

- **Compact Package**
- **Voltage and Current Programming from Zero to Rated Output**
- **Test Points for Output Current and Voltage**
- **Control of Output Via Enable/Inhibit Signal**
- **OEM Customization Available**

The EPM series of high voltage power supplies provides very well regulated, low ripple high voltage in a highly efficient, compact design.

The output voltage and current are controllable over the full range of operation. Voltage and current programming and monitoring signals are all 0-10Vdc where corresponds to 0 to 100% rated output. A High Voltage Inhibit/Enable signal allows for simple on/off control of the power supply.

TYPICAL APPLICATIONS

| | |
|-----------------|-------------------------|
| Electrophoresis | Photomultipliers |
| Electron Beam | Laboratory Applications |
| Ion Source | Electrospinning |

SPECIFICATIONS

Input:

+24Vdc \pm 10% @ 2A

Output:

8 models from 1kV to 30kV. Each model is available in positive or negative polarity output.

Voltage Regulation:

Load: 0.02% of output voltage for a full load change.
Line: 0.01% for \pm 10% change in input voltage.

Current Regulation:

Load: 0.01% of output current from 0 to rated voltage.
Line: 0.01% of rated current over specified input range.

Ripple:

0.1% p-p of maximum rated output voltage.

Dimensions:

2.06"H x 5.63"W x 5.69"D
(52.32mm x 143mm x 144.53mm)

Weight:

2.2 pounds (1kg)

Input Connector:

9 pin AMP Metri-Mate. Mating connector and pins supplied.

Output Cable:

18" \pm 1" (457mm) of UL[®] listed high voltage wire.

Voltage Stability:

0.02% per 8 hours (after 1/2 hour warm-up).

Voltage Temperature Coefficient:

0.01% per $^{\circ}$ C.

Voltage Test Point:

10Vdc \pm 2% = maximum rated output.

Current Test Point:

10Vdc \pm 2% = maximum rated output.

Remote Enable:

3.4Vdc = HV ON.
1.0Vdc or open = HV OFF.

Regulatory Approvals:

Compliant to EEC EMC Directive (1kV to 15kV only).
Compliant to EEC Low Voltage Directive (1kV to 15kV only).
UL/CUL recognized, File E148969 (1kV to 15kV only).

EPM SELECTION TABLE

| Maximum Rating kV | mA | Model Number |
|----------------------|-----|--------------|
| 1 | 30 | EPM 1*30 |
| 3 | 10 | EPM 3*30 |
| 5 | 6 | EPM 5*30 |
| 10 | 3 | EPM 10*30 |
| 15 | 2 | EPM 15*30 |
| 20 | 1.5 | EPM 20*30 |
| 25 | 1.2 | EPM 25*30 |
| 30 | 1 | EPM 30*30 |

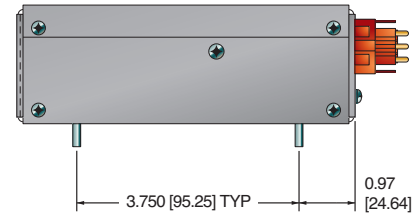
*Specify "P" for positive polarity or "N" for negative polarity.

INPUT – 9 PIN AMP CONNECTOR

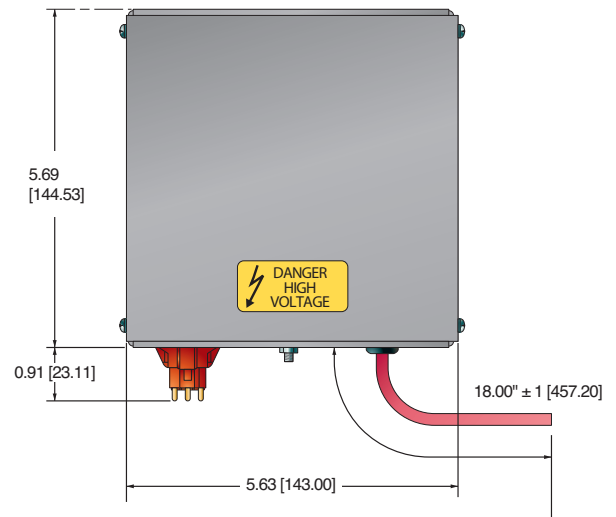
| PIN | SIGNAL | PARAMETERS |
|-----|-----------------------------|--|
| 1 | Power Ground | Power Ground |
| 2 | +24Vdc | +24Vdc @ 1.85 amps, maximum |
| 3 | High Voltage Enable/Inhibit | 0Vdc = HV OFF, +5Vdc = HV ON (see manual for details) |
| 4 | Voltage Test Point | 0 to 10Vdc = 0 to 100% rated output, Zout = 10kΩ |
| 5 | Current Test Point | 0 to 10Vdc = 0 to 100% rated output, Zout = 10kΩ |
| 6 | Voltage Programming | 0 to 10Vdc = 0 to 100% rated output, Zin = 10MΩ |
| 7 | Current Programming | 0 to 10Vdc = 0 to 100% rated output, Zin = 10MΩ |
| 8 | +10Vdc Reference | +10Vdc @ 1mA maximum |
| 9 | Signal Ground | Signal Ground |

DIMENSIONS: in.[mm]

SIDE VIEW



TOP VIEW



FRONT VIEW

