



# HIMOINSA

MODEL  
**HSW-450 T5**  
 INDUSTRIAL RANGE  
 Standard soundproofing  
 Powered by SCANIA



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

## Generating Rates



SERVICE		PRP	STANDBY
Power	kVA	461	501
Power	kW	369	401
Rated Speed	r.p.m.	1.500	
Standard Voltage	V	240/415	
Available Voltages	V	220/80 - 230/400	
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.
- 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)
- 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

### HIMOINSA HEADQUARTERS:

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## Engine Specifications 1.500 r.p.m.

ENGINE		PRP	STANDBY
Rated Output	kW	393	428
Manufacturer		SCANIA	
Model		DC13-72A(02-13)	
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	130 x 160	
Displacement	L	12,7	
Cooling System		Coolant	
Lube Oil Specifications		ACEA E3,E4,E5 or E7	
Compression Ratio		16,3:1	
Fuel Consumption Standby	l/h	97,79	
Fuel Consumption 100% PRP	l/h	87,16	
Fuel Consumption 75 % PRP	l/h	64,32	
Fuel Consumption 50 % PRP	l/h	43,35	
Lube oil consumption with full load	g/kWh	0,3	
Total oil capacity	L	38	
Governor	Type	Electrical	
Air Filter	Type	Dry	
Inner diameter exhaust pipe	mm	90	

## Generator

Generator		
Manufacturer		STAMFORD
Poles	No.	4
Connection type (standard)		Star-series
Mounting type		S-1 14"
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	536
Exhaust Gas Flow	kg/s	0,567
Exhaust Flange Size (external diameter)	mm	160
Heat dissipated by exhaust pipe	KCal/Kwh	607,14

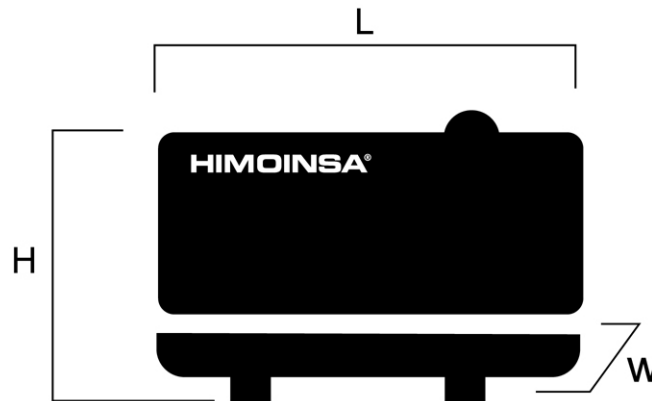
Necessary Amount Of Air		
Intake air flow	m <sup>3</sup> /h	1600
Cooling Air Flow	m <sup>3</sup> /s	9,58
Alternator fan air flow	m <sup>3</sup> /s	1,035

Starting System		
Starting power	kW	5,5
Starting power	CV	7,48
Auxiliary Voltage	Vdc	24

Fuel System		
Fuel Oil Specifications		Diesel
Fuel Tank	L	740 2090



## Dimensions



<b>H1</b> Weight and Dimensions			
(L) Length	mm	4.500	4.500
(H) Height	mm	2.340	2.740
(W) Width	mm	1.800	1.800
Maximum shipping volume	m <sup>3</sup>	18,95	22.19
(*) Weight with liquids in radiator and sump	kg	4.627	5,238
Fuel tank capacity	L	740	2,090
Autonomy	Hours	12	40
Sound pressure level	dB(A)@7m	69 ± 2,3	69 ± 2,3
(*) (with standard accessories)		STANDARD VERSION (Steel tank)	

Australia 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



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## Automatic Controller- CEM7

The CEM7 is an Auto-start digital controller which is equipped on Himoinsa generator sets, which is able to control the operation, monitoring and protection of a generator-set.



### Controller Display:

- Voltage between each Phase & Neutral
- Voltage between Phases
- Current (amps) on each Phase
- Frequency
- Active, Apparent, & Reactive Power
- Power Factor
- Instant Power (kWh) and Accumulative power
- Fuel level
- Oil pressure, coolant temperature
- Battery voltage, battery charging alternator voltage
- Engine Speed
- Hours running

### Engine Alarms:

- High coolant temperature
- Low oil pressure
- Emergency stop
- Battery charging alternator
- Low coolant level
- Over Speed
- Under speed
- Low fuel level by sensor
- Battery low voltage

### Generator Alarms:

- Over-load
- Unbalanced voltage
- Over-voltage
- Under-voltage
- Over-frequency
- Under-frequency
- Short-circuit
- Inverse Power
- Asymmetry among phases

## Optional Sockets Boxes

Position: Mounted in rear panel, above alternator.

### Socket Boxes CBR40



Socket type  
 3 x 15A 2P + T  
 1 x 32A 3P + N + T

### Socket Boxes CBR41



Socket type  
 3 x 15A 2P + T  
 2 x 32A 3P + N + T



## Generator set features

### Engine

- Diesel engine
- 4-stroke cycle
- Water-cooled
- 24V electrical system
- Radiator with blower fan
- Water separator filter (visible level)
- Electronic governor
- HTW sender
- LOP sender
- Radiator water level sensor
- Dry air filter
- Hot parts protection
- Moving parts protection

### Alternator

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

### Electrical system

- Electric control and power panel with measurements devices and control unit (according to necessity and configuration)
- 4-pole thermal magnetic circuit breaker
- Battery isolator
- 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)

### Soundproofed version

- Steel chassis
- Anti-vibration shock absorbers
- Chassis with integrated fuel tank



## Generator set features

### Soundproofed version

- Fuel level gauge
  - Emergency stop button
  - Bodywork made from high quality steel plate
  - High mechanical strength
  - Low level of noise emissions
  - 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 bonnet)
  - 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) 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
- Optional :
- 3-way valve fuel filling (available in 1/2" and 3/8" fittings)
  - Fuel transfer pump