

ENERGY GENERATION



Main Features		
Frequency	Hz	50
Voltage	V	400
Power factor	cos ф	0.8
Phase and connection		3

Power Rating		
Standby power LTP	kVA	6.68
Standby power LTP	kW	5.34
Prime power PRP	kVA	6.08
Prime power PRP	kW	4.86

Ratings definition (According to standard ISO8528 1:2005)

PRP - Prime Power: It is defined as being the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under being carried out as the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The permissible average power output over 24 h of operation shall not exceed 70 % of the prime power.

LTP - Limited-Time running Power:

It is defined as the maximum power available, under the agreed operating conditions, for which the generating set is capable of delivering for up to 500 h of operation per year (whose no more than 300 for continuative use) with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. No overload capability is available.

Engine specifications		
Engine manufacturer		Lombardini
Model		4LD820
[50Hz] Exhaust emission level		Unregulated
Engine cooling system		Air
Nr. of cylinder and disposition		1 in line
Displacement	cm ³	817
Aspiration		Natural
Speed governor		Mechanical
Prime gross power PRP	kW	6
Maximum gross power LTP	kW	6.6
Oil capacity	I	2.6
Fuel		Diesel
Specific fuel consumption @ 75% PRP	g/kWh	288
Specific fuel consumption @ PRP	g/kWh	288
Starting system		Electric
Electric circuit	V	12

Alternator Specifications		
Brand		Linz
Model		E1S13SA
Voltage	V	400
Frequency	Hz	50
Power factor	cos ф	0.8
Туре		Brushes
Poles		4
Voltage regulation system		Compound
Voltage tolerance		4
Efficiency @ 75% load		81.3
Class		Н
IP protection		21



The E1S/4 series includes three-phase 4 poles alternators with brushes and compound regulation.

Mechanical structure

Robust mechanical structure which permits easy access to the connections and components during routine maintenance check-ups.

Voltage accuracy:

 \pm 4% from no load to full load, $\cos\phi = 0.8$ at constant rotation speed.

Output voltage wave form:

The low harmonic content (<5%) allows supplying any type of load, including distorting loads.

Short circuit current:

In case of short circuit the permanent current exceeds rated current by three times, ensuring the correct operation of protections.

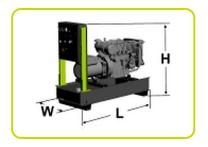
Overload

10% overload for one hour every 6 hours is normally accepted. Short overloads can be very high (three times the rated current).

Asynchronous motors starting:

1 HP per KVA of the generator can be started.

Dimensional data		
Length	(L) mm	1226
Width	(W) mm	700
Height	(H) mm	1132
Dry weight	Kg	232
Fuel tank capacity	1	7



Autonomy		
Fuel consumption @ 75% PRP	l/h	1.54
Fuel consumption @ 100% PRP	l/h	2.06
Running time @ 75% PRP	h	4.55
Running time @ 100% PRP	h	3.40

Data Current		
Battery capacity	%	60
MAX current	А	9.63
Circuit breaker	А	10

Control panel availability	
MANUAL CONTROL PANEL	MCP
AUTOSTART CONTROL PANEL	AST

MCP - Manual control panel

Manual control panel, mounted on the genset and complete of: instrumentation, control, protection and sockets

INSTRUMENTATION (ANALOGUE)

- Voltmeter (1 phase)
 Hours-counter



COMMANDS AND OTHERS

· Start selector switch with key



PROTECTIONS

- Alarm Battery charger failure
- Alarm low oil pressure
- · Circuit breaker protection

OUT PUT PANEL MCP

3P+N+T CEE 400V 16A	n	1
2P+T CEE 230V 16A	n	1



AUTOSTART CONTROL PANEL (AST)

Control panel manual, with remote start (AST), complete with engine protection unit MC01 and instrumentation for control and protection of the generating set.

INSTRUMENTATION (ANALOGUE)

- Voltmeter (1 phase)
- Hours-counter



COMMANDS AND OTHERS

- Start selector switch with key (OFF ON START)
- Emergency stop button.
- Remote start capability via socket complete of two meters wiring (external device not supplied)



PROTECTION WITH ALARM

- Battery charger failure
- · Low oil pressure



PROTECTIONS WITH SHUTDOWN

- · Battery charger failure
- Low oil pressure
- Circuit breaker protection: III poles

OUT PUT PANEL ACP

2P+T CEE 230V 16A	n	1
3P+N+T CEE 400V 16A	n	1
Remote start capability via socket (AST)		



Accessories

Items available as accessory equipment

FEC - Flexible Exhaust Compensator Bellow and flanges

RES - Residential silencer



Printed on 20/03/2016 (ID 1801)



