



COMPACT MOBILE GROUND POWER UNITS FOR MILITARY AIRCRAFT & HELICOPTERS

GPU

GB & GC MODELS

Especially designed for military application and requirement, the GUINAULT compact GPU GB45 / 20 and GC20 models are the perfect power solution for fighter aircraft, small cargo aircraft and helicopter.

Their incredible ratio performances/size (less than 1,1m height for 45 kVA 115 V / 400 Hz + 28 Vdc power supply) permits to cover a large range of aircraft and to handle it easily and safely on the ramp.

The high efficiency GUINAULT dual voltage alternator enable the use of small compact Deutz oil cooled engine (less than 60KW), best choice for low maintenance cost and low fuel consumption, ie. reduced TCO (total cost of ownership). The 9 phases alternator allows clean power with reduced modulation (18 pulses).

Specifications

		GB45 / 20	GC20
ENGINE	Brand/Type Engine model Speed Power	Deutz Turbo Diesel TD2011L04i stage 3 A 2667 rpm 56 kW	
400 Hz OUTPUT	Power Power Factor Voltage Frequency	45 kVA 0.8 115 / 200 VAC (3 phase + N) 400 Hz	- - - -
28 Vdc OUTPUT	Voltage Permanent current Peak current Peak voltage	28.5 Vdc 714 A 2000 A (during 3S) As per MIL-STD-704F	28.5 Vdc 714 A 2000 A (during 3S) As per MIL-STD-704F
ALTERNATOR	Model Number of Poles Voltage Regulation Voltage Regulator Transient Voltage Frequency Regulation Transient Frequency 28 Vdc rectifying	GUINAULT AB180 18 poles ± 1 % Electronic ± 3 V / 200 ms, charged ± 1 Hz ± 15 Hz / 2s, charged 18 pulses	GUINAULT AB180 18 poles ± 1 % Electronic - - - 18 pulses
OPERATING CONDITIONS	Temperature Elevation Accepted fuels	-30°C to +50°C 1500 m @ +35°C Diesel EN590, Jet fuel F-34, F-35, F-44, F-63	
DIMENSIONS AND WEIGHTS	Weight L x W x H (mm)	1260 kg 2060 x 1430 x 1120 mm	1200 kg 2060 x 1430 x 1120 mm

SAFETY FEATURES

Engine

- Overheat
- Low oil pressure
- Battery charge failure
- Overspeed
- Air filter clogged

Generation 115 V / 400 Hz

- Over-voltage
- Under-voltage
- Over-frequency
- Under-frequency
- Overload
- Military Interlock

Generation 28 Vdc

- Over-voltage
- Undervoltage
- Overload

MAIN COMPONENTS

- Electrical cabinet made of stainless steel tested under 1500 V/m pulsed to meet MIL-STD-461 / 464 requirements.
- Polyester hinged canopy (easy access for maintenance)
- Galvanized frame providing excellent protection against corrosion
- Lateral side cable trays
- Brakes applied when tow-bar is raised or lowered
- Front axle with turnable steering
- Tyres 16.5 x 6.5-8
- 85 litres Fuel Tank

- Standard 400 Hz plug: ISO461 / STANAG 3303
- Standard 28 Vdc plug: ISO461 / STANAG 3302
- Batteries: 2 x 12V - 50 Ah