

CHEROKEE INTERNATIONAL, INC.

A SUBSIDIARY OF CORE INDUSTRIES
 PRODUCT SPECIFICATION

QD4 Series

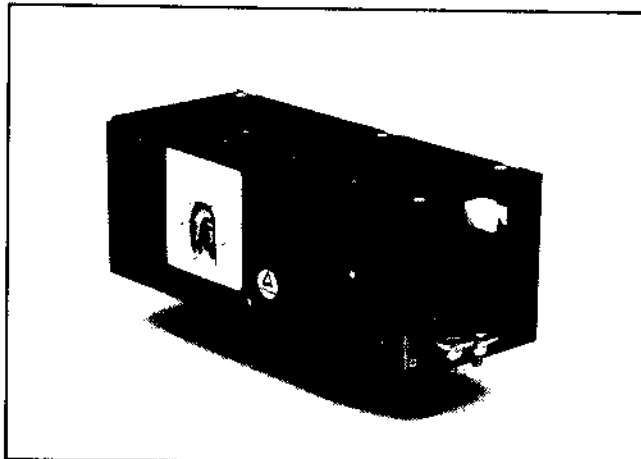
Switching Regulated Power Supplies

Benefits

- Proprietary Cascode Topology inherently provides the most reliable FET switcher available.
- Mag Amp auxiliaries provide well regulated, high current outputs.
- New technology provides highest efficiencies, typically over 80%.
- All outputs can be paralleled.
- Autoranging (Automatic VAC input range selection) is standard.
- External Power Factor Correction Module is available.

Features

- UL Recognized to UL 1950+
- CSA Certified to C22.2 No. 234 (950) and EB 1402C.+
- TUV Licensed to EN60950 (IEC 950)+
- Fully compliant with FCC and VDE (Level A) standards for EMI.
- Accommodates high-peak disk drive requirements.
- 0°-70°C operating ambient.



- AC input provisions:
 - Autoranging, 90-132/180-264 VAC, 47-63 Hz automatically selected
 - Input surge current limited
 - Brown out protected
 - Meets IEEE 587 for input transients
- DC output provisions:
 - Complete overload protection
 - Overvoltage protected
 - Reverse voltage protected
 - Low noise outputs
 - Margining for Output 1 is standard
 - Isolated Outputs

500 Watts Up to 4 Outputs

Available Outputs*

Standard Output Voltage Combination	Output 1			Output 2			Output 3			Output 4		
	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps
A	5	80	90	12	6	8	12	8	12	24 ¹	5	8
B	5	80	90	12	6	8	12	8	12	12	6	8
C	5	80	90	12	6	8	12	8	12	5	8	10
D	5	80	90	5	6	8	12	8	12	24 ¹	5	8
E	5	80	90	15	6	8	15	8	12	5	8	10
F	5	100	120									
G	12	42	50									
H	24	21	25									
I	28	20	23									

Total (sum) of rated DC output power, maximum: 500 Watts

(1) Minimum load 300 mA for 24 VDC outputs

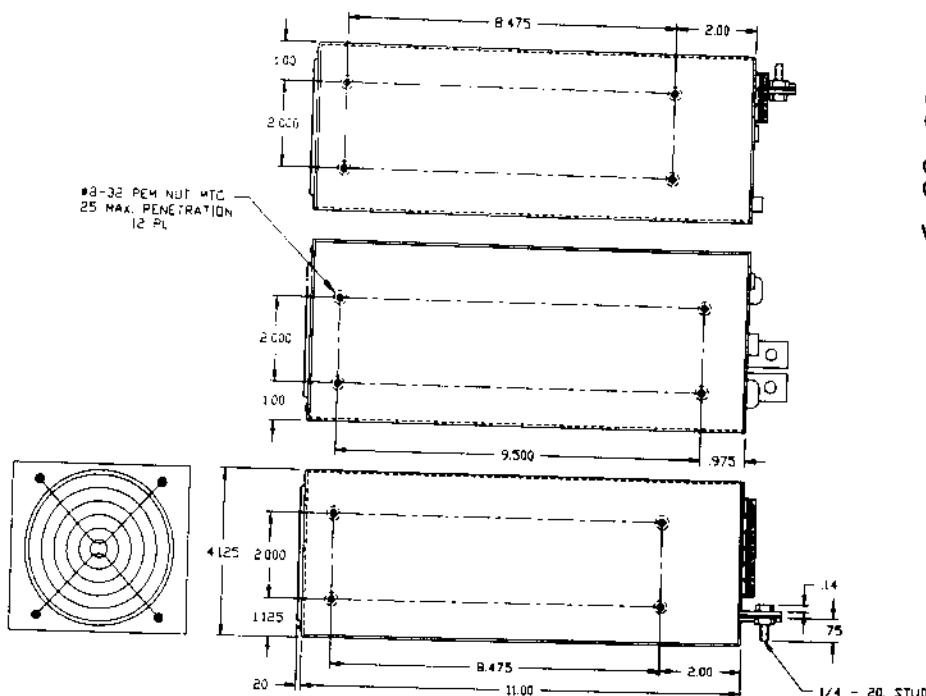
* Other output combinations are also available; consult factory.
 + Most models; consult factory



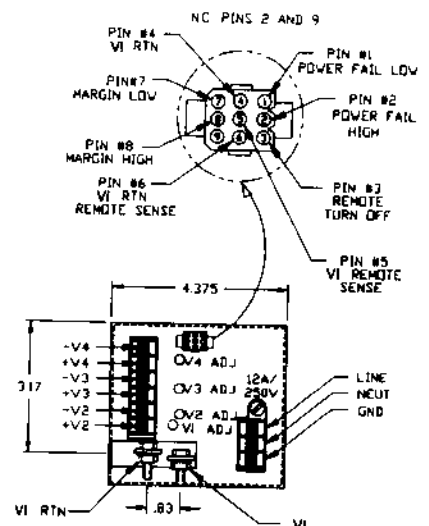
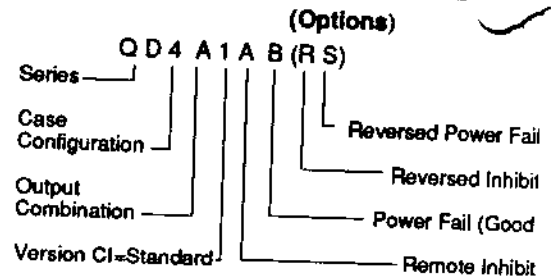
2841 Dow Ave., Tustin, CA 92680-7211 • (714) 544-6665 • FAX (714) 838-4742

QD4 Series

Outline/Mounting/Interface



Ordering Information



Specifications

AC Input	Nominal: 115/230 VAC, 47-63 Hz Range: 90-132/180-264 VAC; automatically selected	Hold-up Time	20 ms after loss of nominal AC input, for specified load regulation
DC Outputs	Nominal: See AVAILABLE OUTPUTS table Range: +/-5% adjustment, all outputs All outputs are isolated.	In-rush Surge	60A Pk, cold start
Regulation	Line: +/-0.5%, all outputs, full AC Input range Load: +/-0.5% Output 1, +/-1% all other outputs, for Output 1 at 10-100% loading, all other outputs at 0-100% loading	Fusing(F-1)	For 115/230 VAC 12A, 250 VAC; 3AG (panel mounted)
Ripple/Noise	Sum: 1% Pk-Pk, all outputs	Remote Sense	For Output 1 only
Overshoot & Undershoot	Deviation: +/-2% for 25% load change at 5A. usec Response: 200 usec to 1% deviation, all outputs, turn-on or turn-off	Remote On/Off	Turn on: open circuit or TTL "hi" Turn off: short to Output 1 return or TTL "lo"
Temperature Coefficient	+/-0.02%/°C, all outputs	Power Fail(Good)	Power applied: Output "lo" until all outputs are in regulation Power lost: After one cycle ride-through (16 msec minimum) output goes "lo" 4 msec minimum before loss of regulation at nominal line
Temperature Range	Operation: 0° to 50°C at rated output power; derate linearly to 50% power at 70°C Storage: -55°C to 85°C	Thermal Shutdown	Automatic shutdown in event of thermal overload. Automatic recovery when conditions improved.
Efficiency	80% typical	Shock/Vibration	Per MIL-STD-810C Vibration: Method 514.2 Procedures X, X1 Shock: Method 516.2, Procedures I, III Shock (Transit): Method 516.2, Procedure II
Overload Protection	Main output current limited by primary current level. All other outputs are individually current limited.	Weight	8 lbs.
Overvoltage Protection	Output 1: output level 6.2V +/-5% causes shutdown (AC input cycle required for restart)	CHEROKEE INTERNATIONAL, INC. 2841 Dow Ave., Tustin, CA 92680-7211 (714) 544-6665 • FAX (714) 838-4742	

Specifications are subject to change without notice.