HIMOINSA
A YANMAR COMPANY

HGO-40 T5 LPG

INDUSTRIAL RANGE
Powered by FORD

SERVICE		PRP	ESP
POWER	kVA	35	40
POWER	kW	28	32
RATED SPEED	r.p.m.	1.500	
MAIN VOLTAGE	V	400/230	
AVAILABLE VOLTAGES	V	200/115 · 230 V (t)	
RATED AT POWER FACTOR	Cos Phi	0,8	

INDUSTRIAL RANGE

HIMOINSA Company with quality certification ISO 9001

HIMOINSA gensets are compliant with EC mark which includes the following directives:

- 2006/42/CE Machinery safety.
- 2014/30/UE Electromagnetic compatibility.
- 2014/35/UE electrical equipment designed for use within certain voltage limits
- 2000/14/EC Sound Power level. Noise emissions outdoor equipment. (amended by 2005/88/EC)
- EN 12100, EN 13857, EN 60204

Ambient conditions of reference according to ISO 8528-1:2018 normative: 1000 mbar, 25ºC, 30% relative humidity.

Prime Power (PRP):
According to ISO 8528-1:2018, Prime power is 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 the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The permissible average power output (Ppp) over 24 h of operation shall not exceed 70 % of the PRP.

Emergency Standby Power (ESP):
According to ISO 8528-1:2018, Emergency standby power is the maximum power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 h of operation per year with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. The permissible average power output over 24 h of operation shall not exceed 70 % of the ESP

Continuous Power (COP): According to Standard ISO 8528-1:2018, this is the maximum power available for continuous loads for unlimited running hours a year between the maintenance times recommended by the manufacturer under the environmental conditions established by the same.

"Class G2" performance according to the load impact test according to ISO 8528-5:2018

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Manufacture facilities:
SPAIN • FRANCE • INDIA • CHINA • USA • BRAZIL • ARGENTINA

Subsidiaries:
PORTUGAL | POLAND | GERMANY | UK | SINGAPORE | UAE | PANAMA | DOMINICAN REPUBLIC | ARGENTINA | ANGOLA | SOUTH AFRICA | MOROCOO

STANDARD SOUNDPROOFING

- D10
- WATER-COOLED
- THREE PHASE
- 50 HZ
- LPG

Himoinsa has the right to modify any feature without prior notice.

Weights and dimensions based on standard products. Illustrations may include optional equipment.

Technical data described in this catalogue correspond to the available information at the moment of printing.

The illustrations and images are indicative and may not coincide in their entirety with the product.

Industrial design under patent.

Engine Specifications | 1.500 r.p.m.

Rated Engine Output (PRP)	kW	32,23
Rated Engine Output (ESP)	kW	36,7
Manufacturer		FORD
Model		LSG635
Engine Type		4-stroke Miller Cycle
Injection Type		Carburization
Aspiration Type		Natural
Number of cylinders and arrangement		6-V
Bore and Stroke	mm	92,5 x 86,7
Displacement	L	3,5
Cooling System		Liquid (water + 50% glycol)
Lube Oil Specifications		API ≥SM, SAE 5W30
Compression Ratio		11,8

Total oil capacity including tubes, filters	L	5,68
Heat dissipated by coolant	kW	29,1
Governor	Type	Electrical
Air Filter	Type	Dry

- LPG-liquefied petrol gas engine
- 4-stroke cycle
- Water-cooled
- 12V electrical system
- Dry air filter
- Radiator with pusher fan
- HTW sender
- LOP sender
- Electronic governor
- Hot parts protection
- Moving parts protection

Generator Specifications | MECC ALTE

Manufacturer		MECC ALTE
Model		ECP32.2S4C
Poles	No.	4
Connection type (standard)		Star-series
Mounting type		S-3 11"1/2
Insulation	Class	H class

Enclosure (according IEC-34-5)	IP23
Exciter system	Self-excited, brushless
Voltage regulator	A.V.R. (Electronic)
Bracket type	Single bearing
Coupling system	Flexible disc
Coating type	Standard (Vacuum impregnation)

- Self-excited and self-regulated
- AVR governor
- IP23 protection
- H class insulation

ISO 9001
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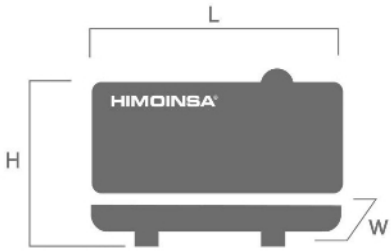
WEIGHT AND DIMENSIONS

		Standard Version
Length (L)	mm	2750
Height (H)	mm	1760
Width (W)	mm	1100
Maximum shipping volume	m³	5,32
Weight with liquids in radiator and sump	Kg	Ask
Autonomy (70% ESP)	Hours	Ask
Autonomy (100% PRP)	Hours	Ask



SOUND PRESSURE

Sound pressure level	dB(A)@7m	65 ± 2,4

APPLICATION DATA

EXHAUST SYSTEM

Exhaust Gas Flow	m³/min	5,64
Maximum allowed back pressure	kPa	20,32
Exhaust Flange Size (external diameter)	mm	90

NECESSARY AMOUNT OF AIR

Intake air flow	m³/h	110,1
Alternator fan air flow	m³/s	0,261

FUEL CONSUMPTION

Fuel Consumption 100% PRP	kg/h	10,61

FUEL SYSTEM

Fuel Oil Specifications		LPG
Lower heating value (LHV)	kWh/kg	10,87
Fuel supply connection size	Inches	1,5
Fuel supply pressure	mbar	70 - 300
Fuel Tank	L	0

ISO 9001

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Soundproofed version

- Steel chassis
- Anti-vibration shock absorbers
- External emergency stop switch
- Bodywork made from high quality steel plate
- High mechanical strength
- Low noise emissions level
- Soundproofing provided by high-density volcanic rock wool
- Epoxy polyester powder coating
- Full access for maintenance (water, oil and filters, no need to remove the canopy)
- Reinforced lifting hooks for crane hoisting
- Chassis drain plug
- Steel residential silencer -35db(A) attenuation.
- IP Protection according to ISO 8528-13:2016

Gas ramp

- Gas filter
- Double solenoid valve
- High pressure regulator
- Primary pressure regulator
- Low pressure switch
- Inlet pressure manometer
- Outlet pressure manometer
- Special Start/Stop sequence
- High pressure switch (Opcional).

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FEATURES OF THE CONTROL UNITS

		CEM 7-G	CEA 7-G	CEC 7	CEM 7-G + CEC7
Generator Readings	Voltage between phases	•	•	•	•
	Voltage between neutral and phase	•	•	•	•
	Current intensities	•	•	•	•
	Frequency	•	•	•	•
	Apparent power (Kva)	•	•	•	•
	Active power (Kw)	•	•	•	•
	Reactive power (kVAr)	•	•	•	•
	Power factor	•	•	•	•
	Low feed pressure	•	•	•	•
	Sealing check solenoid valve	•	•		•
Mains Readings	Voltage between phases		•	•	•
	Voltage between phases and neutral		•	•	•
	Current intensities		•	•	•
	Frequency		•	•	•
	Apparent power		•		
	Active power		•		
	Reactive power		•		
	Power factor		•		
Engine Readings	Coolant temperature	•	•		•
	Oil pressure	•	•		•
	Battery voltage	•	•		•
	R.P.M.	•	•		•
	Battery charge alternator voltage	•	•		•
Engine Protections	High water temperature	•	•		•
	High water temperature by sensor	•	•		•
	Low water temperature by sensor	•	•		•
	Low oil pressure	•	•		•
	Low oil pressure by sensor	•	•		•
	Low water level	•	•		•
	Unexpected shutdown	•	•		•
	Stop failure	•	•		•
	Battery voltage failure	•	•		•
	Battery charge alternator failure	•	•		•
	Overspeed	•	•		•
	Underspeed	•	•		•
	Start failure	•	•		•
	Emergency stop	•	•	•	•

• Standard ⓞ Optional

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		CEM 7-G	CEA 7-G	CEC 7	CEM 7-G + CEC7
Alternator Protections	High frequency	•	•	•	•
	Low frequency	•	•	•	•
	High voltage	•	•	•	•
	Low voltage	•	•	•	•
	Short-circuit	•	•		•
	Asymmetry between phases	•	•	•	•
	Incorrect phase sequence	•	•	•	•
	Inverse power	•	•		•
	Overload	•	•		•
	Genset signal drop	•	•	•	•
Counters	Total hour counter	•	•	•	•
	Partial hour counter	•	•	•	•
	Kilowatt meter	•	•	•	•
	Starts valid counters	•	•	•	•
	Starts failure counters	•	•	•	•
	Maintenance	•	•	•	•
Communications	RS232	ⓞ	ⓞ	ⓞ	ⓞ
	RS485	ⓞ	ⓞ	ⓞ	ⓞ
	Modbus IP	ⓞ	ⓞ	ⓞ	ⓞ
	Modbus	ⓞ	ⓞ	ⓞ	ⓞ
	CCLAN	ⓞ	ⓞ		ⓞ
	Software for PC	ⓞ	ⓞ	ⓞ	ⓞ
	Analogue modem	ⓞ	ⓞ	ⓞ	ⓞ
	GSM/GPRS modem	ⓞ	ⓞ	ⓞ	ⓞ
	Remote screen	ⓞ	ⓞ		ⓞ
	Tele signal	ⓞ (8 + 4)	ⓞ (8 + 4)		ⓞ (8 + 4)
	J1939	ⓞ	ⓞ		ⓞ
Features	Alarm history	• (100)	• (100)	• (100)	• (100)
	External start	•	•	•	•
	Start inhibition	•	•	•	•
	Mains failure start		•	•	•
	Start under normative EJP	•	•		•
	Pre-heating engine control	•	•		•
	Genset contactor activation	•	•	•	•
	Mains & Genset contactor activation		•	•	•
	Engine temperature control	•	•		•
	Manual override	•	•		•
	Programmable alarms	•	•		•
	Genset start function in test mode	•	•	•	•
	Programmable outputs	•	•		•
	Multilingual	•	•	•	•
Special Functions	GPS Positioning	ⓞ	ⓞ		ⓞ
	Synchronisation	ⓞ	ⓞ		ⓞ
	Mains synchronization	ⓞ	ⓞ		ⓞ
	Second Zero elimination	ⓞ	ⓞ		ⓞ
	RAM7	ⓞ	ⓞ		ⓞ
	Remote screen	ⓞ	ⓞ		ⓞ

• Standard ⓞ Optional

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CONTROL PANELS

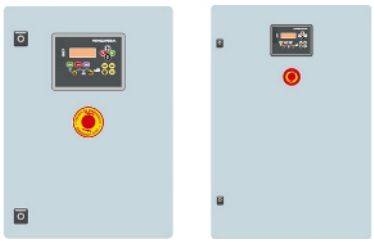
M5

Digital manual Auto-Start control panel and thermal magnetic protection (depending on current and voltage) and differential with CEM7.

Digital control unit CEM7

AS5

Automatic panel WITHOUT transfer switch and WITHOUT mains control with CEM7 unit. (*) AS5 as optional with CEA7 unit. Automatic panel without transfer switch and WITH mains control.



CC2

Himoinsa Switching cabinet WITH display.

Digital control unit CEC7

AS5 + CC2

Automatic panel WITH transfer switch and with mains control. The display will be on the genset and on the cabinet.

Digital control unit CEM7+CEC7

AC5

Automatic mains failure control panel. Wall-mounted cabinet WITH transfer switch and thermal magnetic protection (depending on current and voltage).

Digital control unit CEA7

Electrical system

- Electric control and power panel with measurements devices and control unit (according to necessity and configuration)
- Adjustable earth leakage protection (time & sensitivity) standard in M5 and AS5, with thermal magnetic protection
- Battery charger (standard on gensets with automatic control panels)
- Heating resistor (standard on sets with automatic control panels)
- Battery charger alternator with ground connection
- Starter battery/ies installed (cables and bracket included)
- Ground connection electrical installation with connection ready for ground spike (not supplied)
- Battery Switch (Opcional).

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