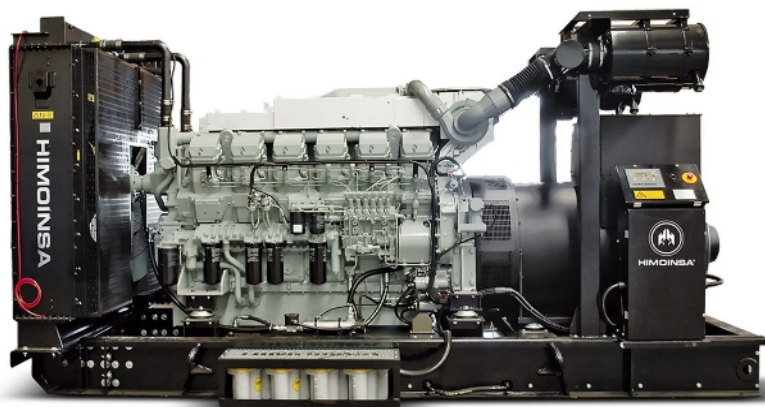




INDUSTRIAL RANGE

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)
- EN 12100, EN 13857, EN 60204

Ambient conditions of reference according to ISO 8528-1:2020 normative: 1000 mbar, 25°C, 30% relative humidity.

Prime Power (PRP):

According to ISO 8528-1:2020, 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 8528-1:2020, 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 8528-1:2020, 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): The manufacturer declares an acceptable average daily and annual load factor of 100%. Overload margin: +10%. Operating hours per year: Unlimited (For data center applications located in countries with a stable network). Uptime Institute Compliant: Tier III & IV. "Class G2" performance according to the load impact test according to ISO 8528-5:2020

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Subsidiaries:

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

SERVICE		PRP / DCP	ESP
POWER	kVA	1400	1540
POWER	kW	1120	1232
RATED SPEED	r.p.m.	1.500	
MAIN VOLTAGE	V	400/230	
AVAILABLE VOLTAGES	V	380/220 · 415/240	
RATED AT POWER FACTOR	Cos Phi	0,8	



OPEN SKID



K22



WATER-COOLED



THREE PHASE



50 HZ



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	1165
Rated Engine Output (ESP)	kW	1285
Manufacturer	MITSUBISHI	
Model	S12R PTA2	
Engine Type	4-stroke diesel	
Injection Type	Direct	
Aspiration Type	Turbocharged and after-cooled	
Number of cylinders and arrangement	12-V	
Bore and Stroke	mm	170 x 180
Displacement	L	49,03
Cooling System	Water	
Lube Oil Specifications	API CD or CF SAE 30 or SAE 40	
Compression Ratio	13,5:1	

Lube oil consumption with full load	g/kWh	0,8
Total oil capacity including tubes, filters	L	180
Total coolant capacity	L	305
Governor	Type	Electrical
Air Filter	Type	Dry
Inner diameter exhaust pipe	mm	304

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



Generator Specifications | MECC ALTE

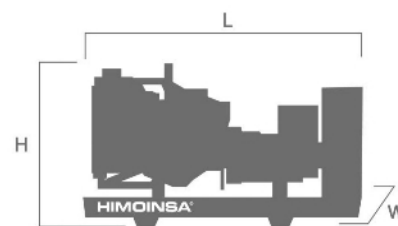
Manufacturer	MECC ALTE	
Model	ECO43.VL4A	
Poles	No.	4
Connection type (standard)	Star - Parallel	
Mounting type	S-00 21"	
Insulation	Class	H class

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)

- 
- Self-excited and self-regulated
 - 4 poles
 - AVR governor
 - IP23 protection
 - H class insulation

WEIGHT AND DIMENSIONS

Standard Version		
Length (L)	mm	4457
Height (H)	mm	2328
Width (W)	mm	2050
Maximum shipping volume	m ³	21,27
Weight with liquids in radiator and sump	Kg	11160
Weight with liquids in sump	Kg	10678
Fuel tank capacity	L	400
Autonomy (70% PRP)	Hours	2
Autonomy (100% PRP)	Hours	1



APPLICATION DATA

EXHAUST SYSTEM

Maximum exhaust temperature	°C	520
Exhaust Gas Flow	m ³ /min	279
Maximum allowed back pressure	mm H ₂ O	600
Heat dissipated by exhaust pipe	KCal/Kwh	587,4

NECESSARY AMOUNT OF AIR

Intake air flow	m ³ /h	6300
Cooling Air Flow	m ³ /s	30
Alternator fan air flow	m ³ /s	1,5

FUEL CONSUMPTION

Fuel Consumption ESP	l/h	310,91
Fuel Consumption 100% PRP	l/h	280,03
Fuel Consumption 70 % PRP	l/h	199,16
Fuel Consumption 50 % PRP	l/h	150,15

FUEL SYSTEM

Fuel Oil Specifications	Diesel	
Maximum power suction pump	mm Hg	75
Maximum return feed pump	mm Hg	150
Fuel Tank	L	400

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



Open set version

- Steel chassis
- Emergency stop button
- Oil sump extraction kit
- Anti-vibration shock absorbers
- Chassis with integrated fuel tank
- Fuel level gauge
- Fuel tank drain plug



FEATURES OF THE CONTROL UNITS

	CEM 7	CEA 7	CEC 7	CEM7 + 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

	CEM 7	CEA 7	CEC 7	CEM7 + 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	⓪	⓪	⓪
	RS485	⓪	⓪	⓪
	Modbus IP	⓪	⓪	⓪
	Modbus	⓪	⓪	⓪
	CCLAN	⓪	⓪	⓪
	Software for PC	⓪	⓪	⓪
	Analogue modem	⓪	⓪	⓪
	GSM/GPRS modem	⓪	⓪	⓪
	Remote screen	⓪	⓪	⓪
	Tele signal	⓪ (8 + 4)	⓪ (8 + 4)	⓪ (8 + 4)
	J1939	⓪	⓪	⓪
Features	Alarm history	• (100)	• (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	⓪	⓪	⓪
	Synchronisation			
	Mains synchronization			
	Second Zero elimination			
	RAM7	⓪	⓪	⓪
	Remote screen	⓪	⓪	⓪

• Standard

⓪ Optional



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

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



Electrical system

- Electric control and power panel with measurements devices and control unit (according to necessity and configuration)
- Connection panel wired to the safety protection (open thermal magnetic protection and alarm)
- Maintenance-free and anti-explosion battery
- Battery Switch
- Battery charger (standard on gensets with automatic control panels)
- Water Jacket Heater with single phase pump
- 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)