

# MK, MKA Series



APPROVED

## SPECIFICATIONS — FIVE YEAR WARRANTY

### INPUT

Single phase standard. For 3 phase consult factory.

#### MK750 AND MK1000 UNITS:

120 VAC (+10% -25%), 47-63 Hz standard.

240 VAC (+10% -25%), 47-63 Hz specify-240 Suffix  
120 VAC-240 VAC Switch Option available on 750 and 1000 series, specify-120/240 Suffix.

**MK1500 UNITS:** 240 VAC (+10% -25%), 47-63 Hz. For 120 VAC consult factory.

**INRUSH CURRENT:** Automatic inrush current limiting (soft start).

### OUTPUT

**VOLTAGE ADJUSTMENT:**  $\pm 5\%$  minimum.

**REGULATION:** Line: 0.2% for full line change.  
Load: 0.2% for 100% load change.

**RIPPLE AND NOISE:** 1% pk/pk or 50 mV pk/pk (MK750 and MK1000 units) or 75 mV pk/pk (MK1500 units) whichever is greater (to 20 MHz).

**TRANSIENT RESPONSE:** Output recovers to within 1% in less than 400 microseconds for a load change of 25% within the range of 25% to 100% load.

**HOLDUP TIME:** Output will remain within regulation limits for 20 milliseconds after loss of AC input power (from nominal line voltage) at full load.

**TEMPERATURE COEFFICIENT:**  $\pm 0.02\%$  per  $^{\circ}\text{C}$  averaged over the temperature range.

**REMOTE SENSING:** Provided with open sense lead protection built in.

**STABILITY:**  $\pm 0.1\%$  maximum deviation for a 24hour period, following an initial half-hour warm-up.

### EFFICIENCY

Up to 85%.

### PROTECTION:

**VOLTAGE:** Overvoltage shutdown built into each model. OVP is factory set at 10 to 20% or 1-2 V, whichever is greater, above nominal output. This protection is reset by recycling the input power. Optional SCR crowbar can be provided for use along with standard OVP. Specify-CB Suffix.

**CURRENT:** Automatic current limit/foldback.

**THERMAL:** Automatic shutdown when internal heat sink temperature exceeds safe limit. Automatic restarting when temperature returns to normal.

**REVERSE VOLTAGE:** Supply is inherently protected from reverse polarity voltage across DC output terminals.

### CONVENIENCE FUNCTIONS

**INHIBIT/REMOTE SHUTDOWN:** A short between two pins in auxiliary connection J1 or a TTL zero can be used to turn the output of the power supply off.

**MARGIN CHECK:** Pins are provided in the auxiliary connector for programming output  $\pm 5\%$  for system margin check.

**POWER FAIL/OUTPUT GOOD SIGNAL:** TTL compatible signal goes to a logic zero when the AC input or DC output goes below minimum operating level. (Standard on MK models, optional on MKA models)

### OPERATING TEMPERATURE

0 $^{\circ}$  to 71 $^{\circ}$ C ambient; full output to 50 $^{\circ}$ C. Derate 2% per  $^{\circ}$ C to 71 $^{\circ}$ C.

### STORAGE TEMPERATURE

-40 $^{\circ}$ C to +85 $^{\circ}$ C.

### COOLING

Integral ball bearing fan provides forced air cooling.

### ELECTRICAL TERMINATIONS

**INPUT:** Barrier type — 6-32 hardware.

**OUTPUT:** Studs — Two 5/16-18 UNC-2A; hex nuts provided. Output control connector (J1) 6 position — Molex No. 03-06-1061 mates with Molex No. 03-06-2061.

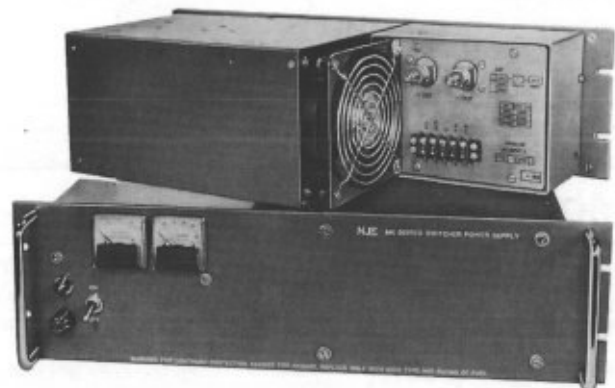
### MECHANICAL & WEIGHT

See Figure 14. — 16 LBS.

# High Efficiency High Current Switcher Regulated Power Supplies

MODEL*	SERIES	VOLTS	AMPS
MK750-2-150	750	2	150
MK750-5-150	750	5	150
MK750-12-65	750	12	65
MK750-15-55	750	15	55
MK750-18-46	750	18	46
MK750-21-40	750	21	40
MK750-24-35	750	24	35
MK750-28-30	750	28	30
MK750-36-24	750	36	24
MK750-48-18	750	48	18
MK1000-2-200	1000	2	200
MK1000-5-200	1000	5	200
MK1000-12-87	1000	12	87
MK1000-15-73	1000	15	73
MK1000-18-61	1000	18	61
MK1000-21-53	1000	21	53
MK1000-24-47	1000	24	47
MK1000-28-40	1000	28	40
MK1000-36-33	1000	36	33
MK1000-48-25	1000	48	25
MK1500-2-300	1500	2	300
MK1500-5-300	1500	5	300
MK1500-12-130	1500	12	130
MK1500-15-110	1500	15	110
MK1500-18-92	1500	18	92
MK1500-21-80	1500	21	80
MK1500-24-70	1500	24	70
MK1500-28-60	1500	28	60
MK1500-36-48	1500	36	48
MK1500-48-36	1500	48	36

\*NOTE: Specify the MKA prefix for TUV models.



## AVAILABLE OPTIONS:

- 120/240: Dual Input Voltage
- CB: Crowbar Overvoltage Protection
- CM: Current Monitor
- FCS: Current Sharing
- 3PH: Three Phase Input
- E: Fungus Inert Coating applied to Circuit Boards
- FI: Reverse Air Flow
- RK1: Panel Mount with Meters
- 400Hz: 400 Hz Input

## Meter Panel Mount Option

All NJE MK Series, 750, 1000, and 1500 watt switchers can now be supplied from the factory premounted and wired to a standard 5 1/4 x 19 inch rack panel. The standard panel comes with meters, on-off switch, fuse and pilot light. Depth behind the panel is a mere 8 inches.

The two 3/8-16 output studs are on the rear of the unit as is the AC input barrier strip. The sense terminals are brought out for customer use on the same barrier strip. The air flow from the MK switcher fan is from left to right when facing the front of the panel. Specify RK1 Option.

# Package MK

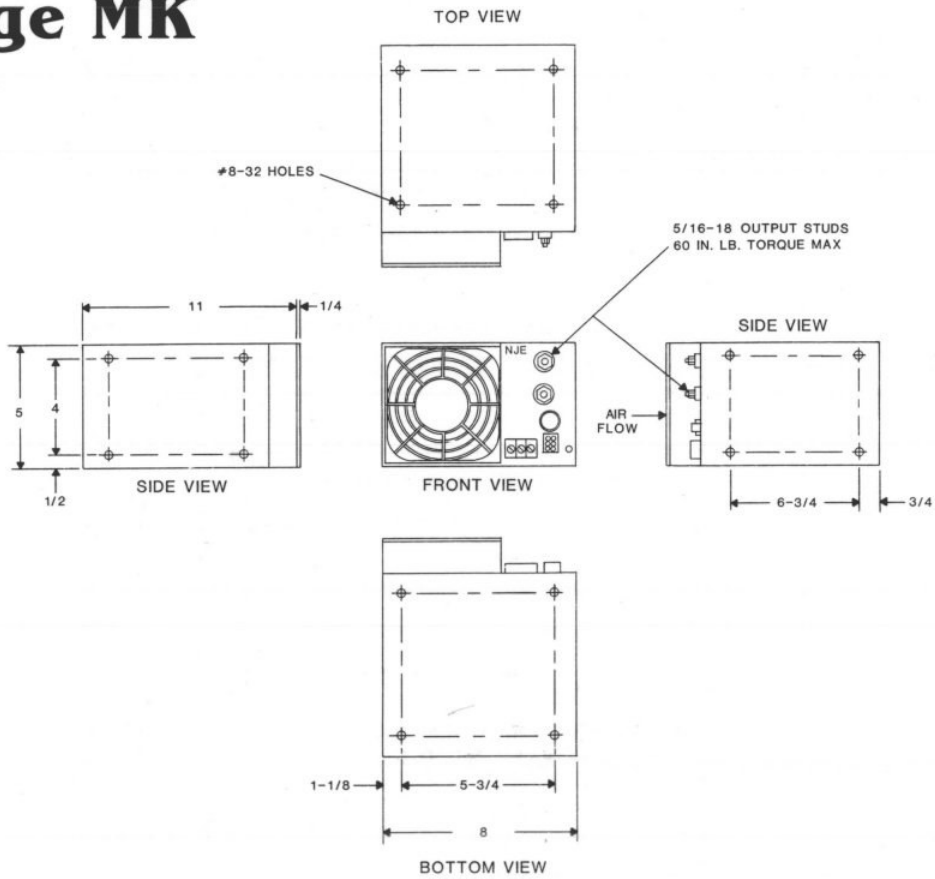


Figure 12