

## MK Series 75 Watt

## Regulated High Voltage DC Modules

## Medium Power Premium Performance...

## Low Cost

## Fully RoHS Compliant

The MK Series of 75 watt high voltage supplies are air insulated, fast response units, with tight regulation and low arc discharge currents

Please refer to Technology > Applications page on our web site for typical applications.

The MK Series with 220 option, are fully compliant with the Following European Directives:  
EN61000-3-2, Line Harmonics.  
EN61010/ IEC61010, Safety  
EN61000-6-4, Conducted and Radiated Emissions  
EN61000-6-2:2005, Conducted and Radiated Immunity  
2011/65/EU, Restriction of the use of hazardous substances (RoHS)



Models from 0-1kVDC through 0-60kVDC; weight <11 lbs.

### Features:

#### Current Regulation Unequalled in a Module of This Price Range.

For example, the regulation from short circuit to rated voltage for the 15kV, 5mA model is +2.5 microamperes.

Glassman's "Air Insulated" designs are completely serviceable; this module is not an epoxy block "throw-away."

#### AC Power "ON" Indicator

**Standard Accessories.** Detachable 8' shielded output cable, mating control connector and line cord.

#### Constant Voltage/Current Operation - Standard

**Low Stored Energy.** Less than 800 millijoules for most models.

#### "Multi-Mode" operation permits maximum user flexibility.

- Local voltage or current control user selectable.
- Remote voltage and/or current control via 0 - +10 volt signal.
- Remote voltage and/or current control via potentiometers.

**Protection:** Overload, short circuit, and arc protection is provided by automatic current regulation and by careful surge limiting design.

#### External Interlock Terminals

#### TTL Enable/Disable

**Warranty.** All power supplies are warranted for three years. A formal warranty statement is available.

## Specifications

(From 5% to 100% Rated Voltage. All units operate down to zero output with very slight degradation of performance.)

**Input:** 105-125V RMS, 48-420Hz single phase, less than 1.5 amperes. 180 VA maximum at full load. C14 input connector per IEC 60320, with mating line cord, provided.

**Efficiency:** Better than 75% at full load.

**Output:** Continuous, stable adjustment, from 0 to rated voltage or current by panel mounted 10-turn potentiometer with 0.05% resolution, or by external 0 to 10V signals is provided. Voltage accuracy is 1% of setting + 0.5% of rated. Repeatability is <0.1% of rated.

**Stored Energy:** 10kV model, 200 millijoules; 50kV model, 1 joule.

**Voltage Regulation:** Better than 0.005% + 1mV/mA, line and load.

**Ripple:** Better than 0.03% RMS of rated voltage +0.5V at full load.

**Current Regulation:** Better than 0.1% from short circuit to rated voltage at any load condition.

**Voltage Monitor:** Zero to + 10V DC signal is provided for zero to rated voltage. Accuracy, 1% of reading + 0.5% of rated. Output impedance is 10 kΩ.

**Current Monitor:** Zero to + 10V DC signal is provided for zero to rated current. Accuracy, 1% of reading +0.05% of rated. Output impedance is 10 k.

**Stability:** 0.01% per hour after 1/2 hour warm-up. 0.05% per 8 hours.

**Voltage Rise/Decay Time Constant:** Using either the HV on/off or remote voltage control, with a 75% load, the output voltage will rise or decay with a typical time constant of 50 milliseconds (100mS maximum).

**Temperature Coefficient:** 0.01% per degree C.

**Ambient Temperature:** - 20 degree C to + 60 degree C, operating; -40 degree C to + 85 degree C storage.

**Polarity:** Available with either positive or negative polarity with respect to chassis ground.

**Protection:** Automatic current regulation protects the power supply against all overload conditions, including arcs and short circuits. Fuses, surge limiting resistors, and low energy components provide the ultimate protection.

**AC Power "ON" Indicator.**

**Accessories:** Detachable 8' shielded output cable (see Models chart for

cable type), mating control connector, and line cord.

**Remote Controls:** A DB25S D-subminiature connector and mating plug are provided for all control input functions. These include common, + 10 volt reference, interlock, current

monitor, current program, voltage monitor, voltage program, TTL, ground, and local control.

**External Interlock:** Open off, closed on.

**Enable/Disable:** 0 to 1.5V off, 2.5 – 15V on.

## Options

Symbol	Description
100	100 Volt input: rated for 90 to 110 volts RMS. 48-63 Hz.
220	230 Volt input: rated for 198 to 253 volts RMS. 48-63 Hz. <b>Required for CE.</b>
400	400Hz input: Available for standard and options 100 and 220.
K01	RS-232/USB control and monitor
K02	RS-232/USB/Ethernet control and monitor

## Models

Positive Polarity	Negative Polarity	Output Voltage	Output Current	Output Cable
MK1P75L	MK1N75L	0-1kV	0-75mA	RG-59
MK1.5P50L	MK1.5N50L	0-1.5kV	0-50mA	RG-59
MK2P37.5L	MK2N37.5L	0-2kV	0-37.5mA	RG-59
MK3P25L	MK3N25L	0-3kV	0-25mA	RG-59
MK5P15L	MK5N15L	0-5kV	0-15mA	RG-59
MK10P7.5	MK10N7.5	0-10kV	0-7.5mA	RG-8U
MK15P5	MK15N5	0-15kV	0-5mA	RG-8U
MK20P3.7	MK20N3.7	0-20kV	0-3.7mA	RG-8U
MK25P3	MK25N3	0-25kV	0-3mA	RG-8U
MK30P2.5	MK30N2.5	0-30kV	0-2.5mA	RG-8U
MK35P2	MK35N2	0-35kV	0-2mA	RG-8U
MK40P1.8	MK40N1.8	0-40kV	0-1.8mA	RG-8U
MK50P1.5	MK50N1.5	0-50kV	0-1.5mA	RG-8U
MK60P1.2	MK60N1.2	0-60kV	0-1.2mA	RG-8U

