



HYBRID 400 Hz & 28 Vdc GROUND POWER UNIT FOR CIVIL, MILITARY HELICOPTER AND BUSINESS AVIATION

APU OFF

GB3/5

Specifically designed for starting and maintaining helicopters, the GUINAULT HYBRID generator is a powerhouse 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/400 Hz 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

		GB3/5
AC OUTPUT	Power Voltage Frequency	3 kVA (p.f. 0.8) 115/200 V (3 phase + N) 400 Hz
DC OUTPUT	Power Voltage Permanent current Peak current Battery recharge time After 3 start-ups	5 kW 28.5 Vdc 175 A 1300 A/1500 A (option 4 batteries) 7 min
ENGINE	Brand/Type Cooling type Usable fuel Power	Kohler KD 440 Air Diesel and jet fuel 1 Cylinder, 440 cm ³ - 8.0 kW
ALTERNATOR	Model Number of Poles Voltage Regulation Voltage Regulator Transient Voltage Frequency Regulation	GUINAULT AB100 brushless 14 poles ± 1.5% ± 0.5 Vdc GUINAULT RS525 Regulator ± 3 V <200 ms, under impact 0-80%, 80% - 0 charged ± 3%
BATTERIES		2 x 12 V - 50 Ah total in 24 Vdc 4 x 12 V - 100 Ah total in 24 Vdc (option 4 batteries)
OUTPUT		1 AC output 115 V-400 Hz, length 8 m. + plug ISO461 1 DC output 28 Vdc, length 8 m. + plug ISO461
DIMENSIONS AND WEIGHTS	Weight (Kg) L x W x H (mm)	240 (160 + 80) 300 (160 + 140) (option 4 batteries) 1700 x 800 x 1010

FEATURES

MAIN COMPONENTS

Engine

- Overheat
- Low oil pressure
- Battery charge failure

Generation 115 V/400 Hz

- Over/Under voltage
- Over/Under frequency
- Overload

Generation 28 Vdc

- Over/Under voltage
- Overload

- Braking 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 5 litres