

# **HFW-200 T5**

INDUSTRIAL RANGE Powered by FPT\_IVECO



SERVICE		PRP	ESP
POWER	kVA	200	220
POWER	kW	160	176
RATED SPEED	r.p.m.	1.5	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

- 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.

   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.

 $^{\circ}\text{Class G2}^{\circ}$  performance according to the load impact test according to ISO 8528-5:2018

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Subsidiaries:
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#### STANDARD SOUNDPROOFING





WATER-COOLED



THREE PHASE



50 HZ



STAGE 3A



DIESEL

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 (COP)	kW	138,5
Rated Engine Output (PRP)	kW	174,9
Rated Engine Output (ESP)	kW	193,1
Manufacturer		FPT_IVECO
Model		N67.TE3PV
Engine Type		4-stroke diesel
Injection Type		Direct, common rail
Aspiration Type		Turbocharged and after-cooled
Number of cylinders and arrangement		6-L
Bore and Stroke	mm	104 x 132
Displacement	L	6,7
Cooling System		Coolant
Lube Oil Specifications		10W40 CJ4 / CK4 ACEA E9
Compression Ratio		16,5:1

Lube oil consumption with full load		0,3 % of fuel consumption
Total oil capacity including tubes, filters	L	17
Total coolant capacity	L	36,2
Governor	Type	Electrical
Air Filter	Type	Dry



- Diesel engine
- 4-stroke cycle
- Water-cooled
- 12V electrical system
- Water separator filter (no visible level)
- Dry air filter
- Radiator with pusher fan
- Radiator water level sensor
- HTW sender
- LOP sender

- Electronic governor
- Hot parts protection
- Moving parts protection



# Generator Specifications | STAMFORD

Manufacturer		STAMFORD
Model		UCI274H
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
- 4 poles
- AVR governor
- IP23 protection
- H class insulation

- Single drive-shaft
- Flexible disc coupling

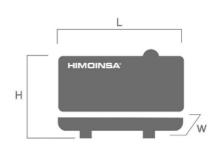






## **WEIGHT AND DIMENSIONS**

		Standard Version	High Capacity version	High Capacity version
Length (L)	mm	3300	3300	3300
Height (H)	mm	1965	1965	2179
Width (W)	mm	1200	1200	1200
Maximum shipping volume	m³	7,78	7,78	8,63
Weight with liquids in radiator and sump	Kg	2300	2400	2560
Fuel tank capacity	L	450	600	1100
Autonomy (70% PRP)	Hours	12	16	30
Autonomy (100% PRP)	Hours	10	14	25
		Plastic tank	Steel tank	Steel tank



## **SOUND PRESSURE**

	15/410=	
Sound pressure level	dB(A)@7m	68 ± 2,4

## **APPLICATION DATA**

#### **EXHAUST SYSTEM**

Maximum exhaust temperature	°C	600
Maximum allowed back pressure	kPa	20
Exhaust Flange Size (external diameter)	mm	120

#### **NECESSARY AMOUNT OF AIR**

Intake air flow	m³/h	682,35
Cooling Air Flow	m³/s	3,8
Alternator fan air flow	m³/s	0,514

#### **FUEL CONSUMPTION**

Fuel Consumption ESP	l/h	47,6
Fuel Consumption 100% PRP	l/h	43,9
Fuel Consumption 70 % PRP	l/h	37,27
Fuel Consumption 50 % PRP	l/h	29,4

## FUEL SYSTEM

Fuel Oil Specifications		Diesel
Fuel Tank	L	450
Other fuel tank capacities	L	600, 1.100

#### STARTING SYSTEM



#### Steel chassis

- Anti-vibration shock absorbers
- Fuel tank
- Fuel level gauge
- 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
- Watertight chassis (acts as a double barrier against liquid retention)
- Fuel tank drain plug
- Chassis drain plug
- Chassis ready for future mobile kit installation

## Soundproofed version

- Steel residential silencer -35db(A) attenuation.
- Oil sump extraction kit
- Versatility to assemble a high capacity chassis with a metallic fuel tank
- IP Protection according to ISO 8528-13:2016
- 3 way valve for external fuel supply (available in 1/2" and 3/8" fittings) (Opcional).
- Fuel transfer pump (Opcional).









# FEATURES OF THE CONTROL UNITS

		CEM 7	CEA 7	CEC 7	CEM7 + 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	•	•	•	•
	Voltage between phases		•	•	•
	Voltage between phases and neutral		•	•	•
	Current intensities		•	•	•
Mains Readings	Frequency		•	•	•
	Apparent power		•		
	Active power		•		
	Reactive power		•		
	Power factor		•		
	Coolant temperature	•	•		•
ø	Oil pressure	•	•		•
Readings	Fuel level (%)	•	•		•
Bea	Battery voltage	•	•		•
är	R.P.M.	•	•		•
Engin	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	•	•		•
	Fuel storage	•	•		•
	Fuel storage by sensor	•	•		•
	Stop failure	•	•		•
	Battery voltage failure	•	•		•
ö	Battery charge alternator failure	•	•		•
Engine Protections	Overspeed	•	•		•
	Underspeed	•	•		•
	Start failure	•	•		•
Ē	Emergency stop	•	•	•	•

Standard

Optional







		CEM 7	CEA 7	CEC 7	CEM7 + CEC7
	High frequency	• CLIT /	•	•	•
	Low frequency	•	•	•	•
	High voltage	•	•	•	•
	Low voltage	•	•	•	•
S	Short-circuit	•	•		•
of tie		•	•	•	•
ro te	Asymmetry between phases	•	•	•	•
r F	Incorrect phase sequence	•	•		•
nati	Inverse power	•	•		•
Alter	Overload	•	•	•	•
	Genset signal drop	•	•	•	•
	Total hour counter  Partial hour counter	•	•		•
				•	
	Kilowatt meter	•	•	•	•
ters	Starts valid counters	•	•	•	•
Coun	Starts failure counters	•	•	•	•
	Maintenance RS232	•	•	•	•
		0	0	0	0
	RS485	<u> </u>	0	0	0
	Modbus IP	<u> </u>	0	0	0
	Modbus	<u> </u>	0	0	0
	CCLAN	<u> </u>	0		0
	Software for PC	0	0	0	0
Su	Analogue modem	0	0	0	0
cati	GSM/GPRS modem	0	0	0	0
Ē	Remote screen	<b>(</b> )	0		0
Comr	Tele signal	① (8 + 4)	① (8 + 4)		(0) (8 + 4)
	J1939	(100)	(100)	(100)	(100)
	Alarm history				
	External start	•	•	•	•
	Start inhibition	•	•	•	•
	Mains failure start		•	•	•
	Start under normative EJP	•	•		•
	Pre-heating engine control	•	•		•
	Genset contactor activation	•	•	•	•
	Mains & Genset contactor activation		•	•	•
	Fuel transfer control	•	•		•
	Engine temperature control	•	•		•
	Manual override	•	•		•
	Programmable alarms	•	•		•
98	Genset start function in test mode	•	•	•	•
aatu	Programmable outputs	•	•		•
	Multilingual	•	•	•	•
_	GPS Positioning	0	0		0
ions	Synchronisation	0	0		0
Inct	Mains synchronization	0	0		0
E FC	Second Zero elimination	0	0		0
Specie	RAM7	0	0		0
ū	Remote screen	0	0		0



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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



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

- Battery Switch
- 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)

