HIGH POWER D.C./D.C. & A.C./D.C. CONVETER

(Programmable/Non-programmable) quasi resonant type

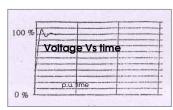
Introduction:

MHFQRC series of high power quasi resonant conveter in (15.0 to 100,000 watts), more than 50 different models working in constant voltage/current mode virtually offering solutions to electrical insulation, pollution control, electrostatic precipitators, petrochemical industry, organic/inorganic chemical, heavy electrical/mechanical industries, high voltage testing, bio-technology,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 converter are I soft commutated S.C.R./ high frequency I.G.B.T. controlled convertors working in feedback cascade mode with least turn-on/turn-off losses. Set voltage/current immediately settles to set point with consistent regulation over wide load range. 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. On account of soft switching, with low cooling requirement, these type of converters are high power density.



Time response of power supply







MHFQRC-024100

MHFQRC-024100

MHFQRC-100100

Model	Watts	Volts	current	Repition rate in case of pulse/sec	cooling	Model	Watts	Volts	Current	Repition rate in case of pulse/sec	Cooling
MHFQRC-006050	300.0	06.0	50.0	1200	Air	MHFQRC-050150	5000.0	50.0	100.0	800	Air
MHFQRC-012050	600.0	12.0	50.0	1200	Air	MHFQRC-050200	10,000.0	50.0	200.0	800	Air
MHFQRC-012100	1200.0	12.0	100.0	1000	Air	MHFQRC-100025	40000.0	100.0	400.0	400	Air
MHFQRC-012200	2500.0	12.0	200.0	1000	Air	MHFQRC-100050	20000.0	100.0	100.0	400	Air
MHFQRC-025025	625.0	25.0	25.0	8000	Air	MHFQRC-100100	20000.0	100.0	200.0	400	Air
MHFQRC-025050	1250.0	25.0	50.0	1000	Air	MHFQRC-100150	40000.0	100.0	400.0	400	Air
MHFQRC-025100	2500.0	25.0	100.0	800	Air	MHFQRC-100200	40000.0	100.0	400.0	400	Air
MHFQRC-025150	3750.0	25.0	150.0	800	Air	MHFQRC-100400	10000.0	200.0	50.0	400	AIR
MHFQRC-025200	5000.0	25.0	200.0	800	Air	MHFQRC-200050	20,000.0	200.0	100.0	400	Air
MHFQRC-050050	2500.0	50.0	50.0	800	Air	MHFQRC-200100	20,000.0	200.0	200.0	400	Air
MHFQRC-050100	5000.0	50.0	100.0	800.0	Air	MHFQRC-400100	40,000.0	400.0	100.0	400	Air

High current/low voltage power supply Specification:

Operating voltage 1.0-200.0 kv D.C./ 100.0 kilo watts

Output current/voltage 1.0-40,000 m.a(max)

Voltage/current control accuracy 99.9% of set point

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 flow range

Voltage control range 0.0-400 volts

Step down ratio 0-100%

Control options 1.cascade feedback control with soft start

3. Contant voltage/current with external adjustment.

Display Voltage/current/kilowatt/Jule in 3½ red glow LED display

Protection over voltage/short ckt.

Option: These power supplies may offered in pulse mode.

Low vollage n	ign current	power supplies all	nension:
MHFQRC-006050	08X06X06	MHFQRC-050150	14X12X12
MHFQRC-012050	10X06X06	MHFQRC-050200	16X14X14
MHFQRC-012100	12X08X08	MHFQRC-100025	18X16X16
MHFQRC-025025	12X10X10	MHFQRC-100050	20X18X18
MHFQRC-025050	12X10X10	MHFQRC-100100	20X18X18
MHFQRC-025100	12X10X10	MHFQRC-100150	20X18X18
MHFQRC-0025200	08X06X06	MHFQRC-100200	14X12X12
MHFQRC-050050	10X06X06	MHFQRC-100400	16X14X14
MHFORC-200050	18X16X14	MHFORC-200100	18X16X16

Three numerals x 100 after MHFQRC indicates voltage of power supply and last three digit Indicates current.2. All dimensions are in inches. Above models are in current range of production, however company under any tailor made specification power supply.



MHFQRC-400100

MOTORON SEMICONDUCTORS CORPORATION

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Model	Watts	Volts X100	Curren X1/100	Repition rate in case of pulse/sec	cooling	Model	Watts	Volts X100	Current X1/100	Repition rate in case of pulse/sec	Cooling
MHFQRC-006050	300.0	06.0	50.0	1200	Air	MHFQRC-050150	5000.0	50.0	100.0	800	Air
MHFQRC-012050	600.0	12.0	50.0	1200	Air	MHFQRC-050200	10,000.0	50.0	200.0	800	Air
MHFQRC-012100	1200.0	12.0	100.0	1000	Air	MHFQRC-100025	40000.0	100.0	400.0	400	Air
MHFQRC-012200	2500.0	12.0	200.0	1000	Air	MHFQRC-100050	20000.0	100.0	100.0	400	Air
MHFQRC-025025	625.0	25.0	25.0	8000	Air	MHFQRC-100100	20000.0	100.0	200.0	400	Air
MHFQRC-025050	1250.0	25.0	50.0	1000	Air	MHFQRC-100150	40000.0	100.0	400.0	400	Air
MHFQRC-025100	2500.0	25.0	100.0	800	Air	MHFQRC-100200	40000.0	100.0	400.0	400	Air
MHFQRC-025150	3750.0	25.0	150.0	800	Air	MHFQRC-100400	10000.0	200.0	50.0	400	AIR
MHFQRC-025200	5000.0	25.0	200.0	800	Air	MHFQRC-200050	20,000.0	200.0	100.0	400	Air
MHFQRC-050050	2500.0	50.0	50.0	800	Air	MHFQRC-200100	20,000.0	200.0	200.0	400	Air
MHFQRC-050100	5000.0	50.0	100.0	800.0	Air	MHFQRC-400100	40,000.0	400.0	100.0	400	Air

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