

### 2000W DC/AC INVERTER



### General Specifications

- DC Input Voltage: 127 to 370 Vdc
- AC Input Voltage: 90 to 264 Vac
- Network Type: Single Phase if AC input
- Frequency: 50/60/400Hz if AC input
- Output Voltage: 230 VAC
- Frequency: 50Hz
- Power: 2000 W
- Dimensions : Rack 19" 2U P360mm
- Weight: 9.5 Kg
- Environment: Embedded, Rugged

### 1. TECHNICAL CHARACTERISTICS AT 23 °C

#### ■ INPUT

PARAMETERS	CHARACTERISTICS
DC Input Voltage	127 to 370 VDC
AC Input Voltage	90 to 264 VAC - Single Phase - 47Hz to 440Hz
Protection	Fuse (20A)
On/Off Switch	Front panel
Input Connector	Embase IEC C20 Male

#### ■ OUTPUT

PARAMETERS	CHARACTERISTICS
Output Voltage	230 VAC
Accuracy Output Voltage	+/-3%
Network Type	Single Phase
Output Current	8.7A RMS maximum (20A peak)
Distortion	< 3%
Output Frequency	50Hz +/- 0.2%
Output Connector	IEC C13 Female Receptacle

### 2. ENVIRONMENTAL

PARAMETERS	CHARACTERISTICS
Operating Temperature	-30°C to +50°C (2.5% derating/°C from 50 to 70°C)
Storage Temperature	-40°C to +85°C
Condensation-free Humidity	20 to 92%
EMC Design (DC Input)	GAM EG 13 booklets 62 and 63
Convection	Forced (rear exit)
PCB Protection	Conformal Coating, bonding of the heaviest components
Vibrations *	10 ~ 500Hz, 3G 12min./1cycle, 180min. each along X, Y, Z axes
Input-Output Galvanic Isolation	3750 VAC
Ground-Input Galvanic Isolation	2000 VAC
Ground-Output Galvanic Isolation	1250 VAC

### 3. SHOCK & VIBRATION QUALIFICATION

- \* Inverter modified for Shock, Vibration qualifications :
- H-bridge internal power track reinforcement
  - Addition of an EMC seal to limit the vibrations of the top cover

### Shock Vibration Tests

**Impact Tests:**

Standard: NF EN 60068-2-27 (2009) + Customer requirements

Equipment: An inverter

**Test:**

- Type : Chocs ½ sinus
- Level : 15g-11ms
- Number of directions: 6 directions
- Number of shocks per direction: 3 shocks (18 total)
- Condition : Equipment ON during the test

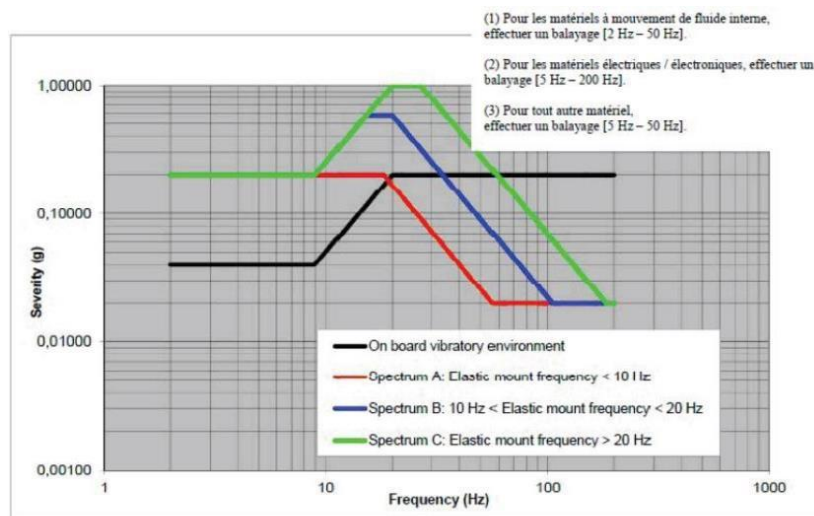
**Vibration Testing**

Standard: NF EN 60068-2-6 (2008) + Customer requirements

Equipment: An inverter

**Test:**

- Type: Sinusoidal Vibrations
- Frequency Range: 2-200Hz
- Scan speed: 1 Octave/min
- Level: According to the profile below (severity A)



La courbe A se rapporte à un type de plot élastique dont les fréquences propres sous charge ne dépassent pas 10 Hz : plot élastomère (MN10, MN15, MN45, Type 5-45-10B, MN56, Type 5-55-10B, MN75 et tous les plots de supports des berceaux) ; plot à câbles.

Essai de qualification aux vibrations	Courbe A : Plot dont la fréquence propre ne dépasse pas 10 Hz			
Fréquence	2 Hz	18,1 Hz	56,6 Hz	200 Hz
Sévérité	200 mg	200 mg	20 mg	20 mg

- Number of Axes: 3 Axes (Ox, Oy, and Oz)
- Duration: 5 scan cycles + 30 minutes at critical frequencies (limited to 4 frequencies)
- Condition: Equipment ON during the test

**4. MECHANICAL**

PARAMETERS	CHARACTERISTICS
Dimensions	Rack 19" x 2U x 360mm depth
Weight	9.5 kg typical

