

## **HRSW-405 T5**

**RENTAL RANGE Powered by SCANIA** 



SERVICE		PRP / DCP	ESP
POWER	kVA	400	440
POWER	kW	320	352
RATED SPEED	r.p.m.	1.5	500
MAIN VOLTAGE	V	400,	/230
AVAILABLE VOLTAGES	V	200/115 ·	230 V (t)
RATED AT POWER FACTOR	Cos Phi	0,	.8



#### RENTAL 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
- 2005/88/EC)

   97/68/EC Emissions of gaseous and particulate pollutants.

   EN 12100, EN 13857, EN 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.

Data Center Power (DCP): Complies with Uptime Institute. The manufacturer declares an acceptable average load factor 100%. It is required a mean time between a revision of 12000h and an oil change of 300h. The genset must not be used as a main power source. If the model is for DCP application, you have to inform to factory. "Class G2" performance according to the load impact test according to ISO 8528-5:2018

HIMOINSA HEADQUARTERS:

Tel.+34 968 19 11 28 Fax +34 968 19 12 17 Fax +34 968 19 04 20 | info@himoinsa.com | www.himoinsa.com

Manufacture facilities: SPAIN • FRANCE • INDIA • CHINA • USA • BRAZIL • ARGENTINA

SUBSIDIATION | GERMANY | UK | SINGAPORE | UAE | PANAMA | DOMINICAN REPUBLIC | ARGENTINA | ANGOLA | SOUTH AFRICA | MOROCOO



#### SOUNDPROOFED RENTAL

H1R H1R

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 Engine Output (PRP) / DCP	kW	354
Manufacturer		SCANIA
Model		DC13-71A(02-02)
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		17,3:1

Lube oil consumption with full load	g/kWh	0,3
Total oil capacity	L	38
Total coolant capacity	L	39
Governor	Type	Electrical
Air Filter	Туре	Dry
Inner diameter exhaust pipe	mm	90



- Diesel engine
- 4-stroke cycle
- Water-cooled
- 24V electrical system
- Water separator filter (visible level)
- Dry air filter
- Radiator with pusher fan
- Radiator water level sensor
- HTW sender
- LOP sender

- Electronic governor
- Hot parts protection
- Moving parts protection



## Generator Specifications | MECC ALTE

Manufacturer		MECC ALTE
Model		ECO40 1S/4 B
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)



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

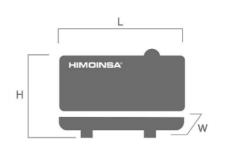






#### **WEIGHT AND DIMENSIONS**

		Standard Version
Length (L)	mm	4602
Height (H)	mm	2809
Width (W)	mm	1850
Maximum shipping volume	m³	23,91
Weight with liquids in radiator and sump	Kg	4919
Fuel tank capacity	L	2000
Autonomy (70% PRP)	Hours	33
Autonomy (100% PRP)	Hours	23
		Stool tank



Steel tank

#### **SOUND PRESSURE**

#### **APPLICATION DATA**

#### **EXHAUST SYSTEM**

Maximum exhaust temperature	°C	525
Exhaust Gas Flow	kg/s	0,467
Maximum allowed back pressure	mbar	100
Exhaust Flange Size (external diameter)	mm	160
Heat dissipated by exhaust pipe	KCal/Kwh	619,45

#### **NECESSARY AMOUNT OF AIR**

Intake air flow	m³/h	1350
Cooling Air Flow	m³/s	9,58
Alternator fan air flow	m³/s	0,9

#### **FUEL CONSUMPTION**

Fuel Consumption 100% PRP	l/h	85,5
Fuel Consumption 70 % PRP	l/h	60,48
Fuel Consumption 50 % PRP	l/h	43,38

#### **FUEL SYSTEM**

Fuel Oil Specifications		Diesel
Fuel Tank	L	2.000

#### STARTING SYSTEM

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



Soundproofed version





- Steel chassis
- Manhole to fill the radiator
- Pre-installation or niche to house the quick
- connection hydraulic fittings for fuel transfer

  Anti-leakage chassis, predisposed to retain liquids (retention tray)
- High capacity fuel tank, with contention base and easy external filling
- Manhole for fuel tank cleaning and drainage
- Manhole for chassis cleaning
- Oversized chassis to protect the bodywork
- Slide carriage and brackets for transportation with forklift
- Tilting cap in the exhaust

- Anti-vibration shock absorbers
- Chassis with integrated fuel tank
- Fuel level gauge
- 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

- Steel residential silencer -35db(A) attenuation.
- Oil sump extraction kit
- External filling of the fuel tank with safety key
- Emergency stop button (double emergency stop protection: Interior on the panel + Exterior on the bodywork)
- Mechanized for power cable output
- Door with window to visualize control panel, alarms and measurements
- Pressure locks
- 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

		CEM 7
Generator Readings	Voltage between phases	•
	Voltage between neutral and phase	•
	Current intensities	•
	Frequency	•
	Apparent power (Kva)	•
	Active power (Kw)	•
	Reactive power (kVAr)	•
	Power factor	•
	Voltage between phases	
	Voltage between phases and neutral	
	Current intensities	
	Frequency	
ngs	Apparent power	
Readings	Active power	
<u>o</u>	Reactive power	
Σain	Power factor	
	Coolant temperature	•
_	Oil pressure	•
inge	Fuel level (%)	•
Readings	Battery voltage	•
9	R.P.M.	•
Engi	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	•
8	Battery charge alternator failure	•
Engine Protections	Overspeed	•
	Underspeed	•
	·	
	Start failure	•
	Emergency stop	•

Standard

Optional







		CEM 7
	High frequency	•
	Low frequency	•
	High voltage	•
	Low voltage	•
ctions	Short-circuit	•
6	Asymmetry between phases	•
Ē	Incorrect phase sequence	•
nator	Inverse power	•
	Overload	•
Alte	Genset signal drop	•
	Total hour counter	•
	Partial hour counter	•
	Kilowatt meter	•
S.	Starts valid counters	•
unter	Starts failure counters	•
ő	Maintenance	•
	RS232	0
	RS485	0
	Modbus IP	0
	Modbus	0
	CCLAN	0
	Software for PC	0
g	Analogue modem	0
ģ	GSM/GPRS modem	•
Communicatior	Remote screen	•
Ę	Tele signal	(0 (8 + 4)
Ö	J1939	0
	Alarm history	• (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	•
S	Genset start function in test mode	•
Featur	Programmable outputs	•
Ŗ	Multilingual	•
	GPS Positioning	0
Special Functions	Synchronisation	•
	Mains synchronization	•
	Second Zero elimination	•
	RAM7	•
	Remote screen	•

Standard











## 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



- M5 control panel with electronic CEM7 control unit and switched emergency stop
- Power panel with built-in circuit breaker plates
- Safety relay in output terminal board (thermal magnetic trip and alarm in control unit)
- Battery Switch
- Adjustable earth leakage protection (time & sensitivity) standard in M5 and AS5, with thermal magnetic protection
- 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)



