

 MICROTEC	R&D Department		
MANUAL	Microtec - Inverter 6 kVA	Date: 15/06/2020	Page 1 of 2
Written by: L. Micheli	Last revision:1.00 (15-06-2020)		

DESCRIPTION OF MODELS

6kVA 230v or 4kVA 120v inverters are available in “Open Version” (without enclosure) and “Box Version”. Open version are suitable to be inserted directly inside a generator box with engine and alternator. Box version are suitable where is not possible or useful to have a complete generator inside a box. It is possible to connect the output of two inverters in parallel (via an external synchronism cable) to obtain double power.

NOTE

To obtain Voltage AC at the output you have to connect PMG three-phase generator and an external 12V battery.

SPECIFICATIONS

Storage temperature		-20...+55°C	
Operating temperature		-10...+40°C	
Humidity		5...85% without condensation	
Altitude		Max. 2000m	
Sealing protection		IP21	
Dimension L x W x D - Weight	OPEN VERSION	277 x 224 x 125 mm	6.5 kg
	BOX VERSION	326 x 315 x 142 mm	8.0 kg

Model	Continuous Power	Input Voltage (line to line)	Input Frequency	Continuous Output Current	Limited Time Power	Maximum Output Current	Output Voltage	Air Flow Speed @ T ≤ 40°C
4kw open 120V	3.6kVA	3*140..230 Vrms DC link = 220V	200...500Hz	31Arms	7kVA 1s	75Apk - 600ms	100...120V AC	8m/s
4kw box 120V	3.6kVA	3*140..230 Vrms DC link = 220V	200...500Hz	31Arms	7kVA 1s	75Apk - 600ms	100...120V AC	Internal
6kw open 230V	6kVA	3*260..450 Vrms DC link = 410V	200...500Hz	26Arms	12kVA 1s	75Apk - 600ms	200...240V AC 100...120V AC	8m/s
6kw box 230V	6kVA	3*260..450 Vrms DC link = 410V	200...500Hz	26Arms	12kVA 1s	75Apk - 600ms	200...240V AC 100...120V AC	Internal

DC-LINK and PMG alternator

Voltage generation start after proper DCbus charging by external voltage source (PMG).

230V – version

Nominal DCbus voltage is 410Vdc and 340Vdc is required to start output generation.
290Vrms line to line are required to guarantee a stable output voltage AC (nominal voltage at full load).
The power limit is set in current; you can adjust the output voltage between 210 – 240 volts or 105 – 120 volts (HALF POWER).

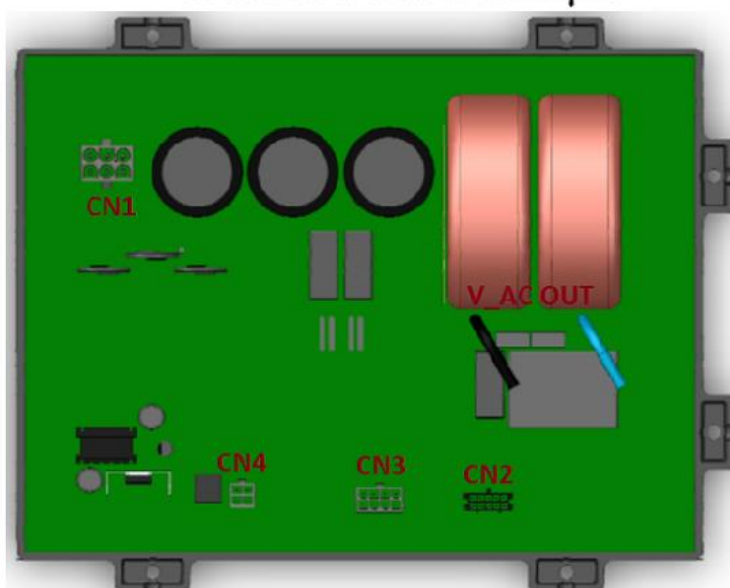
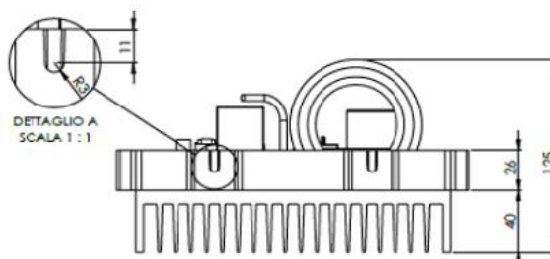
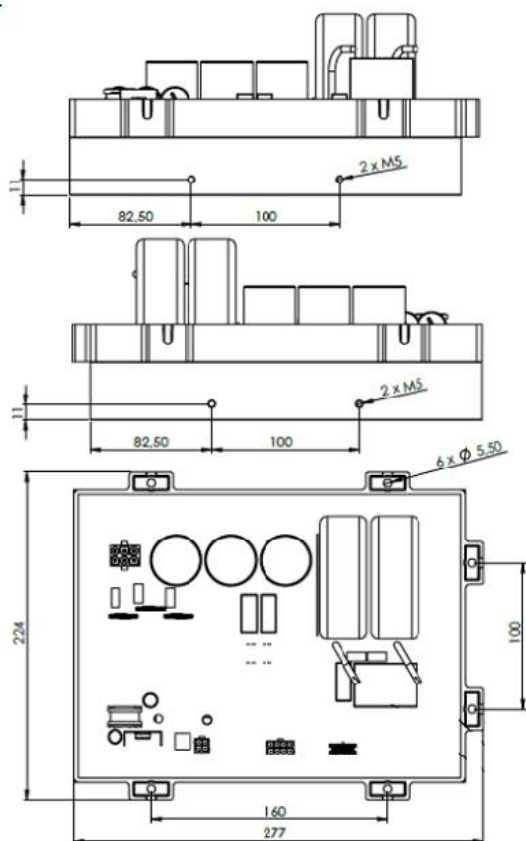
120V – version

Nominal DCbus voltage is 220Vdc and 150Vdc is required to start output generation.
150Vrms line to line are required to guarantee a stable output voltage AC (nominal voltage at full load).
The power limit is set in current; you can adjust the output voltage between 105 – 120 volts.

	Not exceed 450Vrms phase to phase for input voltage in any case
	Not exceed 500Hz for input voltage in any case

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6kVA OPEN VERSION



6kVA BOX VERSION

