# GROUND POWER UNIT

**GB45/20** 



2022 April 21st

GALAXY AEROSPACE (M) SDN BHD Commercial Offer JK598/04/2022

ATTN:

Aqilah Binti Mohd Hanafi Procurement & Logistic Officer



**PLUG & SAVE** 

JULIEN KREBS j.krebs@guinault.com +66 (0)9 36 32 55 89

Address :

Guinault SA PA Orléans Sologne 95 rue du Rond d'eau CS70004 - Saint Cyr-en Val 45075 Orléans cedex 2 — France T +33 2 38 63 84 00 F +33 2 38 69 66 22 info@guinault.com www.guinault.com S.A au capital de 2 394 000 Euros RCS Orléans B 569 800 725 SIRET 569 800 725 00040 APE 2711Z TVA: FR 93 569 800 725

## INTRODUCTION

GUINAULT Company has been designing and manufacturing aircraft Ground Support Equipment (GSE) since 1949. Today, GUINAULT is an independent and privately owned company certified ISO9001/2015 which offers a very modern range of products dedicated to all type of aircraft.

Today, more than 20,000 GUINAULT GSE are in operation world-wide in more than 100 countries over the five continents. GUINAULT is the only company, <u>exclusively</u> focussed on the design and manufacturing APU-OFF solutions, including GPU, ASU, ACU.

<u>Specialization, and in-house expertise</u> are key factors at GUINAULT to offer superior products, ensuring the highest reliability, the highest performance to really substitute to the APU on the ground:



400Hz Alternator design, (manufactured by GUINAULT in France), digital electronics, power electronics, industrial refrigeration, thermodynamics are in house expertise.

Thanks to its unique specialized experience in the APU-OFF solutions for decades, GUINAULT claims to be the partner of choice for the airlines, handlers and any third parties looking for savings and emission reductions trough the APU-OFF at the airport.

Because the return on investment for an APU-OFF solution (GPU, ASU, ACU) is impressive, because the reliability of the equipment generates valuable kerosene savings, because too many APUs are still running on the airports due to GSE quality/performances/reliability issues, GUINAULT pays a great attention to the quality of manufacturing, the selection of components, the tests, to ensure the highest performance and reliability. The digital technology is designed in house, to ensure the highest reliability in airport conditions, and to include dedicated service functions to the APU-OFF target.

For all these reasons, GUINAULT is a first choice GSE partner for providing power solutions to handlers, Airports, Airlines, Aircraft/helicopter OEM and Military Armed Forces.

A factory tour being be the best way to witness GUINAULT organization, strategy and expertise: feel free to come, and visit our factory, our design and testing facilities, and its 200 highly qualified and motivated employees. aircraft.







**GUINAULT S.A, Orléans (France)** 



## WHY CHOOSING GUINAULT?

### Invest in quality to save over the entire life time of the equipment



#### **High performances:**

- Permanent current
- Peak current
- Voltage Transients
- Frequency Transients



#### Reliability and robustness:

- Deutz oil cooled engine
- GUINAULT Alternator and electrical regulation
- Stainless steel electrical box with excellent EMC
- Full anti-corrosion protection: polyester canopy, plastic fuel tank and hot dip galvanized steel chassis for long term utilization



#### Easy to Use:

- Excellent manoeuvrability due to reduced dimensions / weight and the leading front axle
   with ball bearing for low turning radius (turning radius = wheel base)
- Control panel with clear indication and robust switches
- Easy access for maintenance

#### Reducing of the Total Cost Ownership:



- Optimized fuel consumption due to the excellent efficiency of the alternator
- Low cost of spare parts due to the choice of standard components as much as possible



#### Multi-purpose:

- The GPU guarantees an adapted power supply for numerous types of aircrafts thanks to the high temporary overloads tolerated by the alternator and the Simultaneous Dual-Voltage operation possible for 400Hz and 28Vdc OUTPUTS



#### Complies with applicable standards in force:

- EN2282 / ISO6858 / EN12312-20 / SAE ARP 5015A / EN1915...
- Directives 2006/42/CE and 2004/108/CE and delivered with CE Certificate.



## **FINANCIAL OFFER**

We are very pleased to send you our best offer for the latest version of our Compact GPU:

#### 1- COMPACT GROUND POWER UNIT TYPE GB45/20 - AC + DC

Outputs:	1 output 400Hz, 115/200V, 10m cable, 45kVA permanent power at pf 0.8 equipped with E/F by-pass selector with standard plug STANAG3303  1 output 28Vdc of 10m, 714A permanent current capacity, 2000A instantaneous peak equipped with standard plug STANAG3302. Including multiposition current limitation switch for compliance with various aircrafts requirement (ATR, Beechcraft). Use of simultaneous AC + DC outputs possible.	
Engine:	DEUTZ type TD2011 4 cylinders with integrated oil cooling system, Stage 3A	41 200 6 *
Alternator:	GUINAULT brushless 18 poles alternator 2667 rpm type AB180	41,300 € *
Electronic cards:	GUINAULT electronic PCBs for monitoring of 400Hz and 28Vdc generations, sequence and voltage, regulation boards (voltage drop compensation).	
Colour:	Chassis grey (galvanized) / canopy white	
Documentation:	One technical operating and maintenance manual in English language + spare parts catalogue	

#### 2- OPTIONS

Installation, Commissioning & Training:	1 day at customer's facilities upon delivery of the equipment. All costs included.	Included
---	--	----------

#### **3- FREIGHT COSTS**

Freight Costs:	CIF Port Klang (Malaysia) in a 20' container	+ 2,100 €
----------------	--	-----------

\*the price is in EURO (€) Ex. Works St Cyr en Val, Incoterms 2020



## **SALES CONDITIONS**

**DELIVERY TIME:** Standard delivery time Ex-works: 16 weeks\* upon receipt of the down payment by our bank. Reduced delivery time can be studied upon request depending on stock availability at the date of order.

\* Please note that the factory is closed 3 weeks in august & last week of December

#### Today, one unit ready Ex-works in 4 weeks (subject to prior sales)

**WARRANTY:** The equipment, except parts subjected to wear and tear, is guaranteed up to a period of 24 months or 3.000 operating hours whatever occurs first (starting from date of delivery) as per our general warranty conditions FE045 available upon request (\*).

- (\*) As per our general warranty conditions FE045:
- 1 / The Deutz diesel engine warranty is limited to maximum:
- 2.000h/24 months whatever comes first and according to the Deutz warranty conditions.
- 2/ The warranty covers the part to be replaced, the labor for repair, and transportation of the part.
- 3/ The warranty does not apply to parts subject to wear and tear, fluids, paints, tires, batteries, plugs, couplings, air hoses, seals, paints, filters unless being found defective at delivery of the goods.
- 4/ Default or damages resulting from equipment un-proper use or non-respect of preventive maintenance operations (as described in technical documentation delivered along with the equipment) will not be covered by the warranty.

#### **OFFER VALIDITY:**

This offer is valid until 16/06/2022. After that date, prices and availability are subjected to be modified.

#### **PAYMENT TERMS:**

- 30% of the total price of the order as down payment at latest 2 weeks after acknowledgment of order.
- 70% of the total amount of the order:
  - 1) either by Telegraphic Transfer: Before the date of shipment or within 30 days from invoice date if credit is insured by **Coface Credit Insurance Company.**
  - 2) or by Irrevocable and Confirmed Letter of Credit payable upon presentation of shipping documents. The letter of credit must be issued at the latest 3 weeks following the Purchase Order date in one of our banks listed below:
  - LCL
  - CIC
  - HSBC
  - SOCIETE GENERALE

and confirmed by the same bank.



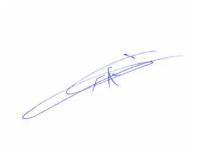
**CONDITIONS:** Our General Sales Conditions are available upon request. Intellectual property of this offer remains with GUINAULT at all time and must not be given to a third party without our prior acceptance.

We hope our offer will retain all your attention and we remain at your entire disposal for any further information you may require.

Best Regards.

#### **GUINAULT**

S.A. au capital de 2 394 000 Euros SIRET 569 800 725 00040 - APE 2711Z PAOS La Saussaye Rue du Rond d'Eau 45590 SAINT-CYR EN VAL - FRANCE Tèl. (33) 02 38 63 84 00 - Fax (33) 02 38 69 66 22



Julien KREBS

Area Sales Manager Asia Pacific



## **AFTER SALES**

#### GUINAULT AFTER-SALES SERVICES

- Dedicated Spare-Parts & Technical Support Services with a 2000m² facility including extended stock of spare parts and test equipment
- Mobile Engineers Team dedicated to after-sales for any intervention all over the world
- Phone assistance 7 days/7
- Local technical assistance in many countries through cooperation with local companies
- Operating and maintenance training upon request at GUINAULT or at customer' site
- Complete and detailed maintenance manual, customizing of technical documentation
- Technical Support Software (Data Base):

Fast troubleshooting

Improves follow up quality and response time

Improves return of experience

Enable products performance improvements

Event history record of all equipment

## ENGINE LOCAL ASSISTANCE



- The technical service of Deutz is available worldwide
- Contact details of your nearest engine agent will be given upon request









## **CONTACT**

Please don't hesitate to contact us if you need any information and visit our website @ www.guinault.com

Tel: +33 (0)2 38 63 84 00 Fax: +33 (0)2 38 69 66 22

#### info@guinault.com



