



## HYBRID 400 Hz & 28 Vdc GROUND POWER UNITS FOR MILITARY HELICOPTERS

# GPU

## GB3 / 5 MODEL

**Specifically designed for starting helicopters, the GUINAULT hybrid generator is a group power unit at very low cost: the charged batteries add their capacity to the diesel motor-generator in order to ensure the peak currents necessary for aircraft start-up. The dual voltage alternator allows to simultaneously provide:**

- an alternating current (AC) of 115 VAC / 400Hz required by the on-board electronics during flight preparation
- a direct voltage of 28 Vdc for helicopter maintenance operations and start-up

As a result of the peak 28 Vdc direct current capacity, the GB3 / 5 GUINAULT GPU is adapted for the majority of helicopters.

The GUINAULT hybrid unit is an autonomous, ultra-compact, light, and air portable generator for helicopters, giving, with its diesel-electric hybrid design, very low fuel consumption.

# Specifications

		<b>GB3 / 5</b>
<b>AC OUTPUT</b>	Power Voltage Frequency	3 kVA (p.f. 0.8) 115 / 200V (3 phase + N) 400Hz
<b>DC OUTPUT</b>	Power Voltage Permanent current Peak current  Battery recharge time after 3 start-ups	5 kW 28.5 Vdc 175 A 1300 A 1500A with 4 batteries (option) 7 min
<b>ENGINE</b>	Brand/Type Cooling type Usable fuel Power	Kohler KD440 Air Diesel and jet fuel 1 Cylinder, 440 cm <sup>3</sup> - 8.0 kW
<b>ALTERNATOR</b>	Model Number of Poles Voltage Regulation Voltage Regulator Transient Voltage Frequency Regulation	GUINAULT AB100 brushless 14 poles ± 1.5% ± 0.5Vdc GUINAULT RS525 Regulator ± 3V < 200ms, under impact 0-80%, 80% - 0 charged ± 3%
<b>BATTERIES</b>		2 x 12V - 50Ah total in 24Vdc 4 x 12V - 100Ah total in 24Vdc (option 4 batteries)
<b>OUTPUT</b>		1 AC output 115V-400Hz, length 8m. + plug ISO461 1 DC output 28Vdc, length 8m. + plug ISO461
<b>DIMENSIONS AND WEIGHTS</b>	Weight  L x W x H	240 kg (160 + 80 kg) 300 kg (160 + 140 kg) option 4 batteries 1490 x 796 x 993 mm 1655 x 796 x 1035 mm (option 4 batteries)

## AIRCRAFT COMPATIBILITY

- Air transportable
- Can be loaded on CN235

## SAFETY FEATURES

### Engine

- Overheat
- Low oil pressure
- Battery charge failure

### Generation

- 115V/400Hz**
- Over/Under voltage
  - Over/Under frequency
  - Overload

### Generation 28 Vdc

- Over/Under voltage
- Overload

## CONSTRUCTION

- Electrical cabinet made of stainless steel tested as per MIL-STD-461 / 464 requirements.
- Brakes applied when tow-bar is raised or lowered
- Tubular frame with anti-corrosion protection
- Cable compartments above the GPU
- Leading front axle with slewing ring steering
- Fuel Tank of 5 liters



Data are subject to modification without prior notice.