



FEATURES

- 1 to 12 isolated outputs with full configurability
- 1.45V to 28V standard output voltages
- Optional Isolated Bias Supply Voltage 5V @ 50mA
- Class B Conducted Emissions
- Up to 1000 Watts of output power
- Series and parallel capability
- Zero load operation
- Power factor correction
- Universal input
- Fully floating outputs
- Modular construction
- Control signals on each module
- Industry standard package

DESCRIPTION

The Quikflex range of configurable AC/DC power supplies combines a 2 transistor forward converter front end with planar magnetic main transformer technology and modular magnetic amplifier output stages to provide a fast turn-around, production line built power solution that can be matched to your exact requirements for Volts and Amps. Delivering up to 1000W of output power in a extruded aluminium package, the units are delivered complete with CE and UL approval and are fully compliant to EN61000-3-2. Power connections are made using screw terminal connections and primary and secondary controls enable power channels to be individually voltage adjusted, enabled or connected in parallel or series to provide limitless power solutions.

OUTPUT MODULE SPECIFICATIONS

Module Ref:	Output Configuration	No. of Slots	V _{OUT} Min (V)	V _{OUT} Nom (V)	V _{OUT} Max (V)	I _{MAX} (A)
QFMOD1	Single	1	3.0	5.0	5.6	30.0
QFMOD2	Single	1	5.0	12.0	13.0	20.0
QFMOD3	Single	1	8.0	18.0	20.0	15.0
QFMOD4	Single	1	12.0	24.0	28.0	12.0
QFMOD5	Dual	1	10.0	24.0	28.0	3.0
			10.0	24.0	28.0	3.0
QFMOD6	Dual	1	3.0	5.0	5.6	10.0
			10.0	24.0	28.0	3.0
QFMOD70	Single	2	1.45	5.0	5.6	80.0

INPUT CHARACTERISTICS

Parameter	Conditions/Notes	MIN	NOM	MAX	Units
Voltage Range	Universal Input	88		264	VAC
Frequency		47		63	Hz
Inrush Current	230VAC at 30°C			50	A
Power Factor	Conforms to EN61000-3-2		0.98		

OUTPUT CHARACTERISTICS

Parameter	Conditions		MIN	NOM	MAX	Units
Maximum Power	4 Slot Power Level B				400	W
	4/6 Slot Power Level C				600	
	6 Slot Power Level D (See Note 1)				1000	
Voltage Adjustment	Outputs are user adjustable via multi-turn potentiometer or factory set to your requested voltage					
Efficiency				82		%
Line Regulation				±0.1		%
Load Regulation	50% Load Change			±0.2		%
Cross Regulation				±0.2		%
Transient Response	25% to 75% load change	Voltage Deviation	<10			%
		Settling Time	<0.5			ms
Temperature Coefficient				-0.02		%/°C
Ripple & Noise	20MHz BW whichever is greater of:			100		mVp-p
				1.0		%
Overvoltage Protection	Please refer to ACAN06					
Overcurrent Protection	Please refer to ACAN06					
Thermal Protection	Please refer to ACAN06					
Power Fail Warning	Option 003/5/6/7 or custom			5.0		ms
Minimum Load	Except module 70, 5% min load		0			A
Turn-on Delay				500		ms
Remote Sense	Single outputs only				0.5	V

GENERAL CHARACTERISTICS

Parameter	Conditions	MIN	TYP	MAX	Units
Hold-up time	Nominal output voltage, full load		20		ms
Isolation Voltage	Input/Output		3000		VAC
	Input/Chassis		1500		VAC
Switching Frequency			200		kHz
Leakage Current	QFG4 - 250VAC, 60Hz		1.25		mA
	QFG6 - 250VAC, 60Hz		1.75		mA
MTBF	MIL-HDBK-217 F at 40°C		176		kHrs



ENVIRONMENTAL CHARACTERISTICS

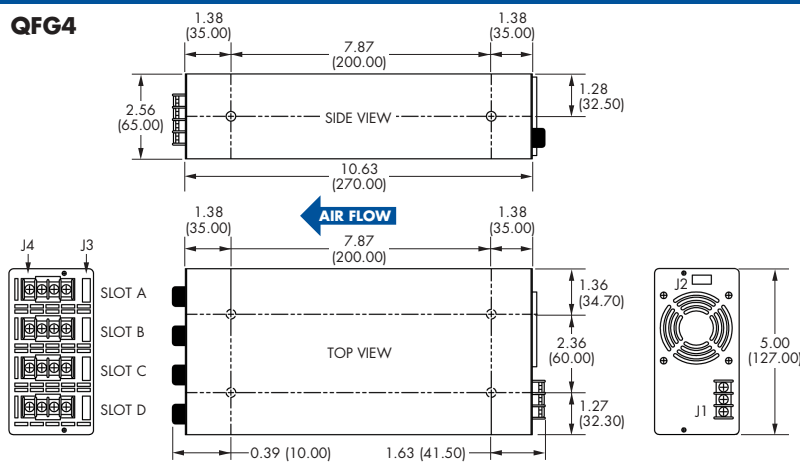
Parameter	Conditions	MIN	NOM	MAX	Units
Operating Temperature	See derating curve	-20		70	°C
Storage Temperature		-40		85	°C
Relative Humidity	Non-condensing	5		95	%

EMC CHARACTERISTICS

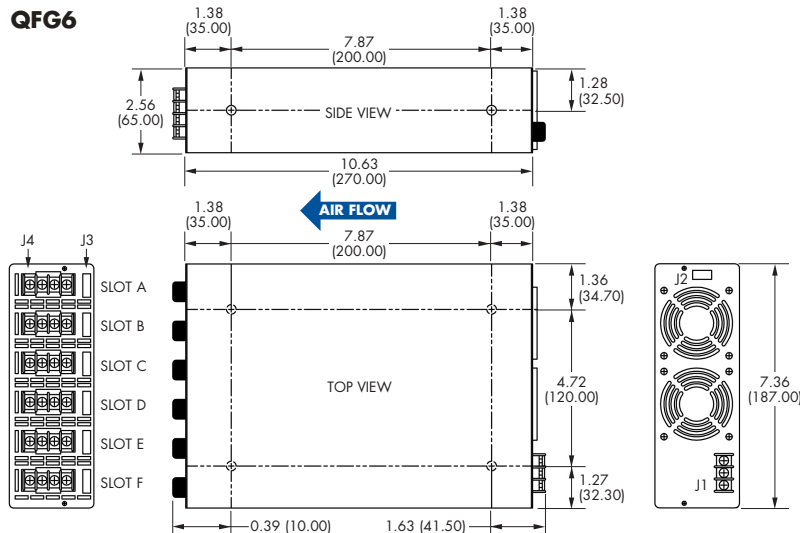
	Test	Standard
Emissions	Conducted	EN55022, FCC Level B
	Electrostatic Discharge	EN61000-4-2 Level 4
	Radiated RFI	EN61000-4-3 Level 3
Immunity	Fast transients – burst	EN61000-4-4 Level 3
	Input line surges	EN61000-4-5 Class 3
	Conducted RFI	EN61000-4-6 Level 3
	Voltage dips	EN61000-4-11 Compliant

MECHANICAL DIMENSIONS

QFG4



QFG6



Typical weight: QFG4: 2.5kg QFG6: 3.5kg Mounting Holes (M4) on Base and Side
All dimensions in Inches (mm) ± 0.01 (0.25) Max screw penetration is 4mm

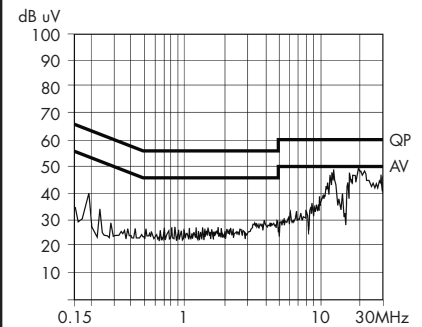
OUTPUT FUNCTIONS

Modules 1 to 6	Module 70 Additional Features (see ACAN06)
Power Good Signal	Adjustable Current Limit
Remote Inhibit	Foldback or Straight Line Current Limiting
Output Voltage Adjustment	+5VDC Bias Voltage
	Factory Set Output Inhibit or Enable

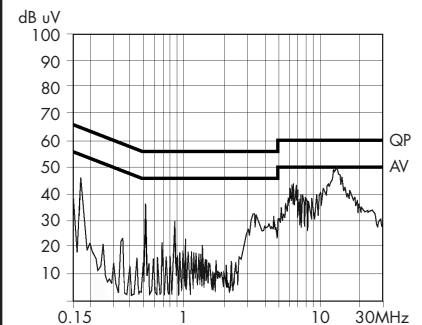
(For dual output modules, QFMOD5 and QFMOD6 output functions are only available on first (top) output)

TYPICAL EMISSIONS

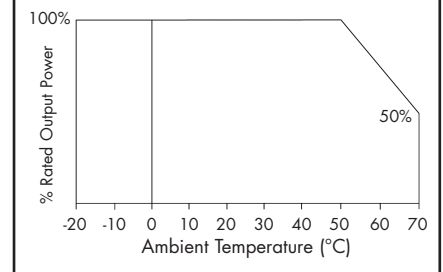
QFG4 - TO EN55022 LEVEL B



QFG6 - TO EN55022 LEVEL B



DERATING CURVE



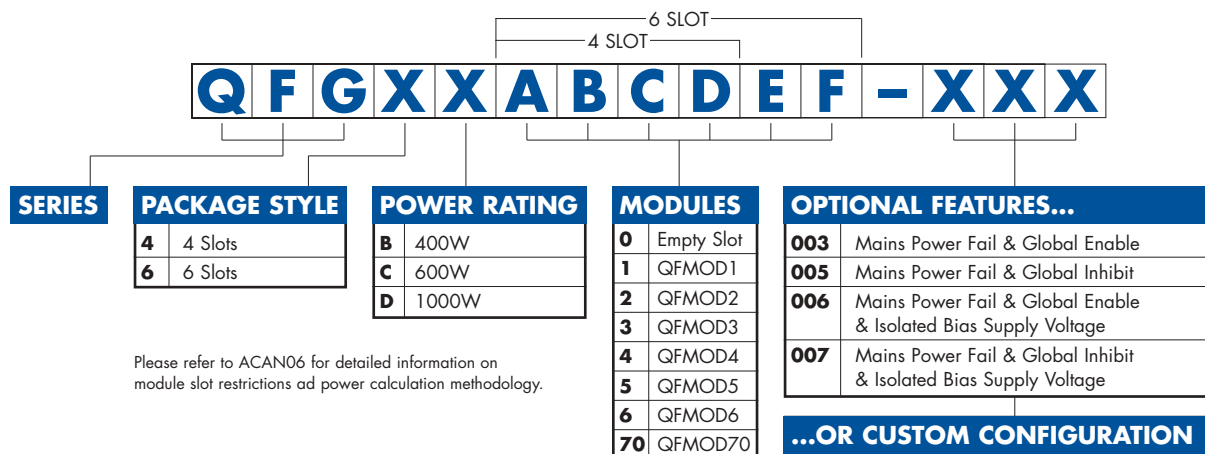
CONNECTORS

J1	Input Power
J2	Optional Global Signals (see ACAN06)
J3	Output Signals Refer to ACAN06 for pinouts
J4	Output Terminals

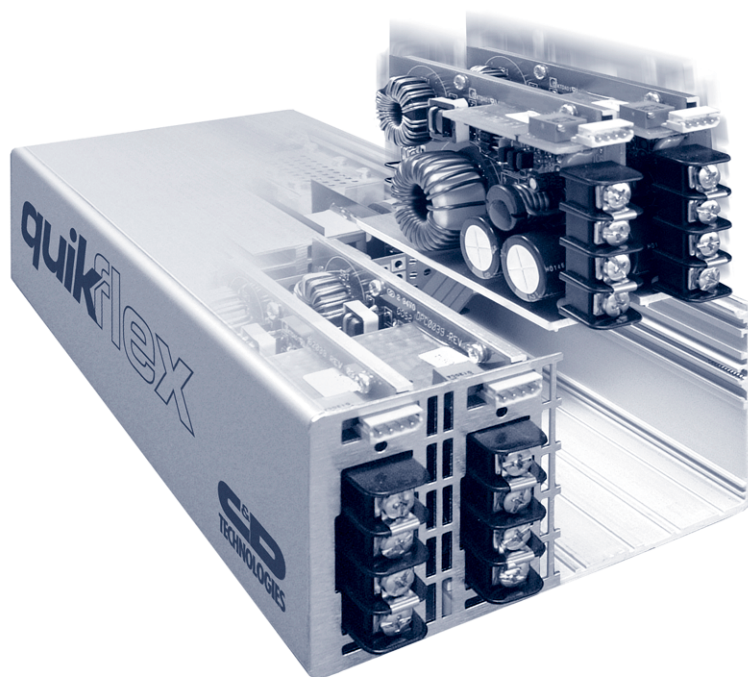
QFG STANDARD OPTIONS

003	Mains Power Fail + Logic Enable
005	Mains Power Fail + Logic Inhibit
006	Mains Power Fail + Logic Enable + Bias Supply Voltage
007	Mains Power Fail + Logic Inhibit + Bias Supply Voltage

PART NUMBERING



Please refer to ACAN06 for detailed information on module slot restrictions and power calculation methodology.



...OR CUSTOM CONFIGURATION

Units are shipped with factory set nominal output voltages. Quikflex power supplies can be factory configured to user specifications e.g. voltage adjustment, parallel and/or serial connections. A unique custom part number will be assigned by the factory for each configuration (please refer to examples below). For further information please refer to ACAN06.

Example Part Numbers:

QFG4B1240

Series: Quikflex General
Package Style: 4 Slot
Power Rating: 400W
Modules: Slot A: 5V @ 6A
Slot B: 12V @ 18A
Slot C: 24V @ 5A
Slot D: Empty
Optional Features: None

QFG6D014440-101

Series: Quikflex General
Package Style: 6 Slot
Power Rating: 750W
Modules: Slot A: Empty
Slot B: 5V @ 6A
Slot C: 24V @ 5A
Slot D: 28V @ 9A
Slot E: 28V @ 9A
Slot F: Empty
Optional Features: Mains Power Fail, Global Enable

The above custom configuration utilizes parallel and serial connections to generate 28V at 18 Amps. The output voltage of QFMOD4 has been factory set to 28V with the additional options of Mains Power Fail and Global Enable.

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