

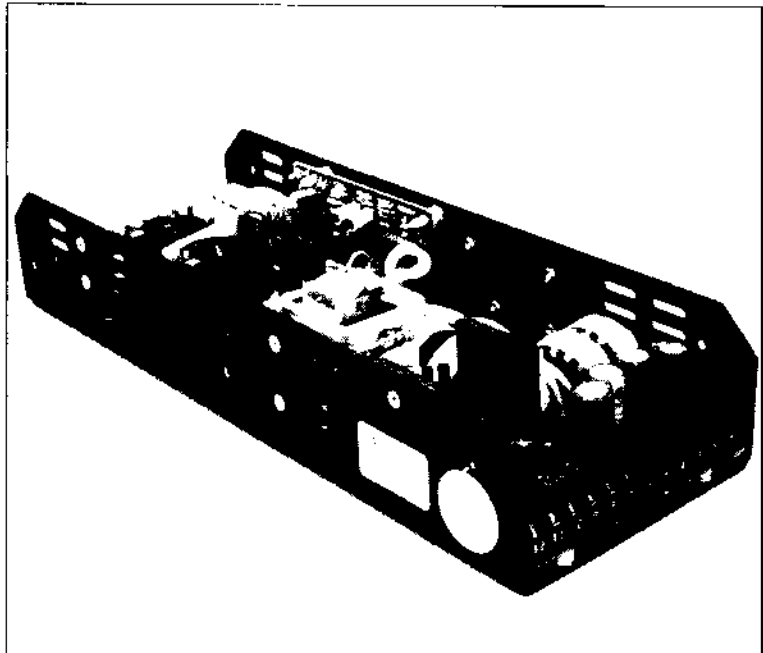
PRODUCT SPECIFICATION

QX10 Series

Multiple Output Switching
Power Supplies

Features

- UL Recognized to UL 1012 and 478 :
- CSA Certified to C 22.2 No. 220 - M'986 and EB1402 :
- TUV Licensed to IEC 380 and 950 and VDE 0806 Class 1 SELV 4
- Fully compliant with FCC and VDE (Level A) standards for EMI
- 90-132/180-264 VAC input, 47-63 Hz
- Accommodates high peak disktape drive requirements
- Remote/internal sensing for Output 1/ Output 2 combination
- 0° - 50° C operating ambient
- AC input safety provisions:
 - input voltage transient protected
 - input surge current limited
 - brown out protected
 - jumper relocation for VAC range selection
- DC output safety provisions:
 - complete overload protection
 - overvoltage protected
 - reverse voltage protected
 - low noise outputs



250/325 Watts Up to 4 Outputs

Available Outputs

Standard Output Voltage Combination	Output 1			Output 2			Output 3			Output 4		
	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps
A	- 5	20	25	- 5	20	25	12	5	-	12	10	15
B	- 5	15	20	- 5	15	20	12	5	-	24	8	12
C	- 5	15	20	- 5	15	25	24	5	-	12	10	15
D	- 5	15	25	- 5	15	25	24	5	-	24	8	12
E	- 5	15	25	5	15	25	12	7*	10	12	10	15
F	+12	10	15	-12	10	15	24	5	-	5	10	15
G	+24	8	12	-24	8	12	12	5	-	5	10	15

*2% Load Regulation

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

Total (sum) of rated DC output power maximum:
 Convection cooling only: 250 Watts
 Forced-air cooling (25 CFM): 325 Watts
 Peak power (10 sec): 400 Watts

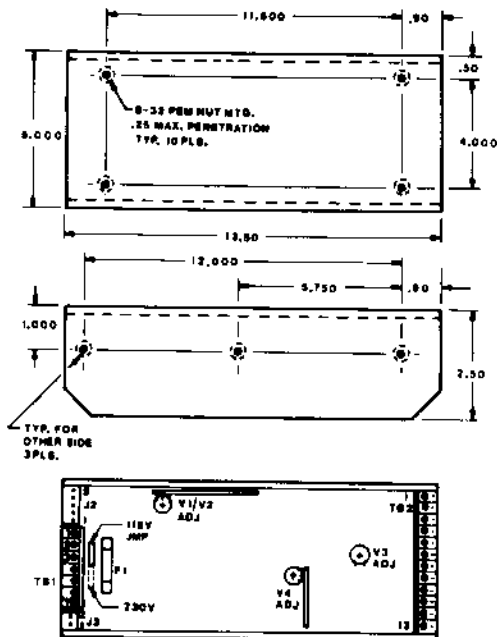
- Other output combinations are also available; consult factory
- All outputs, save Outputs 1 and 2, nominally have separate (floating) returns. Other return combinations can be provided; consult factory
- All -5V outputs can be -5.2V outputs by appropriate rectifier selection; consult factory for appropriate designation.
- Higher peak power is available for shorter duration; consult factory

*Most models; consult factory



QX10 Series

Outline/Mounting/Interface



Input Terminal Block (TB1)

- 1 AC Input
- 2 Safety Gnd
- 3 ACC Input
- 4
- 5 >Jmp for 115V
- 6 >Jmp for 230V
- 7 Not Used

Output Terminal Block (TB2)

- 1 Output 1 (+)
- 2 Output 1 (+)
- 3 Output 2 (-)
- 4 Output 2 (-)
- 5 Output 1/2 Rtn
- 6 Output 1/2 Rtn
- 7 Output 1/2 Rtn
- 8 Output 1/2 Rtn
- 9 Output 3 (-)
- 10 Output 3 Rtn
- 11 Output 4 (+)
- 12 Output 4 Rtn

Control Connector (J2)

- 1 Remote On/Off
- 2 Control Rtn
- 3 Remote Output Sense (+)
- 4 Remote Sense Rtn
- 5 Remote Output Sense (-)
- Mate with 5 terminal AMP MTA-100 or equal

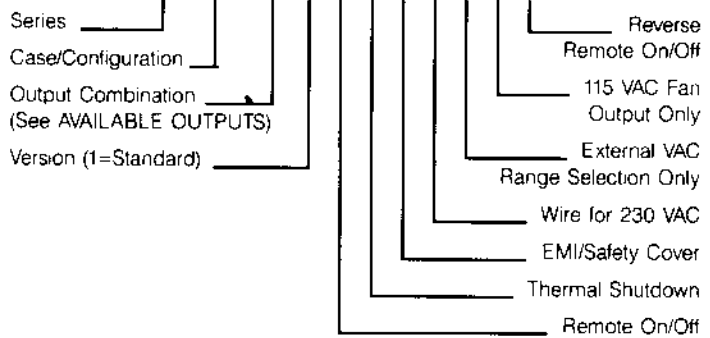
Fan Connector (J3)

- 1 115 VAC Output
- 2 115 VAC Rtn
- Mate with 3 terminal AMP MTA-156 or equal, with center pin pulled

Ordering Information

Options*

QX 10 - A 1 A C D F M N R

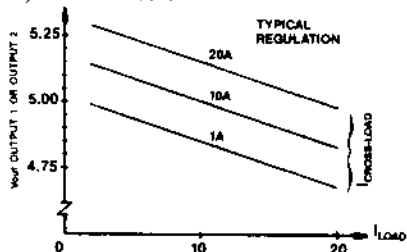


*List all options selected

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; remotely selectable or jumper plug selectable (Option M)
DC Outputs	Nominal See AVAILABLE OUTPUTS table Range: $\pm 5\%$ adjustments, all outputs
Regulation	Line: $\pm 0.25\%$, all outputs, full AC Input range Load: For Outputs 1 and 2 $\pm 0.25\%$ for absolute sum of voltages For Outputs 1 and 2 = $\pm 5V$ Load Reg: $\pm 2\%$ for 20/80% loading Cross Reg: $\pm 2\%$ for 20/80% loading Centering: Dependent upon loading, and, adjustable by rectifier selection
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; derate linearly to 50% power at 70°C Storage: 55°C to 85°C



For Outputs 1 and 2: $> \pm 5V$ the regulation is improved
Load for Outputs 3 and 4: $\pm 1\%$ for zero to full load, for Output 1 plus Output 2 loading $\geq 10\%$ of rated load

Efficiency	75% typical
Overload Protection	Total Output Power limited by limiting primary current level Output 1 plus Output 2: limited by shutting down primary drive Outputs 3 and 4: limited by post regulator characteristics
Overvoltage Protection	Output 1 output level $> 6.25V \pm 5\%$ (or V _X 125%) causes shutdown (AC input removal for restart) Outputs 2 and 3: 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 Surge	50A Pk, cold start
Fusing (F-1)	8A/4A, 3AG for 115/230 VAC
Remote Sense	Output 1 and Output 2
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*	115 VAC fan output (11W)
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.

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