

PRODUCT SPECIFICATION

Half bridge @ 25 kHz

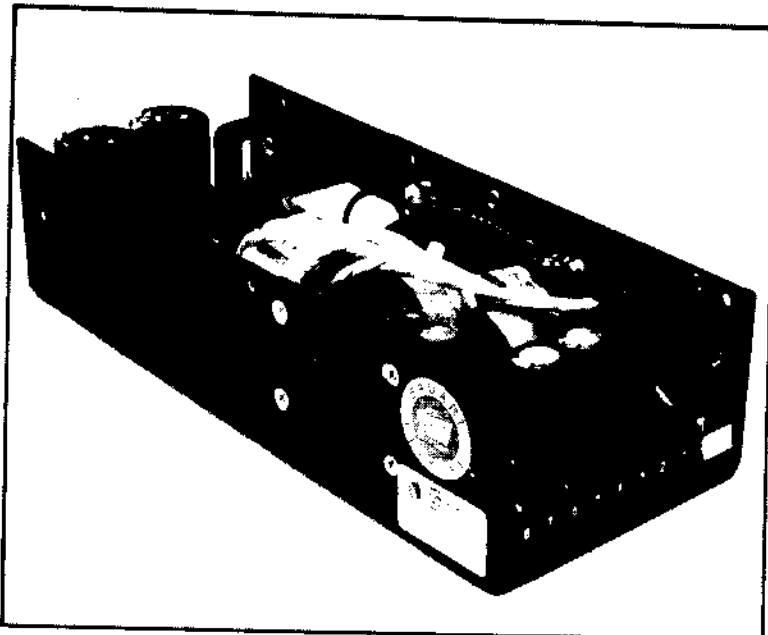
Bipolar - Fet Controlled

QP1 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



175/200 Watts Up to 3 Outputs

Available Outputs

Standard Output Voltage Combination	Volts	<i>Float</i> Output 1 †		<i>Float</i> Output 2			<i>Float</i> Output 3		
		Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps
A	5	20	25	12	2.5	3	12	6	10
B	5	20	25	12	4.0	6	12	4	6
C	5	10	15	12	2.5	3	12	6	10
D	5	10	15	12	4.0	6	12	4	6
E	5	20	25	5	2.5	3	12	6	10
F	5	20	25	5	4.0	6	12	4	6
G	5	10	15	24	2.5	3	12	6	10
H	5	10	15	24	4.0	6	12	4	6
I	5	10	15	12	2.5	3	24	6	10
J	5	10	15	12	4.0	6	24	4	6
K	5	20	25	12	4.0	6	5	6	10
L	5	20	25	24	2.5	3	5	6	10

** 20% Min Load*

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

Post reg

Post reg

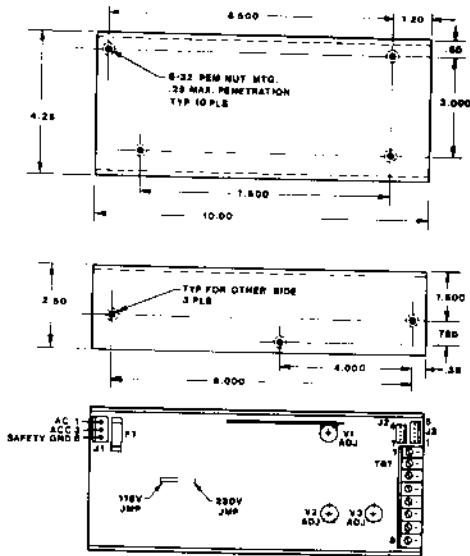
Total (sum) of rated DC output power, maximum:
 Convection cooling only 175 Watts
 Forced-air cooling (25 CFM) 200 Watts
 Peak power (10 sec) 225 Watts

- Other output combinations are also available; consult factory
- All outputs have independent returns
- †Most models; consult factory

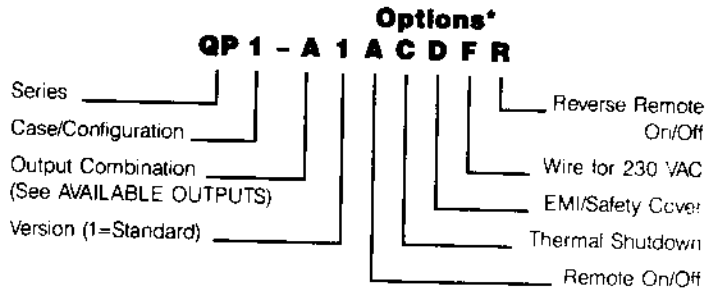


QP1 Series

Outline/Mounting/Interface



Ordering Information



*List all options selected

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

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 M7A-100 (Locking)

- 1 Output 1 Sense (+)
- 2 Output 3 (+)
- 3 Output 1 Sense (-)
- 4 Output 3 Rtn

Control Header (J3)

AMP M7A-100 (Locking)

- 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 2 Rtn |
| 3 Output 1 Rtn | 7 Output 3 (+) |
| 4 Output 1 Rtn | 8 Output 3 Rtn |

Specifications

<p>AC Input Nominal: 115/230 VAC, 47-63Hz Range: 90-132/180-264 VAC; jumper selectable</p> <p>DC Outputs Nominal: See AVAILABLE OUTPUTS table Range: adjustable $\pm 5\%$, all outputs</p> <p>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 $\geq 20\%$ loading of Output 1 and zero to full loading of other Outputs</p> <p>Ripple/Noise Sum: 1% Pk-Pk, all outputs</p> <p>Overshoot & Undershoot Deviation: 2% for 25% load change at 5A/usec Response: 200 usec to 1% deviation, all outputs, turn-on or turn-off</p> <p>Temperature Coefficient $\pm 0.02\%$ / °C, all outputs</p> <p>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</p> <p>Efficiency 75% typical</p> <p>Overload Protection Output 1: current limited by primary current level Outputs 2 and 3: current limited by post regulator characteristics</p> <p>Overvoltage Protection Output 1: output level $> 6.25V \pm 5\%$ causes shutdown (AC input removal for restart) Outputs 2 and 3: post regulators have pre-regulated inputs.</p>	<p>Reverse Voltage Protection Up to 100% of rated current, all outputs</p> <p>Hold-up Time 20 ms after loss of nominal AC Input, for specified load regulation</p> <p>In-rush Current 35A Pk, cold start</p> <p>Fusing 5A/3A, 5MF for 115/230 VAC (F1)</p> <p>Remote On/Off* Turn on: open circuit or TTL "hi" Turn off: short to Output 1 return, or TTL "lo" Option "R" is the reverse</p> <p>Thermal Shutdown* Heat-sink-mounted thermal switch acts equivalently to Remote On/Off</p> <p>Fan Drive* Output 3 voltage provided on separate header (1 Amp max.)</p> <p>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</p>
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Specifications are subject to change without notice.

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