



GENERAL DESCRIPTION

The EMKI series power supply is a completely solid-state regulated current source with a continuously variable output, designated particularly for supplying power to xeon or krypton arc lamps. Stable light output and long lamp life are ensured since the lamp current is regulated to within 1% regardless of line functions and the ripple current is less than 2%. The semiconductor circuitry allows instant start-up and the use of silicon controlled rectifiers as regulating elements provides high reliability and high efficiency in a very compact unit.

This power supply also provides the boost or "open circuit" voltage required for starting arc lamps. In addition, it can pulse any standard igniter to permit a completely automated starting sequence, locally or remotely controlled.

The EMKI series power supply incorporates a built-in high-voltage igniter assembly which is pulsed automatically when the power supply is turned on.

OUTPUT

MODEL	BOOST (V)	OPERATING (V)*	CURRENT (A)
EMK120-50	350	120	50
EMK150-40	350	150	40
EMK200-30	375	200	30
EMK200-40	375	200	40
EMK220-50	375	220	50
EMK240-25	375	240	25

*Guaranteed minimum value at lowest specified line voltage. High voltage ignition pulse 30KV.

Ignition pulse amplitude values are approximate. Actual value depends on load characteristics and distributed impedances of load leads.

INPUT

Three-phase, three wire system, (plus neutral for 380V operation).

Line Voltage, phase-to-phase: 188-242V or 342-418V.

Line Frequency: 47-63HZ. (Except 57-63HZ for units rated over 10KW)

Line Current: 6KW; 25A; 11KW; 43A.

GENERAL

CURRENT REGULATIONS: 1% line and load combined, over useful operating range of amp(s) (50-100% of rated current).

CURRENT RIPPLE (RMS): Less than 1% units. Ripple is measured with lamp(s) ignited and the power supply operating between 50-100% of rated current. Dynamic impedance of the lamp(s) is to be greater than 0.9 ohm per lamp.

TEMPERATURE COEFFICIENT: 0.02% per degree C.

STABILITY: 0.1% for 6 hours after warm-up, under fixed line, load and temperature conditions.

RESPONSE TIME: Approximately 25 ms for a 30-100% current programming change.

AMBIENT TEMPERATURE: Operating: 0°C to 50°C. Non-operating: -40°C to 85°C.

CONTROLS: Ammeter with remote terminals
Current 0 to 100%
Remote programming
Remote turn-on

PROTECTION: Fuses or circuit breaker for input lines. Fuses for auxiliary circuits. Automatic reset over-temperature switch de-energizes line contactor. Adjustable over-current kill circuit drops output to zero in case current regulation goes out of control. Auxiliary contact on line contactor discharges filter capacitors when unit is turned off.

SIZE: All units: 19" (483mm) rack width by 20" (508mm) depth, plus 2" (51mm) for output terminals.

WEIGHT: EMKI: 215 lbs. (97.7kg)

CUSTOM DESIGNS: E/M can modify or manufacture a unit to your voltage and current requirements.

PRODUCT CHANGES: Product information published in this brochure was current at time of printing, however, E/M reserves the right to change specifications, designs and models without prior notice.



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