HIMOINSA
A YANMAR COMPANY

# HSF-65 T5

**HS | STATIONARY RANGE**
**Powered by FPT_IVECO**




| SERVICE | | PRP | ESP |
|---|---|---|---|
| POWER | kVA | 60 | 63 |
| POWER | kW | 48 | 50 |
| RATED SPEED | r.p.m. | 1.500 | |
| STANDARD VOLTAGE | V | 400/230 | |
| AVAILABLE VOLTAGES | V | 230/115 · 380/220 · 415/240 | |
| RATED AT POWER FACTOR | Cos Phi | 0,8 | |

## HS | STATIONARY 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)
- 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, 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.

G2 class load acceptance in accordance with ISO 8528-5:2018

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

## STANDARD SOUNDPROOFING

- HS40
- 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 Output (COP) | kW | 43,2 |
| Rated Output (PRP) | kW | 54,5 |
| Rated Output (ESP) | kW | 60 |
| Manufacturer | | FPT_IVECO |
| Model | | NEF45SM1F |
| Engine Type | | 4-stroke diesel |
| Injection Type | | Direct |
| Aspiration Type | | Turbocharged |
| Number of cylinders and arrangement | | 4-L |
| Bore and Stroke | mm | 104 x 132 |
| Displacement | L | 4,5 |
| Cooling System | | Liquid (water + 50% glycol) |
| Lube Oil Specifications | | ACEA E3 - E5 |
| Compression Ratio | | 17,5:1 |

| | | |
|---|---|---|
| Fuel Consumption ESP | l/h | 18 |
| Fuel Consumption 100% PRP | l/h | 16,7 |
| Fuel Consumption 80 % PRP | l/h | 13 |
| Fuel Consumption 50 % PRP | l/h | 9,5 |
| Lube oil consumption with full load | | 0,1 % of fuel consumption |
| Total oil capacity including tubes, filters | L | 12,8 |
| Total coolant capacity | L | 18,5 |
| Governor | Type | Mechanical |
| Air Filter | Type | Dry |

- Diesel engine
- 4-stroke cycle
- Water-cooled
- 12V electrical system
- Dry air filter
- Radiator with pusher fan
- Mechanical governor
- Hot parts protection
- Moving parts protection

## Generator Specifications | STAMFORD

| | | |
|---|---|---|
| Manufacturer | | STAMFORD |
| Model | | UCI224E |
| 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) |

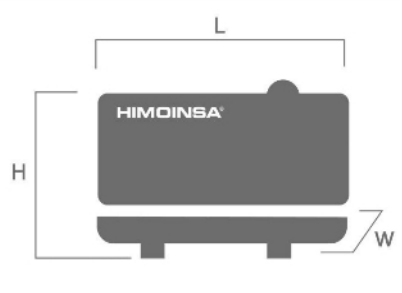
- Self-excited and self-regulated
- IP23 protection
- H class insulation



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## WEIGHT AND DIMENSIONS

| | | Standard Version |
|---|---|---|
| Length (L) | mm | 2.600 |
| Height (H) | mm | 1.500 |
| Width (W) | mm | 910 |
| Maximum shipping volume | m³ | 3,55 |
| Weight with liquids in radiator and sump | Kg | 1195 |
| Fuel tank capacity | L | 195 |
| Autonomy | Hours | 15 |
| | | Steel tank |




## APPLICATION DATA

### EXHAUST SYSTEM

| | | |
|---|---|---|
| Maximum exhaust temperature | ºC | 492 |
| Maximum allowed back pressure | kPa | 5 |
| Heat dissipated by exhaust pipe | KCal/Kwh | 493 |

### NECESSARY AMOUNT OF AIR

| | | |
|---|---|---|
| Intake air flow | m³/h | 289 |
| Cooling Air Flow | m³/s | 2,2 |
| Alternator fan air flow | m³/s | 0,216 |

### 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 | 195 |

## Soundproofed version

- Steel chassis
- Lower power cable outlet with aluminum cover
- Side auxiliary cable outlet with aluminum cover
- Modular tank and retention tray system. Allows easy removal and / or maintenance of the equipment
- Wide access to the engine compartment because of a removable door
- Fuel tank in retention tray
- Soundproofing with foam and polyurethane film
- 4 side lifting points
- Anti-vibration shock absorbers
- Fuel tank
- Fuel level gauge
- External emergency stop switch
- Bodywork made from high quality steel plate
- High mechanical strength
- Epoxy polyester powder coating
- Full access for maintenance (water, oil and filters, no need to remove the canopy)
- Versatility to assemble a high capacity chassis with a metallic fuel tank
- IP Protection according to ISO 8528-13:2016
- Manual oil extraction pump (Opcional).
- Noise reduction kit (Opcional).
- Fuel transfer pump (Opcional).



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# FEATURES OF THE CONTROL UNITS

| | | M7X | CEM 7 | CEA 7 | CEC 7 | M7X+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 | • | • | • | • | • |
| 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 | • | • | • | | • |
| | Fuel level (%) | • | • | • | | • |
| | 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 | • | • | • | | • |
| | Fuel storage | • | • | • | | • |
| | Fuel storage by sensor | • | • | • | | • |
| | Stop failure | • | • | • | | • |
| | Battery voltage failure | • | • | • | | • |
| | Battery charge alternator failure | • | • | • | | • |
| | Overspeed | • | • | • | | • |
| | Underspeed | • | • | • | | • |
| | Start failure | • | • | • | | • |
| | Emergency stop | • | • | • | • | • |

• Standard  ⓞ Optional



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| | | M7X | CEM 7 | CEA 7 | CEC 7 | M7X+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) | | |
| | J1939 | ⓞ M7XJ | ⓞ | ⓞ | | ⓞ M7XJ |
| Features | Alarm history | ● (100) | ● (10) / (opc. +100) | ● (10) / (opc. +100) | ● (10) / (opc. +100) | ● (100) |
| | 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 | ● | ● | ● | | ● |
| | 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



## AS5

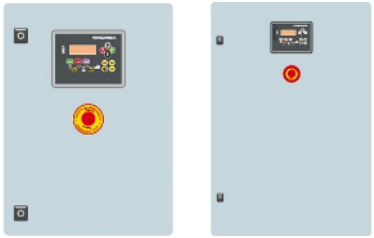
Automatic panel WITHOUT transfer switch and WITHOUT mains control with CEM7 unit. (*) AS5 as optional with CEA7 unit. Automatic panel without transfer switch and WITH mains control.



## AS7

Automatic control panel WITHOUT Transfer Switch and WITHOUT mains control with M7X unit.

Digital control unit M7X



## 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



## AS7 + CC2

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

Digital control unit M7X+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)
- 4-pole thermal magnetic circuit breaker
- Adjustable earth leakage 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).
- Leakage detector (Opcional).
- Optional Battery (Optima) (Opcional).



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