MK Series
75 Watt
Regulated
High Voltage
DC Modules
Medium Power
Premium
Performance...
Low Cost

Fully compliant with the European harmonized EMI directive, EN50082-2, and with the low voltage (safety) directive, 73/23/EEC.

Line harmonics are within the European harmonized standard, EN61000-3-2 specifications.

Models from 0-1kVDC through 0-60kVDC; weight <11 lbs. (Shown with and without optional input voltage selector switch.)

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.
YY1 Option: 115/230VAC selectable input; switch located on front panel for setting appropriate mains input.

“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: Standard power supplies are warranted for three years; OEM and modified power supplies are warranted for one year. A formal warranty statement is available.

Designing Solutions for High Voltage Power Supply Applications
GLASSMAN HIGH VOLTAGE INC.
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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.
Input connector per IEC 320, 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 0.5% of setting + 0.2% of
rated. Repeatability is <0.1%
of rated.
Stored Energy: 10kV model, 200
millijoules; 50kV model, 1 joule.
Voltage Regulation: Better than
0.005% + 1mVmA, 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, 0.5% of reading +
0.2% of rated voltage.
Current Monitor: Zero to +10V DC
signal is provided for zero to rated
current. Accuracy, 1% of reading +
0.0% of rated current.
Stability: 0.01% per hour after 1/2
hour warm-up. 0.0% 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 5V off,
2.5 – 15V on.

Options
Symbol Description
220 220 Volt Input: rated for 210 to 250 volts RMS. 48-420 Hz.
100 100 Volt input: rated for 90 to 110 volts RMS. 48-420 Hz.
YY1 115/230 VAC selectable input; switch located on front panel.

Models

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

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