

REGULATED DC/DC HIGH VOLTAGE POWER SUPPLIES

SERIES RC

7 Models Covering the range of 0-3 KV to 0-30 KV at up to 10 Watts

FEATURES:

- Voltage Programmable
- Excellent Dynamic Regulation
- Arc-Over Protected
- Compact/Fully Encapsulated

APPLICATIONS:

- CRT Displays
- Photomultipliers
- X-Ray Tubes

MODEL GUIDE MODEL OUTPUT VOLTAGE OUTPUT CURRENT

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT
RC5-3	0 to 3KV	1.5mA
RC5-5	0 to 5KV	l mA
RC5-10	0 to 10KV	0.5mA
RC5-15	0 to 15KV	0.33mA
RC5-20	0 to 20KV	0.25mA
RC5-25	0 to 25KV	0.2mA
RC5-30	0 to 30KV	0.16mA
RC10-3	0 to 3KV	3.3mA
RC10-5	0 to 5KV	2mA
RC10-10	0 to 10KV	1mA
RC10-15	0 to 15KV	660uA
RC10-20	0 to 20KV	500uA
RC10-25	0 to 25KV	400uA
RC10-30	0 to 30KV	333uA

All units are available in Positive or Negative polarity. Add P or N as suffix to Model number to indicate polarity desired.



DESCRIPTION:

The GAMMA "RC" series of high voltage power supplies provides a compact well regulated high voltage source. Utilization of a self-excited ultra-sonic power oscillator insures low RFI and low stored energy.

All models include current limiting circuitry augmented by surge limiting resistors to limit the output current to 20% above maximum rated value under arc-overs, short circuits and overloads.

Output voltage may be programmed from 0 to maximum voltage from either an external 5K ohm potentiometer or a 0 to +10V low voltage ground referenced source.

All high voltage components are vacuum encapsulated to insure corona free, reliable operation.



GAMMA HIGH VOLTAGE RESEARCH INC.

Designers/Manufacturers-High Voltage Power Supplies
1096 NORTH U.S. #1, ORMOND BEACH, FL 32174 * TEL. 386-677-7070, FAX 386-677-3039



SERIES RC

ELECTRICAL CHARACTERISTICS:

PHYSICAL CHARACTERISTICS:

Input Voltage:

+28VDC ±10% *

*24VDC available - specify when ordering

Output Voltage

Programmable from zero to maximum rated voltage from Weight: 2.5 lbs (up to 15KV)

either and external 5K potentiometer or a zero to

+10Volt low voltage ground referenced source

Output Current:

5 or 10 watts Maximum(according to model)

Regulation:

Line: 0.01% Maximum

Load: 0.01%

Ripple:

0.05% Maximum

Temp. Coefficient:

0.01% per °C

Stability:

0.01% per 8 hours.

Monitor Outputs:

1) Voltage Monitor (Optional)

2) Current Monitor (Optional)

Programming:

Method 1: Resistance External 5K ohm potentiometer

Method 2: Voltage: Zero to +10 Volts

Dimensions: 3 1/2" x 5 1/8" x 1 9/16" (up to 15KV)

3 3/4" x 6" x 2 3/4" (20 & 30KV)

3.5 lbs (20 & 20KV)

Input Connector: Terminal Strip

See Outline Drawing

Output Termination: 12" Flying Lead

ENVIRONMENTAL CHARACTERISTICS

Temperature Range: 0 to 50°c

INSTALLATION:

A. Four #6-32 x 1/4 screws are provided for mounting purposes. If screws are replaced, the depth into the inserts should not exceed 1/4".

B. Solder two 16 gauge leads to the (+) and (-) input terminals for connection to the external power supply source.

C. Solder the programming potentiometer to the appropriate terminals.

D. Ground the (-) input either at the source supply or at the module terminal.

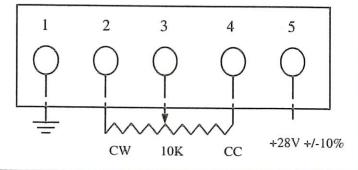
Programming:

Method 1: Connect Potenttiometer per drawing below Method 2: Via External Voltage Source, Apply 0 to 10V

between terminals 4(-) and 3 (+).

Note: Program source may be either floated or grounded.

Program Interface





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