

# **HGP-170 T5 LPG**

**INDUSTRIAL RANGE Powered by PSI** 



SERVICE		PRP	ESP	
POWER	kVA	167	186	
POWER	kW	133	149	
RATED SPEED	r.p.m.	1.5	500	
STANDARD VOLTAGE	V	400	/230	
AVAILABLE VOLTAGES	V	230/132	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

- 2006/42/CE Machinery safety.
   2014/30/UE Electromagnetic compatibility.
   2014/30/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)

  97/68/EC Emissions of gaseous and particulate pollutants. (amended by 2012/46/EU)

  EN 12100, EN 13857, EN 60204

Ambient conditions of reference according to ISO 8528-1:2018 normative: 1000 mbar, 25°C, 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.

G2 class load acceptance in accordance with ISO 8528-5:2013

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



# STANDARD SOUNDPROOFING





WATER-COOLED



THREE PHASE



50 HZ



**NOT AVAILABLE** 



**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 Output (PRP)	kW	144,3
Rated Output (ESP)	kW	161,3
Manufacturer		PSI
Model		14.6L
Engine Type		4-stroke Otto Cycle
Injection Type		Carburization
Aspiration Type		Turbocharged and after-cooled
Number of cylinders and arrangement		8-V
Bore and Stroke	mm	128 x 142
Displacement	L	14,6
Cooling System		Coolant
Lube Oil Specifications		API CD/≥CF, SAE 15W40
Compression Ratio		10,5:1

Fuel Consumption ESP	kg/h	41,6
Fuel Consumption 100% PRP	kg/h	39
Fuel Consumption 75 % PRP	kg/h	28,7
Fuel Consumption 50 % PRP	kg/h	21,1
Fuel Consumption 25 % PRP	kg/h	14,4
Total oil capacity including tubes, filters	L	38,1
Total coolant capacity	L	127
Heat dissipated by coolant	kW	230
Governor	Туре	Electrical
Air Filter	Туре	Dry



- LPG-liquefied petrol gas engine
- 4-stroke cycle
- Water-cooled
- 24V electrical system
- Dry air filter
- Radiator with pusher fan
- HTW sender
- LOP sender

- Electronic governor
- Hot parts protection
- Moving parts protection



# Generator Specifications | STAMFORD

Manufacturer		STAMFORD
		STAINII OND
Model		UCI274G
Poles	No.	4
Connection type (standard)		Star-series
Mounting type		S-1 14"
Insulation	Class	H class

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
- 4 poles
- AVR governor
- IP23 protection
- H class insulation

- Single drive-shaft
- Flexible disc coupling

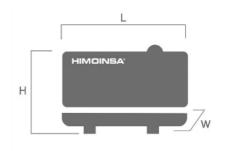






# **WEIGHT AND DIMENSIONS**

		Standard Version
Length (L)	mm	5.000
Height (H)	mm	2.369
Width (W)	mm	2.100
Maximum shipping volume	m³	24,87
Weight with liquids in radiator and sump	Kg	5016
Autonomy	Hours	Ask



# **SOUND PRESSURE**

Sound pressure level dB(A)@7m	70 ± 2,4
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# **APPLICATION DATA**

# **EXHAUST SYSTEM**

Maximum exhaust temperature	°C	750
Exhaust Gas Flow	m³/min	45,2
Maximum allowed back pressure	kPa	10,2
Exhaust Flange Size (external diameter)	mm	200

# **NECESSARY AMOUNT OF AIR**

Intake air flow	m³/h	840	
Alternator fan air flow	m³/s	0,514	

#### STARTING SYSTEM

Starting power	kW	7
Starting power	CV	9,52
Recommended battery	Ah	200
Auxiliary Voltage	Vdc	24

#### **FUEL SYSTEM**

Fuel Oil Specifications		LPG
Lower heating value (LHV)	kWh/kg	12,88
Composition *		95% Propane
Fuel supply connection size	Inches	2
Fuel supply pressure	mbar	70 - 300







- · 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

- Soundproofed version
  - Watertight chassis (acts as a double barrier against liquid retention)
  - Chassis drain plug
  - Steel residential silencer -35db(A) attenuation.
  - Oil sump extraction kit
  - IP Protection according to ISO 8528-13:2016



# Manual shut-off valve

- · Gas filter
- Double solenoid valve
- Primary pressure regulator
- Secondary pressure regulator (Zero pressure regulator)
- Low pressure switch
- Valve (tightness) testing system
- Inlet pressure manometer
- Outlet pressure manometer

Gas ramp

- Special Start/Stop sequence
- High pressure regulator (Opcional).
- High pressure switch (Opcional).









# FEATURES OF THE CONTROL UNITS

		CEM 7-G	CEA 7-G	CEC 7	CEM 7-G + CEC7
	Voltage between phases	•	•	•	•
	Voltage between neutral and phase	•	•	•	•
	Current intensities	•	•	•	•
	Frequency	•	•	•	•
on on	Apparent power (Kva)	•	•	•	•
di g	Active power (Kw)	•	•	•	•
Rea	Reactive power (kVAr)	•	•	•	•
Ę.	Power factor	•	•	•	•
Jera	Low feed pressure	•	•	•	•
Ö	Sealing check solenoid valve	•	•		•
	Voltage between phases		•	•	•
	Voltage between phases and neutral		•	•	•
	Current intensities		•	•	•
on on	Frequency		•	•	•
adings	Apparent power		•		
Rea	Active power		•		
S	Reactive power		•		
Σ	Power factor		•		
- s	Coolant temperature	•	•		•
dings	Oil pressure	•	•		•
ũ	Battery voltage	•	•		•
gine	R.P.M.	•	•		•
E D	Battery charge alternator voltage	•	•		•
	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	•	•		•
m	Battery voltage failure	•	•		•
cio na	Battery charge alternator failure	•	•		•
tect	Overspeed	•	•		•
Ģ	Underspeed	•	•		•
gine	Start failure	•	•		•
Eng	Emergency stop	•	•	•	•

Standard

Optional







		CEM 7-G	CEA 7-G	CEC 7	CEM 7-G + CEC7
	High frequency	•	•	•	•
	Low frequency	•	•	•	•
	High voltage	•	•	•	•
Ø	Low voltage	•	•	•	•
ţ	Short-circuit	•	•		•
otec	Asymmetry between phases	•	•	•	•
ŗ	Incorrect phase sequence	•	•	•	•
ator	Inverse power	•	•		•
tern	Overload	•	•		•
₹	Genset signal drop	•	•	•	•
	Total hour counter	•	•	•	•
	Partial hour counter	•	•	•	•
	Kilowatt meter	•	•	•	•
S	Starts valid counters	•	•	•	•
ž	Starts failure counters	•	•	•	•
ů	Maintenance	•	•	•	•
	RS232	0	0	0	0
	RS485	0	0	0	0
	Modbus IP	0	0	0	0
	Modbus	0	0	0	0
	CCLAN	0	0		0
	Software for PC	0	0	0	0
ñ	Analogue modem	0	0	0	0
	GSM/GPRS modem	0	0	0	0
<u> </u>	Remote screen	0	0		0
Ē	Tele signal	① (8 + 4)	① (8 + 4)		① (8 + 4)
8	J1939	0	0		0
	Alarm history	(10) / (222 + 100)	(10) / (222 + 100)	(40) / (222 + 400)	(40) / (and 1400)
	External start	(10) / (opc. +100)	(10) / (opc. +100)	(10) / (opc. +100)	(10) / (opc. +100)
	Start inhibition	•	•	•	•
	Mains failure start		•	•	•
	Start under normative EJP	•	•		•
	Pre-heating engine control	•	•		•
					•
	Genset contactor activation	•	•	•	•
	Genset contactor activation  Mains & Genset contactor activation	•	•	•	•
	Mains & Genset contactor activation	•			
	Mains & Genset contactor activation  Engine temperature control		•		•
	Mains & Genset contactor activation  Engine temperature control  Manual override	•	•		•
m	Mains & Genset contactor activation  Engine temperature control  Manual override  Programmable alarms	•	•		•
cures	Mains & Genset contactor activation  Engine temperature control  Manual override  Programmable alarms  Genset start function in test mode	•	•	•	•
Teatures	Mains & Genset contactor activation  Engine temperature control  Manual override  Programmable alarms  Genset start function in test mode  Programmable outputs	•	•	•	•
	Mains & Genset contactor activation  Engine temperature control  Manual override  Programmable alarms  Genset start function in test mode  Programmable outputs  Multilingual	•	•	•	•
	Mains & Genset contactor activation  Engine temperature control  Manual override  Programmable alarms  Genset start function in test mode  Programmable outputs  Multilingual  GPS Positioning	•	•	•	•
reatures	Mains & Genset contactor activation  Engine temperature control  Manual override  Programmable alarms  Genset start function in test mode  Programmable outputs  Multilingual  GPS Positioning  Synchronisation	• • • • • • • • • • • • •	• • • • • • • • • • • • • • • •	•	• • • • • • • • • • • • • • • • • • •
ctions Features	Mains & Genset contactor activation  Engine temperature control  Manual override  Programmable alarms  Genset start function in test mode  Programmable outputs  Multilingual  GPS Positioning  Synchronisation  Mains synchronization	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	•	• • • • • • • • • • • • • • • • • • •
Functions Features	Mains & Genset contactor activation  Engine temperature control  Manual override  Programmable alarms  Genset start function in test mode  Programmable outputs  Multilingual  GPS Positioning  Synchronisation  Mains synchronization  Second Zero elimination	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	•	• • • • • • • • • • • • • • • • • • •
cial Functions Features	Mains & Genset contactor activation  Engine temperature control  Manual override  Programmable alarms  Genset start function in test mode  Programmable outputs  Multilingual  GPS Positioning  Synchronisation  Mains synchronization	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	•	• • • • • • • • • • • • • • • • • • •

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



# Electric control and power panel with measurements devices and control unit (according to

- necessity and configuration)4-pole thermal magnetic circuit breaker
- 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

# Electrical system

- 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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