGE CODE	S5417	DWG. NO.	3026-DOC1-10	REV	A
	SCALE		RELEASE DATE	2/8/05	SHEET	3	OF
							3

Signals & Commands

Inhibit: Active low, all output shut down.
 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). 300W 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.

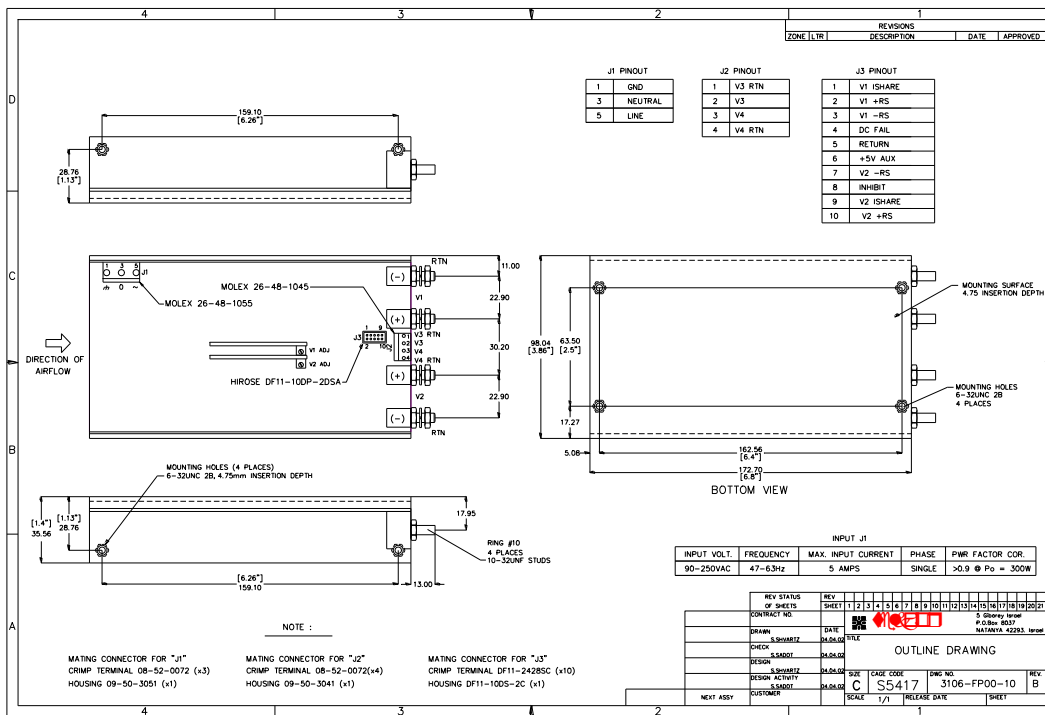
Dielectric Withstand:
 Input to Case: 1500VAC
 Input to Output: 3000VAC
 Output to Case: For V1 - 500 VDC. For V2 – 500 VDC
 Safety Agency Compliance: C/UL 60950, EN-60950,CLASS 1, SELV CE – MARK (LVD)
 Leakage Current: 1mA @50/60 Hz, 264Vac input
 MTBF: 300,000 hours minimum per BELCORE 332,issue 6 specification @30 degrees C.

CUSTOMER GENERAL	SIZE	CAGE CODE	S5417	DWG. NO.	3026-DOC1-10	REV	A	
	SCALE		RELEASE DATE	2/8/05	SHEET	4	OF	4

Mechanical Dimensions:

Size: 700 gr. Max. (26 oz)
 Weight: 173 x 98 x 35.5(mm) (6.8" x 3.85" x 1.4")

Outline Drawing:



CUSTOMER GENERAL	SIZE	CAGE CODE	S5417	DWG. NO.	3026-DOC1-10	REV	A
	SCALE		RELEASE DATE	2/8/05	SHEET	5	OF
							5