

**Electrical
Specification for:**

DP200-433

Wide range DC/DC Quad Output 200W Power Supply

**Telkoor Part
Number:**

900-8455-0000

CUSTOMER: GENERAL	SIZE	CAGE CODE	S5417	DWG. NO.	8455-DOC1-10	REV	A2
	SCALE	RELEASE DATE	7/9/05	SHEET	1	OF	6

REVISION HISTORY				
Rev Level	Rev Date	Change Made	Reason for Change	Effective
A1	1/12/05	Update Minimum load and ripple specifications	Correlation between specification and unit performance	1/12/05
A2	19/02/07	Update 5v & 3.3v outputs values	Error correction	19/02/07

Approvals		
	Name	Date
Written by:	S. Sadot	7/9/05
Engineering:	S. Sadot	7/9/05
Sales & Marketing:	H. Liber	7/9/05
Management:	Y. Ben Ami	7/9/05

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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	5.0V	1A	15A	17A
V2	3.3V	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 $\pm 1\%$
 V4 $\pm 4\%$
 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 $\pm 2\%$ Factory set on production
 Initial Set Point Tolerance: V1, V2 $\pm 0.05V$, and V3 $\pm 0.1V$. For V4 $\pm 0.2V$
 Overshoot & Undershoot: Less than 1% at turn ON-OFF
 Transient Load Response: $\pm 5\%$ 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)

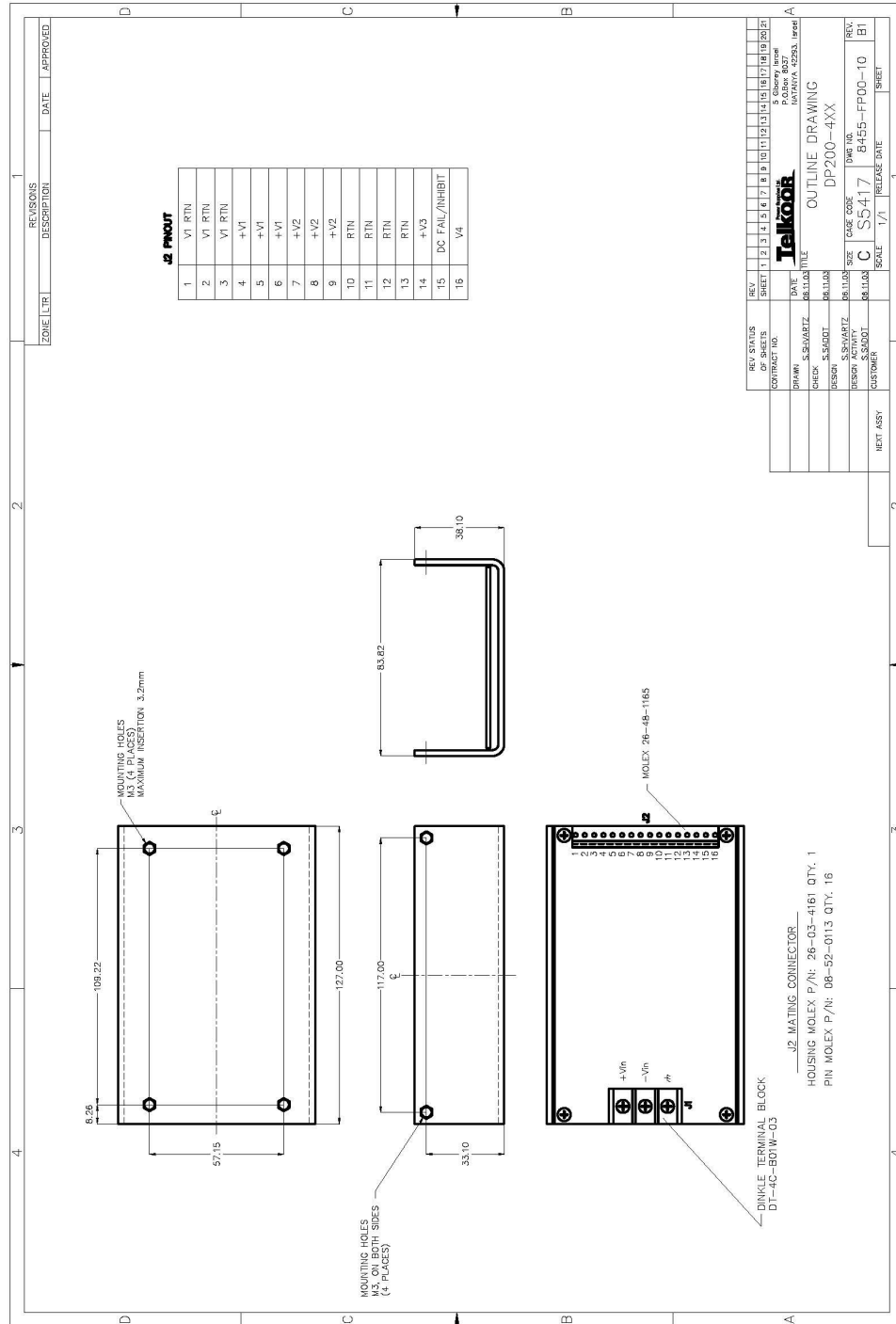
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Mechanical Dimensions

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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SIZE

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