

PRODUCT SPECIFICATION

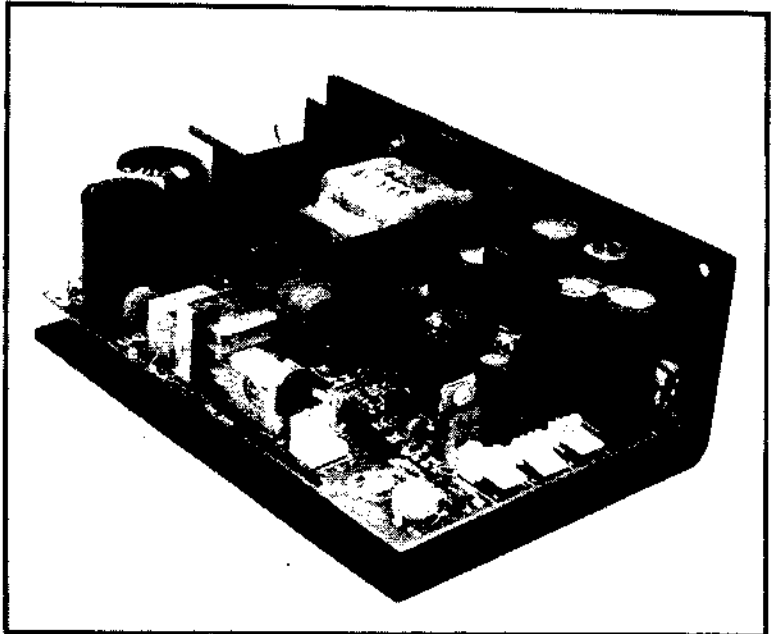
*Variable Frequency Flyback
QFI with Class S*

QF3 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 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
- DC output provisions:
 - complete overload protected
 - overvoltage protected
 - reverse voltage protected
 - low noise outputs



70/85 Watts Up to 3 Outputs

Available Outputs

Standard Output Voltage Combination	<i>OVP 6.15 15%</i> Output 1 <i>V_{OS} ± 5%</i>			Output 2			Output 3		
	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps
A	+5	7.5	9.0	+12	4.0	5.0	12	0.5	1.0
B	+5	7.5	9.0	+12	4.0	5.0	-5	0.5	1.0
C	+5	7.5	9.0	+24	2.5	3.0	-12	0.5	1.0
D	+5	7.5	9.0	+24	2.5	3.0	-5	0.5	1.0
E	+5	7.5	9.0	+12	4.0	5.0	-	-	-
F	+5	7.5	9.0	+24	2.5	3.0	-	-	-
G	+5	7.5	9.0	+15	3.0	4.0	-15	0.5	1.0

Quasi *3 terminal regulator*

Total (sum) of rated DC output power, maximum.
 Convec: on cooling only 70 Watts
 Forced-air cooling (25 CFM) 85 Watts
 Peak power (10 sec) 85 Watts

- Other output combinations are also available, consult factory
- All outputs share a common return; consult factory for alternatives.

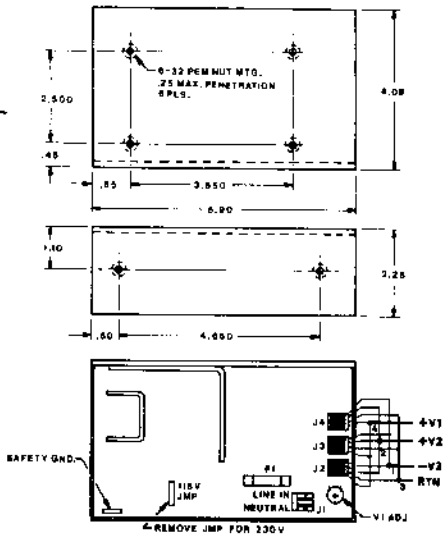
†Most models; consult factory



QF3 Series

Outline/Mounting/Interface

*Mounting
Holes not
shown as
QFI*



Connector J1
(Mate=AMP 640426-3)
1 AC Line
3 Neutral

Connector J2/J3/J4
(Mate=Molex 22-01-1044)
1 Output 3
2 Output 2
3 Return
4 Output 1

Safety Gnd
FASTON .25 TAB

Ordering Information

Options*

QF 3 - A 1 D F G

Series _____

Case/Configuration _____

Output Combination (See AVAILABLE OUTPUTS) _____

Version (1=Standard) _____

Wire for 230 VAC

EMI/Safety Cover

*List all options selected

Remote 15/230 sec

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: Output 1 adjustable $\pm 5\%$ Output 2 tracks Output 1. Output 3 fixed $\pm 5\%$																								
Output Tolerances	<table border="1"> <thead> <tr> <th></th> <th>Min 1</th> <th>Max 1</th> <th>Tolerance*</th> </tr> </thead> <tbody> <tr> <td>Output 1 (+5V)</td> <td>1.0A</td> <td>8.0A</td> <td>$\pm 5\%$</td> </tr> <tr> <td>Output 2 (+12V)</td> <td>0.5A</td> <td>4.0A</td> <td>$\pm 5\%$</td> </tr> <tr> <td>(+12V)</td> <td>0.5A</td> <td>3.0A</td> <td>$\pm 5\%$</td> </tr> <tr> <td>(+24V)</td> <td>0.5A</td> <td>2.5A</td> <td>$\pm 5\%$</td> </tr> <tr> <td>Output 3 All</td> <td>0</td> <td>0.5A</td> <td>$\pm 5\%$</td> </tr> </tbody> </table> <p>* Tolerance includes load regulation, cross regulation, centering, line regulation and temperature regulation.</p>		Min 1	Max 1	Tolerance*	Output 1 (+5V)	1.0A	8.0A	$\pm 5\%$	Output 2 (+12V)	0.5A	4.0A	$\pm 5\%$	(+12V)	0.5A	3.0A	$\pm 5\%$	(+24V)	0.5A	2.5A	$\pm 5\%$	Output 3 All	0	0.5A	$\pm 5\%$
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Output 3 All	0	0.5A	$\pm 5\%$																						
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	All Outputs protected through short circuit conditions, automatic recovery
Overvoltage Protection	Output 1: output level exceeding 6.25V $\pm 5\%$ 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	1 lb. 5 oz.

Specifications are subject to change without notice.

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