

Regulated, Programmable 15 Watt HV Modules



0 to +300 through 0 to +10,000 VDC @ 15 Watts

0 to - 300 through 0 to - 6,000 VDC @ 15 Watts

H Series



The H Series is a line of compact, regulated power supplies featuring 15 watts of continuous output power.*¹ This line features 0 to 100% programmability via a 0 to 5 volt DAC compatible high impedance

programming input voltage. A 0 to 5 volt output voltage monitor is provided. Short circuit, arc, and reverse polarity protection are standard. Technical assistance is readily available.

FEATURES

- 0 to 100% Programmability
- Output Voltage Monitor
- Short Circuit Protection
- Reverse Polarity Protection
- Arc Protection
- Low EMI / RFI
- MTBF: >790K hours per Bellcore TR-332
- Shielded Metal Case
- Input/Output Filtering

OPTIONS

- Mounting Holes (Add 'H' to end of model e.g. H10NH); through H60)
- RoHS(- 'R' suffix denotes the product is designed to meet RoHS requirements i.e. H03PR)
- Epoxy: Low Outgassing (NASA approved per ASTM E-595-93)
UL 94 V0 flammability rating
- Alternate Input Voltages available: contact factory

APPLICATIONS

- Piezo devices
- HV op amp rails
- Ultrasonic transducers
- Lamp ignition & drive
- Electrophoresis
- Capacitor Charging
- Lasers
- General Lab Use

PHYSICAL CHARACTERISTICS

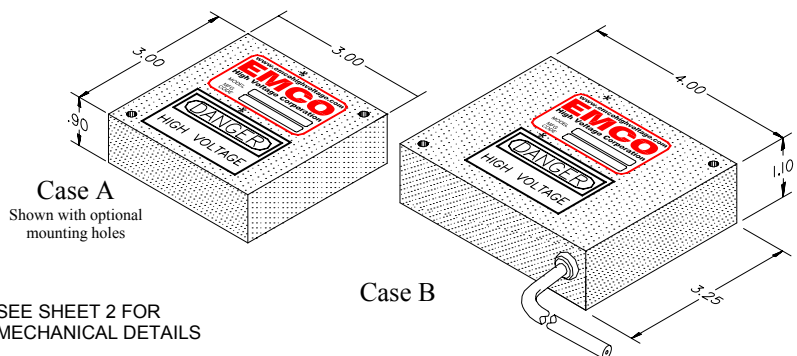
- CASE A: 3.0 (76.2) X 3.0 (76.2) X 0.90 (22.9)
- WEIGHT: 10 Ounces (283.5 grams)
- PINS: .04 (1.02) Dia., .30 (7.62) min length
- CASE B: 3.25 (82.6) x 4.0 (101.6) x 1.10 (27.9)
- WEIGHT: 18 Ounces (510.3 grams)
- PINS: .04 (1.02) Dia., .20 (5.08) min length
- PACKAGING: Fully Encapsulated
- CASE MATERIAL: Black Anodized Aluminum

ELECTRICAL SPECIFICATIONS*²

- INPUT VOLTAGE: 24 Volts (+/-0.5 Volt)
- Alternate Input Voltages available: contact factory
- OUTPUT VOLTAGE: See Table
- OUTPUT CURRENT: See Table
- PROGRAMMING VOLTAGE: 0 to +5 Volts, <100 μ A
- REGULATION: Line: < 0.2%
- Load: See Table
- INPUT CURRENT: No Load: <0.5 Amps
Full Load: <1.5 Amps
- TEMPERATURE COEFFICIENT: < 200ppm/ $^{\circ}$ C
- OPERATING TEMP: -10 $^{\circ}$ to +50 $^{\circ}$ C
- STORAGE TEMP: -20 $^{\circ}$ to +90 $^{\circ}$ C
- MAXIMUM CASE TEMP: +85 $^{\circ}$ C (measured at points indicated)

MODEL	OUTPUT VOLTAGE	OUTPUT* ¹ CURRENT	RIPPLE P-P	REGULATION (LOAD)	CASE SIZE
H03P	0 to +300	50 mA	<1.0%	<0.75%	A
H03N	0 to -300	50 mA	<1.0%	<0.75%	A
H05P	0 to +500	30 mA	<0.5%	<0.20%	A
H05N	0 to -500	30 mA	<0.5%	<0.20%	A
H10P	0 to +1,000	15 mA	<0.01%	<0.20%	A
H10N	0 to -1,000	15 mA	<0.01%	<0.20%	A
H15P	0 to +1,500	10 mA	<0.025%	<0.20%	A
H15N	0 to -1,500	10 mA	<0.02%	<0.20%	A
H20P	0 to +2,000	7.5 mA	<0.03%	<0.20%	A
H20N	0 to -2,000	7.5 mA	<0.03%	<0.20%	A
H30P	0 to +3,000	5 mA	<0.75%	<0.20%	A
H30N	0 to -3,000	5 mA	<1.0%	<0.20%	A
H40P	0 to +4,000	3.75 mA	<0.75%	<0.20%	A
H40N	0 to -4,000	3.75 mA	<0.75%	<0.20%	A
H50P	0 to +5,000	3 mA	<0.75%	<0.20%	A
H50N	0 to -5,000	3 mA	<0.75%	<0.20%	A
H60P	0 to +6,000	2.5 mA	<0.75%	<0.50%	A
H60N	0 to -6,000	2.5 mA	<0.75%	<0.20%	A
H101P	0 to +10,000	1.5 mA	<1.0%	<0.20%	B

*Notes 1. At Maximum Rated Output Voltage.
2. Specifications after 1 hour warm-up, full load, + 25 $^{\circ}$ C unless otherwise noted.



SEE SHEET 2 FOR MECHANICAL DETAILS

Dimensions are in inches
Dimensional Tolerances: \pm .03 (.76mm)
(Metric equivalents in parenthesis)

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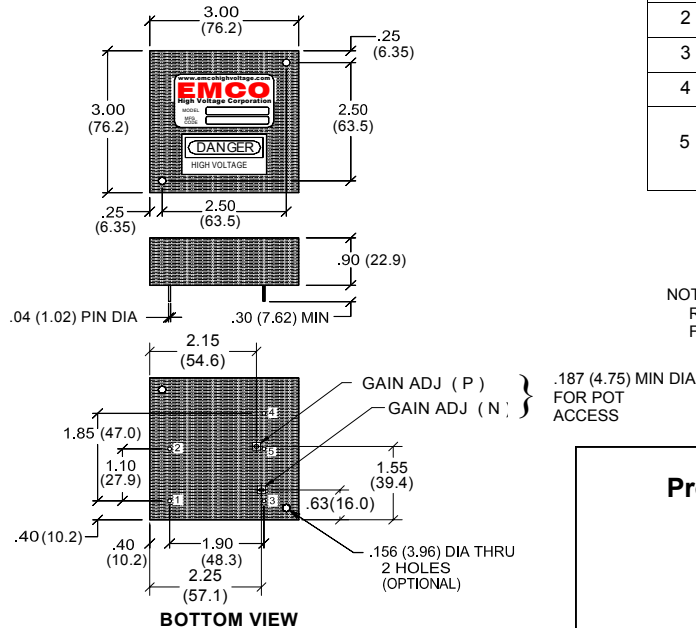
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CASE A

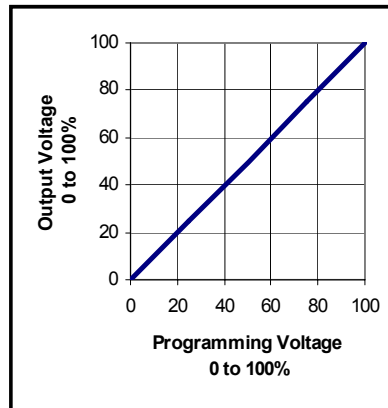


Pin #	Function
1	+24V Input
2	Ground
3	Programming Volts: 0 to +5V
4	High Voltage Output
5	Voltage Monitor: Positive Outputs: 0 to +5V = 0 to 100% V out Negative Outputs: 0 to - 5V = 0 to 100% V out

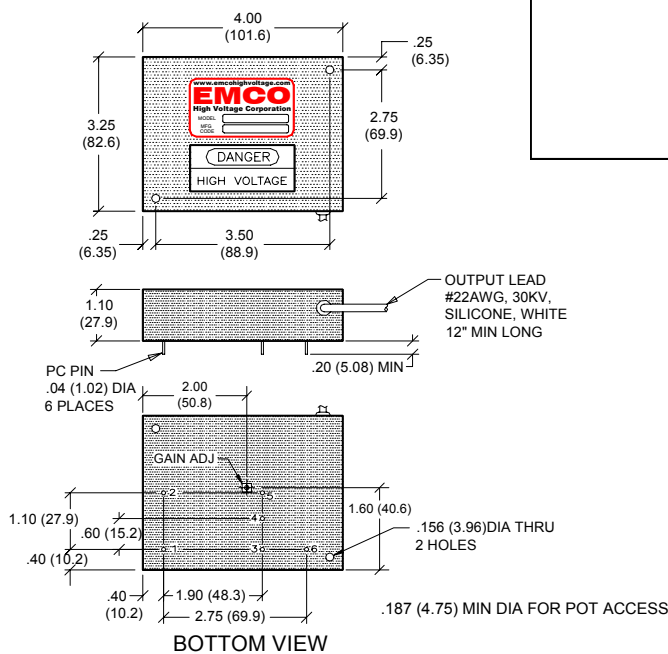
Dimensions are in Inches
Dimensional Tolerances: ± 0.03 (.76mm)
(Metric equivalents in parenthesis)

NOTE:
RUN SEPARATE GROUND PATHS TO PIN 2
FOR POWER AND SIGNAL GROUNDS.

Programming Voltage vs Output Voltage



CASE B



Pin #	Function
1	+24V DC
2	Ground
3	Programming Volts: 0 to +5V
4	Programming Return
5	Voltage Monitor: 0 to 5V = 0 to 100% V out
6	Output Return

Dimensions are in Inches
Dimensional Tolerances: ± 0.03 (.76mm)
(Metric equivalents in parenthesis)

NOTE:
RUN SEPARATE GROUND PATHS FOR
POWER AND SIGNAL GROUNDS.

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We reserve the right to make changes without notification