

# GPU type GA

**Aircraft Ground Power Unit  
truck mounted type GA  
90 to 180kVA – 115/200V 400Hz**



## Main characteristics

Voltage	115/200V three phases + neutral
Voltage regulation	± 1%
Transient voltage	±3V <200ms, under load impact 0-80% or 80%-0
Power factor – cos φ	0,8
Frequency	400 Hz
Frequency regulation	± 1Hz
Transient frequency	±10Hz < 2s, under load impact 0-80% or 80%-0

## Characteristics across the range

GPU model	Power kVA (cos φ 0,8)	Overloads kVA (cos φ 0,8)	Diesel engine type
<b>GA100V</b>	90 / 100*	112	<b>Iveco</b> NEF45 4 cylinders
<b>GA100D</b>			<b>Deutz</b> BF4M1013EC 4 cylinders
<b>GA120V</b>	120	150	<b>Iveco</b> NEF67TM2 6 cylinders
<b>GA120D</b>		138	<b>Deutz</b> BF6M1013E / EC 6 cylinders
<b>GA150V</b>	140 / 150*	165	<b>Iveco</b> NEF67TM3 6 cylinders
<b>GA150D</b>		165	<b>Deutz</b> BF6M1013EC 6 cylinders
<b>GA180D</b>	180	200	<b>Deutz</b> BF6M1013FC 6 cylinders

\* Depending on engine speed: 1714 rpm / 2182 rpm



**GUINAULT SA**  
PAOS La Saussaye  
F - 45590 Saint-Cyr en Val  
Tél : +33 (0) 2 38 63 84 00  
Fax : +33 (0) 2 38 69 66 22  
[www.guinault.com](http://www.guinault.com)



## Engine

- Turbo diesel engine
- Water cooled
- Engine speed : 2182 rpm
- Electronic engine speed regulator EMR (Deutz) or GAC (Iveco)
- Batteries : 2 x 12V - 125Ah each

## Alternator

- GUINAULT type AS250
- 400Hz, 115/200V
- 22 poles, brushless
- GUINAULT electronic voltage PCB control board type RS525

## Safeties

### Electrics

- Over voltage (130V)
- Under voltage (102V)
- Over frequency (420Hz)
- Under frequency (380Hz)
- Overload

### Engine

- Battery loading default
- Over speed
- High temperature
- Low oil pressure
- Air filter clogging-up

## Outputs

- 115/200V-400Hz, length 10 m with standard plug ISO461 / Stanag 3303. 1 output for GA100 – 2 outputs for GA120/GA150/GA180
- 28Vdc output (optional)

## Trucks

- Mercedes Sprinter
- Iveco Daily
- Isuzu
- Nissan
- Others trucks on request

## Main assembly

- Polyester canopy
- Cables storage compartments on each side of the unit
- Fuel tank 170 litres

## Options

- 28Vdc output**, GUINAULT rectifier transformer unit :
  - 800A permanent - 1800A during 3s – peak 2400A
  - ATR aircraft current limitation
  - 1 output length 10m with standard plug Stanag 3302
  - simultaneous use of DC and AC outputs
- Low revolution speed with alternator 1714rpm** for optimised noise level and fuel consumption
- Super sound-proofing : 69dB(A) @ 7m
- DFS400 double insulation
- Cold temperature engine starting kit
- Anti-starting security when cables connected to aircraft
- Sand wind protections
- Automatic engine oil refilling system
- Automatic stop of the unit if no line contactor is interlocked
- Additional outputs :
  - Dual voltage 28/56Vdc output
  - Single phase 400Hz output
  - 230Vac - 50Hz
  - 2<sup>nd</sup> 28Vdc (indépendant)

