

H I G H F R E Q U E N C Y
C O N V E R T E R
V I O L A



Address

Via Archimede 18
Sesto San Giovanni (MI) 20099
Italy

Phone

T: +39 02.26.22.40.54
F: + 39 02.24.06.945

Email / Web

commerciale@secompower.it
info@secompower.it
www.secompower.it

About Us

FOUNDED IN 1975, SECOM IS A LEADING COMPANY FOR THE DISTRIBUTION AND PRODUCTION OF COMPONENTS AND DEVICES FOR POWER ELECTRONICS

SECOM continuously carries out new research and technical proposal in conjunction with important clients, providing technical support to meet their specific needs.

Production excellence and efficient organization allow SECOM to commit itself to providing to the market with timely and professional service in numerous sectors of static energy conversion.

Flexibility and short delivery time have become pillars to SECOM's company policy.

WHO WE ARE



Over the years the company has become an important designer and manufacturer of power electronic devices for industrial automation manufacturing technologies

WHAT WE DO



SECOM studies and manufactures customized solutions on behalf of its customers.

CONTENTS

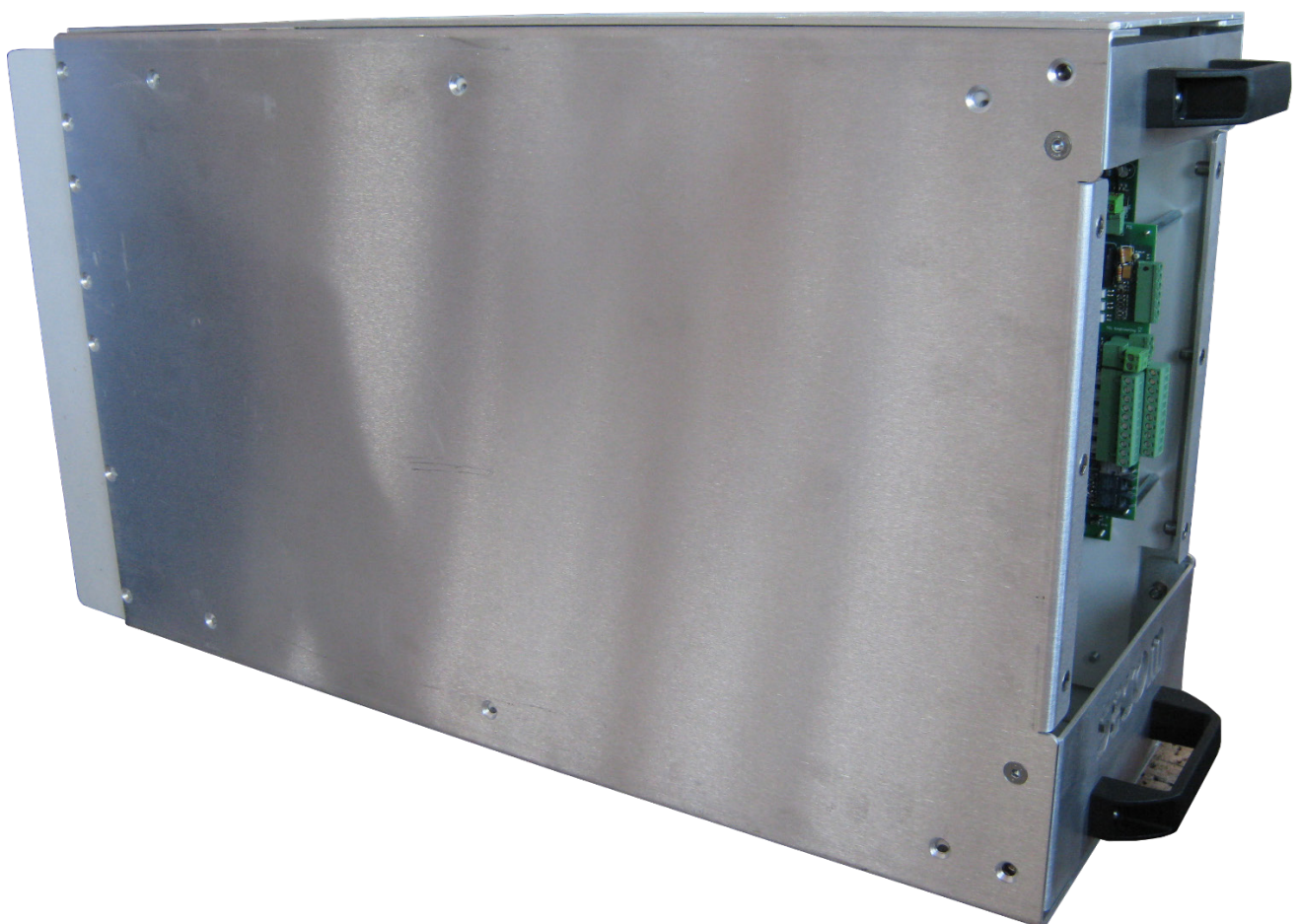
4	OVERVIEW
7	DIMENSION DRAWINGS
8	COOLING SYSTEM
9	TECHNICAL DATA

VIOLA

OVERVIEW

SECOM introduced in 2013 a new series of frequency converters designed to supply power to equipment that incorporates technology currently used in induction heating, hardening, smelting and/or other applications where a resonant circuit is required.

The “**Viola**” is an high-frequency converter that requires an Induction Heating. The output power is determined by the maximum output current and frequency required in the application itself.





VIOLA

OVERVIEW

The following picture refers to the wiring diagram 220376.

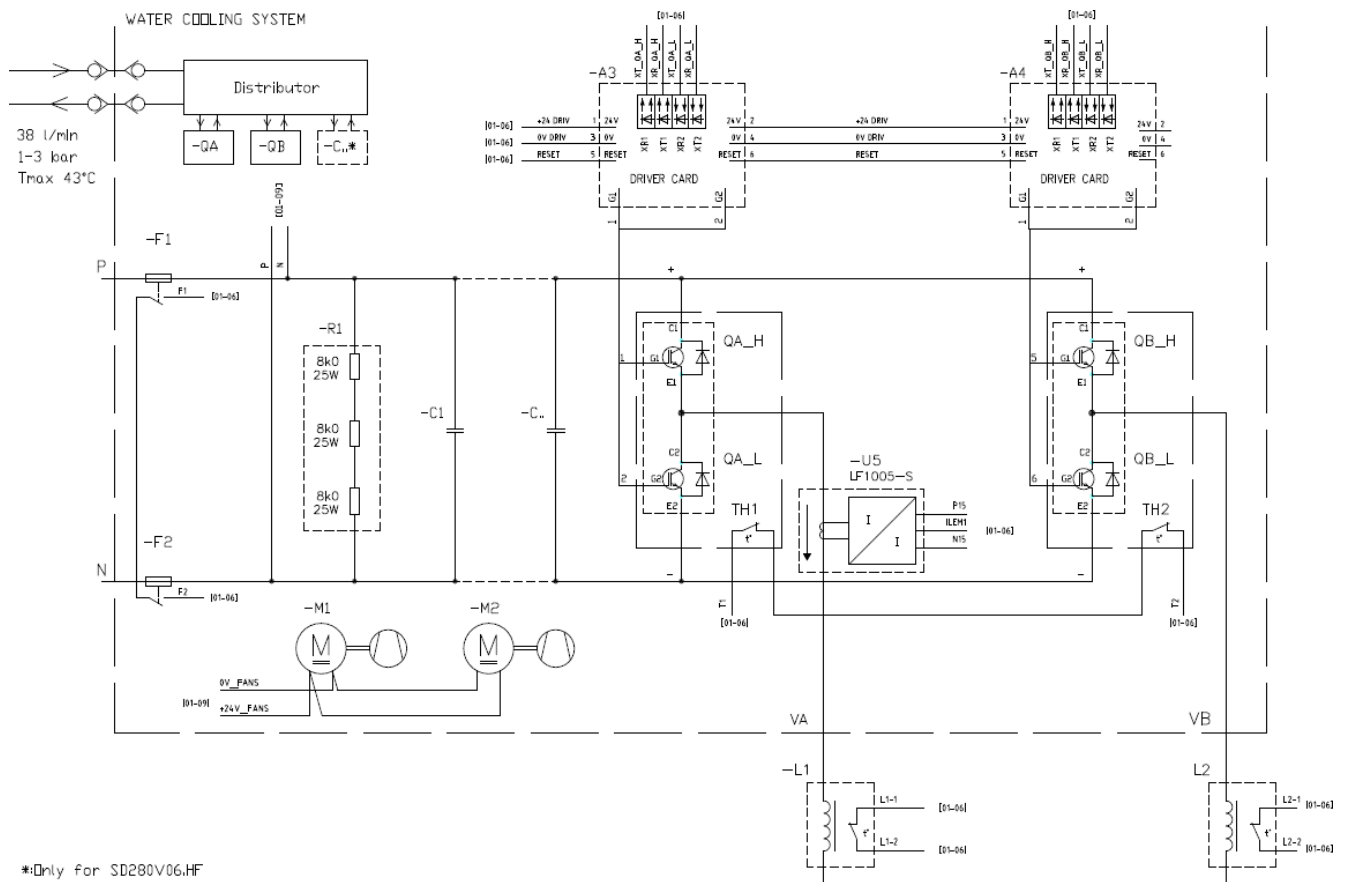
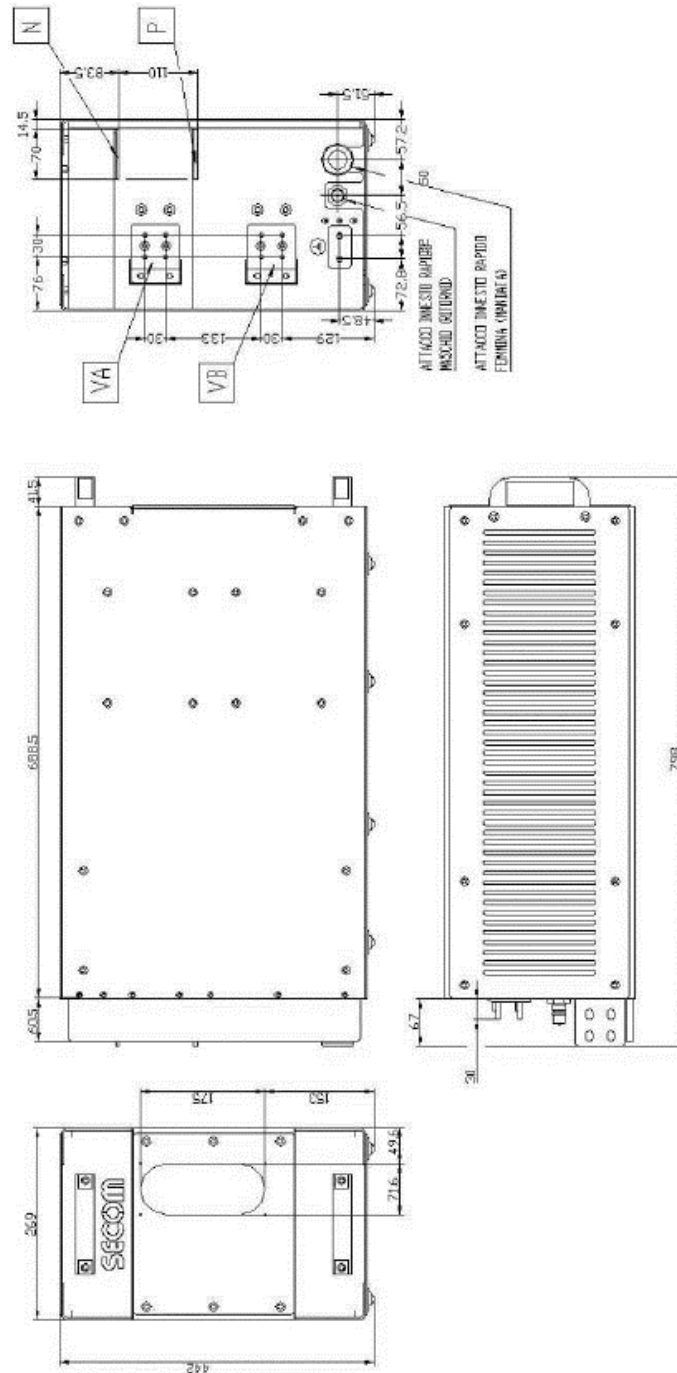


Fig. - Power schematic diagram

DIMENSIONAL DRAWINGS

The SD_HF is composed of a removable module as shown in the figure below.



COOLING SYSTEM

The modules are provided with water cooling circuits that guarantees the cooling of the main components (IGBTs and DC-link capacitors)

Water inlet and outlet valves are placed in the rear side of the module.

The cooling system characteristics are indicated in the table below.

Characteristic	Value
Volume (l)	3
Water Flow (l/min)	30
Pressure (bar)	1-3
Temperature range (°C)	10-43
Max Temperature (°C)	43

The module is provided by air intake on top and bottom side of the module to guarantee the appropriate ventilation of the internal parts not water cooled.

Warning! Keep clean the air intake, the grill obstructed could cause damage to the equipment. It is possible to use eventual cubicle ventilation to guarantee the correct air cooling of the module.

Inside the module two fans cool down the backup power supply that use the DC bus voltage to supply the electronic cards of the module in case of malfunctions of the main $24V_{DC}$ supply.

TECHNICAL DATA

Ambient conditions	
Altitude	1000 m. a.s.l.
Air temperature	0 ÷ 40°C
Storage temperature	0 ÷ 50°C
Relative humidity	10 ÷ 90 %

Dimensions and weight	
Height	442 mm.
Width	269 mm.
Depth (handle and bars)	798 mm.
Weight	45 kg.

Electrical data	
Converter type	IGBT single phase inverter
Cooling system	Water
Output frequency range	0 - 10 kHz*

*: 15/l min each IGBTs heatsink, 8l/min for the capacitor heatsink.

DC/AC Inverter 500V - 690V		Sn [KVA]	In [A]	Pn [kW]	Vin [Vdc]	Vout [Vac]	Fsw [kHz]
110650R1001	SD280V06.HF	280	400	238	930	690	6
110650R1041	SD310V06.HF	310	450	264	930	690	6
110650R1042	SD340V06.HF	340	490	289	930	690	6
110650R1043	SD440V06.HF	440	630	374	930	690	3





Via Archimede 18
Sesto San Giovanni (MI), 20099

CONTACT INFO

T: +39 02.26.22.40.54
Fx: +39 02.24.06.945

info@secompower.com
commerciale@secompower.com
www.secompower.it