

HIGH CURRENT POWER SUPPLY

Programmable/Non-programmable

MHCLV-Series

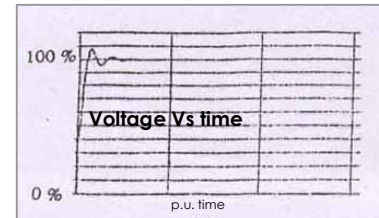
Introduction:

MHCLV series of high current/low voltages supplies are available in (15.0 to 1000 kilo watts), more than 50 different models working in constant voltage/current mode (uni-polar/bi-polar mode) virtually offering solutions to electrochemical, corrosion, petrochemical industry, organic/inorganic chemical, heavy electrical/mechanical industries, machine tools, non-conventional energy, 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 power supply current/low voltage are line commutated S.C.R. or force commutated high frequency I.G.B.T. controlled rectifier working in feedback cascade mode. Set voltage/current immediately settles to set point with consistent regulation over wide load range and without any hunting with fail proof protection against either 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.



Time response of power supply



MHCLV-024100



MHCLV-024100



MHCLV-100100

SPECIFICATIONS OF SWITCHING TYPE HIGH CURRENT/LOW VOLTAGE POWER SUPPLIES(AC/DC)

Power range < 100.0 K.Watts

| Model | Watts | Volts | current | Repetition rate | cooling | Model | Watts | Volts | Current | Repetition rate | Cooling |
|--------------|---------|-------|---------|-----------------|---------|--------------|----------|-------|---------|-----------------|---------|
| MHCLV-003003 | 018.0 | 06.0 | 03.0 | 1200 | Air | MHCLV-050200 | 10,000.0 | 50.0 | 2000 | 800 | Air |
| MHCLV-006050 | 300.0 | 06.0 | 50.0 | 1200 | Air | MHCLV-050400 | 20,000.0 | 50.0 | 4000 | 800 | Air |
| MHCLV-012025 | 300.0 | 12.0 | 25.0 | 1200 | Air | MHCLV-050200 | 10,000.0 | 50.0 | 2000 | 800 | Air |
| MHCLV-012050 | 600.0 | 12.0 | 50.0 | 1200 | Air | MHCLV-075020 | 01500 | 750.0 | 020 | 800 | Air |
| MHCLV-012100 | 1200.0 | 12.0 | 100.0 | 1000 | Air | MHCLV-075040 | 03000 | 75.0 | 050 | 800 | Air |
| MHCLV-012200 | 2500.0 | 12.0 | 200.0 | 1000 | Air | MHCLV-075100 | 07500 | 75.0 | 100 | 800 | Air |
| MHCLV-200200 | 4000.0 | 20.0 | 200.0 | 1000 | Air | MHCLV-075200 | 015000 | 75.0 | 200 | 400 | Air |
| MHCLV-025025 | 625.0 | 25.0 | 25.0 | 1000 | Air | MHCLV-100050 | 10000.0 | 100.0 | 100.0 | 400 | Air |
| MHCLV-025050 | 1250.0 | 25.0 | 50.0 | 1000 | Air | MHCLV-100100 | 10000.0 | 100.0 | 100.0 | 400 | Air |
| MHCLV-025100 | 2500.0 | 25.0 | 100.0 | 800 | Air | MHCLV-100100 | 15000.0 | 100.0 | 150.0 | 400 | Air |
| MHCLV-025150 | 3750.0 | 25.0 | 150.0 | 800 | Air | MHCLV-100300 | 30000.0 | 100.0 | 300.0 | 400 | Air |
| MHCLV-025200 | 5000.0 | 25.0 | 200.0 | 800 | Air | MHCLV-100400 | 40000.0 | 100.0 | 400.0 | 400 | Air |
| MHCLV-050050 | 2500.0 | 50.0 | 50.0 | 800 | Air | MHCLV-200400 | 10000.0 | 200.0 | 50.0 | 400 | Air |
| MHCLV-050100 | 5000.0 | 50.0 | 100.0 | 800 | Air | MHCLV-200050 | 20,000.0 | 200.0 | 100.0 | 400 | Air |
| MHCLV-050200 | 5000.0 | 50.0 | 200.0 | 800 | Air | MHCLV-200100 | 20,000.0 | 200.0 | 200.0 | 400 | Air |
| MHCLV-050400 | 5000.0 | 50.0 | 400.0 | 800 | Air | MHCLV-400100 | 40,000.0 | 400.0 | 100.0 | 400 | Air |
| MHCLV-050075 | 50000.0 | 50.0 | 1000 | 800 | Air | MHCLV-300100 | 30,000.0 | 600.0 | 750.0 | 400 | Air |
| MHCLV-050150 | 75000.0 | 50.0 | 1500 | 800 | Air | MHCLV-600100 | 60,000.0 | 600.0 | 1500 | 400 | Air |

These power supply is also offered in multi output /synchronized mode.

General Specification of High current/low voltage power supply:

Operating voltage 220 volts, 1/3 phase, 40-60 Hz
 Output current/voltage 0-400 volts/400 amps (max)(pulse/D.C)/multioutput mode
 Voltage/current control accuracy 99.9% of set point
 Output impedance: compatible to load to ensure maximum possible power transfer.
 Resolution 0.1 volts/amps D.C.
 Repeatability 100 percent
 Response time 0.5 - 1.1 mill-seconds
 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)
 Interface Signal 0.0-12.0 volts D.C. (proportional to process variable)
 Voltage control range 0.0-400 volts
 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 Voltage/current/kilowatt/Jules in 3½ 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 /accuracy & regulation may vary from generally offered product.

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HIGH CURRENT POWER SUPPLY

Programmable/Non-programmable

MHCLV-Series

SPECIFICATIONS OF SWITCHING TYPE HIGH CURRENT/LOW VOLTAGE PULSE POWER SUPPLIES(AC/DC)

Power range<100.0 K.Watts

| Model | Watt | Volts | current | Repetition rate ipulse/sec x10 | cooling | Model | Watts | Volts | Current | Repetition rate pulse/sec x 10 | Cooling |
|---------------|------|-------|---------|-----------------------------------|---------|---------------|-------|-------|---------|-----------------------------------|---------|
| MHCLV-0010501 | 0050 | 01.0 | 050.0 | 1200 | Air | MHCLV-0050501 | 0250 | 05.0 | 050.0 | 800 | Air |
| MHCLV-0011001 | 0100 | 01.0 | 100.0 | 1200 | Air | MHCLV-0051001 | 0500 | 05.0 | 100.0 | 800 | Air |
| MHCLV-0011501 | 0150 | 01.0 | 150.0 | 1000 | Air | MHCLV-0052001 | 1000 | 05.0 | 200.0 | 400 | Air |
| MHCLV-0020501 | 0100 | 02.0 | 050.0 | 1000 | Air | MHCLV-0053001 | 1500 | 05.0 | 300.0 | 400 | Air |
| MHCLV-0021001 | 0200 | 02.0 | 100.0 | 1000 | Air | MHCLV-0054001 | 2000 | 05.0 | 400.0 | 400 | Air |
| MHCLV-0021501 | 0300 | 02.0 | 150.0 | 1000 | Air | MHCLV-0061001 | 0600 | 06.0 | 100.0 | 400 | Air |
| MHCLV-0022001 | 0400 | 02.0 | 200.0 | 800 | Air | MHCLV-0062001 | 1200 | 06.0 | 200.0 | 400 | Air |
| MHCLV-0030501 | 0150 | 03.0 | 050.0 | 800 | Air | MHCLV-0060501 | 0300 | 06.0 | 050.0 | 400 | Air |
| MHCLV-0031001 | 0300 | 03.0 | 100.0 | 800 | Air | MHCLV-0061001 | 0600 | 06.0 | 100.0 | 400 | Air |
| MHCLV-0040501 | 0200 | 04.0 | 050.0 | 800 | Air | MHCLV-0062001 | 1200 | 06.0 | 200.0 | 400 | Air |
| MHCLV-0041001 | 0400 | 04.0 | 100.0 | 800.0 | Air | MHCLV-0061001 | 0600 | 06.0 | 100.0 | 400 | Air |

Three numerals after MHCLV indicates voltage of power supply and last three digit indicates current. All dimensions are in inches

SPECIFICATIONS OF SWITCHING TYPE HIGH CURRENT/LOW VOLTAGE PULSE POWER SUPPLIES(AC/DC)

Power range<100.0 K.Watts

| Model | Watts | Volts | current | Repetition rate pulse/sec x10 | cooling | Model | Watts | Volts | Current | Repetition rate pulse/sec x 10 | Cooling |
|---------------|-------|-------|---------|----------------------------------|---------|---------------|-------|-------|---------|-----------------------------------|---------|
| MHCLV-0010502 | 00500 | 01.0 | 0500 | 25/option | Air | MHCLV-0050502 | 02500 | 05.0 | 0500 | 25/option | Air |
| MHCLV-0011002 | 01000 | 01.0 | 1000 | 25/option | water | MHCLV-0051002 | 05000 | 05.0 | 1000 | 25/option | water |
| MHCLV-0011502 | 01500 | 01.0 | 1500 | 25/option | water | MHCLV-0052002 | 10000 | 05.0 | 2000 | 25/option | water |
| MHCLV-0020502 | 01000 | 02.0 | 0500 | 25/option | water | MHCLV-0053002 | 15000 | 05.0 | 3000 | 25/option | water |
| MHCLV-0021002 | 02000 | 02.0 | 1000 | 25/option | water | MHCLV-0054002 | 20000 | 05.0 | 4000 | 25/option | water |
| MHCLV-0021502 | 03000 | 02.0 | 1500 | 25/option | water | MHCLV-0061002 | 06000 | 06.0 | 1000 | 25/option | water |
| MHCLV-0022002 | 04000 | 02.0 | 2000 | 25/option | water | MHCLV-0062002 | 12000 | 06.0 | 2000 | 25/option | water |
| MHCLV-0030502 | 01500 | 03.0 | 0500 | 25/option | water | MHCLV-0060502 | 03000 | 06.0 | 0500 | 25/option | water |
| MHCLV-0031002 | 03000 | 03.0 | 1000 | 25/option | water | MHCLV-0061002 | 06000 | 06.0 | 1000 | 25/option | water |
| MHCLV-0040502 | 02000 | 04.0 | 0500 | 25/option | water | MHCLV-0062002 | 12000 | 06.0 | 2000 | 25/option | water |
| MHCLV-0041002 | 04000 | 04.0 | 1000 | 25/option | water | MHCLV-0061002 | 06000 | 06.0 | 1000 | 25/option | water |

High Current low voltage power supplies dimension:

| | | | | | | | |
|--------------|----------|--------------|----------|--------------|----------|--------------|----------|
| MHCLV-003003 | 08X06X06 | MHCLV-050075 | 14x14x14 | MHCLV-001050 | 14x14x14 | MHCLV-003200 | 20x16x16 |
| MHCLV-006050 | 12x08x08 | MHCLV-050150 | 18x16x16 | MHCLV-001100 | 18x16x16 | MHCLV-003400 | 22x18x18 |
| MHCLV-012025 | 12x10x10 | MHCLV-050200 | 20x18x18 | MHCLV-001200 | 20x18x18 | MHCLV-003600 | 24x18x18 |
| MHCLV-012050 | 12x10x10 | MHCLV-050400 | 20x18x18 | MHCLV-001300 | 20x18x18 | MHCLV-003750 | 24x20x16 |
| MHCLV-012100 | 14x10x10 | MHCLV-100050 | 14x12x12 | MHCLV-001500 | 14x12x12 | MHCLV-003999 | 28x14x14 |
| MHCLV-012200 | 16x12x12 | MHCLV-100050 | 18x16x16 | MHCLV-002050 | 18x16x16 | MHCLV-004100 | 28x14x14 |
| MHCLV-025025 | 16x14x14 | MHCLV-100100 | 14x14x14 | MHCLV-002100 | 14x14x14 | MHCLV-004200 | 28x16x16 |
| MHCLV-025050 | 18x10x10 | MHCLV-100150 | 18x16x16 | MHCLV-002150 | 18x16x16 | MHCLV-004600 | 28x18x18 |
| MHCLV-025100 | 18x12x12 | MHCLV-100200 | 20x16x16 | MHCLV-002200 | 20x16x16 | MHCLV-004800 | 28x20x20 |
| MHCLV-025150 | 18x14x14 | MHCLV-100400 | 22x18x18 | MHCLV-003050 | 22x18x18 | MHCLV-005100 | 28x22x22 |
| MHCLV-025200 | 18x16x18 | MHCLV-200050 | 24x18x18 | MHCLV-003100 | 24x18x18 | MHCLV-005200 | 28x22x24 |
| MHCLV-050050 | 16x16x16 | MHCLV-200100 | 24x20x16 | MHCLV-003200 | 24x20x16 | MHCLV-005400 | 28x24x24 |

Three numerals after MHCLV indicates voltage x100 of power supply and last three digit indicates amps. All dimensions are in inches.

Above models are in current range of production, however company undertake any tailor made specification power supply.

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