

## NMX-750



### Featuring:

- Forced current sharing for N +1 redundancy
- Remote sense on outputs #1 and 2
- Universal AC input
- 0.99 typical power factor
- Dual converter design eliminates interaction between logic and auxiliary outputs
- Low ripple and noise on all outputs
- DC power good and AC power fail signals
- True remote inhibit
- Monotonic turn-on and turn-off

### STANDARD NMX SERIES

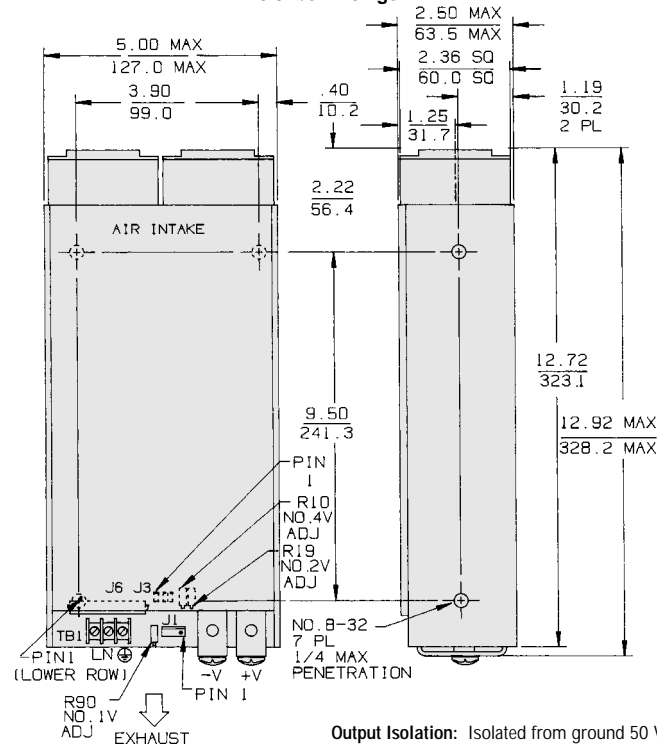
MODEL	PWR	OUTPUT #1	OUTPUT #2	OUTPUT #3	OUTPUT #4
NMX-753-0512	750	+5V @ 120A	+12V @ 12/20A pk	-12V @ 10A	
NMX-754-1205	750	+5V @ 120A	+12V @ 12/20A pk	-12V @ 10A	5.2V @ 5A
NMX-754-1212	750	+5V @ 120A	+12V @ 12/20A pk	-12V @ 10A	12V @ 5A
NMX-754-1224	750	+5V @ 120A	+12V @ 12/20A pk	-12V @ 10A	24V @ 3A
NMX-754-1512	750	+5V @ 120A	+15V @ 10A	-15V @ 10A	12V @ 5A
NMX-754-1524	750	+5V @ 120A	+15V @ 10A	-15V @ 10A	24V @ 3A

### The smallest, most capable 750 W power supply of its kind.

Condor has developed the NMX Series of power supplies to meet the global market's demand for increased performance and reliability. In the NMX, universal input, smaller volume and added features have been achieved without compromising Condor's superior reliability. Condor engineers have perfected a unique converter that operates up to 350 kHz, with increased efficiency. This allows us

to make smaller power supplies without the penalty of higher operating temperatures. Refined use of surface mount technology allows Condor to add performance features such as forced current sharing and power factor correction. It also assures enhanced reliability through the reduction of circuit board area and the number of through-hole components.

**NMX-750**  
5.0 lbs - 2.3 kgs



Dimensions: Inches  
Millimeters

**SPECIFICATIONS: ALL MODELS**

**INPUT**

**AC Input:** 90-264 Vac continuous range, 47 to 63 Hz. Internally fused for 15 A.  
**Power Factor:** 0.99 typical at full load. Meets EN61000-3-2.  
**Inrush:** Cold start AC current is less than 50 A at 115 Vac and 100 A at 230 Vac. Limited by thermistor.  
**Brownout Protection:** Holds regulation to 85 Vac.  
**Holdup Time:** 20 ms minimum after removal of power at full load.  
**Efficiency:** 75% typical.  
**AC Power Fail:** Provides TTL "0" 5 ms before output voltage goes out of regulation band upon loss of AC power.

**OUTPUT**

**Adjustability:** Outputs #1 and 2 user adjustable  $\pm 5\%$  minimum. Output #3 tracks #2; initial accuracy  $\pm 4\%$ . Output #4 user adjustable  $\pm 5\%$  minimum, or +5% only if voltage is 5.2 V.  
**Line & Load Reg:** Outputs #1, 2, and 4 hold  $\pm 1\%$  over AC input range and 0 to 100% load change. Output #3 requires 20% minimum load on outputs #2 and 3 to hold  $\pm 4\%$ .  
**Ripple & Noise:** Less than 1% p-p or 100 mV, whichever is greater.  
**Remote Sense (Outputs #1 and 2):** Compensates for 250 mV total line drop. Open sense lead protection. (See Redundancy, below.)  
**Temperature Coefficient (Outputs #1, 2, and 4):** 0.02% per degree C.  
**Stability:** 0.1% over 8 hours after 30 minutes warm-up.  
**Transient Response (Outputs #1, 2, and 4):** Output voltage returns to within 1% in less than 500  $\mu$ s for a 50% load change. Peak transient does not exceed 5%.  
**Overload Protection:** All outputs are protected against overload and short circuit. Automatic recovery upon removal of fault.  
**Overvoltage Protection (Outputs #1 and 2):** Protects load against power supply induced over voltage. Trip point is factory set so that output voltage cannot exceed 136% of nominal.  
**Peak Output Current:** Dual current ratings define continuous and peak currents. The peak current shown can be delivered for a maximum period of 30 seconds.  
**Remote Inhibit:** Contact closure to the negative sense line or a TTL level "0" turns off DC outputs.

**DC Power Good:** Provides a TTL "1" when output #1 is above 4.6 V nominal.  
**Redundancy:** External OR-ing diodes and forced current sharing on output #1 provide "N+1" capability. Remote Sense (+S) compensates for additional 0.6 V diode voltage drop. When the current sharing terminal is connected between units, current sharing remains within 10% of the unit's full output current rating.

**ENVIRONMENTAL**

**Thermal Protection:** Shuts down power supply if overheated. Automatic recovery.  
**Temperature Range:** 0° to 50° C at full ratings.  
**Safety Agencies:** Most models are approved to UL1950; CSA 22.2 #234; IEC 950 and TÜV EN60950, Class 1 SELV, CE 72/23/EEC/93/68EEC (low voltage directive).  
**Conducted RFI:** Meets FCC Part 15, Subpart J, Class A; EN55022 Class B; CISPR 22 Class B.

**Output Isolation:** Isolated from ground 50 Vdc.  
**Reverse Voltage:** Protected against reverse voltage up to supply current rating.  
**Cooling:** Self cooled with internal ball-bearing fans.

**OPTIONS:**

**Option "B", Barrier Strip:** Provides auxiliary output connections on #6-32 terminal screws with 3/8" centers.  
 Consult factory for other available options.

**AC INPUT (90-264 VAC Continuous Range)**

FUNCTION	115 VAC	230 VAC	CONNECTOR
TB1- (L)	Line	Line 1	Barrier strip # 6-32 screws 3/8" centers
TB1- (N)	Neutral	Line 2	
TB1- (G)	Safety Ground	Safety Ground	

**DC OUTPUT**

FUNCTION	LOCATION	NOTES	CONNECTOR
Output #1	Terminal marked +V	Main Output	Bus bars #1/4-20 screws
	Terminal marked -V	Rtn (Common)	
Output #2	J6-5, 13, 6, 14, 7, 15	Rtn (Common)	AMP # 770974-1 mates with connector #770583-1 with sockets #171639-1 (AWG #20 to #16)
Output #3	J6-8, 16		
Output #4	J6-5, 13, 6, 14, 7, 15	Rtn (Common)	
Output #4	J6-1, 9	(+) Floating Output	
	J6- 2, 10	(-) Floating Output	

**STATUS AND CONTROL**

FUNCTION	LOCATION	NOTES	CONNECTOR
Remote Sense	J1-5	Output #1 Sense	AMP MTA type #640456-5 pin header (locking)
	J1-4	Output #1 Sense Rtn	
DC Power Good	J1-3	Reference to Common	
Inhibit	J1-2	when #1 Sense Rtn is Terminated	
Current Share	J1-1		
Remote Sense	J3-1	Output #2 Sense	AMP MTA type #640456-4 pin header (locking)
	J1-4	Output #2 Sense Rtn	
AC Power Fail	J3-3	Reference to Common	