



MODEL
HSY-20 M6
HS | STATIONARY RANGE
Standard soundproofing
Powered by YANMAR

- HS20
- WATER-COOLED
- SINGLE PHASE
- 60 HZ
- DIESEL

Generating Rates



SERVICE		PRP	ESP
Power	kVA	16,5	19,5
Power	kW	16,5	19,5
Rated Speed	r.p.m.	1.800	
Main voltage	V	240/120	
Rated at power factor	Cos Phi	1	

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)
- EN 12100, EN 13857, EN 60204

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

Limited-time running power (LTP):

According to Standard ISO 8528-1:2020, this is the maximum power available for a limited operating time of 500 Hours a year between the maintenance times recommended by the manufacturer under the environmental conditions established by the same.

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

"Class G2" performance according to the load impact test according to ISO 8528-5:2020

HIMOINSA HEADQUARTERS:

Fábrica: Ctra. Murcia - San Javier, Km. 23,6 | 30730 SAN JAVIER (Murcia) Spain
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

Subsidiaries:

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



HIMOINSA CHINA CO. LTD - TLF. +86 519 8622 66 88 | FAX: +86 519 86 22 66 87 | E-mail: china@asia.himoinsa.com
Nº 10 FENGMIN ROAD, SOUTH PART OF WUJIN, HI-TECH INDUSTRIAL DEVELOPMENT ZONE
CHANGZHOU 213164 JIANGSU PROVINCE P.R. CHINA

Engine Specifications 1.800 r.p.m.

ENGINE		PRP	ESP
Rated Engine Output	kW	19,6	23,3
Manufacturer		YANMAR	
Model		4TNV88HSPU	
Engine Type		4-stroke diesel	
Injection Type		Direct	
Aspiration Type		Natural	
Number of cylinders and arrangement		4-L	
Bore and Stroke	mm	88 x 90	
Displacement	L	2,19	
Cooling System		Coolant	
Lube Oil Specifications		SAE 3 class 10W30 / API grade CD,CF	
Compression Ratio		19,1	
Lube oil consumption with full load	g/kWh	0,27	
Total oil capacity	L	7,4	
Total coolant capacity	L	5,5	
Governor	Type	Mechanical	
Air Filter	Type	Dry	
Inner diameter exhaust pipe	mm	51,6	

Generator

Generator		
Manufacturer		MECC ALTE
Poles	No.	4
Connection type (standard)		Double delta
Mounting type		S-4 7,5"
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

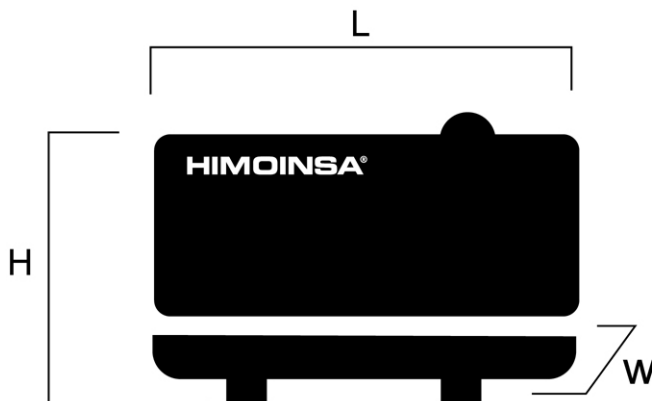
Exhaust System			
Maximum exhaust temperature	°C		550
Exhaust Gas Flow	m ³ /min		6,19
Maximum allowed back pressure	mm H ₂ O		1300
Exhaust Flange Size (external diameter)	mm		60

Necessary Amount Of Air			
Intake air flow	m ³ /h		106,43
Cooling Air Flow	m ³ /s		0,987
Alternator fan air flow	m ³ /s		0,13

Starting System			
Starting power	kW		1,4
Starting power	CV		1,9
Recommended battery	Ah		92
Auxiliary Voltage	Vdc		12

Fuel System			
Fuel Oil Specifications			Diesel
Fuel Tank	L		115
Other fuel tank capacities	L	165, 215, 265, 460, 0	
Fuel Consumption ESP	l/h		6,49
Fuel Consumption 70 % ESP	l/h		4,5

Dimensions



Weight and Dimensions

(L) Length	mm	1.980
(H) Height	mm	1.270
(W) Width	mm	750
Maximum shipping volume	m ³	1,89
(*) Weight with liquids in radiator and sump	kg	655
Fuel tank capacity	L	115
Autonomy (70% ESP)	Hours	26
Autonomy (100% ESP)	Hours	18
Sound pressure level	dB(A)@7m	71 ± 2,4
Sound pressure level with attenuation system	dB(A)@7m	68 ± 2,4

(*) (with standard accessories)

HIMOINSA CHINA 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.

STANDARD VERSION (Steel tank)

Local Distributor

Dimensions of Other Available Versions

Weight and Dimensions		
(L) Length	mm	1.980
(H) Height	mm	1.320
(W) Width	mm	750
Maximum shipping volume	m ³	1,96
(*) Weight with liquids in radiator and sump	kg	Ask
Fuel tank capacity	L	165
Autonomy (70% ESP)	Hours	37
Autonomy (100% ESP)	Hours	25
Sound pressure level	dB(A)@7m	71 ± 2,4
Sound pressure level with attenuation system	dB(A)@7m	68 ± 2,4
(*) (with standard accessories)		
Weight and Dimensions		
(L) Length	mm	1.980
(H) Height	mm	1.370
(W) Width	mm	750
Maximum shipping volume	m ³	2,03
(*) Weight with liquids in radiator and sump	kg	695
Fuel tank capacity	L	215
Autonomy (70% ESP)	Hours	48
Autonomy (100% ESP)	Hours	33
Sound pressure level	dB(A)@7m	71 ± 2,4
Sound pressure level with attenuation system	dB(A)@7m	68 ± 2,4
(*) (with standard accessories)		
Weight and Dimensions		
(L) Length	mm	1.980
(H) Height	mm	1.420
(W) Width	mm	750
Maximum shipping volume	m ³	2,11
(*) Weight with liquids in radiator and sump	kg	Ask
Fuel tank capacity	L	265
Autonomy (70% ESP)	Hours	59
Autonomy (100% ESP)	Hours	41
Sound pressure level	dB(A)@7m	71 ± 2,4
Sound pressure level with attenuation system	dB(A)@7m	68 ± 2,4
(*) (with standard accessories)		

OPTIONAL VERSION (Steel tank)

OPTIONAL VERSION (Steel tank)

OPTIONAL VERSION (Steel tank)

Dimensions of Other Available Versions

Weight and Dimensions		
(L) Length	mm	1.980
(H) Height	mm	1.620
(W) Width	mm	750
Maximum shipping volume	m ³	2,41
(*) Weight with liquids in radiator and sump	kg	Ask
Fuel tank capacity	L	460
Autonomy (70% ESP)	Hours	102
Autonomy (100% ESP)	Hours	71
Sound pressure level	dB(A)@7m	71 ± 2,4
Sound pressure level with attenuation system	dB(A)@7m	68 ± 2,4
(*) (with standard accessories)		
Weight and Dimensions		
(L) Length	mm	1.980
(H) Height	mm	1.120
(W) Width	mm	750
Maximum shipping volume	m ³	1,66
(*) Weight with liquids in radiator and sump	kg	Ask
Sound pressure level	dB(A)@7m	71 ± 2,4
Sound pressure level with attenuation system	dB(A)@7m	68 ± 2,4
(*) (with standard accessories)		

OPTIONAL VERSION (Steel tank)

OPTIONAL VERSION (Steel tank)

CONTROL PANEL MODEL

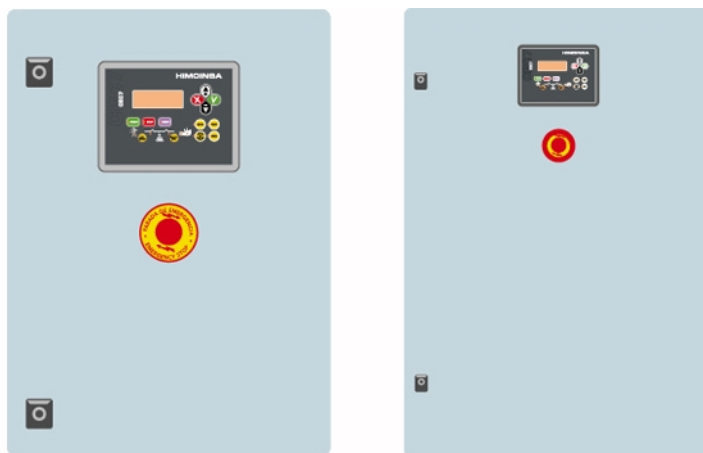
AS7

Automatic control panel *WITHOUT* Transfer Switch and *WITHOUT* mains control with M7X unit. Digital control unit M7X



CC2

Himoinsa Switching cabinet *WITH* display. Digital control unit CEC7



AS7 + CC2

Automatic control panel *WITH* transfer switch and *WITH* mains control. The display will be on the genset and on the cabinet. Digital control unit M7X+CEC7



MODEL
HSY-20 M6
HS | STATIONARY RANGE
Standard soundproofing
Powered by YANMAR

CONTROL PANEL MODEL

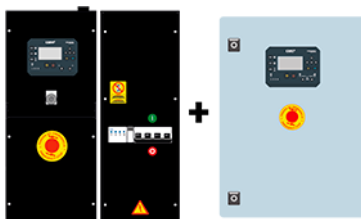
AS5

Automatic panel *WITHOUT* transfer switch and *WITHOUT* mains control with CEM8 unit. (*) AS5 as optional with CEA8 unit. Automatic panel without transfer switch and *WITH* mains control. Digital control unit CEM8 CEA8



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 CEM8+CEC8



MODEL
HSY-20 M6
HS | STATIONARY RANGE
Standard soundproofing
Powered by YANMAR

Controller features (I)

- : Standard
- x : Not included
- : Optional

MODEL
HSY-20 M6
HS | STATIONARY RANGE
Standard soundproofing
Powered by YANMAR

Generator Readings	M7X	CEC 7	M7X+CEC7	CEM 8
Voltage between phases	•	•	•	•
Voltage between neutral and phase	•	•	•	•
Current intensities	•	•	•	•
Frequency	•	•	•	•
Apparent power (Kva)	•	•	•	•
Active power (Kw)	•	•	•	•
Reactive power (kVAr)	•	•	•	•
Power factor	•	•	•	•
Mains Readings	M7X	CEC 7	M7X+CEC7	CEM 8
Voltage between phases	x	•	•	x
Voltage between phases and neutral	x	•	•	x
Current intensities	x	•	•	x
Frequency	x	•	•	x
Apparent power	x	x	x	x
Active power	x	x	x	x
Reactive power	x	x	x	x
Power factor	x	x	x	x
Engine Readings	M7X	CEC 7	M7X+CEC7	CEM 8
Coolant temperature	•	x	•	•
Oil pressure	•	x	•	•
Fuel level (%)	•	x	•	•
Battery voltage	•	x	•	•
R.P.M.	•	x	•	•
Battery charge alternator voltage	•	x	•	•
Engine Protections	M7X	CEC 7	M7X+CEC7	CEM 8
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

MODEL
HSY-20 M6
HS | STATIONARY RANGE
Standard soundproofing
Powered by YANMAR

Engine Protections	M7X	CEC 7	M7X+CEC7	CEM 8
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	M7X	CEC 7	M7X+CEC7	CEM 8
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	M7X	CEC 7	M7X+CEC7	CEM 8
Total hour counter	•	•	•	•
Partial hour counter	•	•	•	•
Kilowatt meter	•	•	•	•
Starts valid counters	•	•	•	•
Starts failure counters	•	•	•	•
Maintenance	•	•	•	•
Communications	M7X	CEC 7	M7X+CEC7	CEM 8
RS232	x	•	•	x
RS485	x	•	•	•
Modbus IP	x	•	•	•
Modbus	x	•	•	•

Controller features (III)

- : Standard
- x : Not included
- : Optional

MODEL
HSY-20 M6
HS | STATIONARY RANGE
Standard soundproofing
Powered by YANMAR

Communications	M7X	CEC 7	M7X+CEC7	CEM 8
CCLAN	x	x	x	•
Software for PC	x	•	•	•
Analogue modem	x	•	•	•
GSM/GPRS modem	x	•	•	x
Remote screen	x	x	x	•
Tele signal	x	x	x	•
J1939	• M7XJ	x	• M7XJ	•
Features	M7X	CEC 7	M7X+CEC7	CEM 8
Alarm history	• (100)	• (100)	• (100)	•
External start	•	•	•	•
Start inhibition	•	•	•	•
Mains failure start	x	•	•	x
Start under normative EJP	•	x	•	•
Pre-heating engine control	•	x	•	•
Genset contactor activation	•	•	•	•
Mains & Genset contactor activation	x	•	•	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	x	•	•	•
Special Functions	M7X	CEC 7	M7X+CEC7	CEM 8
GPS Positioning	x	x	x	x
Synchronisation	x	x	x	x
Mains synchronization	x	x	x	x
Second Zero elimination	x	x	x	x
RAM7	x	x	x	•
Remote screen	x	x	x	•

Generator set features

Engine

- Diesel engine
- 4-stroke cycle
- Water-cooled
- 12V electrical system
- Dry air filter
- Radiator with pusher fan
- Mechanical governor
- 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)
- Adjustable earth leakage protection
- Leakage detector
- 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)
- Optional :
 - Battery Switch
 - Optional Battery (Optima)

Soundproofed version

- Steel chassis
- Lower power cable outlet with aluminum cover
- Side auxiliary cable outlet with aluminum cover
- Modular tank and retention tray system. Allows easy removal and / or maintenance of the equipment
- Wide access to the engine compartment because of a removable door

Generator set features

Soundproofed version

- Fuel tank in retention tray
 - Soundproofing with foam and polyurethane film
 - 4 side lifting points
 - Anti-vibration shock absorbers
 - Fuel tank
 - Fuel level gauge
 - External emergency stop switch
 - Bodywork made from high quality steel plate
 - High mechanical strength
 - Epoxy polyester powder coating
 - Full access for maintenance (water, oil and filters, no need to remove the canopy)
 - Versatility to assemble a high capacity chassis with a metallic fuel tank
 - IP Protection according to ISO 8528-13:2016
- Optional :
- Manual oil extraction pump
 - Noise reduction kit
 - Retention Tray
 - Manual oil drain pump
 - Fuel transfer pump

PDF Summary

Created : 19/01/2026 11:19

Author : Himoinsa

Number of pages : 14

Report Type: Data Sheet - Hs | stationary range

Generated by: HIMOINSA Engineering Dept.

Page 1. Genset data

Page 2. Engine Specifications. Generator Specifications.

Page 3. Installation Data

Page 4. Dimensions

Page 5. Dimensions of Other Available Versions

Page 6. Dimensions of Other Available Versions

Page 7. Control Panel Model

Page 8. Control Panel Model

Page 9. Controller features (I)

Page 10. Controller features (II)

Page 11. Controller features (III)

Page 12. Generator Features & Options

Page 13. Generator Features & Options

Page 14. PDF Summary

