

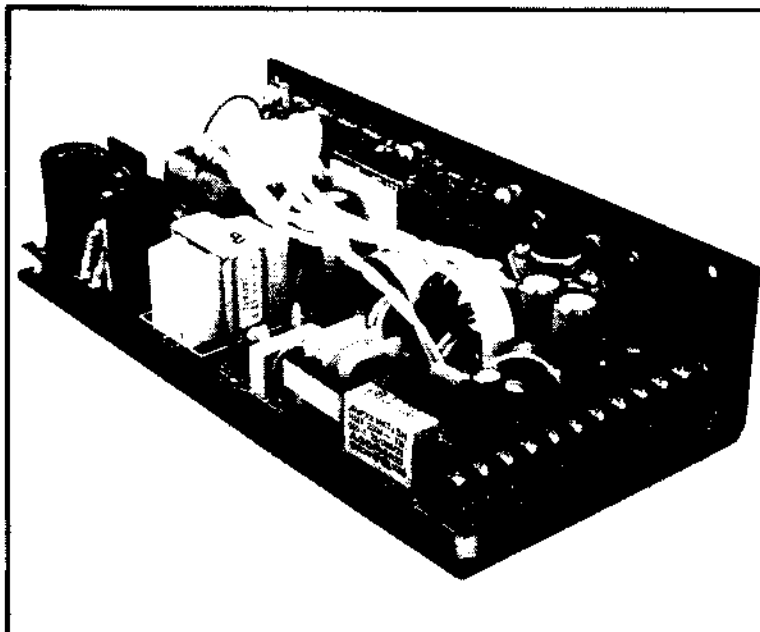
PRODUCT SPECIFICATION

# QT16 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
- 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



**150/175 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	20.0	25.0	+12	2.0	3.0	-12	1.0	1.5	24	5.0	8.0
B	5	20.0	25.0	+12	2.0	3.0	-12	1.0	1.5	12	6.0	8.0
C	5	20.0	25.0	+12	2.0	3.0	-12	1.0	1.5	5	6.0	8.0
D	+5	10.0	20.0	-12	4.5	5.0	—	—	—	+24	5.0	8.0
E	5	20.0	25.0	—	—	—	—	—	—	12	6.0	8.0
F	5	25.0	30.0	—	—	—	—	—	—	—	—	—
G	5	20.0	25.0	+24	1.0	1.5	-12	0.5	1.0	12	6.0	8.0
H	5	20.0	25.0	+15	2.0	3.0	—	—	—	15	5.0	8.0
I	5	20.0	25.0	+15	3.0	—	-15	1.0	1.5	24	5.0	8.0

Total (sum) of rated DC output power, maximum:  
 Convection cooling only                   150 Watts  
 Forced-air cooling (25 CFM)               175 Watts  
 Peak power (10 sec)                       175 Watts  
 (Combination "D" provides increased peak power)

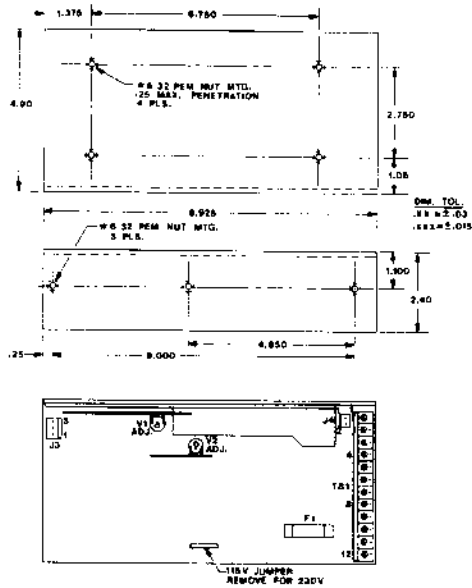
- Other output combinations are also available; consult factory
- Outputs 1 and 4 have independent returns; Outputs 2 and 3 share a common return, save for D; consult factory for alternatives.
- Combination D commons Output 1 return, Output 4 return and Output 2; thereby providing a -12V output at the Output 2 return

‡Most models; consult factory



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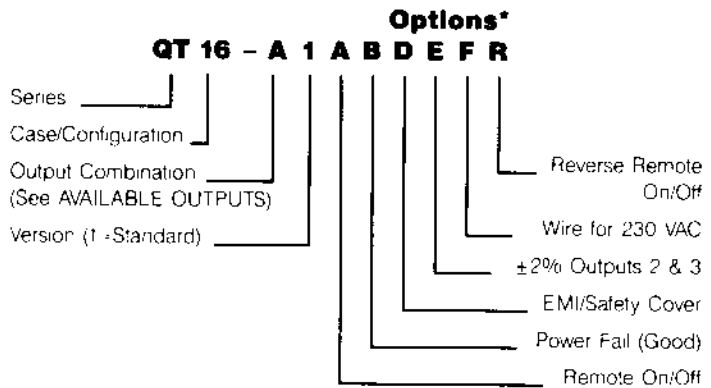
## Outline/Mounting/Interface



### Terminal Block (TB1)

- |                    |                   |
|--------------------|-------------------|
| 1 Output           | 7 Output 3 (-)    |
| 2 Output 1         | 8 Output 4        |
| 3 Output 1 RTN     | 9 Output 4 RTN    |
| 4 Output 1 RTN     | 10 Safety Ground  |
| 5 Output 2 (+)     | 11 AC Input (ACC) |
| 6 Output 2 & 3 RTN | 12 AC Input (AC)  |

## 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.

### Control Connector (J3)

- (AMP MTA, 156 ctr)
- 1 Remote On/Off
- 2 RTN
- 3 Power Fail

### Control Connector (J4)

- (AMP MTA, 100 ctr)
- 1 Remote sense RTN
- 2 Remote sense

W1 - connects Output 4 RTN to Output 1 RTN

W2 - connects Output 2 & 3 RTN to Output 1 RTN

W3 - connects Output 2 (+) to Output 1 RTN

## Specifications

<b>AC Input</b>	Nominal 115/230 VAC, 47-63Hz Range 90-132/180-264 VAC; jumper selectable
<b>DC Outputs</b>	Nominal: See AVAILABLE OUTPUTS table Range: Outputs 1 and 4 adjustable ±5% Outputs 2 and 3 fixed ±5% (optionally ±2%)
<b>Regulation</b>	Line: ±0.25%, all outputs, full AC Input range Load: ±0.25% for Outputs 1 and 4, ±1% for Outputs 2 and 3; for >10% loading of Output 1 and zero to full loading of other Outputs
<b>Ripple/Noise</b>	Sum: 1% Pk-Pk, all outputs
<b>Overshoot &amp; Undershoot</b>	Deviation: 2% for 25% load change at 5A/μsec Response: 200 μsec to 1% deviation, all outputs, turn-on or turn-off
<b>Temperature Coefficient</b>	±0.02% / °C, all outputs
<b>Temperature Range</b>	Operation: 0° to 50°C at rated output power derate linearly to 50% power at 70°C Storage: -55°C to 85°C
<b>Efficiency</b>	75% typical
<b>Overload Protection</b>	Output 1: current limited by primary current level Outputs 2, 3 and 4: current limited by post regulator characteristics
<b>Overvoltage Protection</b>	Output 1: output level >6.25V ±5% causes shutdown (AC input cycle for restart) Outputs 2, 3 and 4: post regulators have quasi-regulated inputs.

### Reverse Voltage Protection

100% of rated current outputs

### Hold-up Time

20 ms after loss of nominal AC Input, for specified load regulation

### In-rush Current

35A Pk, cold start

### Fusing (F-1)

4A/2A, 5MF for 115/230 VAC

### Remote Sense

For Output 1 only

### Remote On/Off\*

Turn on: open circuit or TTL "hi"  
Turn off: Short circuit or TTL "lo"  
Option "R" is the reverse

### Power Fail (Good)\*

Power applied: Output "lo" until all outputs are in regulation  
Power lost: After one cycle ride-through (16 msec minimum) output goes "lo" 4 msec minimum before loss of regulation  
Output 1 and 2 returns are commoned  
Option "S" is the reverse

### 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

3 lbs., 3 oz.

Specifications are subject to change without notice.

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