

Barberà del Vallès, a 25 de mayo de 2022

## SUCESORES DE GINES GARCÍA SA

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**S/Ref.: Motogenerador CATERPILLAR C18 de 650 kVA PRP INSONORIZADO**  
**N/Ref.: Documento de información comercial BA-T-220041-2**

Muy Sres. Nuestros:

Agradeciendo su solicitud, tenemos el placer de presentarles el siguiente Documento de Información Comercial. La información incluida en este documento se emite con el objeto de proporcionar información sobre los términos y alcance un posible acuerdo de suministro. Las condiciones del mismo están sujetas a las negociaciones finales, así como a la evaluación de riesgos y aprobación de crédito por parte de Finanzauto, S.A.U., y no se entenderá concedida dicha aprobación sino con la emisión del documento con el título "Oferta Definitiva".

**MODELO: DE 715 GC (650 kVA, 520 kW, 400V, 50Hz, 1.500rpm, Servicio Principal), según el suministro adjunto:**

- Conjunto motor CATERPILLAR C18 y alternador CATERPILLAR LC7024H.
- Panel de control EMCP 4.2
- Interruptor IV montado sobre alternador.
- Cabina metálica insonorizada cumpliendo normativa UE.
- Tanque de combustible en bancada de 1157 litros de capacidad.

**EXCLUSIONES:** Obra civil, permisos y legalizaciones, cableado de control y potencia, cuadro de conmutación y vigilancia de tensión, instalación en su totalidad y todo aquello no contemplado en esta oferta.

**PRECIO GRUPO ELECTRÓGENO: // 88.412 // EUR**

**PLAZO DE ENTREGA:** Unidades disponibles en nuestro stock durante el mes de Julio de 2022.

**FORMA DE PAGO:** 20% a la firma del pedido y 80% a la comunicación de equipo listo para envío (transferencia).

**PUESTA EN MARCHA:** incluida. 1 día.

**TRANSPORTE:** Puesto en obra sobre camión en sus instalaciones.

**I.V.A.:** No incluido.

**VALIDEZ DE OFERTA:** Hasta la venta de las unidades en stock.

**GARANTÍA:** 1 año sin límite de horas para Servicio Prime.

Finanzauto garantiza que los bienes suministrados se encuentran libres de defecto con el contenido y exclusiones que se mencionan en el certificado de CAT. La garantía llevará consigo, exclusivamente y cuando proceda, la reparación o sustitución del producto. Los productos no CAT estarán garantizados, exclusivamente, de acuerdo con la garantía del respectivo fabricante, y sólo si éste la concede. En ningún caso se incluyen en la garantía cualesquiera costes indirectos, tales como, entre otros, los gastos de viaje, helicóptero, hotel, remolque, alquiler de grúas, andamiaje, etc., excepto en los casos expresamente previstos en la garantía del fabricante.



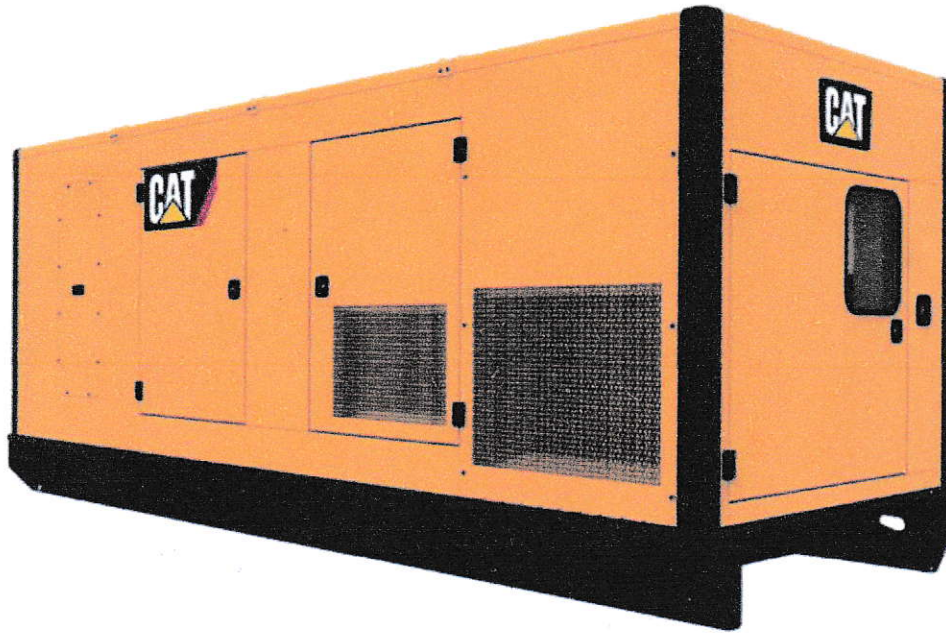
**ESTE DOCUMENTO DE INFORMACIÓN COMERCIAL NO TIENE CARÁCTER VINCULANTE**

Este documento de información comercial tiene carácter indicativo y se emite con el objeto de proporcionar información sobre los términos y alcance de una posible operación de suministro en los términos en ella descritos.

Dado su carácter indicativo, el plazo de entrega y las especificaciones de suministro están sujetas a posibles cambios.

La posible operación de suministro que pueda derivarse de esta oferta indicativa está sujeta a los términos y condiciones vigentes y publicadas en nuestra web: <http://www.finanzauto.es/es/terminos-y-condiciones>

Confiamos que la presente oferta cumpla con sus requerimientos. Para cuestiones técnicas o adicionales no dude en contactar con nosotros.



**GENSET CATERPILLAR C18 PGFT**

**PRIME POWER SERVICE**

**650 kVA @ 1500 RPM  
400 V - 50 Hz**

## SCOPE OF SUPPLY

Generator set consisting of a CATERPILLAR C18 ATAAC diesel engine and a CATERPILLAR LC7024H alternator, mounted on a skid, the components of each system are as described below.

### AIR INTLET SYSTEM

- Dry-type modular air filter, with high-performance filtering self-centring drum. Includes dust evacuator.
- Service indicator.

### REFRIGERATION SYSTEM

- Radiator installed on skid, refrigeration capacity up to 50°C, expansion tank incorporated.
- Blower fan with protections driven by the diesel engine (by belts).
- Centrifugal water pump driven by diesel engine (by gears).
- Coolant drain pipe with shut-off valve.
- Engine stop and alarm device for low coolant level, mounted on the expansion tank.
- Caterpillar ELC long-life antifreeze.

### EXHAUST SYSTEM

- Included in soundproof cabin. Composed of flexible steel exhaust and 25 dB muffler.

### FUEL SYSTEM

- Primary and secondary fuel filter.
- Manual fuel priming pump.
- Structural tank on skid with capacity of 1157 litres.
- Flexible fuel line connections.

### LUBRICATION SYSTEM

- Lube Oil pan.
- Lube oil cooler with bypass valve.
- Oil filter.
- Engine-driven oil circulation pump.
- Lubricating oil for first filling.
- Oil drain line.
- Oil mist vent.

### STARTING SYSTEM

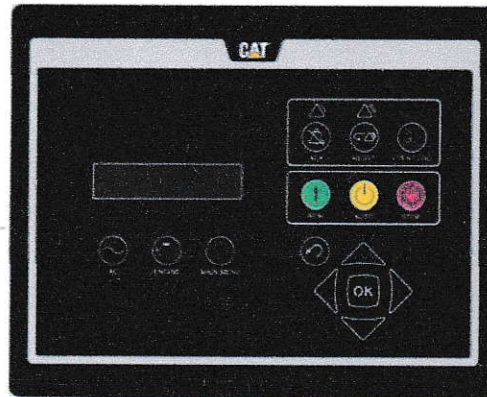
- 24 Vdc starter motor.
- Set of 2 starter batteries, cables and 2 18 liter acid bottles for filling.
- 45 Amp charging alternator.
- Battery disjuntor.

### CONTROLS

- Electronic speed regulator ADEM A4.

## INSTRUMENTATION

Control Panel EMCP 4.2 mounted on the genset:



- Liquid crystal display for operating parameters of both motor and generator.
- 2 alarm/shutdown warning lamps (amber, red).
- 3 keys with status indicator lamps for: manual start/manual stop/automatic operation.
- 1 lamp test key.
- 1 key for acknowledging alarms.
- Multifunction navigation keyboard.
- 1 key to display motor parameters.
- 1 key to display generator parameters.
- Digital multimeter, with indication of:
  - Line and phase generation voltages.
  - Currents (per phase and a average).
  - Frequency.
  - Engine revolutions.
  - Battery voltage.
  - Engine hours.
  - Oil pressure.
  - Water temperature.
  - Record of the last 40 alarms.
- Measurements with an accuracy of 2%.
- Settings and programming stored in non-volatile memory, to avoid losses in the event of possible power failures.
- 3 levels of password security to protect settings.
- IP56 Protection degree on the front, resistant to fuel and engine oil stains, IP22 on the rear.
- Operating temperature range from -20° C to 70° C.
- Optional Modbus RS485 communications
- Alarm/Shutdown indications by:
  - Boot failure.
  - High water temperature alarm/shutdown.
  - Low oil pressure alarm/shutdown.
  - Overspeed.
  - High/low battery voltage.
  - Emergency stop activated.

All these alarm/shutdown conditions are announced by turning on the corresponding lamp, as well as with descriptive text on the screen.

- Controls:
  - Automatic/Start/Stop.
  - Shutdown with cooling time.
  - Local and remote emergency stop.
  - Programmable boot cycle.
  - Lamp test.
- Digital inputs (8 total):
  - Remote emergency stop.
  - Remote Start / Stop.
  - 2/4 programmable channels.
  - The number of programmable inputs may vary depending on the panel version.
- Relay outputs (6 total):
  - Activation of the starter motor.
  - Fuel control.
  - 4 programmable channels.
  - The number of programmable relays may vary depending on the panel version.

#### **GENERATOR**

- AREP excitation system (which increases motor starting capacity and has the capacity to maintain 300% of nominal I for 10 sec.)
- R450 voltage regulator.
- 4-pole switch with trip coil and auxiliary status contact mounted in a cabinet located at the rear of the group (behind the generator), IEC approved.
- Class H insulation.
- Class H temperature rise.
- RFI filter.
- Earth-fault protection relay.

#### **ACOUSTIC CANOPY**

Resistant self-supporting cabin for outdoor installation, made of galvanized steel and treated with zinc phosphate for greater resistance to corrosion. Baked paint finish with polyester powder.

Fairing with side window in safety glass, for visualization and command of the control panel. It incorporates an emergency stop button on the outside.

Zinc doors equipped with stainless steel locks and hinges, for maintenance and access to fill fuel, oil, coolant and starting batteries.

Oil, refrigerant and gas elimination ducts internal to the cabin.

Exhaust attenuation system housed within the cab for operator safety and maximum service life.

**GENERAL**

Anti-vibration dampers, located between the genset bed and the motor-generator assembly.

Depending on what is established by the manufacturer of the good object of this offer, your Warranty will be 12 months from its start-up or 18 months from the time we inform you that it is at your disposal to proceed with its installation, whichever comes first. Not being applicable what is established in this regard in the Consolidated Text of the General Law for the Defense of Consumers and Users and other complementary laws approved by RD 1/2007 16 Noviembre.

CE certificate.

Yellow paint on engine and generator, skid and radiator in black.

**DOCUMENTATION**

The following documentation is supplied with the physical delivery of the generator set:

- Electrical connections diagram.
- Engine and generator maintenance operation manual.
- Specification manual for fluids to be used.
- Engine and generator parts book.
- Original warranty sheet.

**TECHNICAL SPECS**

**GENSET**

Manufacturer .....	CATERPILLAR
Model .....	C18 PGCI
Power .....	650 kVA / 520 kWe
Voltage .....	400 V. 3-phase
Service .....	Prime. ISO 8528 PRP

**ENGINE**

GENERAL

Manufacturer .....	CATERPILLAR
Model .....	C18 ATAAC
Fuel .....	Diesel
Cylinders .....	6
Disposition .....	In-Line
Bore .....	145 mm
Stroke .....	183 mm
Displacement .....	18,13 litres
Compression ratio .....	14,5:1
Aspiration .....	Turbo - aftercooler
Speed .....	1500 rpm
Break Horse Power .....	571 kW

AIR INTAKE SYSTEM

Air Volume for combustion ..... 37,9 m<sup>3</sup>/min

REFRIGERATION SYSTEM

Radiator Water Volume ..... 54,8 litres  
 Non-radiator water volume ..... 20,8 litres  
 Radiator air circulation ..... 373 m<sup>3</sup>/min  
 Admissible air restriction ..... 0,12 kPa  
 Power consumed by fan ..... 17,3 kW  
 Voltage input ..... 240 Vac

EXHAUST SYSTEM

Exhaust gas volume ..... 103 m<sup>3</sup>/min  
 Exhaust gas temperature ..... 553,7 °C  
 Max. Exhaust counterpressure ..... 10 kPa  
 Design exhaust counterpressure ..... 5 kPa  
 Silencers pressure drop ..... 1 kPa  
 Exhaust flange diameter ..... 203 mm

LUBE OIL SYSTEM

Oil pan capacity ..... 38 litres  
 Recommended oil API ..... CG-4

STARTING SYSTEM

Batteries voltage ..... 24 Vcc

**GENERATOR**

GENERAL

Manufacturer ..... CATERPILLAR  
 Model ..... LC7024H  
 Power ..... 650 kVA  
 Speed ..... 1500 rpm  
 Frequency ..... 50 Hz  
 Voltage ..... 400 V. 3-phase  
 Power Factor ..... 0,8  
 4-pole output protection ..... 1.250 A  
 Permanent-voltage regulator ..... ± 0,5%  
 Voltage adjustment ..... ± 5%  
 Isolation ..... CLASE H  
 Protection ..... IP23  
 Bearings ..... 1  
 Telephonic influence factor ..... < 50  
 Wave deviation ..... < 2%  
 Efficiency ..... 94,0%  
 KVA available in "starting peaks"  
 (for a voltage fall of 30%) .. ..... 1.580 kVA



## ISOLATION CANOPY

### PERFORMANCE

### NOISE

50 Hz @ 1500 rpm (dBA full load)		
1 m	7 m	15 m
82,3	72,5	66,5

## ENGINE-ALTERNATOR ASSEMBLY

### WORK CONDITIONS

Max. altitude without derating ..... 2.500 masl (at 40°C)  
 Max. temperature without derating..... 60 °C (a 2.000 masl)  
 \* Consult for other conditions

Canopy ambient capacity ..... 39 °C  
 Heat absorbed by refrigeration..... 165 kW  
 Residual heat in exhaust ..... 487 kW  
 Radiated heat (motor + generator) ..... 114,9 kW  
 Fuel consumption  
 100% load ..... 133,2 l/h  
 75% load ..... 98,4 l/h  
 50% load ..... 67,2 l/h  
 Specific fuel consumption ..... 195,8 g/kWmh

### EMISSIONS (NOMINAL VALUES)

	100%	25%
NOx (mg/Nm <sup>3</sup> )	3.072,6	4.063,6
CO (mg/Nm <sup>3</sup> )	401,3	332,2
HC (mg/Nm <sup>3</sup> )	7,3	18,6
Particles (mg/Nm <sup>3</sup> )	14,4	14,3

### EMISSIONS (GUARANTEED VALUES)

	100%	25%
NOx (mg/Nm <sup>3</sup> )	3.318,4	4.384,3
CO (mg/Nm <sup>3</sup> )	750,5	621,2
HC (mg/Nm <sup>3</sup> )	13,7	35,2
Particles (mg/Nm <sup>3</sup> )	28,0	27,9

DIMENSIONS

Long .....	5.824 mm
Wide .....	1.920 mm
High .....	2.245 mm
Weight with oil and coolant .....	5.824 kg
Weight with oil, coolant and fuel .....	6.610 kg

REGULATIONS

The genset meets or exceeds the following international standards:

AS1359, CSA, IEC60034-1, ISO3046, ISO8528, NEMA MG 1-22, NEMA MG 1-33, UL508A, 72/23/EEC, 98/37/EC, 2004/108/EC

The prime duty power specified for the generator set is defined as that available with variable connected loads, for unlimited running time. The average power delivered is 70% of the specified power. Typical peak demand is 100% of rated power (eKW), with 10% overload capacity for emergency use for up to one hour in a 12-hour period. Overload operation cannot exceed 25 hours per year.

It is specified according to ISO 3046. The fuel limiting power according to ISO3046/1, AS2789, DIN6271 and BS5514.

Specified power is based on SAE J1349 standard conditions. Said specification also applies to the standard conditions according to ISO3046/1, DIN6271 and BS5514.

The fuel consumption is based on a gas oil with an API density of 35° at 16°C, whose PCI is 42780 kJ/kg and its density is 838.9 kg/m<sup>3</sup> when used at 29°C.

*The technical data contained in this document is based on TMI reference no. DM9823 and LEHE0380-02 (08/16).*

*Materials and specifications are subject to change without notice. For the preparation of this document, the International System of Units has been used.*