

AAL-007 - LOMBARDINI - 4LD 820

1.500 R.P.M. | 50 Hz

TECHNICAL SPECIFICATIONS



Model:

AAL-007

Gen set with manual control panel. Air cooled.

Image for guidance purposes.

ENGINE	MAKE	MODEL
	LOMBARDINI	4LD 820
ALTERNATOR	MODEL	
	MECC-ALTE BTP 3-1S/4	

(400 / 230 V)

CONTINUOUS POWER: (PRP "Prime Power" norma ISO 8528-1)	6 kVA
STAND-BY POWER: (LTP "Limited Time Power" norma ISO 8528-1)	7 kVA

Amperes in the different voltages:

VOLTAGE	HZ	PHASE	COS Ø	PRP KVA/KW	LTP KVA/KW	AMPERAGE
415/240	50	3	0,8	6,0/5	6,6/6	9,12
400/230	50	3	0,8	6,0/5	6,6/6	9,47
380/220	50	3	0,8	6,0/5	6,6/6	9,96
240/139	50	3	0,8	6,0/5	6,6/6	15,78
230/133	50	3	0,8	6,0/5	6,6/6	16,46
220/127	50	3	0,8	6,0/5	6,6/6	17,21

ELECTRO EXIM SRL

ELECTRO EXIM SRL
21 Ialomicioarei St., sector 1, code 011277, BUCHAREST - ROMANIA
Phone: 0040 21 2231347 - 0040 744 755 390 - FAX: 0040 21 2231201
E-mail: office@electroexim.com - Web: www.electroexim.ro

AAL-007 - LOMBARDINI - 4LD 820

1.500 R.P.M. | 50 Hz

ENGINE CHARACTERISTICS

MAKE	MODEL
LOMBARDINI	4LD 820

GENERAL DATA

Power PRP (kWm)	6.00
Power LTP (kWm)	6.60
No. cylinders	1
Cylinder capacity (L)	0.80
Diameter per stroke (mm)	102 x 100
Compression ratio	-
Cooling system	AIR
Injection	DIRECT
Suction	NATURAL
Series regulator	MECHANICAL
Fly wheel coupling	CONO 30

Lubrication system

Oil capacity (L)	2.60
Oil consumption (%)	0.01
Min. alarm oil pressure (bar)	1.50

Ventilation system

Air cooling flow (m3/h)	360
Combustion air flow (m3/h)	30.80
Max. back pressure for fan (mbar)	0

Exhaust system

Exhaust gas flow (m3/h)	-
Exhaust back pressure (mbar)	-
Temp. exhaust gases (°C)	-

Electrical system

VDC (V)	12
Battery (Ah)	60
Engine start-up (kW)	-

ELECTRO EXIM SRL

ELECTRO EXIM SRL
 21 Ialomicioarei St., sector 1, code 011277, BUCHAREST - ROMANIA
 Phone: 0040 21 2231347 - 0040 744 755 390 - FAX: 0040 21 2231201
 E-mail: office@electroexim.com - Web: www.electroexim.ro

AAL-007 - LOMBARDINI - 4LD 820

1.500 R.P.M. | 50 Hz

ALTERNATOR CHARACTERISTICS

MODEL

MECC-ALTE BTP 3-1S/4

GENERAL DATA

Power PRP (kVA)	7
Power LTP (kVA)	7.70
Efficiency Alt. 3/4 %	80
Efficiency Alt. 4/4 %	79.40
No. Poles	4
Voltage regulator	COMPOUND TRANS
No. wires	6
Insulation	H
Xd (%)	157
X'd (%)	15.40
X	13
Degree of protection	IP23

GENERATOR SET CONSUMPTION

% POWER USED	LITRES/HOUR
50%	1.15
75%	1.73
100%	2.30

DIMENSIONS, CAPACITIES, APPROXIMATE WEIGHT AND NOISE

LENGTH	DIMENSIONS (MM)	
	WIDTH	HEIGHT
1092	600	938
FUEL TANK (LITRES)		WEIGHT (KG)
7,5		270.00
NOISE LEVEL (dB (A))		

ELECTRO EXIM SRL

ELECTRO EXIM SRL
21 Ialomicioarei St., sector 1, code 011277, BUCHAREST - ROMANIA
Phone: 0040 21 2231347 - 0040 744 755 390 - FAX: 0040 21 2231201
E-mail: office@electroexim.com - Web: www.electroexim.ro

AAL-007 - LOMBARDINI - 4LD 820

1.500 R.P.M. | 50 Hz

INMESOL GENERATOR SET

GENERAL DESCRIPTION

The "INMESOL" generator set is an electrical energy generating machine which is used in places where there **is no mains supply** or when there is a MAINS failure.

The mobile elements, distribution belt, fan, etc., and those parts which reach high temperatures during operation, exhaust manifold, etc, include their corresponding protections, in compliance with the requirements of the Machinery Directive **2006/42**.

REGULATIONS



The machine holds the "CE" marking, and the corresponding Declaration of Conformity is issued with each of them, in which it specifies that the machine complies with **R.D 842/2002 Low Voltage Regulations and with the European Directives:**

- 2006/42 on Safety in Machinery.
- 2006/95/CE on Electrical Safety.
- 2004/108/CE on Electromagnetic Compatibility.
- 2005/88/CE on NOISE EMISSIONS by equipment for outdoor use (for SOUNDPROOF GENERATOR SETS).

AAL-007 - LOMBARDINI - 4LD 820

1.500 R.P.M. | 50 Hz

IN INDUSTRIAL RANGE / SCOPE OF SUPPLY

		
Engine/alternator monobloc directly connected and installed via silent blocks on a frame made from high tensile electro welded steel profiles that are treated with degreasing liquids and aplicated with a phosphate coat and polyester (QUALICOAT) paint.	✓	✓
Canopy of steel sheet sound proofed with fireproof rockwool, and treated with degreasing liquids and aplicated with a phosphate coat and polyester (QUALICOAT) paint.	•	✓
Fuel tank integrated in the base frame provided with fuel level jauge and fuel connections to the engine.	✓	✓
Engine with mechanical engine driven pusher fan.	✓	✓
Industrial silencer with -15 db(A) noise reduction and exhaust outlet tube.	✓	•
Residencial silencer with -35 db(A) noise reduction with exhaust tube and protection cap.	•	✓
Electric control cubicle with control module including protection and reading of electrical meassures engine instrumentation fuel level and engine running hours, etc.	✓	✓
Termal and magnetic circuit breaker and termal and magnetic circuit breaker and earth fault relay.	✓	✓
Battery charge alternator.	✓	✓
Starter battery complete with cables to the engine and pole protection.	✓	✓
Installation prepared for earthing spike (spike not included).	✓	✓
Security protection for heat and moving parts as well as live electrical components.	✓	✓
External emergency stop push button.	✓	✓
Manual engine oil extraction pump.	•	✓
Self excited and auto regulated alternator.	✓	✓
Integrated lifting hook for single point lifting with crane, gensets up to 450 kVA (Except in swing-out cover model)	•	✓
4 Lifting points for gen sets from 450 kVA and bigger.	✓	•
Preparate for extended fuel tank, fully bomded for leakage protection.	✓	✓
Base frame is prepared for trailer kit installation.	✓	✓
Standard electronic speed governor on engines from 220 kVA (LTP) and up.	✓	✓
Horizontal outlet for hot air	•	✓

AAL-007 - LOMBARDINI - 4LD 820

1.500 R.P.M. | 50 Hz

DSE 3110 – AAL-007 MANUAL CONTROL PANEL

DSE 3110 – AAL-007 MANUAL CONTROL PANEL

MANUAL CONTROL, PROTECTION AND DISTRIBUTION panel, assembled on the generator set in metal cabinet with a DSE 3110 engine protection unit.



It has the following:

Image for guidance purposes.

1 STARTER SWITCH

2 MEASURING INSTRUMENTS:

- Digital reading of HZ, Volts and Hours Counter (DSE 3110)

AAL-007 - LOMBARDINI - 4LD 820

1.500 R.P.M. | 50 Hz

DSE 3110 – AAL-007 MANUAL CONTROL PANEL

3 SET CONTROL AND ENGINE PROTECTION: DSE 3110, allows:

- START AND STOP the set MANUALLY.
- Possibility of doing it AUTOMATICALLY via START ON SIGNAL.
- Digital readings of the operating hours and the Frequency
- Controls the main characteristics of the engine, causing an alarm or the stopping of the machine:
 - 1.Low and High Voltage (STOP)
 - 2.Low and High Frequency and Speed (STOP)
 - 3.Low Oil Pressure and High Coolant Temperature (STOP)
 - 4.Failure of the Alternator Battery-Charger (ALARM)
 - 5.Low Fuel Level (ALARM)

4 PROTECTIONS:

- Magnetothermal Protections 4P, 16 A (B)
- Protection fuses for control module.

5 DISTRIBUTION:

- 1 BASE CEE 3P+N+T 16A
- 1 BASE SHUKO 16A

AAL-007 - LOMBARDINI - 4LD 820

1.500 R.P.M. | 50 Hz

DSE 3110 – AAL-007 MANUAL CONTROL PANEL

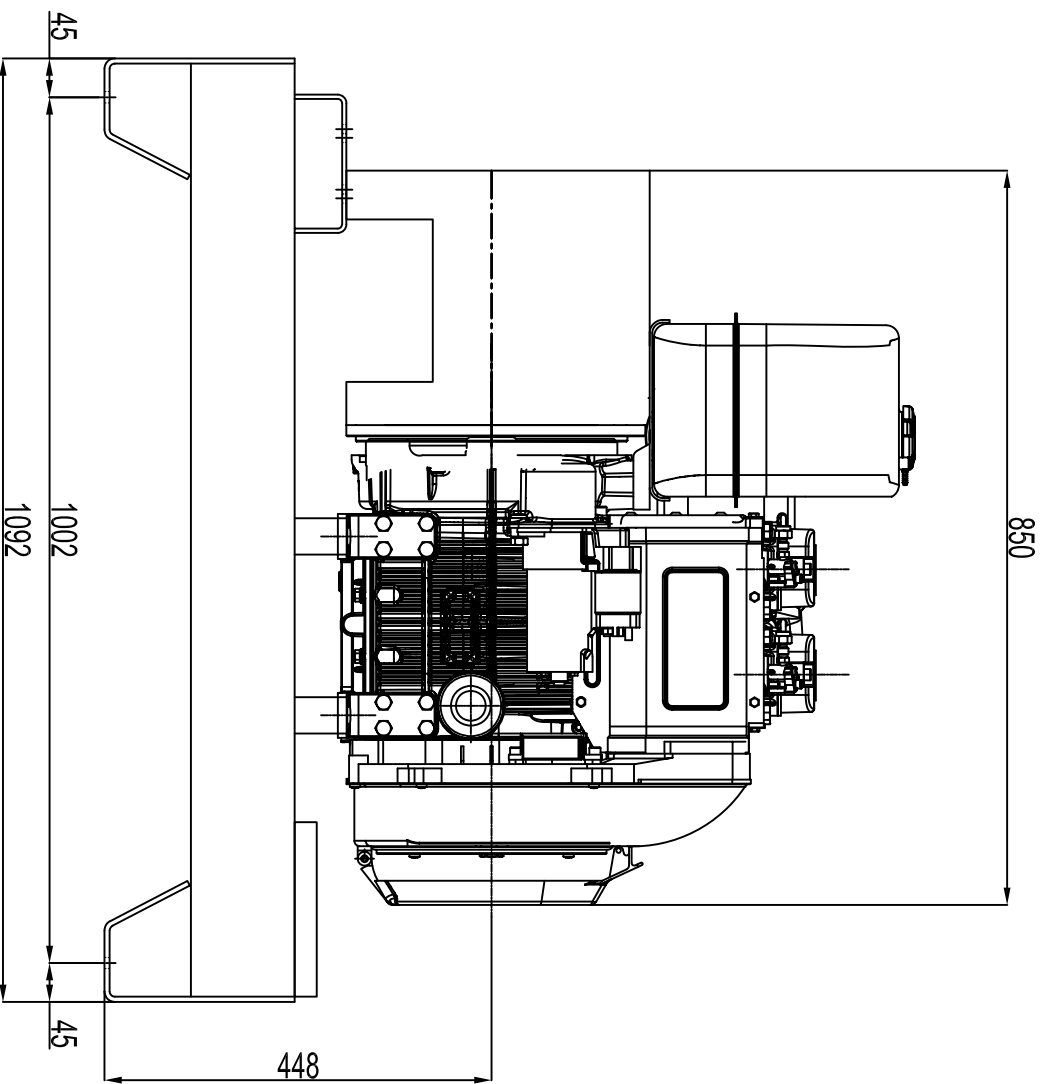
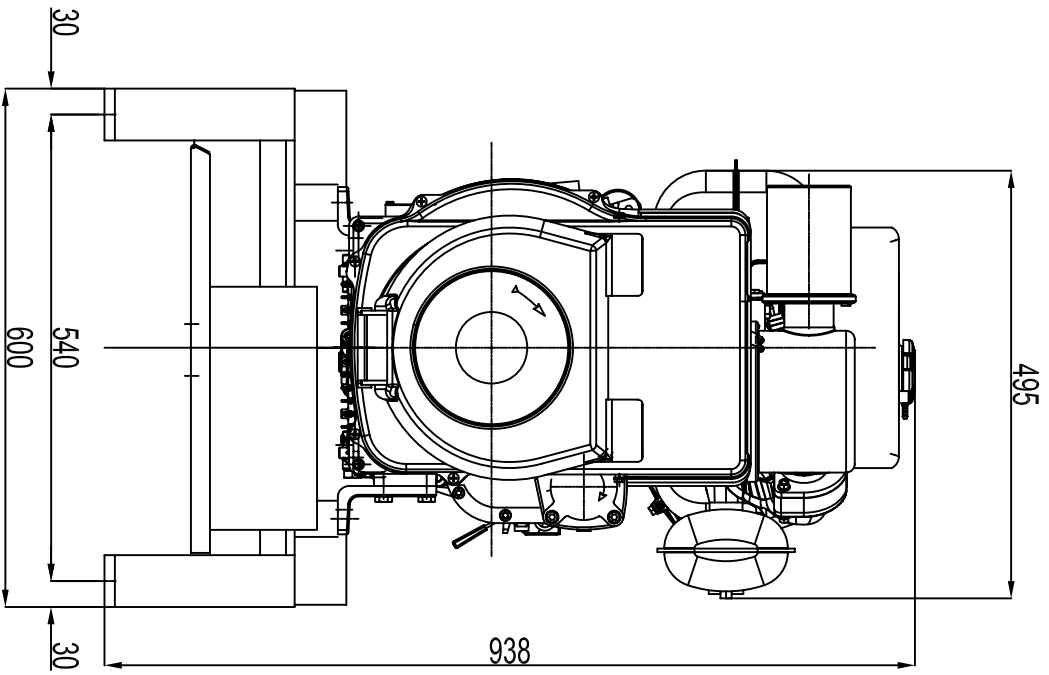
6 OPTIONAL:

AUTOMATIC PANEL FOR MANUAL GENERATOR: ATS DSE 334


- This panel provides the manual control generator with a reserve operation from the Mains, as the ATS sends the command to start and stop the generator, when it detects a supply failure and when the Mains is restored

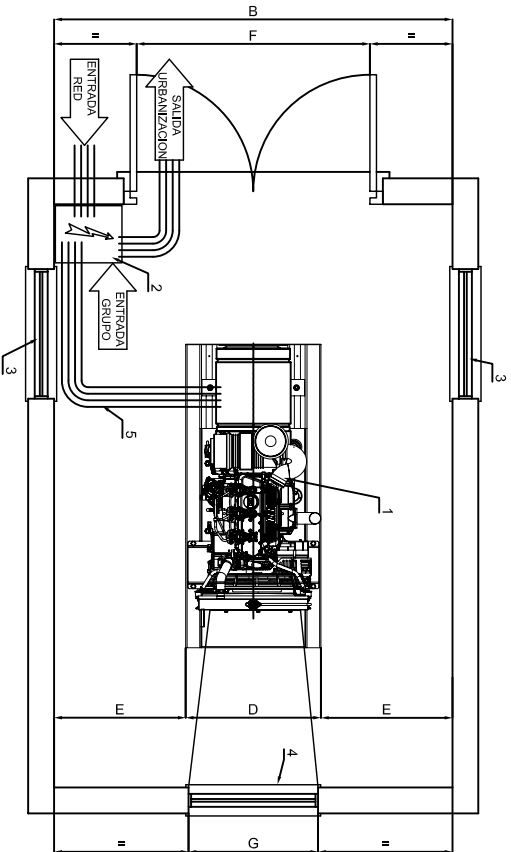
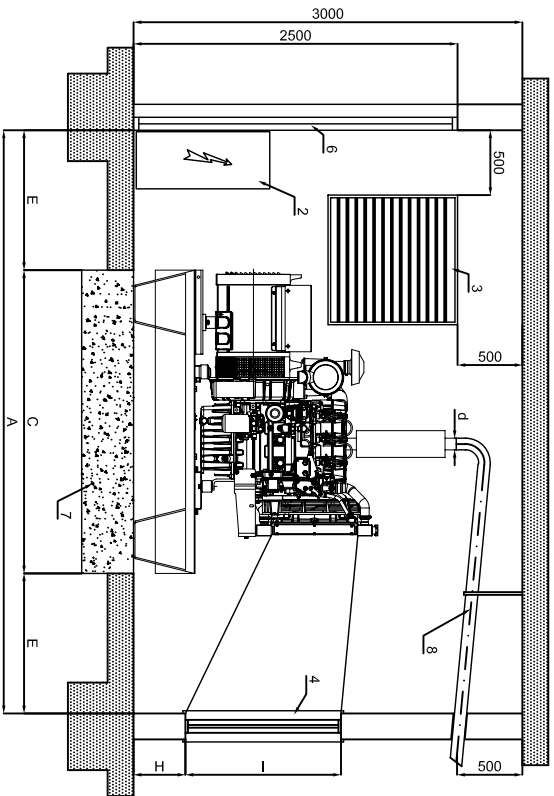


Cubicle composed of the electronic control module which is detecting a mains failure and of 2 contactors mechanically and electrically interlocked or a motorized switch controlled by the above electronic controller who are realizing the change of supply from the GEN SET or the MAINS to the load.



CAPACIDAD DE DEPOSITO = 7,5 LTS

		<p>PROYECTO: G.E ABIERTO 6 Kvas LOMBARINI (4LD820)</p>	
<p><small>Intendencia o Org. de Superv. de Op. y de M. de la Empresa, para el control y supervisión de la ejecución de los trabajos con el fin de garantizar la seguridad y la calidad de los trabajos.</small></p>		MATERIAL	
CODIGO		TOLERANCIA GENERAL	
PESO		UDS	
ESCALA		EXPEDIENTE:	
		Nº MOD	
		Nº PLANO	
		MARCA	



DIMENSIONES DE SALA SEGUN POTENCIA												
POTENCIA	A	B	C	D	E	F	G	H	I	d	PESO	SECCION HUECO ENTRADA AIRE
6 Kva AIRE	2092	1600	1092	600	1000	620	400	500	600		260	2x0.50 m2
7 Kva	3300	1580	1300	580	1000	600	400	500	600	50	300	2x0.50 m2
11 Kva	3300	1580	1300	580	1000	600	700	500	600	50	320	2x0.50 m2
15 Kva AIRE	3300	1580	1300	580	1000	600	700	500	600	50	380	2x0.50 m2
15 Kva	3300	1580	1300	580	1000	600	700	500	600	50	400	2x0.50 m2
19 Kva	3300	1580	1300	580	1000	600	700	500	600	50	480	2x0.50 m2

- NOMENCLATURA**
- 1 - GRUPO ELECTROGENO
 - 2 - CUADRO DE CONTROL
 - 3 - HUECO ENTRADA DEL AIRE
 - 4 - TUNEL DE EXPULSION DEL AIRE
 - 5 - BANDEJA PASACABLES
 - 6 - PUERTA DE ACCESO
 - 7 - BASE HORMIGON ARMADO H-175
 - 8 - TUBO DE ESCAPE

EL Ø DE LA TUBERIA DE EXTENSION DEL ESCAPE PUEDE SER EL MISMO QUE EL DEL SILENCIADOR HASTA 5 m. PARA DISTANCAS MAYORES DE 5 m. DEBE AUMENTARSE EL Ø DE LA TUBERIA 10 mm POR CADA 10 m MAS DE DISTANCIA ENTRE EL GRUPO ELECTROGENO Y LA SALIDA EXTERIOR

CALCULO ESPESOR LOSA DE HORMIGON

$$E = \frac{W}{d \times D \times C}$$

E = altura bloque de hormigon
W = peso total grupo electrogeno
d = densidad del hormigon (2400 kg/m³)
D = anchura bloque de hormigon (m)
C = longitud bloque de hormigon (m)

h = 20/100 mm

INMESOL		PROYECTO:		GRUPO ESTATICO ESTANDAR LOMBARDINI			
Las informaciones o cumplir en dependencia de origen, a de todo el proyecto, se han realizado con el mayor cuidado y diligencia, pero no se garantiza su exactitud, ni se asume responsabilidad alguna por los errores o omisiones que pudieran producirse.		MODIFICADO	J.S.BELAR	07-11-2011	MATERIAL		
CODIGO		COMPROBADO	J.S.BELAR	03-04-2008	TOLERANCIA GENERAL		
PESO		ESCALA					
DENOMINACION:		GRUPOS EST.-STD LOMBARDINI		EXPEDIENTE:		Nº PLANO	MARCA
DIMENSIONES DE SALA							