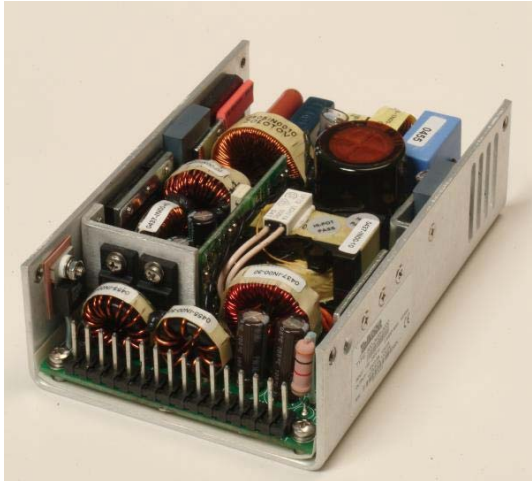




## eF175-455 – 200W Open Frame Quad Output AC/DC Switching Power Supply



### Product Description

Industry's smallest open frame quad output AC/DC switcher delivering 200W continuous Power with active PFC.

The unit is built in a 1U 3" X 5" footprint

**Telkoor Part Number:  
900-0455-0000**

### Product Specifications:

#### Input

<b>AC Input Voltage</b>	85-265 VAC
<b>Input Inrush Current</b>	50A maximum, cold start at 25°C, 250VAC
<b>Active Power Factor Correction</b>	0.96 typical at 230VAC, full load 0.98 typical at 115VAC, full load
<b>Efficiency @ 230VAC Full Load</b>	81% typical at 230VAC, full load
<b>Efficiency @ 115VAC Full Load</b>	78% typical at 115VAC, full load
<b>Input Line Protection</b>	Internal Line Fuse IEC type 5A 250Vac Normal BLO
<b>Hold-up Time</b>	16msec minimum at 110VAC and full load

#### Output

<b>V1 / Current</b>	-55V / 2.8A
<b>V2 / Current</b>	+12.2V / 2.5A
<b>V3 / Current</b>	+5.1V / 3.5A
<b>V4 / Current</b>	+3.4V / 3.5A
<b>Total Output Power</b>	200Watt
<b>Line Regulation</b>	± 0.1% for Vin (Min) to Vin (Max)
<b>O-Ring option</b>	No
<b>Hot-Swap option</b>	N/A
<b>Remote Sense (open sense lines protected)</b>	N/A

<b>Transient Response</b>	±5% Max. Deviation for load change of 25% to 75% , at slew rate of 1A/usec, recovery time less then 5mSec
<b>Over-Voltage Protection</b>	Outputs shut down at 125% Max. of nominal, AC input must Recycled to reset
<b>Short Circuit Protection</b>	Yes
<b>Temperature Protection</b>	shutdown due to excessive internal temperature 90 to 97°C (base plate) automatic recovery
<b>Load Regulation</b>	
<b>V1</b>	± 2% for load change from zero to full load
<b>V2, V3 &amp; V4</b>	± 2% for load change from 10% to 100% load
<b>Overshoot / Undershoot at Turn-on</b>	Less than 1% at turn ON-OFF
<b>Turn-on Delay</b>	2 sec. Maximum
<b>Initial Setting Accuracy</b>	V2 Factory pre-set at ±1%
<b>Voltage Set Point (Internal trim-pot)</b>	V1+/-1.0V, V2+/- 0.5V, V3 +/-0.2V, V4 ±0.05V
<b>Ripple @ Noise with 20MHz Bandwidth measured across 47µF Load Capacitor Paralleled with 1µF Ceramic Cap.</b>	
<b>V1 &amp; V2</b>	100Mv p-p tested on 10 microfarad, in parallel with 0.1 microfarad capacitors, Bandwidth 20 MHz
<b>V3 &amp; V4</b>	50mV p-p tested on 10 microfarad, in parallel with 0.1 microfarad capacitors, Bandwidth 20 MHz
<b>Overload Protection</b>	
<b>V1 &amp; V2</b>	V1 105 to 130% of Im, constant current limit, automatic recovery (V2 SD) V2 110 to 150% of Im constant current limit, automatic recovery

## Environmental

<b>Temperature</b>	
<b>Operation</b>	-5°C to +60°C (de-rating linearly to 70 °C with 30% de-rating)
<b>Storage</b>	-40°C to +85°C
<b>Cooling</b>	100W free convection cooling (base plate cooling). 200W continuous forced air cooling, 250lfm, 15CFM min. 220W with 330lfm, 20 CFM.
<b>Humidity</b>	Maximum 5% to 95% RH non-condensing
<b>Altitude</b>	Operating 10,000 ft. Non- operating 40,000 ft
<b>Vibration</b>	Three orthogonal axes at 1 octave/min, 5 min dwell at four major resonances at 0.75G peak, 5Hz to 500Hz
<b>Conducted &amp; Radiated Emission</b>	MEETS FCC CLASS B, EN55022 CLASS B – With an external Inlet

<b>Emission</b>	input line filter, added to each unit.
<b>Surge</b>	EN61000-4-5 - 2KV common mode and 1KV differential mode
<b>MTBF</b>	400,000 hours minimum per BELCOR 332, issue 6 specification @30 degrees C (Max. junction temperature 110°C , Capacitors 105°C)
<b>Dielectric Isolation</b>	
<b>Input to Case</b>	1500VAC.
<b>Input to Output</b>	3000VAC
<b>Output to Case</b>	250VDC

### Safety, Regulations and EMI Specifications

<b>Safety Approvals</b>	UL 60950 , CSA C22.2 -234, LEVEL 3, EN-60950 , CE - MARK
<b>ESD Susceptibility</b>	EN61000-4-2 level 4 +8KV AIR +4KV CONTACT DISCHARGE, performance criteria B
<b>Radiated Susceptibility</b>	80-1000Mhz 3V/m, AM 80% (1KHz), criteria A
<b>EFT / Burst</b>	EN61000-4-4
<b>Input Surge</b>	EN61000-4-5 2KV common mode and 1KV differential mode
<b>Conducted Disturbance</b>	EN61000-4-6 3VRMS, 80% A.M. BY 1kHz
<b>Power frequency magnetic field</b>	EN61000-4-8 3A /m at 50Hz, performance criteria A.
<b>Immunity to voltage Dips</b>	30% reduction for 10mSec –Criteria B, 60% For 100mSec. Criteria C, 95% reduction for 5000mSec Criteria C.

### Monitoring Command & Control

<b>Inhibit</b>	N/A
<b>DC Fail</b>	Open collector, active low when any of V1, V2 outputs drop 10% below rated output
<b>Input AC Connector</b>	Molex 26-48-1055, on the power supply PCB External Line filter inlet, IEC320C14 P/N :03SS1 Will be provided with each power supply
<b>Current Share</b>	N/A
<b>Output Connectors</b>	Molex 16 pin P/N: 26-48-1166 V1 - Pins 1-3 V1 Common – pins4-6 V2 –pin 16 V3-pins 7,8 V4 pins 13,14 V2-V4 Common –pins 9-12 DC fail pin 15

## Mechanical Dimensions

<b>Size</b>	127mm x 84mm x 38.0mm
<b>Weight</b>	650 Gr.

## Outline Drawing

All characteristics are subject to change without prior notice.

