

PRODUCT SPECIFICATION

Variable frequency Flyback.

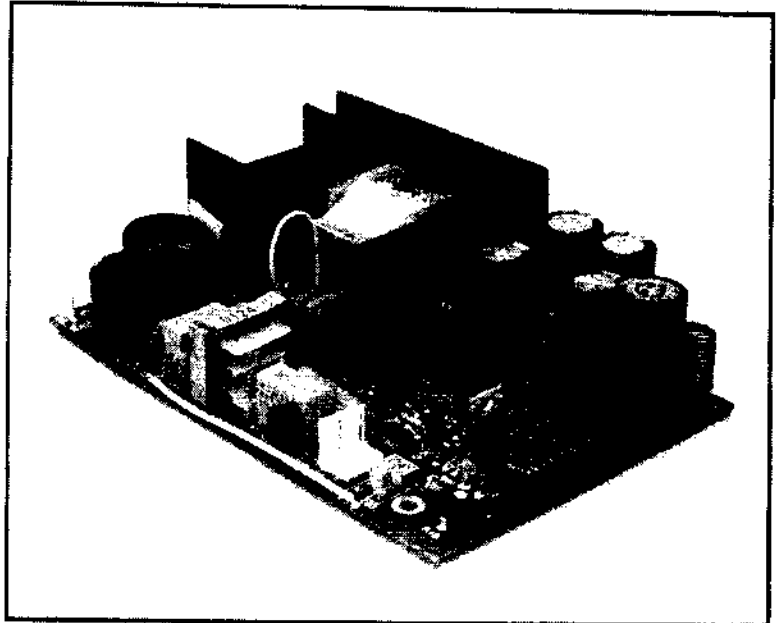
QF1 Series

Multiple Output Switching
Power Supplies

*Same as Astec 8151 (except smaller 5.8")
22.5 Khr @ Full load - 100 Khr @ No load.
Will chirp if no load applied.*

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 VDE 0806 Class 1 SELV ‡
- Fully compliant with FCC and VDE (Level A) standards for EMI
- Accommodates high-peak disk drive requirements
- 0° - 50° C operating ambient with convection cooling only
- AC input provisions:
 - 90-132/180-264 VAC, 47-63Hz
 - jumper relocation for VAC range selection
 - input surge current limited
 - brown out protected *Thermistor*
- DC output provisions:
 - complete overload protected
 - overvoltage protected
 - reverse voltage protected
 - low noise outputs



50/60 Watts Up to 3 Outputs

** Value of 3rd output voltage can not exceed value of the 2nd output.*

Available Outputs

Standard Output Voltage Combination	<i>OVP, Vadj ±5%, 6.25</i> Output 1			Output 2			Output 3 *		
	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps
A	+5	4.0	5.0	+12	3.0	4.0	-12	0.5	1.0
B	+5	4.0	5.0	+12	3.0	4.0	-5	0.5	1.0
C	+5	4.0	5.0	+24	2.0	2.5	-12	0.5	1.0
D	+5	4.0	5.0	+24	2.0	2.5	-5	0.5	1.0
E	+5	4.0	5.0	+12	3.0	4.0	-	-	-
F	+5	4.0	5.0	+24	2.0	2.5	-	-	-
G	+5	4.0	5.0	+15	2.0	3.0	-15	0.5	1.0
J	+5	6.0	8.0	-	-	-	-	-	-

Total (sum) of rated DC output power, maximum:
 Convection cooling only 50 Watts
 Forced-air cooling (25 CFM) 60 Watts
 Peak power (10 sec) 60 Watts *190 watts*

Quasi, 10-100% ⇒ 15%

3 terminal regulator

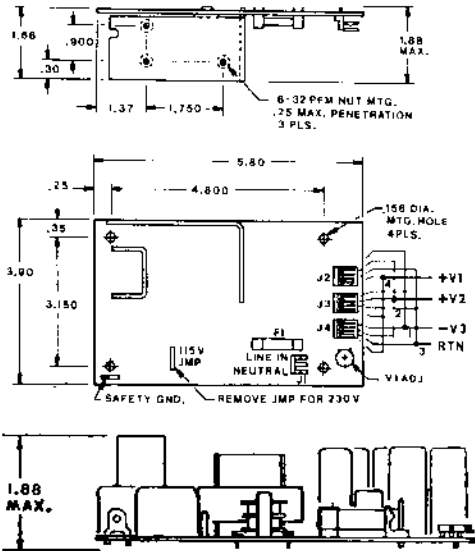
- Other output combinations are also available; consult factory *±5%*
- All outputs share a common return; consult factory for alternatives.
- Increased output power can be obtained by appropriate heat sink mounting *(chassis)*

‡Most models, consult factory



QF1 Series

Outline/Mounting/Interface



Connector J1
(Mate=Molex 09-50-3031)
1 AC Line
3 Neutral

Connector J2/J3/J4
(Mate=Molex 22-01-1043)
1 Output 3
2 Output 2
3 Return
4 Output 1

Safety Gnd
FASTON .25 TAB

Ordering Information

Options*
QF 1 - A 1 F Ac
 Series _____
 Case/Configuration _____
 Output Combination _____
 (See AVAILABLE OUTPUTS)
 Version (1=Standard) _____

Wire for 230 VAC
 *List all options selected

115/230 Vac Remote select.

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

*± 0.02 for two places
± 0.01 for three places.*

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: Output 1 adjustable ±5%
Output 2 tracks Output 1.
Output 3 fixed ±5%

Output Tolerances	Min	Max	Tolerance*
Output 1 (+5V)	0.5A	4.0A	±5%
Output 2 (+12V)	0.4A	3.0A	+5%
(+15V)	0.4A	3.0A	±5%
(+24V)	0.2A	2.0A	±5%
Output 3 All	0	0.5A	±5%

* Tolerance includes load regulation, cross regulation, centering, line regulation and temperature regulation.
• Single output version requires 1A min.

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; derates linearly to 50% power at 70°C
Storage: -55°C to 85° C

Efficiency 75% typical

Overload Protection All Outputs protected through short circuit conditions, automatic recovery

Overvoltage Protection Output 1: output level exceeding 6.25V ±5% causes shutdown, automatic recovery

Reverse Voltage Protection 100% of rated current, Outputs 1 and 2

Hold-up Time 16 ms after loss of nominal AC Input, for specified load regulation

In-rush Surge 15A Pk/115VAC, 30A Pk/230 VAC

Fusing (F-1) 2A, 5MF for 115/230 VAC

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 14.0 oz.

Specifications are subject to change without notice.

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