

HIGH VOLTAGE/LOW CURRENT POWER SUPPLIES

Programmable/Non-programmable

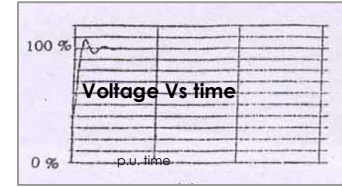
MHVLC-Series

Introduction:

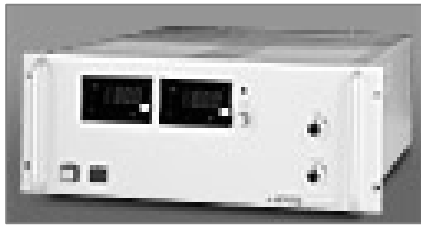
MHVLC series of high voltage /low current supplies are available upto 20,000 kv/(15.0 to 100,000 watts), in more than 50 different models working in constant voltage/current mode virtually offering solutions to electrical insulation, pollution control, electrostatic precipitators, Capillary zone electrophoresis, Petrochemical industry, organic/inorganic chemical, heavy electrical/mechanical industries, high voltage testing, electron microscope supplies, smart sensors and actuators, electrorheology, biotechnology, capacitor energy storage, solids state physics application and many uncountable defense/nuclear applications. Updated design topology ensures better controllability and efficiency with additional integrated power/voltage and frequency control/protection. These power supplies may operate in parallel to make it more redundant. Company offers tailor made solution to custom requirement.

Operating Principle:

These high voltage supply current/low voltage are line commutated S.C.R. or force commutated high frequency I.G.B.T. controlled converters working in feedback cascade mode. Set voltage/ current immediately settles to set point with consistent regulation over wide load range with fail proof protection against over/under voltage. These power supplies may be operated in parallel along with facility of parallel Port/serial port to enable it to interface with computer to achieve any real time Voltage /current profile.



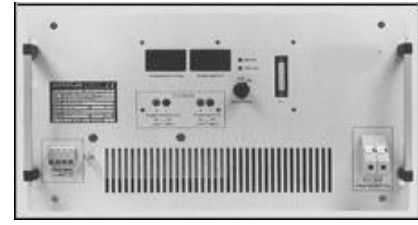
Transient time response of power supply



MHVLC-020010



MHVLC-050020



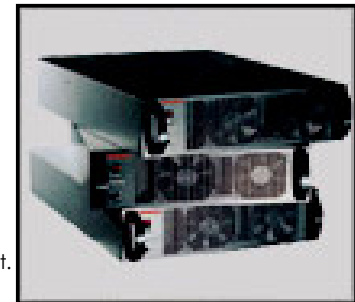
MHVLC-100100

Model	Power watts	Volts K.V./ option	Current m.a./ option	Repetition rate pulse/sec maximum	cooling	Model	Power watts	Volts K.V.	Current m.a.	Repetition rate Pulse/sec maximum	Cooling
MHVLC-0509993	500.0	0.5	1000.0	100/option	Air/oil	MHVLC-0300103	500.0	30.0	010.0	100/option	Air/oil
MHVLC-0301003	300.0	03.0	100.0	100/option	Air/oil	MHVLC-0300203	500.0	30.0	020.0	100/option	Air/oil
MHVLC-0500403	200.0	05.0	040.0	100/option	Air/oil	MHVLC-0500103	500.0	50.0	010.0	100/option	Air/oil
MHVLC-0501003	500.0	05.0	100.0	100/option	Air/oil	MHVLC-0500203	1000.0	50.0	020.0	100/option	Air/oil
MHVLC-0500203	200.0	10.0	020.0	100/option	Air/oil	MHVLC-0500403	2000.0	50.0	040.0	100/option	Air/oil
MHVLC-0100503	500.0	10.0	050.0	100/option	Air/oil	MHVLC-0501003	5000.0	50.0	100.0	100/option	Air/oil
MHVLC-0101003	1000.0	10.0	100.0	100/option	Air/oil	MHVLC-1000103	1000.0	100.0	10.0	100/option	Air/oil
MHVLC-0105003	5000.0	10.0	500.0	100/option	Air/oil	MHVLC-1000203	2000.0	100.0	020.0	100/option	Air/oil
MHVLC-0109993	10,000.0	10.0	1000.0	100/option	Air/oil	MHVLC-1000503	5000.0	100.0	050.0	100/option	Air/oil
MHVLC-0200503	1000.0	20.0	050.0	100/option	Air/oil	MHVLC-1001003	10000.0	100.0	100.0	100/option	Air/oil
MHVLC-0201003	2000.0	20.0	100.0	100/option	Air/oil	MHVLC-2002003	10000.0	200.0	050.0	100/option	Air/oil
MHVLC-0205003	10000.0	20.0	500.0	100/option	Air/oil	MHVLC-2002003	20000.0	200.0	100.0	100/option	Air/oil
MHVLC-0209993	20,000.0	20.0	1000.0	100/option	Air/oil	MHVLC-4000503	20,000.0	400.0	050.0	100/option	Air/oil

Voltage/current specs of above power supplies are of regular production, however company is regularly manufacturing power supplies of higher voltage/current options.

High voltage/low current power supply Specification:

Operating voltage: 1.0-200.0 kV D.C. / 100.0 kilo watts
 Output current: 0.0-40,000 m.a (max)
 Voltage/current control accuracy: 99.9% of set point
 Voltage regulation: Line : $\pm 0.05\%$ (for $\pm 10\%$ of input change)/ Load: 0.05% (for 10 to 100% of load change)
 Current regulation: Line : $\pm 0.05\%$ (For $\pm 10\%$ of input change)/Load: 0.05% (for 10 to 100% of load change)
 Resolution: 0.1 volts/amps D.C.
 Repeatability: 100 percent
 Response time: 0.5 – 1.1 mill-seconds
 Interface Signal: 0.0-12.0 volts D.C. proportional to output voltage
 Voltage control ranges: 0.0-400 K.V.
 Step down ratio: 0-100%
 Control options: 1. **Reverse polarity control** 2. 1. Cascade feedback control with Soft start 2. Ratio control (option) 2. Constant voltage/current with external adjustment.
 Display: 3-1/2, 4-1/2, 5-1/2 Voltage/current/charge/kilowatt/option in 3 1/2 red glow LED display
 Protection: over voltage/short ckt.
 Additional: Local: Constant voltage mode, by 10-turn potentiometer Constant current mode, by 10-turn potentiometer
 Remote: Constant voltage mode, by external voltage of 0 to 10Vdc*



NOTE: These power supplies are also offered in pulse mode.

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HIGH VOLTAGE/LOW CURRENT POWER SUPPLIES

Programmable/Non-programmable

MHVLC-Series

High Voltage Power Supply Specification:

Model	Power watts	Volts K.V.	Current 10 ⁻² amps	Repetition rate pulse/sec maximum	cooling	Model	Power watts	Volts K.V.	Current 10 ⁻² amps.	Repetition rate Pulse/sec maximum	Cooling
MHVLC-0301002	03000	03.0	100.0	100	Air/oil	MHVLC-0300102	06000	30.0	20.0	100	Air/oil
MHVLC-0500402	02000	05.0	040.0	100	Air/oil	MHVLC-0500102	05000	50.0	10.0	100	Air/oil
MHVLC-0501002	05000	05.0	100.0	100	Air/oil	MHVLC-0500202	01000	50.0	20.0	100	Air/oil
MHVLC-0500202	02000	10.0	020.0	100	Air/oil	MHVLC-0500402	02000	50.0	40.0	100	Air/oil
MHVLC-0100502	05000	10.0	050.0	100	Air/oil	MHVLC-0501002	05000	50.0	100.0	100	Air/oil
MHVLC-0101002	01000	10.0	100.0	100	Air/oil	MHVLC-1000102	01000	100.0	10.0	100	Air/oil
MHVLC-0105002	05000	10.0	500.0	100	Air/oil	MHVLC-1000202	02000	100.0	20.0	100	Air/oil
MHVLC-0109992	10000	10.0	1000.0	100	Air/oil	MHVLC-1000502	05000	100.0	50.0	100	Air/oil
MHVLC-0200502	01000	20.0	050.0	100	Air/oil	MHVLC-1001002	10000	100.0	100.0	100	Air/oil
MHVLC-0201002	02000	20.0	100.0	100	Air/oil	MHVLC-2002002	10000	200.0	50.0	100	Air/oil
MHVLC-0205002	10000	20.0	500.0	100	Air/oil	MHVLC-2002002	20000	200.0	100.0	100	Air/oil
MHVLC-0209992	20000	20.0	1000.0	100	Air/oil	MHVLC-4000502	20000	400.0	50.0	100	Air/oil

High Voltage Power Supply Specification:

Model	Power watts	Volts K.V.	Current 10 ⁻⁵ amps	Repetition rate pulse/sec maximum	cooling	Model	Power watts	Volts K.V.	Current 10 ⁻⁵ amps.	Repetition rate Pulse/sec maximum	Cooling
MHVLC-0301005	030.0	03.0	100.0	100	Air/oil	MHVLC-0300105	060.0	30.0	20.0	100	Air/oil
MHVLC-0500405	020.0	05.0	040.0	100	Air/oil	MHVLC-0500105	050.0	50.0	10.0	100	Air/oil
MHVLC-0501005	050.0	05.0	100.0	100	Air/oil	MHVLC-0500205	010.0	50.0	20.0	100	Air/oil
MHVLC-0500205	020.0	10.0	020.0	100	Air/oil	MHVLC-0500405	020.0	50.0	40.0	100	Air/oil
MHVLC-0100505	050.0	10.0	050.0	100	Air/oil	MHVLC-0501005	050.0	50.0	100.0	100	Air/oil
MHVLC-0101005	010.0	10.0	100.0	100	Air/oil	MHVLC-1000105	010.0	100.0	10.0	100	Air/oil
MHVLC-0105005	050.0	10.0	500.0	100	Air/oil	MHVLC-1000205	020.0	100.0	20.0	100	Air/oil
MHVLC-0109995	100.0	10.0	1000.0	100	Air/oil	MHVLC-1000505	050.0	100.0	50.0	100	Air/oil
MHVLC-0200505	010.0	20.0	050.0	100	Air/oil	MHVLC-1001005	100.0	100.0	100.0	100	Air/oil
MHVLC-0201005	020.0	20.0	100.0	100	Air/oil	MHVLC-2002005	100.0	200.0	50.0	100	Air/oil
MHVLC-0205005	100.0	20.0	500.0	100	Air/oil	MHVLC-2002005	200.0	200.0	100.0	100	Air/oil
MHVLC-0209995	200.0	20.0	1000.0	100	Air/oil	MHVLC-4000505	200.0	400.0	50.0	100	Air/oil



MHVLC-0301005



MHVLC-0209992



MHVLC-0500202

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