

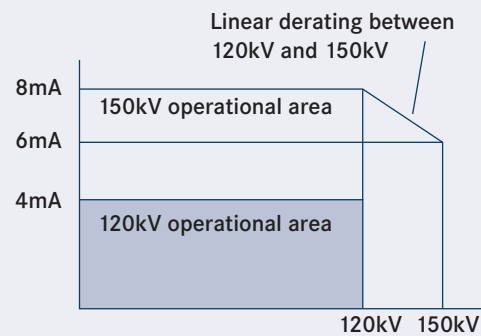


Mercury Range - Specification Sheet



Specification - Electrical (150kV specifications in brackets)

Supply voltage	198 to 264 VAC, 45 to 60Hz.
Output voltage	Up to 120kV (150kV) DC positive or negative polarity.
Output current	Maximum of 4mA (8mA) - see graph
Accuracy	The voltage and current are within 5% FSD of the demand value.
Rise time	300msec from HV On command into 30pF load.
Control	By operator's control unit or remote interface. A basic facility for remote monitoring and control of the output voltage and current is incorporated.
Remote control	Remote interface signals as follows: 1. HV monitor 2. mA monitor 3. HV demand reference 4. mA limit reference 5. HV On command 6. HV On report 7. Remote status report
Interlock	An interlock keyswitch is provided on the front panel of the control unit. A facility for an external interlock loop is also included.



The Genvolt 'Mercury' series units were designed specifically for operation with the patented Ion Blast air purification system which can achieve up to 99.98% cleaning efficiencies even with micron-sized particles.

However, the system is available for use in other fields of application that require a source of HV DC. The Mercury is available in three basic models: 150kV, 960W: provides 8mA up to 120kV with linear deration to 6mA at 150kV. 120kV, 480W: provides 4mA up to 120kV. 80kV, 2.5mA: provides 2.5mA up to 80kV.

Control is by means of an external control unit. This is available in two types. Type 'A', which is illustrated above, has full digital metering facilities and includes a remote interface. Adjustment down to zero is possible with the type 'A' with independent control of both mA and kV settings. Type 'B' has simple bar graph indication of current and voltage and a rotary switch to derate either the current demand or voltage demand from maximum over a limited range.

The control signals are standard 0-10V and it is thus possible for the user to employ any suitable control system as an alternative to the two control panels. Genvolt's flexible approach makes it possible to produce variants on the above designs, usually in short time frames.

Design improvements may lead to specification changes.