

# **HGM-980 T5 NG**

HEAVY RANGE Powered by MTU



SERVICE		СОР	
POWER	kVA	978	
POWER	kW	978	
RATED SPEED	r.p.m.	1.500	
STANDARD VOLTAGE	V	400/230	
RATED AT POWER FACTOR	Cos Phi	1,0	



## **HEAVY 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.
   2014/35/UE electrical equipment designed for use within certain voltage limits
   2000/14/EC Sound Power level. Noise emissions outdoor equipment. (amended by 2005/90/EC) 2005/8/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,  $25^{\circ}\text{C}$ ,  $30^{\circ}$  relative humidity.

Prime Power (PRP):

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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.

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



#### CONTAINER



40FT-HC



WATER-COOLED



THREE PHASE



50 HZ



NATURAL GAS

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 (COP)	kW	1040
Manufacturer		MTU
Model		8V4000L64
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	170 x 210
Displacement	L	38,1
Cooling System		Coolant
Lube Oil Specifications		SAE 40
Compression Ratio		14,0

Fuel Consumption 100% COP	Nm3/h	242,5
Fuel Consumption 75 % COP	Nm3/h	185,4
Fuel Consumption 50 % COP	Nm3/h	130,5
Total oil capacity	L	200
Total coolant capacity	L	234
Governor	Type	Electrical
Air Filter	Type	Dry



- Natural Gas engine
- 4-stroke cycle
- Water-cooled
- 24V electrical system
- Dry air filter
- Remote radiator
- HTW sender
- LOP sender

- Electronic governor
- Hot parts protection
- Moving parts protection



# Generator Specifications | STAMFORD

Manufacturer		STAMFORD
Model		PI734E
Poles	No.	4
Connection type (standard)		Star
Mounting type		S-00 21"
Insulation	Class	H class
1		

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
- 4 poles
- IP23 protection
- H class insulation

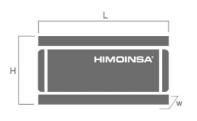






# **WEIGHT AND DIMENSIONS**

		Standard Version
Length (L)	mm	12.192
Height (H)	mm	2.896
Width (W)	mm	2.438
Maximum shipping volume	m³	86,08
Weight with liquids in radiator and sump	Kg	21206
Autonomy	Hours	Ask



## **SOUND PRESSURE**

Sound pressure level	dB(A)@7m	78 ± 2,4	
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## **APPLICATION DATA**

## **EXHAUST SYSTEM**

Maximum exhaust temperature	°C	427
Exhaust Gas Flow	m³/min	66,51
Maximum allowed back pressure	mbar	60

## **NECESSARY AMOUNT OF AIR**

Intake air flow	m³/h	3864
Alternator fan air flow	m³/s	2,69

## STARTING SYSTEM

Starting power	kW	9
Starting power	CV	12,24
Auxiliary Voltage	Vdc	24

## **FUEL SYSTEM**

Fuel Oil Specifications		Natural Gas
Lower heating value (LHV)	kWh/Nm3	9,5
Composition *		95% Methane
Fuel supply connection size	mm	80
Fuel supply pressure	mbar	120 - 250







- Soundproofing provided by high-density volcanic rock wool
- High mechanical resistance
- Low level of noise emissions
- Door with window to visualize control panel, alarms and measurements
- Reinforced lifting points for crane hoisting and lower ones for transportation by forklift
- Residential steel silencer with -35dB attenuation and tilting cap in the exhaust

- Anti-vibration shock absorbers
- Steel chassis
- Manual oil extraction pump
- Robust construction designed for continuous or emergency applications
- Stainless steel fittings
- Emergency stops

## Container version

- Easy access to the power connection
- Reinforced chassis for heavy range
- · Easy access for chassis cleaning
- Silent-block with anti-corrosion protection between the genset and the chassis
- Easy access to fill radiator through the roof



Gas ramp

- Gas filter
- Double solenoid valve
- Gas pressure regulator
- Low pressure switch
- High pressure switch

- Inlet pressure manometer
- · Outlet pressure manometer





# 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	•	•	•	•
ø	Apparent power (Kva)	•	•	•	•
ding g	Active power (Kw)	•	•	•	•
nea Bea	Reactive power (kVAr)	•	•	•	•
for	Power factor	•	•	•	•
nera	Low feed pressure	•	•	•	•
Ö	Sealing check solenoid valve	•	•		•
	Voltage between phases		•	•	•
	Voltage between phases and neutral		•	•	•
	Current intensities		•	•	•
<u>u</u>	Frequency		•	•	•
ding	Apparent power		•		
n ea	Active power		•		
sins	Reactive power		•		
Σ	Power factor		•		
S.	Coolant temperature	•	•		•
adings	Oil pressure	•	•	-	•
Ë	Battery voltage	•	•		•
gine	R.P.M.	•	•		•
Eng	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	•	•		•
ø	Battery voltage failure	•	•		•
ţi	Battery charge alternator failure	•	•		•
otec	Overspeed	•	•		•
Ţ	Underspeed	•	•		•
gine	Start failure	•	•		•
ᇤ	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 E	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 CEA7



#### Control panel and emergency stop button

- Power panel
- Battery charger (standard on automatic control panels)
- Heating resistor (standard on sets with automatic control panels)
- Battery charge alternator with ground connection
- Starter battery/ies installed (cables and bracket included)

# Electrical System Container

- Ground connection electrical installation with connection ready for ground spike (not supplied)
- 4 pole circuit breaker
- Battery isolator



