

**Electrical  
Specification for:**

**DP200-435**

Wide range DC/DC Quad Output 200W Power Supply

**Telkoor Part  
Number:**

900-8456-0000

CUSTOMER: RAD	SIZE	CAGE CODE	S5417	DWG. NO.	8456-DOC1-10	REV	B
	SCALE		RELEASE DATE	7/3/06	SHEET	1	OF 6



**Input:**

Input Voltage: 36-72 VDC  
 Inrush Current: 20A maximum  
 Reverse Polarity: Internally protected by Power Mosfet  
 Efficiency: 84% typical at 48Vdc, full load  
 81% typical at 36Vdc, full load  
 Input Protection: Internal Line Fuse: IEC type 10A 125VAC

**Output Voltages & Currents:**

<i>Output</i>	<i>Output Voltage</i>	<i>I Min</i>	<i>I Max</i>	<i>I Peak</i>
V1	5.2V	1A	15A	17A
V2	3.45V	0	15A	17A
V3	12V	0	3.5A	5 A
V4	-12V	0	1A	2A

**Notes:**

- Maximum output power at any combination within this table is 200 watts
- V4 return is floating

Output Power: 200W  
 Line & Load Regulation: 1A minimum load on the +5V/V1  
     V1, V2, V3 ± 1%  
     V4 ± 4%  
 Ripple & Noise - tested on 10 microfarad, in parallel with 0.1 microfarad capacitors, Bandwidth 20 MHz  
     V1, V2 50mV Maximum  
     V3 200mV Maximum  
     V4 120mV Maximum  
 Output Voltage Adjustment Range for V1 ± 2% Factory set on production  
 Initial Set Point Tolerance: V1, V2 ± 0.05V, and V3 +/-0.1V. For V4 ± 0.2V  
 Overshoot & Undershoot: Less than 1% at turn ON-OFF  
 Transient Load Response: ± 5% Max. Deviation for load change of 25% to 75% , at slew rate of 1A/usec, recovery time less then 500Msec  
 Turn On Delay: 0.5 sec. Maximum.  
 Turn-On Rise Time; Rise time of outputs will be 20 mSec maximum, should rise monotonically.  
 Over-current Protection: V1 110% to 125% of IMax, constant current limit, automatic recovery. V2 & V3 & V4 110% to 150% of IMax constant current limit, automatic recovery  
 Over-voltage Protection: Outputs shut down at 110% to 130% of nominal, input must Recycled to reset.  
 Temperature Protection: Internal thermostat protects the power supply against excessive temperature. Automatic recovery.

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**Signals & Commands (one of the two signals is available upon request)**

DC Fail (Standard) For V1, V2 & V3 - Open collector, active low when any of the outputs drop 10% below rated output.  
 Inhibit (Optional) Replace DC Fail signal Active Low

**Environmental Specifications:**

Temperature: Operating: -25°C to +50°C (de-rating linearly to 70°C with -2.5% per 1°C). Storage: -40°C to +85°C.  
 Temperature Coefficient: -10 to 70°C ± 0.01%/°C  
 Cooling: 100W free convection cooling (base plate cooling). 200W continuous forced air cooling, 15CFM 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, EN55022 CLASS B – With an external input filter.

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: Input to case: 1500Vdc.  
 Input to Output: Input to output: 1500Vdc  
 Output to Case: Output to case: 100Vdc.

**Safety Agency Compliance:**

UL 60950  
 CSA C22.2 -234, LEVEL 3.  
 EN-60950  
 CE - MARK

**MTBF:**

400,000 hours minimum per BELCOR 332, issue 6 specification @30 degrees C (Max. junction temperature 110°C, Capacitors 105°C)

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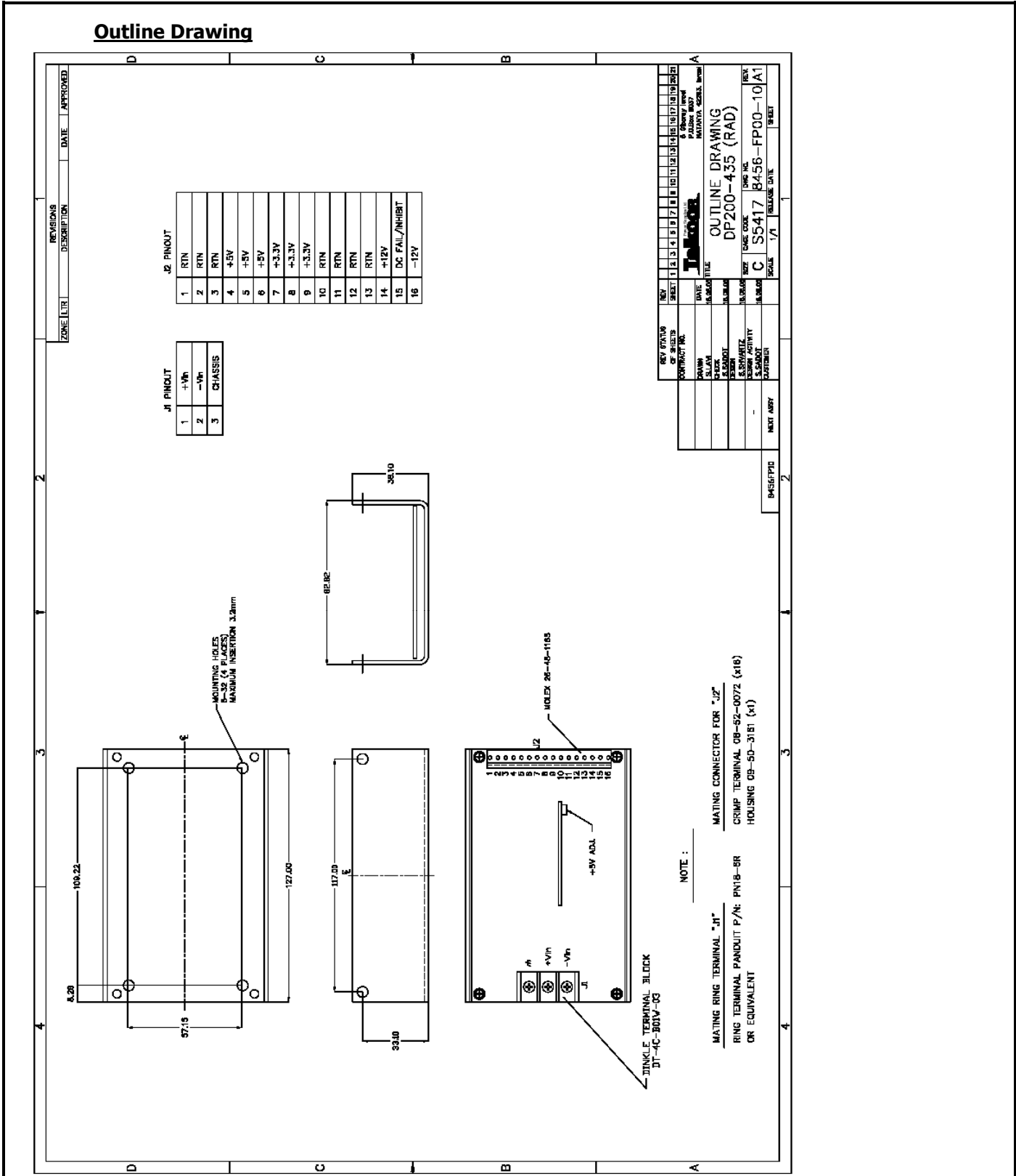


**Mechanical Dimensions**

Size	127mm x 84mm x 38.1mm
Weight	650 Gr.
Input DC Connector	TB Dinkle DT- 4C- B01W-03
Output Connector	Molex 16 pin P/N: 26-48-1165 (V1, V2, V3, V4)

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Outline Drawing



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