



HIMOINSA

MODEL
HTW-2030 T5
 HEAVY RANGE
 Container
 Powered by MITSUBISHI



- 40FT-HC
- WATER-COOLED
- THREE PHASE
- 50 HZ
- DIESEL

Generating Rates



| SERVICE | | PRP | STANDBY |
|-----------------------|---------|-------------------|---------|
| Power | kVA | 2033 | 2268 |
| Power | kW | 1627 | 1814 |
| Rated Speed | r.p.m. | 1.500 | |
| Standard Voltage | V | 400/230 | |
| Available Voltages | V | 380/220 - 415/240 | |
| Rated at power factor | Cos Phi | 0,8 | |

01

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 2002/88/EC & 2004/26/EC)
- EN 12100, EN 13857, EN 60204

Ambient conditions of reference according to ISO 8528-1:2005 normative: 1000 mbar, 25°C, 30% relative humidity.

Prime Power (PRP):

According to ISO 8528-1:2005, 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 8528-1:2005, 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

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

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Engine Specifications 1.500 r.p.m.

| ENGINE | | PRP | STANDBY |
|---|-------|-------------------------------|---------|
| Rated Output | kW | 1684 | 1895 |
| Manufacturer | | MITSUBISHI | |
| Model | | S16R PTAA2 | |
| Engine Type | | 4-stroke diesel | |
| Injection Type | | Direct | |
| Aspiration Type | | Turbocharged and after-cooled | |
| Number of cylinders and arrangement | | 16-V | |
| Bore and Stroke | mm | 170 x 180 | |
| Displacement | L | 65,37 | |
| Cooling System | | Water | |
| Lube Oil Specifications | | API CD or CF SAE 30 or SAE 40 | |
| Compression Ratio | | 13,5:1 | |
| Fuel Consumption Standby | l/h | 454,01 | |
| Fuel Consumption 100% PRP | l/h | 402,12 | |
| Fuel Consumption 75 % PRP | l/h | 307,58 | |
| Fuel Consumption 50 % PRP | l/h | 215,04 | |
| Fuel Consumption 25 % PRP | l/h | 124,5 | |
| Lube oil consumption with full load | g/kWh | 0,8 | |
| Total oil capacity including tubes, filters | L | 230 | |
| Total coolant capacity | L | 400 | |
| Governor | Type | Electrical | |
| Air Filter | Type | Dry | |
| Inner diameter exhaust pipe | mm | 340 | |

Generator

| Generator | | |
|--------------------------------|-------|--------------------------------|
| Manufacturer | | MECC ALTE |
| Poles | No. | 4 |
| Connection type (standard) | | Star - Parallel |
| Mounting type | | S-00 21" |
| 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) |



Application Data

| Exhaust System | | |
|---------------------------------|---------------------|--------|
| Maximum exhaust temperature | °C | 560 |
| Exhaust Gas Flow | m ³ /min | 420 |
| Maximum allowed back pressure | mm H ₂ O | 600 |
| Heat dissipated by exhaust pipe | KCal/Kwh | 641,28 |

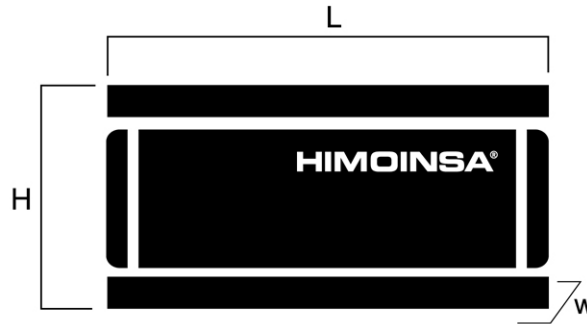
| Necessary Amount Of Air | | |
|-------------------------|-------------------|-------|
| Intake air flow | m ³ /h | 9540 |
| Cooling Air Flow | m ³ /s | 41,66 |
| Alternator fan air flow | m ³ /s | 2,25 |

| Starting System | | |
|-------------------------|-----|----------|
| Starting power | kW | 7,5 x 2 |
| Starting power | CV | 10,2 x 2 |
| Recommended battery | Ah | 400 |
| Auxiliary Voltage | Vdc | 24 |
| Starter current peak | A | 1250 |
| Nominal starter current | A | 400 |

| Fuel System | | |
|----------------------------|-------|--------|
| Fuel Oil Specifications | | Diesel |
| Maximum power suction pump | mm Hg | 75 |
| Maximum return feed pump | mm Hg | 150 |
| Fuel Tank | L | 2.000 |



Dimensions



| 40 hc | Weight and Dimensions | | |
|-------|--|----------------|----------|
| (L) | Length | mm | 12.192 |
| (H) | Height | mm | 2.896 |
| (w) | Width | mm | 2.438 |
| | Maximum shipping volume | m ³ | 86,08 |
| (*) | Weight with liquids in radiator and sump | kg | 22.960 |
| (*) | Dry weight | kg | 22.358 |
| | Fuel tank capacity | L | 2.000,0 |
| | Autonomy | Hours | 7 |
| | Sound pressure level | dB(A)@7m | 75 ± 2,4 |

(*) (with standard accessories)

STANDARD VERSION

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.
 Industrial design under patent.

Local Distributor



CONTROL PANEL MODEL

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



Controller features (I)

- : Standard
- x : Not included
- : Optional

| Generator Readings | CEM 7 | CEA 7 | CEC 7 | CEM7 + CEC7 |
|------------------------------------|-------|-------|-------|-------------|
| Voltage between phases | • | • | • | • |
| Voltage between neutral and phase | • | • | • | • |
| Current intensities | • | • | • | • |
| Frequency | • | • | • | • |
| Apparent power (Kva) | • | • | • | • |
| Active power (Kw) | • | • | • | • |
| Reactive power (kVAr) | • | • | • | • |
| Power factor | • | • | • | • |
| Mains Readings | CEM 7 | CEA 7 | CEC 7 | CEM7 + CEC7 |
| Voltage between phases | x | • | • | • |
| Voltage between phases and neutral | x | • | • | • |
| Current intensities | x | • | • | • |
| Frequency | x | • | • | • |
| Apparent power | x | • | x | x |
| Active power | x | • | x | x |
| Reactive power | x | • | x | x |
| Power factor | x | • | x | x |
| Engine Readings | CEM 7 | CEA 7 | CEC 7 | CEM7 + CEC7 |
| Coolant temperature | • | • | x | • |
| Oil pressure | • | • | x | • |
| Fuel level (%) | • | • | x | • |
| Battery voltage | • | • | x | • |
| R.P.M. | • | • | x | • |
| Battery charge alternator voltage | • | • | x | • |
| Engine Protections | CEM 7 | CEA 7 | CEC 7 | CEM7 + CEC7 |
| High water temperature | • | • | x | • |
| High water temperature by sensor | • | • | x | • |
| Low water temperature by sensor | • | • | x | • |
| Low oil pressure | • | • | x | • |
| Low oil pressure by sensor | • | • | x | • |
| Low water level | • | • | x | • |
| Unexpected shutdown | • | • | x | • |



Controller features (II)

- : Standard
- x : Not included
- : Optional

| Engine Protections | CEM 7 | CEA 7 | CEC 7 | CEM7 + CEC7 |
|-----------------------------------|-------|-------|-------|-------------|
| Fuel storage | • | • | x | • |
| Fuel storage by sensor | • | • | x | • |
| Stop failure | • | • | x | • |
| Battery voltage failure | • | • | x | • |
| Battery charge alternator failure | • | • | x | • |
| Overspeed | • | • | x | • |
| Underspeed | • | • | x | • |
| Start failure | • | • | x | • |
| Emergency stop | • | • | • | • |
| Alternator Protections | CEM 7 | CEA 7 | CEC 7 | CEM7 + CEC7 |
| High frequency | • | • | • | • |
| Low frequency | • | • | • | • |
| High voltage | • | • | • | • |
| Low voltage | • | • | • | • |
| Short-circuit | • | • | x | • |
| Asymmetry between phases | • | • | • | • |
| Incorrect phase sequence | • | • | • | • |
| Inverse power | • | • | x | • |
| Overload | • | • | x | • |
| Genset signal drop | • | • | • | • |
| Counters | CEM 7 | CEA 7 | CEC 7 | CEM7 + CEC7 |
| Total hour counter | • | • | • | • |
| Partial hour counter | • | • | • | • |
| Kilowatt meter | • | • | • | • |
| Starts valid counters | • | • | • | • |
| Starts failure counters | • | • | • | • |
| Maintenance | • | • | • | • |
| Communications | CEM 7 | CEA 7 | CEC 7 | CEM7 + CEC7 |
| RS232 | • | • | • | • |
| RS485 | • | • | • | • |
| Modbus IP | • | • | • | • |
| Modbus | • | • | • | • |



Controller features (III)

- : Standard
- x : Not included
- : Optional

| Communications | CEM 7 | CEA 7 | CEC 7 | CEM7 + CEC7 |
|-------------------------------------|----------------------|----------------------|----------------------|----------------------|
| CCLAN | • | • | x | • |
| Software for PC | • | • | • | • |
| Analogue modem | • | • | • | • |
| GSM/GPRS modem | • | • | • | • |
| Remote screen | • | • | x | • |
| Tele signal | • (8 + 4) | • (8 + 4) | x | • (8 + 4) |
| J1939 | • | • | x | • |
| Features | CEM 7 | CEA 7 | CEC 7 | CEM7 + CEC7 |
| Alarm history | • (10) / (opc. +100) | • (10) / (opc. +100) | • (10) / (opc. +100) | • (10) / (opc. +100) |
| External start | • | • | • | • |
| Start inhibition | • | • | • | • |
| Mains failure start | x | • | • | • |
| Start under normative EJP | • | • | x | • |
| Pre-heating engine control | • | • | x | • |
| Genset contactor activation | • | • | • | • |
| Mains & Genset contactor activation | x | • | • | • |
| Fuel transfer control | • | • | x | • |
| Engine temperature control | • | • | x | • |
| Manual override | • | • | x | • |
| Programmable alarms | • | • | x | • |
| Genset start function in test mode | • | • | • | • |
| Programmable outputs | • | • | x | • |
| Multilingual | • | • | • | • |
| Special Functions | CEM 7 | CEA 7 | CEC 7 | CEM7 + CEC7 |
| GPS Positioning | • | • | x | • |
| Synchronisation | • | • | x | • |
| Mains synchronization | • | • | x | • |
| Second Zero elimination | • | • | x | • |
| RAM7 | • | • | x | • |
| Remote screen | • | • | x | • |
| Programming timer | • | • | x | • |



Generator set features

Engine

- Standard air filter
- Standard fuel filter
- Standard oil filter
- Oil temperature sensor
- Coolant level sensor
- Exhaust gas compensator
- Diesel engine
- 4-stroke cycle
- Water-cooled
- 24V electrical system
- Radiator with blower fan
- Electronic governor
- HTW sender
- LOP sender
- Hot parts protection
- Moving parts protection

Alternator

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

Container version

- 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
- Fuel tank integrated in the chassis
- Anti-vibration shock absorbers
- Steel chassis
- Manual oil extraction pump



Generator set features

Container version

- Robust construction designed for continuous or emergency applications
- Stainless steel fittings
- Emergency stops
- 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

Electrical System Container

- 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)
- Ground connection electrical installation with connection ready for ground spike (not supplied)
- 4 pole circuit breaker
- Power panel with safety protection in output terminals box (open thermal magnetic protection and alarm)
- Maintenance-free and anti-explosion battery
- Battery isolator



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HEAVY RANGE
Container
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PDF Summary

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