CHEROKEE INTERNATIONAL, INC.

A SUBSIDIARY OF CORE INDUSTRIES

PRODUCT SPECIFICATION

QD16 Series *Power Factor Corrected*

Switching Regulated Power Supplies

Benefits

- Power Factor Correction - to .98
- 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 70%.
- All outputs can be paralleled..
- Autoranging (Automatic VAC input range selection) is standard.

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
  -Meets IEC 555-2 for harmonic distortion
- DC output provisions:
  -Complete overload protection
  -Overvoltage protected
  -Reverse voltage protected
  -Low noise outputs
  -Direct paralleling
  -Margining for Output 1 is standard

1000 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	Volts	Rated Amps	Volts	Rated Amps
A	5	150	175	12	20	12	20	24[1]	10
B	5	150	175	12	20	12	20	12	20
C	5	150	175	12	20	12	20	5	20
D	5	150	175	5	20	12	20	24[1]	10
E	5	150	175	15	20	15	20	5	20
F	5	200							
G	12	85							
H	24	42							
I	28	36							

Total (sum) of rated DC output power, maximum: 1000 Watts[2]

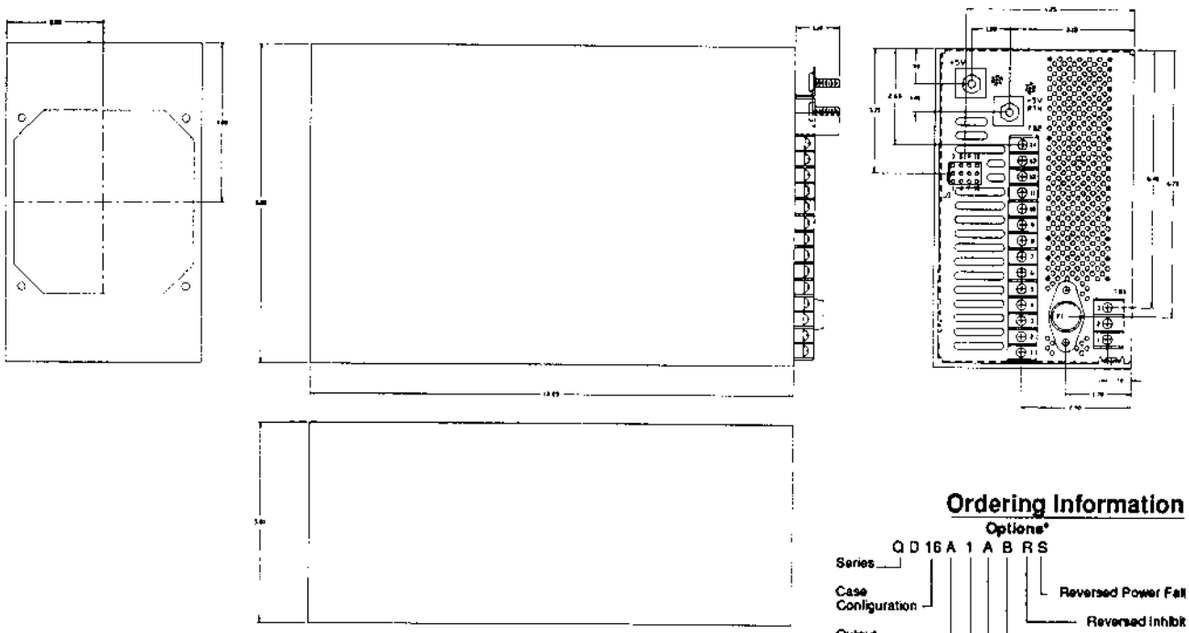
(1) Minimum load 300 mA for 24 VDC outputs

* All outputs are isolated.
* 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 • TWX 510-101-0493

QD16 Series

Outline/Mounting/Interface



5" x 8" x 12.25"

Ordering Information

Specifications

AC Input Nominal: 115/230 VAC, 47-63 Hz
Range: 90-132/180-264 VAC; automatically selected

DC Outputs Nominal: See AVAILABLE OUTPUTS table
Range: +/-5% adjustment
All outputs are isolated.

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

Ripple/Noise Sum: 1% Pk-Pk, all outputs

Overshoot & Undershoot Deviation: +/-2% for 25% load change at 5A.usec
Response: 200 usec to 1% deviation, all outputs,turn-on or turn-off

Temperature Coefficient +/-0.02%/°C, all outputs

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

Efficiency 70% typical

Overload Protection All outputs are individually current limited.

Overvoltage Protection Output 1: output level 6.2V +/-5% causes shutdown (AC input cycle required for restart)

*** Options**

Rev. 8-91

Direct Paralleling Single wire paralleling insures load sharing when multiple supplies are connected together.

Hold-up Time 20 ms after loss of nominal AC Input, for specified load regulation

In-rush Surge 100A Pk, cold start

Fusing(F-1) For 115/230 VAC 20A, 250 VAC; 3AG (panel mounted)

Remote Sense All outputs

Remote On/Off* Turn on: open circuit or TTL "hi"
Turn off: short to Output 1 return or TTL "lo"

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" 2 msec minimum before loss of regulation at nominal line

Thermal Shutdown Automatic shutdown in event of thermal overload. Automatic recovery when conditions improved.

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

Weight 13 lbs

Specifications are subject to change without notice.

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