

PRODUCT SPECIFICATION

to Brick @ 254111

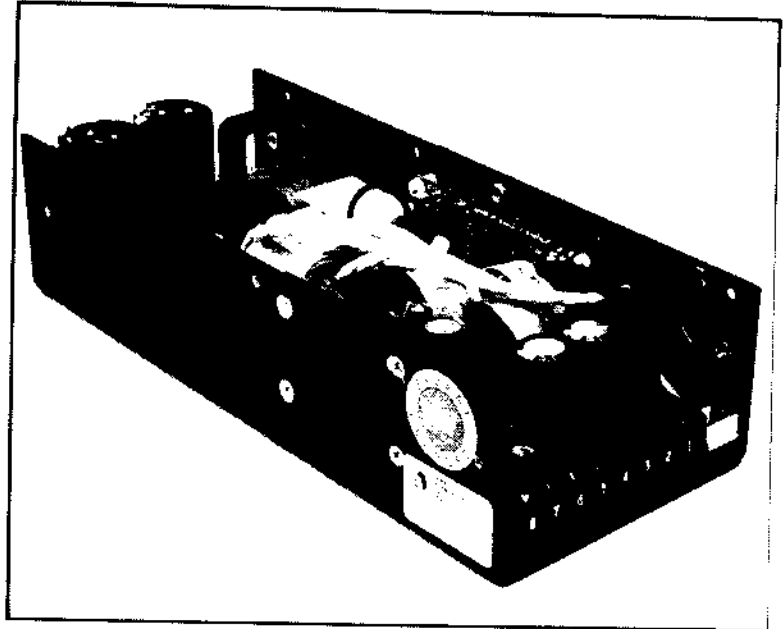
OPC with extra output

QP3 Series

Multiple Output Switching
Power Supplies

Features

- UL Recognized to UL 1012 and 478 †
- CSA Certified to C 22.2 No. 220 - M1986 and EB1402 †
- TUV Licensed to IEC 380 and 950 and VDE 0806 Class 1 SELV †
- Fully compliant with FCC and VDE (Level A) standards for EMI
- 90-132/180-264 VAC, 47-63 Hz
- All outputs fully regulated
- Accommodates high-peak disk drive requirements
- 0° - 50°C operating ambient
- AC input safety provisions:
 - transient input voltage protected
 - input surge current limited
 - brown out protected
 - VAC input range jumper selectable
- DC output safety provisions:
 - complete overload protection
 - overvoltage protected
 - reverse voltage protected
 - remote internal sensing for Output 1
 - low noise outputs



225/250 Watts Up to 4 Outputs

Available Outputs

Standard Output Voltage Combination	<i>Opt. Vals</i> Output 1*			Output 2			Output 3			<i>Volts</i> Output 4		
	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps
A	5	40	45	+12	2.0	3.0	12	1.0	1.5	± 5	6	10
B	5	40	45	+12	2.0	3.0	-12	1.0	1.5	± 12	6	10
C	5	40	45	-12	2.0	3.0	12	1.0	1.5	± 24	6	10
D	5	40	45	+ 5	2.0	3.0	5	1.0	1.5	± 12	6	10
E	5	40	45	+ 5	2.0	3.0	- 5	1.0	1.5	± 24	6	10
F	5	40	45	+24	1.0	1.5	12	.1	.25	± 12	6	10
G	5	40	45	+24	1.0	1.5	-24	1.0	1.5	± 12	6	10
H	5	40	45	+24	1.0	1.5	- 5	.1	.25	± 12	6	10
I	5	40	45	+12	2.0	3.0	- 5	.1	.25	± 24	6	10

*Rated Amps = 30A for convection cooling

- Available options include:
 - remote on/off control
 - thermal shutdown control
 - safety/EMI shield cover

3 to 27

Total (sum) of rated DC output power, maximum:
 Convection cooling only 225 Watts
 Forced-air cooling (25 CFM) 250 Watts
 Peak power (10 sec) 275 Watts

- Other output combinations are also available, consult factory
- Outputs 2, 3, 4 share a common return

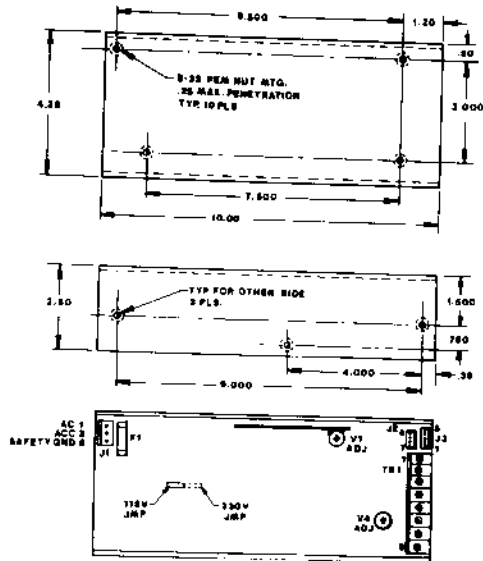
†Most models; consult factory

Linear Post 107



QP3 Series

Outline/Mounting/Interface



AC Input Header (J1)
AMP MTA-156 (Locking)
 1 AC
 2 N.U. (Pin Pulled)
 3 ACC
 4 N.U. (Pin Pulled)
 5 Safety Gnd

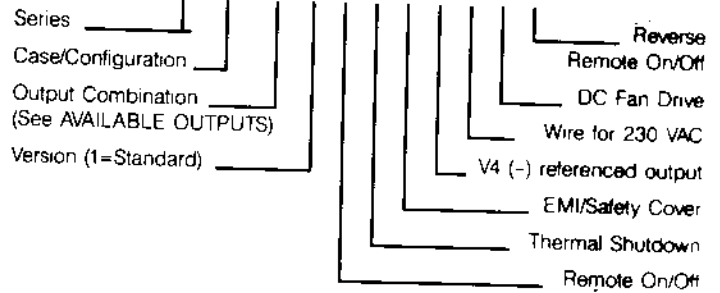
Fan Drive/Remote Sense Header (J2)
AMP MTA-100, #640456-4
 1 Output 1 Sense (+)
 2 Output 4 (+)
 3 Output 1 Sense (-)
 4 Output 4 Rtn

Control Header (J3)
AMP MTA-100, #640456-5
 1 LED Drive Rtn
 2 LED Drive (005A to Output)
 3 Not used
 4 Remote On/Off Rtn
 5 Remote On/Off

DC Output Term. Block (TB1)
 1 Output 1 (+) 5 Output 2 (+)
 2 Output 1 (+) 6 Output 3 (-)
 3 Output 1 Rtn 7 Output 4 (+)
 4 Output 1 Rtn 8 Output 2,3,4 Rtn

Ordering Information

Options*
QP3 - A 1 A C D E F N R



*List all options selected

All Power Supplies are warranted to be free of defects in materials and workmanship for a period of one year.

Specifications

AC Input	Nominal: 115/230 VAC, 47-63Hz Range: 90-132/180-264 VAC, jumper selectable
DC Outputs	Nominal: See AVAILABLE OUTPUTS table Range: adjustable $\pm 5\%$, Outputs 1 and 4. Outputs 2 and 3 are fixed $\pm 5\%$
Regulation	Line: $\pm 0.25\%$, all outputs, full AC Input range Load: $\pm 0.25\%$ for Output 1, $\pm 1\%$ for all other outputs; for $\geq 10\%$ loading of Output 1 and zero to full loading of other Outputs
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	$\pm 0.02\%$ / °C, all outputs
Temperature Range	Operation: 0° to 50°C at rated output power, derates linearly to 50% power at 70°C Storage: -55°C to 85°C
Efficiency	75% typical
Overload Protection	Output 1: current limited by primary current level Outputs 2 through 4: current limited by post regulator characteristics
Overvoltage Protection	Output 1: output level $> 6.25V \pm 5\%$ causes shutdown (AC input removal for restart) Outputs 2 through 4: post regulators have pre-regulated inputs.

Reverse Voltage Protection	Up to 100% of rated current, all outputs
Hold-up Time	20 ms after loss of nominal AC Input, for specified load regulation
In-rush Current	35A Pk, cold start
Fusing	5A/3A, 5MF for 115/230 VAC (F1)
Remote On/Off*	Turn on: open circuit or TTL "hi" Turn off: short to Output 1 return, or TTL "lo"
Thermal Shutdown*	Heat-sink-mounted thermal switch acts equivalently to Remote On/Off
Fan Drive*	Output 4 voltage provided on separate header (1 Amp max.)
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

Specifications are subject to change without notice.

CHEROKEE INTERNATIONAL, INC.
 2841 Dow Ave., Tustin, CA 92680-7211
 (714) 544-6665 • FAX (714) 838-4742
 TWX (714) 510-101-0493