



**HIMOINSA®**  
THE ENERGY

MODEL  
**HDW-400 T5**  
INDUSTRIAL RANGE  
Soundproof  
Powered by DOOSAN



- H1
- WATER-COOLED
- THREE PHASE
- 50 HZ
- NON COMPLYING 97/68/EC
- DIESEL

## Generating Rates



SERVICE		PRP	STANDBY
Power	kVA	400	450
Power	kW	320	360
Rated Speed	r.p.m.	1.500	
Standard Voltage	V	400/230	
Available Voltages	V	230 - 230/132	
Rated at power factor	Cos Phi	0,8	

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**HIMOINSA Company with quality certification ISO 9001**

**HIMOINSA gensets are compliant with EC mark which includes the following directives:**

- 2006/42/CE Machinery safety.
- 2006/95/EC Low voltage.
- 2004/108/CE Electromagnetic compatibility.
- 2000/14/EC Sound Power level. Noise emissions outdoor equipment. (amended by 2005/88/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

**HIMOINSA HEADQUARTERS:**

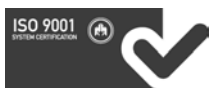
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## Engine Specifications 1.500 r.p.m.

ENGINE		PRP	STANDBY
Rated Output	kW	347	398
Manufacturer		DOOSAN	
Model		P158LE	
Engine Type		Diesel 4 strokes-cycle	
Injection Type		Direct	
Aspiration Type		Turbocharged and aftercooled	
Cylinders Arrangement		8 - V	
Bore and Stroke	mm	128 x 142	
Displacement	L	14,618	
Cooling System		coolant	
Lube Oil Specifications		API CH4 SAE 15W40 or 10W40	
Compression Ratio		15:1	
Fuel Consumption StandBy	l/h	102,9	
Fuel Consumption 100% PRP	l/h	89,3	
Fuel Consumption 75 % PRP	l/h	65,1	
Fuel Consumption 50 % PRP	l/h	43,9	
Fuel Consumption 25 % PRP	l/h	23,7	
Lube Oil Consumption Full Load		0,5 % of fuel consumption	
Total Oil Capacity	L	21	
Total Coolant Capacity	L	80	
Heat rejection to coolant	kW	157,7	
Governor	Type	Electrical	
Air Filter	Type	Dry	
Inner diameter exhaust pipe	mm	82,3	

## Generator

Generator		
Poles	Num	4
Winding Conections (standard)		Star-serie
Frame Mounting		S-1 14"
Insulation	Class	H class
Enclosure (according IEC-34-5)		IP23
Exciter System		self-excited, brushless
Voltage Regulator		A.V.R. (Electronic)
Bearing		Single bearing
Coupling		Flexible disc
Coating type		Standard (Vacuum impregnation)



## Application Data

### Exhaust System

Maximum allowed back pressure	kPa	5,9
Exhaust Flange Size (external diameter)	mm	160
Heat evacuated through exhaust pipe	kW	362,6

### Air Inlet System

Intake Air Flow	m <sup>3</sup> /h	1746
Cooling Air Flow	m <sup>3</sup> /s	8,7
Alternator fan air flow	m <sup>3</sup> /s	0,8

### Starting System

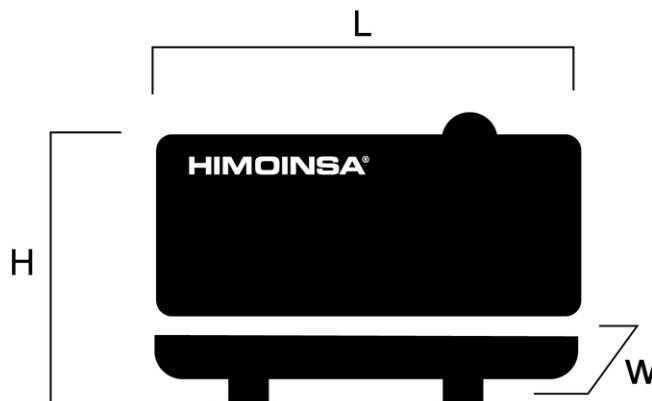
Starting Motor	kW	7
Starting Motor	CV	9,52
Recommended Battery Capacity	Ah	200
Auxiliary Voltage	Vcc	24

### Fuel System

Fuel Oil Specifications		Diesel
Maximum power suction pump	mm Hg	75
Maximum return feed pump	mm Hg	450
Fuel Tank	L	740
Other Fuel tank capacity	L	2.090



## Dimensions



<b>H1</b>	<b>Weight and Dimensions</b>		
(L)	Length	mm	4.500
(H)	Height	mm	2.340
(W)	Width	mm	1.800
	Maximum shipping volume (standard supplier)	m <sup>3</sup>	18,95
(*)	Wet weight	Kg	4.554
	Fuel tank capacity	L	740
	Autonomy	Hours	11
	Sound pressure level	dB(A)@7m	69 ± 2,3

(\*) (with standard accessories)

STANDARD VERSION (Steel tank)

Himoinsa has the right to modify any characteristic without prior notice.  
Weights and dimensions based on standard products. Illustrations may include optional equipment.  
Technical data described here correspond with the available information at the moment of printing.  
Industrial design under patent.

Local Distributor



## Dimensions of other available versions

<i>Weight and Dimensions</i>		
(L) Length	mm	4.500
(H) Height	mm	2.740
(W) Width	mm	1.800
Maximum shipping volume (standard supplier)	m <sup>3</sup>	22,19
(*) Wet weight	Kg	5.165
Fuel tank capacity	L	2.090,0
Autonomy	Hours	32
Sound pressure level	dB(A)@7m	69 ± 2,3

(\*) (with standard accessories)

HIGH CAPACITY VERSION (Steel tank)



## Generating Sets Standard and Optional Features

### Engine

- Diesel engine
- 4 strokes-cycle
- Water-cooled
- 24V Electrical system
- Radiator with blowing fan
- water separator decanting filter (no visible level)
- Electronic governor
- Sender WT
- Senders OP
- Dry air cleaner
- Hot parts protection
- Moving parts protection

### Alternator

- Self-excited and Self-regulated
- IP23 protection degree
- Insulation H class

### Electrical system

- Electric control panel with measurements devices and control display (according to necessity and configuration)
  - 4 poles circuit breaker
  - Battery charger (standard on automatic control panels)
  - Pre-heating resistance (standard on automatic control panels) / water jacket heater
  - Battery charger alternator with ground connection
  - Starting battery/ies installed and connected to the engine (supports included)
  - Ground connection electrical installation with connection ready for ground pike (not supplied)
- Optional :      · Battery isolator

### Soundproofed version

- Steel made chassis
- Oil sump extraction kit
- Versatility to assemble high capacity metallic fuel tank chassis
- Antivibration shock absorber



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## Generating Sets Standard and Optional Features

### Soundproofed version

- Chassis with integrated fuel tank
  - Fuel level sender
  - Emergency stop button
  - Sound attenuated canopy made of high quality steel metal.
  - High mechanical strenght
  - Low noise level
  - Attenuation through high density rock wool material
  - Epoxy Powder coating
  - Easy acces for service mainteance
  - Reinforced lifting eye to lift by crane
  - Bunded chassis (works as liquids retention tray)
  - Drain fuel tank cap
  - Drain chassis cap
  - Chasis ready for future mobile kit installation
  - Steel made residential silencer -35db(A) attenuation.
- Optional :
- 3 way valve fuel filling (available in 1/2" and 3/8" fittings)
  - Fuel transfer pump