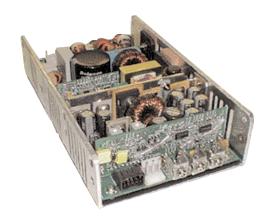
70-120 Watts NTQ123 Series

Total Power: 70-120 Watts Input Voltage: 85-264 VAC # of Outputs: Quad



Special Features

- Active power factor correction
- EN61000-3-2 compliance
- Remote sense on outputs one and two
- Power fail and remote inhibit
- Single wire current sharing on outputs one and two
- Adjustable main outputs
- Built-in Class B EMI filter
- Overvoltage protection
- Overload protection
- Thermal overload protection

Environmental

Operating temperature: 0° to 50°C ambient; derate each output at 2.5% per degree from 50° to 70°C

Electromagnetic susceptibility: Designed to meet EN61000-4, -2, -3, -4, -5, -6, -8, -11 Level 3

Humidity: Operating; non-condensing 5% to 95%

Vibration: Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.7 G peak 5 Hz to 500 Hz, operational

Storage temperature: -40° to 85°C

Temperature coefficient: ± .04% per °C

MTBF demonstrated: >1 million hours at full load and 25°C ambient conditions

Electrical Specs

Input

Input range 85-264 VAC Frequency 47-63 Hz

Inrush current 38 A max., cold start @ 25°C Efficiency 65% typical at full load

FCC Class B conducted and radiated, EMI filter CISPR 22 Class B conducted and radiated, EN55022 Class B conducted and radiated, VDE 0878 PT3 Class B

conducted and radiated.

Power factor 0.99 typical

Safety ground leakage current

<1 mA @ 50/60 Hz, 264 VAC input

Output

Maximum power 70 W convection,

120 W with 30 CFM forced air

Adjustment range ±5% minimum on outputs one and two Hold-up time 20 ms @ 120 W load, 120 VAC input Overload protection Short circuit protection on all outputs. Case overload protected @ 110-145%

above peak rating

Overvoltage protection 3.3 V and 5 V output: 20% to 35% above nominal output

Logic Control

Remote inhibit

Power failure

TTL logic signal goes high 100-500 msec after 5 V output; it goes low at

least 4 msec before loss of regulation Requires an external TTL Signal to

inhibit outputs

Compensates for 0.5 V lead drop Remote sense

minimum, will operate without remote sense connected. Reverse connection

protection.

Safety

VDE 0805/EN60950 (IEC950) 21310-3336-0004 UL UL1950 E186249

CSA CSA 22.2-234 Level 3 LR109492C **NEMKO** EN 60950/EMKO-TUE P98100870

(74-sec) 203

BABT EN60950/EN41003 608497 CB Certificate and report 5009

CE Mark (LVD)

AMERICAS

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Units 2111-2116, Level 21 Tower1, Metroplaza 223, Hing Fong Road Kwai Fong, New Territories Hong Kong Telephone: 852-2437-9662 Facsimile: 852-2402-4426



Ordering Information

Model Number	Output Voltage	Minimum Load⁴	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load¹	Regulation ²	Ripple P/P (PARD)³
NTQ123	+3.3 V	0 A	14 A	25 A	28 A	±2%	50 mV
	+5 V	2 A	12.5 A	24 A	28 A	±2%	50 mV
	+12 V	0 A	1 A	2 A	4 A	±3%	120 mV
	-12 V	0 A	0.5 A	1 A	1.5 A	±3%	120 mV

- 1. Peak current lasting <30 seconds with a maximum 10% duty cycle.
- 2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
- 3. Peak-to-peak with 20 MHz bandwidth and $10~\mu F$ in parallel with a 0.1 μF capacitor at rated line voltage and load ranges.
- 4. Minimum loads are required. In parallel minimum loads are 2.5 A on the 5 V output and 1 A on the 3.3 V output for each power supply.

Pin Assignments

Connec	ctor		5K6
SK1	PIN 1	Ground	
J.C.	PIN 3	Neutral	M 3.5 Q () #6-32 UNC (8 places)
	PIN 5	Live	M 3.5 #6-32 UNC (8 places) (3 places) \$\frac{1}{2} \frac{1}{2} \fr
			M 3.5 #6-32 UNC (8 places) (3 places)
SK5	PIN 1	+12 V	
	PIN 2	Common	
	PIN 3	-12 V	SK4 SK3 SK2 VR401 VR408
SK6	PIN 1	3.3 V SWP	5Vai 53Vai
	PIN 2	-3.3 V Sense	
	PIN 3	+3.3 V + Sense	
	PIN 4	5 V SWP	
	PIN 5	COMMON	9.5
	PIN 6	+5 V Sense	□○□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
	PIN 7	-5 V Sense	
	PIN 8	+ Inhibit	4.7 6.5 (119.6) (165.1)
	PIN 9	- Inhibit	
	PIN 10	Power Fail	
Matina	Connectors		
	C Input:	Molex: 09-50-8051 (USA)	
(3)	ie inputi	Molex: 09-91-0500 (UK)	
		PINS: 08-58-0111	
SK2,3,4	1:	Molex series 19141-0058/0063	
(SK5) ±	12V Molex:09-5	50-8031 (USA)	
		Molex: 09-91-0300 (UK)	
		PINS: 08-58-0111	
(SK6) C	Control Signals:	Molex: 90142-0010	531
		PINS: 90119-2110	361
		or	4.00 (38.1)
		Amp: 87977-3	(101.6)
		PINS: 87309-8	
Astec C	Connector Kit #7	0-841-012	
Notes:			
		ect to change without notice.	
		ches (mm), tolerance ±.02".	2.5
		uires an external 5 V @ 10 mA	- 2.5 (63.5)
to a	ictivate		(03.3)



5. Warranty: 1 year6. Weight: 1.38 lb. / .63 kg

4. Mounting maximum insertion depth is 0.12".