

HFW-160 T5

INDUSTRIAL RANGE Powered by FPT_IVECO



SERVICE		PRP	ESP
POWER	kVA	160	175
POWER	kW	127	140
RATED SPEED	r.p.m.	1.	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
- FN 12100, FN 13857, FN 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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DOMINICAN REPUBLIC | ARGENTINA | ANGOLA | SOUTH AFRICA



STANDARD SOUNDPROOFING





WATER-COOLED



THREE PHASE



50 HZ



STAGE 2



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 Output (PRP)	kW	137,7
Rated Output (ESP)	kW	152
Manufacturer		FPT_IVECO
Model		NEF67TM3A
Engine Type		4-stroke diesel
Injection Type		Direct
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		Liquid (water + 50% glycol)
Lube Oil Specifications		ACEA E3 - E5
Compression Ratio		17,5 : 1

Fuel Consumption ESP	l/h	39
Fuel Consumption 100% PRP	l/h	36
Fuel Consumption 80 % PRP	l/h	29
Fuel Consumption 50 % PRP	l/h	18
Lube oil consumption with full load		0,5 % of fuel consumption
Total oil capacity including tubes, filters	L	17,2
Total coolant capacity	L	25,5
Governor	Type	Mechanical
Air Filter	Type	Dry
Inner diameter exhaust pipe	mm	70
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- Diesel engine
- 4-stroke cycle
- Water-cooled
- 12V electrical system
- Water separator filter (no visible level)
- Dry air filter
- Radiator with pusher fan
- Mechanical governor
- Hot parts protection
- Moving parts protection
- HTW sender (Opcional).
- LOP sender (Opcional).
- Radiator water level sensor (Opcional).



Generator Specifications | STAMFORD

Manufacturer		STAMFORD
Model		UCI274F
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

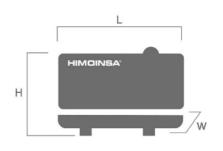






WEIGHT AND DIMENSIONS

		Standard Version	High Capacity version	High Capacity version
Length (L)	mm	3.300	3.300	3.300
Height (H)	mm	1.956	1.956	2.179
Width (W)	mm	1.200	1.200	1.200
Maximum shipping volume	m³	7,75	7,75	8,63
Weight with liquids in radiator and sump	Kg	2210	2300	2465
Fuel tank capacity	L	450	600	1100
Autonomy	Hours	16	21	38
		Plastic tank	Steel tank	Steel tank



SOUND PRESSURE

Sound pressure level	dB(A)@7m	68 ± 2.4

APPLICATION DATA

EXHAUST SYSTEM

Maximum exhaust temperature	°C	570
Exhaust Gas Flow	kg/s	0,205
Maximum allowed back pressure	kPa	5
Exhaust Flange Size (external diameter)	mm	120
Heat dissipated by exhaust pipe	KCal/Kwh	688,9

NECESSARY AMOUNT OF AIR

Intake air flow	m³/h	586
Cooling Air Flow	m³/s	3,8
Alternator fan air flow	m³/s	0,514

STARTING SYSTEM

Starting power	kW	3
Starting power	CV	4,08
Recommended battery	Ah	100
Auxiliary Voltage	Vdc	12

FUEL SYSTEM

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



Soundproofed version

- 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

- Steel residential silencer -35db(A)
- 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

Voltage between phases			CEM 7	CEA 7	CEC 7	CEM7 + CEC7
Current intensities		Voltage between phases	•	•	•	•
Prequency		Voltage between neutral and phase	•	•	•	•
Apparent power (Kva) Apparent power (Kva) Reactive power (kVa/r) Power factor Voltage between phases Prequency Frequency Active power Reactive power Reactive power Power factor Coolant temperature Oil pressure Power factor Coolant temperature Puel level (%) Battery voltage R.P.M. Battery charge alternator voltage High water temperature Voltage between phases Voltage between phases Notage between phase Notage	ø	Current intensities	•	•	•	•
Apparent power (Kva) Apparent power (Kva) Reactive power (kVa/r) Power factor Voltage between phases Prequency Frequency Active power Reactive power Reactive power Power factor Coolant temperature Oil pressure Power factor Coolant temperature Puel level (%) Battery voltage R.P.M. Battery charge alternator voltage High water temperature Voltage between phases Voltage between phases Notage between phase Notage	ding	Frequency	•	•	•	•
Reactive power (kVAr)		Apparent power (Kva)	•	•	•	•
Power factor	ţ	Active power (Kw)	•	•	•	•
Voltage between phases	ners	Reactive power (kVAr)	•	•	•	•
Voltage between phases and neutral Current intensities Frequency Apparent power Active power Reactive power Power factor Coolant temperature Oil pressure Ful level (%) Battery voltage R.P.M. Battery charge alternator voltage High water temperature by sensor Low water temperature by sensor Low water level Unexpected shutdown Ful storage failure Battery voltage failure Battery voltage alternator failure Overspeed Underspeed Indexpected Indexpected shutdow Overspeed Underspeed Indexpected Inde	Ö	Power factor	•	•	•	•
Current intensities		Voltage between phases		•	•	•
Frequency Apparent power Active power Reactive power Power factor Coolant temperature Oil pressure Fuel level (%) Battery voltage R.P.M. Battery charge alternator voltage High water temperature Low water temperature by sensor Low oil pressure by sensor Low oil pressure by sensor Low water level (%) Fuel level (%) Battery charge alternator woltage High water temperature High water temperature High water temperature by sensor Low ater temperature by sensor Low filter by sensor Low filter by sensor Low filter by sensor Battery voltage failure Fuel storage Fuel storage Fuel storage Fuel storage by sensor Stop failure Battery voltage failure Overspeed Underspeed Start failure Start failure		Voltage between phases and neutral		•	•	•
Apparent power Active power Reactive power Power factor Coolant temperature Fuel level (%) Battery voltage R.P.M. Battery charge alternator voltage High water temperature High water temperature by sensor Low water temperature by sensor Low oil pressure Low oil pressure Unexpected shutdown Fuel storage dailure Fuel storage Fuel		Current intensities		•	•	•
Reactive power Power factor	m	Frequency		•	•	•
Reactive power Power factor	ging	Apparent power		•		
Power factor	e e	Active power		•		
Coolant temperature	ins.	Reactive power		•		
Oil pressure	Š	Power factor		•		
Fuel level (%)		Coolant temperature	•	•		•
Battery voltage R.P.M. Battery charge alternator voltage High water temperature High water temperature by sensor Low water temperature by sensor Low oil pressure Low oil pressure Low oil pressure Low water level Unexpected shutdown Fuel storage Fuel storage Fuel storage Battery voltage failure Battery voltage failure Battery charge alternator failure Overspeed Underspeed Start failure Start failure	S.	Oil pressure	•	•		•
R.P.M.	ğ	Fuel level (%)	•	•		•
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 Battery charge alternator failure Overspeed Underspeed Start failure Start failure	ã	Battery 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 Fuel storage by sensor Stop failure Battery voltage failure Battery charge alternator failure Overspeed Underspeed Start failure	gine	R.P.M.	•	•		•
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 Battery charge alternator failure Overspeed Underspeed Start failure	<u> </u>	Battery charge alternator voltage	•	•		•
Low water temperature by sensor Low oil pressure Low oil pressure Low oil pressure by sensor Low water level Unexpected shutdown Fuel storage Fuel storage by sensor Stop failure Battery voltage failure Battery charge alternator failure Overspeed Underspeed Start failure		High water temperature	•	•		•
Low oil pressure Low oil pressure by sensor Low water level Unexpected shutdown Fuel storage Fuel storage Fuel storage by sensor Stop failure Battery voltage failure Battery charge alternator failure Overspeed Underspeed Start failure Start failure • • • • • • • • • • • • • • • • • •		High water temperature by sensor	•	•		•
Low oil pressure by sensor Low water level Unexpected shutdown Fuel storage Fuel storage by sensor Stop failure Battery voltage failure Battery charge alternator failure Overspeed Underspeed Start failure Start failure		Low water temperature by sensor	•	•		•
Low water level Unexpected shutdown Fuel storage Fuel storage Fuel storage by sensor Stop failure Battery voltage failure Battery charge alternator failure Overspeed Underspeed Start failure Start failure		Low oil pressure	•	•		•
Unexpected shutdown Fuel storage Fuel storage by sensor Stop failure Battery voltage failure Battery charge alternator failure Overspeed Underspeed Start failure Start failure		Low oil pressure by sensor	•	•		•
Fuel storage Fuel storage by sensor Stop failure Battery voltage failure Battery charge alternator failure Overspeed Underspeed Start failure Start failure		Low water level	•	•		•
Fuel storage by sensor Stop failure Battery voltage failure Battery charge alternator failure Overspeed Underspeed Start failure Start failure		Unexpected shutdown	•	•		•
Stop failure Battery voltage failure Battery charge alternator failure Overspeed Underspeed Start failure Start failure Stop failure Overspeed Start failure		Fuel storage	•	•		•
Battery voltage failure Battery charge alternator failure Overspeed Underspeed Start failure Battery voltage failure Overspeed Start failure Start failure		Fuel storage by sensor	•	•		•
Battery charge alternator failure Overspeed Underspeed Start failure Battery charge alternator failure Start failure		Stop failure	•	•		•
Start failure • • •	ø	Battery voltage failure	•	•		•
Start failure • • •	ţi	Battery charge alternator failure	•	•		•
Start failure • • •	otec		•	•		•
Start failure Emergency stop Start failure		Underspeed	•	•		•
Emergency stop	gine	Start failure	•	•		•
	<u></u>	Emergency stop	•	•	•	•

Standard

Optional







		CEM 7	CEA 7	CEC 7	CEM7 + CEC7
	High frequency	•	•	•	•
Protections	Low frequency	•	•	•	•
	High voltage	•	•	•	•
	Low voltage	•	•	•	•
	Short-circuit	•	•		•
	Asymmetry between phases	•	•	•	•
	Incorrect phase sequence	•	•	•	•
ě	Inverse power	•	•		•
Alternat	Overload	•	•		•
	Genset signal drop	•	•	•	•
	Total hour counter	•	•	•	•
	Partial hour counter	•	•	•	•
	Kilowatt meter	•	•	•	•
m	Starts valid counters	•	•	•	•
ters	Starts failure counters	•	•	•	•
, n		•	•	•	•
<u>_</u>	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
Si	Analogue modem	0	0	0	0
gatic	GSM/GPRS modem	0	0	0	0
ğ	Remote screen	0	0		0
Ē	Tele signal	① (8 + 4)	① (8 + 4)		① (8 + 4)
<u> </u>	J1939	0	0		0
	Alarm history	(10) / (opc. +100)	(10) / (opc. +100)	• (10) / (opc. +100)	(10) / (opc. +100)
	External start	•	•	(10)7 (opc. 1100)	(10)7 (650.1100)
	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	•	•		•
	Genset start function in test mode	•	•	•	•
r S	Programmable outputs	•	•		•
Feat	Multilingual	•	•	•	•
	GPS Positioning		<u> </u>		
	Synchronisation				
ø	Mains synchronization				
Special Functions					
	Second Zero elimination RAM7				0
		0	0		0
	Remote screen	0	0		0
	Programming timer	0	0		0

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).

