

## TECHNICALS SPECIFICATIONS



Image for guidance purposes.

Model:

# AL-650

Gen set composed of engine and alternator perfectly assembled and fitted in a practical tubular chasis, that is adding great strenght and versatility.

**STANDBY POWER (LTP):**

**7 kVA**

(LTP: "Limited Time Power" norma ISO 8528-1)

## Engine

Make	Lombardini
Model	15LD-440
Fuel	Diesel
Start	Automatic main failed
Cooling system	Air

Mechanical effect power (kWm)	6,7
Diameter x stroke (mm)	86x76
Compression ratio	20,3:1
Series regulator	M
No. cylinders	1
Displacement (cm³)	441
Fuel consumption 100% (L/H)	2
Oil tank capacity (L)	1,5
Máx. oil consumption (kg/h)	0,0048
Battery recommended V/Ah	12/19
Fuel tank capacity (L)	5

## Alternator

Voltage (V)	400 / 230
Frequency (Hz)	50
R.p.m.	3000
No. poles	2
Protection degree IP	21
Insulation	H

\*Series regulator **M**: Mechanical.

## Genset general characteristics

Prime Power PRP (kVA/kW)	6,5
Standby power LTP (kVA)	7
Frequency (Hz)	50
R.p.m.	3000
Voltage (V)	400 / 230
Cos $\Phi$	1

## Dimensions and weight

Dimensions (mm) Lenght x Width x Height	810x550x600
Weight (kg)	117

## OPTIONS

Control panel with voltmeter & hours counter or ammeter.

Control panel equipped with DSE 3110 for remote start

Transport kit with wheel and handles

**DSE 6120 MKIII AUTOMATIC CONTROL PANEL WITH AMF/ATS PANEL**

**V2**

PROTECTION, DISTRIBUTION AND AUTOMATIC CONTROL panel which starts the generator set when it detects a mains failure and stops it when the mains is restored with the control unit DSE 6120 MKIII. It also starts and stops the group manually via a pushbutton or remote start-up by contact. It incorporates change over switch. The entire assembly is in a steel enclosure separated from the gen set.



Image for guidance purposes.

It has the following:

## 1. EMERGENCY STOP PUSHBUTTON

## 2. PROTECTIONS:

Magnetothermal switch (preheating resist.) 2P (16 A)

Protection fuses for control module

## 3. BATTERY CHARGER

**V1** PREWIRED VERSION FOR AMF

**V2** GENSETS WITH AMF/ATS PANEL AND 4 POLE CIRCUIT BREAKER

**V3** GENSET WITH AMF CONTROL PANEL BUT WITHOUT ATS PANEL AND SEPARATED ATS PANEL

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**4. DSE 6120 MKIII PROTECTION CONTROL MODULE.**

**LCD SCREEN:**

It is equipped with a digital LCD screen, which makes it easy to read the information concerning the ENGINE, ALTERNATOR and LOAD available in several languages. The readings that can be obtained are:

ENGINE:	ALTERNATOR AND CHARGE:	MAINS:
Coolant temperature	Voltages between phases and between phases and neutral.	Frequency
Oil pressure	Intensities	Voltages between phases and neutral (L1-N, L2-N, L3-N).
Turning speed (rpm)	Frequency	Voltages between phases and (L1-L2, L2-L3, L1-L3).
Fuel level	Active Power (kW)	Active Power (kW)
Battery voltage	Reactive Power (kVAr)	Reactive Power (kVAr)
Battery alternator voltage.	Apparent Power (kVA)	Apparent Power (kVA)
Operating hours	Cos phi	Cos phi
Number of start-ups	Active energy meter (kW-h)	

**CONTROL OF THE SET:**

STARTS and STOPS the set AUTOMATICALLY when mains failure is detected and when it is restored, respectively.

It can also operate MANUALLY a REMOTE STAR.

Breaker control via fascia buttons.

**PROTECTION OF THE ENGINE AND ALTERNATOR, WITH THE ALARMS ACTIVATED:**

ENGINE:	ALTERNATOR:	MAINS:
Low oil pressure	Low and High Voltage	Low and High Voltage
High coolant temperature	Low and High Frequency	Low and High Frequency
Low and High battery Voltage.	Overload due to Intensity (A)	
Failure of the alternator to charge batteries	Power Overload (KW)	
Low fuel level	Low load	

Engine maintenance alarms for fuel filter, air filter and oil filter

**OTHER CHARACTERISTICS:**

The real-time clock records the last 100 events.	USB connectivity	ALTERNATIVE CONFIGURATIONS, which open up the working possibilities
"DSE Net" for the connection of expansion modules. The possibilities of adapting the operation of the generator sets to the different current applications are expanded.	Fully configurable via software and PC.	DATA LOGGING. Option to display, either graphically or in editable tables, information on the genset operation.
Extensive number of configurable inputs and outputs.	Communication via USB cable for remote control	Sleep Mode
Configurable alarms and timers.	Programmable clock with multiple maintenance events which can be configured for optimal motor functioning. Weekly and/or monthly programming for up to 8 startups and shutdowns per week.	Option to inhibit start-up by external signal during a specific period.
Internal PLC editor	CAN, MPU & alternator speed sensing (selectable depending on engine type).	Five key menu navigation
Fuel and start outputs configurable when using CAN.	Customisable power up text and images	Backed-up real time clock.
Tier 4 ECO engine support including exhaust fluids & filters		

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