

General Purpose High Voltage Supply

0 to + or - 1,000 through 0 to + or - 33,000 VDC @ 10 Watts
4000 Series

www.emcohighvoltage.com

EMCO
High Voltage Corporation



FEATURES

0 to 100% Adjustability
Voltage Programmable
Voltage Monitor *
Remote On/Off Control
EMI/RFI Shielding
Short Circuit Protection
Reverse Polarity Protection
Arc Protection

* Excluding Models 4300 & 4330

OPTIONS

Negative Output Voltage,
put "N" after model
(For example: 4300N)

APPLICATIONS

Cathode Ray Tubes
Lasers and Q Switches
Capacitor Charging
Test Instrumentation
Electrostatic Field Generators
Electrophoresis

PHYSICAL CHARACTERISTICS

MODELS 4010 thru 4200 • SIZE: 4.1 (104) x 3.1 (78.7) x 1.4 (35.56)

MODELS 4300 thru 4330 • SIZE: 4.1 (104) x 3.6 (91.4) x 1.4 (35.56)

WEIGHT: 1.5 Pound (.675 kg.) Approx.

CASE MATERIAL: Black Anodized Aluminum

INPUT CONNECTOR: Molex 09-75-2074

MATING CONNECTOR: Molex 09-50-3071 (Supplied)

MOLEX PINS: 08-50-0106 (supplied)

MODELS 4010 thru 4200 • HV LEAD: 30KV 22 AWG

MODELS 4300 thru 4330 • HV LEAD: 40KV 20 AWG

ELECTRICAL SPECIFICATIONS

INPUT VOLTAGE: +24 Volts (+20%- 5%)

OUTPUT VOLTAGE: See Table

OUTPUT CURRENT: See Table

ANALOG CONTROL: 0 to 10 Volts=0 to 100% Output

VOLTAGE MONITOR: 0 to 10 Volts=0 to 100% Output

ON/OFF CONTROL: On=0 Volts or N.C.

Off=5 Volts

REFERENCE OUTPUT: 10 Volts ($\pm 0.5\%$)

OPERATING TEMP: -10° to +60° C

The 4000 Series is a line of fully adjustable DC to DC converters providing an economical source of high voltage that is ideal for CRT's, lasers, Q switches, PMT's, detectors, electron and ion guns, capacitor charging, test equipment, and many other applications. These units feature remote voltage programming, resistance programming, or manual adjustability via an externally accessible potentiometer. Short

circuit protection, arc protection, and reverse polarity protection are standard as well as remote on/off and a 0 to 10 volt output voltage monitor. The 4000 Series has a built-in 10V precision reference output available. These units also feature excellent EMI/RFI shielding. Two #6-32 studs mount the supply in a three inch mounting pattern. Call, e-mail or fax your requirements for immediate attention.

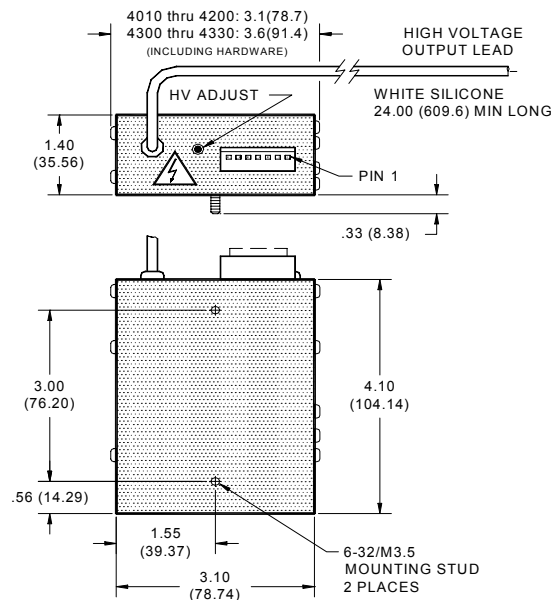
PROGRAMMING	
VOLTAGE:	Apply 0-10V to pin 5 for 0-100% output.
RESISTANCE:	Connect potentiometer to pin 4 (reference voltage), connect wiper arm to pin 5, and connect potentiometer to ground.
MANUAL:	Connect pin 6 to pin 5, turn front panel pot for voltage adjust.

PIN	FUNCTION
1	On-Off Control
2	Ground/Case
3	+24 Volt Input
4	10 Volt Reference Output
5	Programming Voltage
6	Internal Potentiometer
7	Voltage Monitor

Dimensions are in Inches
Dimensional Tolerances: $\pm .30$ (.76)
(Metric equivalents in parentheses)

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT *1	RIPPLE P-P
4010	0 to 1,000	10 mA	.1%
4020	0 to 2,000	5 mA	.1%
4030	0 to 3,000	3.3 mA	.2%
4050	0 to 5,000	2 mA	.1%
4070	0 to 7,000	1.4 mA	.1%
4100	0 to 10,000	1 mA	.1%
4120	0 to 12,000	.8 mA	.1%
4150	0 to 15,000	.67 mA	.1%
4200	0 to 20,000	.5 mA	.2%
4300*2	0 to 30,000	.33 mA	.4%
4330*2	0 to 33,000	.30mA	.2%

*Note: 1. At Maximum Rated Output Voltage.
2. No Voltage Monitor



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