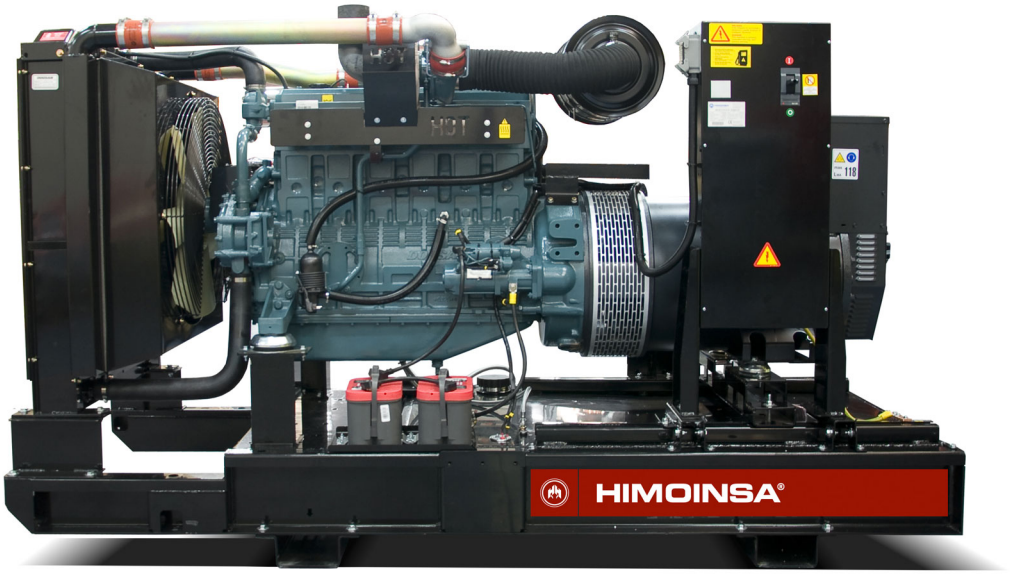
HIMOINSA

MODEL

HDW-120 T5

INDUSTRIAL RANGE
Open Skid
Powered by DOOSAN



- K6
- WATER-COOLED
- THREE PHASE
- 50 HZ
- NON COMPLYING 97/68/EC
- DIESEL

Generating Rates

SERVICE		PRP	ESP
Power	kVA	118	130
Power	kW	95	104
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	

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 8528-1:2018 normative: 1000 mbar, 25ºC, 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

G2 class load acceptance in accordance with ISO 8528-5:2013

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

MODEL
HDW-120 T5
INDUSTRIAL RANGE
Open Skid
Powered by DOOSAN

Engine Specifications 1.500 r.p.m.

ENGINE		PRP	ESP
Rated Output	kW	103	114
Manufacturer		DOOSAN	
Model		D1146T	
Engine Type		4-stroke diesel	
Injection Type		Direct	
Aspiration Type		Turbocharged	
Number of cylinders and arrangement		6-L	
Bore and Stroke	mm	111 x 139	
Displacement	L	8,071	
Cooling System		Coolant	
Lube Oil Specifications		API CH4 SAE 15W40 or 10W40	
Compression Ratio		16,8:1	
Fuel Consumption ESP	l/h	27	
Fuel Consumption 100% PRP	l/h	25,9	
Fuel Consumption 75 % PRP	l/h	19,5	
Fuel Consumption 50 % PRP	l/h	13,6	
Fuel Consumption 25 % PRP	l/h	8,2	
Lube oil consumption with full load		0,5 % of fuel consumption	
Total oil capacity	L	15,5	
Total coolant capacity	L	34	
Heat dissipated by coolant	kW	41,4	
Governor	Type	Mechanical	
Air Filter	Type	Dry	
Inner diameter exhaust pipe	mm	75	

Generator

Generator		
Manufacturer		STAMFORD
Poles	No.	4
Connection type (standard)		Star-series
Mounting type		S-2 11,5"
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)

ISO 9001 SYSTEM CERTIFICATION
Ctra. Murcia - San Javier, km. 23,6 | 30730 San Javier (Murcia) SPAIN | Tel.: +34 902 19 11 28 / +34 968 19 11 28
Fax: +34 968 19 12 17 | Export Fax +34 968 19 04 20 | E-mail:info@himoinsa.com | www.himoinsa.com
HIMOINSA® THE ENERGY

Application Data

Exhaust System		
Maximum allowed back pressure	kPa	5,9
Heat dissipated by exhaust pipe	kW	95,1

Necessary Amount Of Air		
Intake air flow	m^3/h	744
Cooling Air Flow	m^3/s	3,33
Alternator fan air flow	m^3/s	0,514

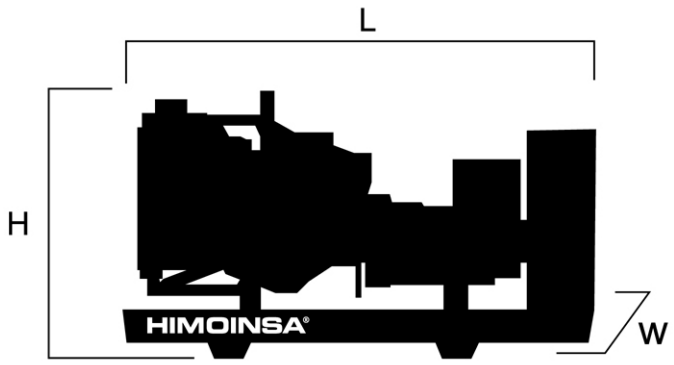
Starting System		
Starting power	kW	4,5
Starting power	CV	6,12
Recommended battery	Ah	100
Auxiliary Voltage	Vdc	24

Fuel System		
Fuel Oil Specifications		Diesel
Maximum power suction pump	mm Hg	75
Maximum return feed pump	mm Hg	450
Fuel Tank	L	250

ISO 9001 SYSTEM CERTIFICATION
Ctra. Murcia - San Javier, km. 23,6 | 30730 San Javier (Murcia) SPAIN | Tel.: +34 902 19 11 28 / +34 968 19 11 28
Fax: +34 968 19 12 17 | Export Fax +34 968 19 04 20 | E-mail:info@himoinsa.com | www.himoinsa.com
HIMOINSA® THE ENERGY

MODEL
HDW-120 T5
INDUSTRIAL RANGE
Open Skid
Powered by DOOSAN

Dimensions



	Weight and Dimensions		
(L)	Length	mm	2.900
(H)	Height	mm	1.503
(W)	Width	mm	900
	Maximum shipping volume	m^3	3,92
(*)	Weight with liquids in radiator and sump	kg	1.579
	Fuel tank capacity	L	250
	Autonomy	Hours	13

(*) (with standard accessories)

STANDARD VERSION

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.
Industrial design under patent.

Local Distributor

ISO 9001 SYSTEM CERTIFICATION
Ctra. Murcia - San Javier, km. 23,6 | 30730 San Javier (Murcia) SPAIN | Tel.: +34 902 19 11 28 / +34 968 19 11 28
Fax: +34 968 19 12 17 | Export Fax +34 968 19 04 20 | E-mail:info@himoinsa.com | www.himoinsa.com
HIMOINSA THE ENERGY

CONTROL PANEL MODEL

M5

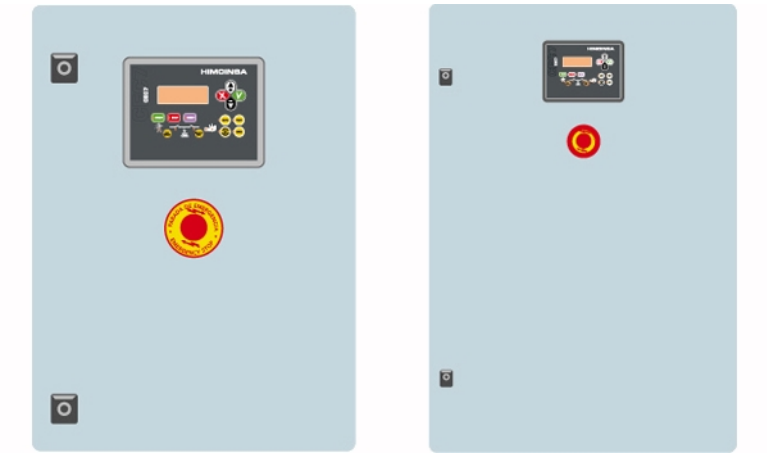
Digital manual Auto-Start control panel and thermal magnetic protection (depending on current and voltage) and differential with CEM7. Digital control unit CEM7

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



ISO 9001 SYSTEM CERTIFICATION

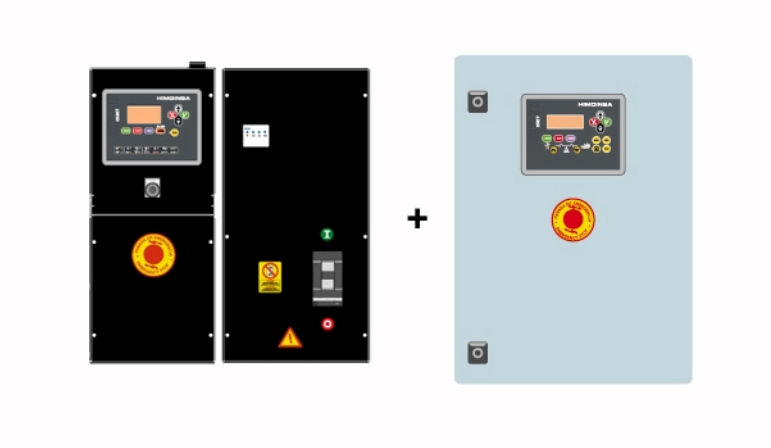
Ctra. Murcia - San Javier, km. 23,6 | 30730 San Javier (Murcia) SPAIN | Tel.: +34 902 19 11 28 / +34 968 19 11 28
Fax: +34 968 19 12 17 | Export Fax +34 968 19 04 20 | E-mail:info@himoinsa.com | www.himoinsa.com

HIMOINSA® THE ENERGY

CONTROL PANEL MODEL

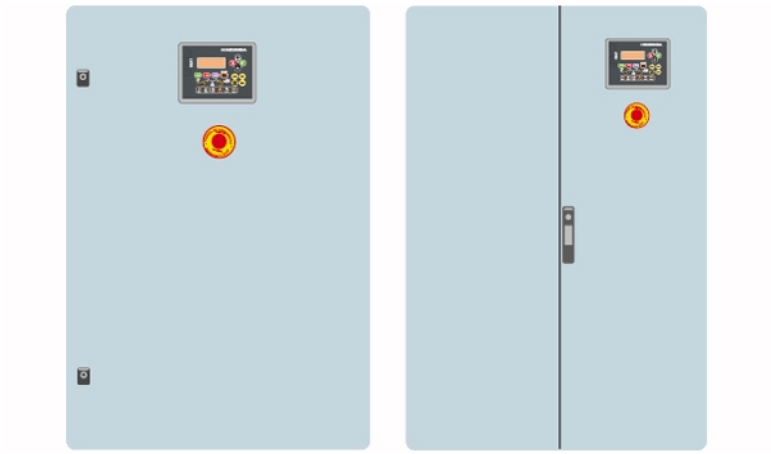
AS5 + CC2

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



ISO 9001 SYSTEM CERTIFICATION

Ctra. Murcia - San Javier, km. 23,6 | 30730 San Javier (Murcia) SPAIN | Tel.: +34 902 19 11 28 / +34 968 19 11 28
Fax: +34 968 19 12 17 | Export Fax +34 968 19 04 20 | E-mail:info@himoinsa.com | www.himoinsa.com

HIMOINSA® THE ENERGY

MODEL
HDW-120 T5
INDUSTRIAL RANGE
Open Skid
Powered by DOOSAN

Controller features (I)

• : Standard
x : Not included
• : Optional

Generator Readings	CEM 7	CEA 7	CEC 7	CEM7 + CEC7
Voltage between phases	•	•	•	•
Voltage between neutral and phase	•	•	•	•
Current intensities	•	•	•	•
Frequency	•	•	•	•
Apparent power (Kva)	•	•	•	•
Active power (Kw)	•	•	•	•
Reactive power (kVAr)	•	•	•	•
Power factor	•	•	•	•
Mains Readings	**CEM 7**	**CEA 7**	**CEC 7**	**CEM7 + CEC7**
Voltage between phases	x	•	•	•
Voltage between phases and neutral	x	•	•	•
Current intensities	x	•	•	•
Frequency	x	•	•	•
Apparent power	x	•	x	x
Active power	x	•	x	x
Reactive power	x	•	x	x
Power factor	x	•	x	x
Engine Readings	**CEM 7**	**CEA 7**	**CEC 7**	**CEM7 + CEC7**
Coolant temperature	•	•	x	•
Oil pressure	•	•	x	•
Fuel level (%)	•	•	x	•
Battery voltage	•	•	x	•
R.P.M.	•	•	x	•
Battery charge alternator voltage	•	•	x	•
Engine Protections	**CEM 7**	**CEA 7**	**CEC 7**	**CEM7 + CEC7**
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	•

ISO 9001 SYSTEM CERTIFICATION
Ctra. Murcia - San Javier, km. 23,6 | 30730 San Javier (Murcia) SPAIN | Tel.: +34 902 19 11 28 / +34 968 19 11 28
Fax: +34 968 19 12 17 | Export Fax +34 968 19 04 20 | E-mail:info@himoinsa.com | www.himoinsa.com
HIMOINSA® THE ENERGY

HIMOINSA

MODEL
HDW-120 T5
INDUSTRIAL RANGE
Open Skid
Powered by DOOSAN

Controller features (II)

• : Standard
x : Not included
• : Optional

Engine Protections	CEM 7	CEA 7	CEC 7	CEM7 + CEC7
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	**CEM 7**	**CEA 7**	**CEC 7**	**CEM7 + CEC7**
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	**CEM 7**	**CEA 7**	**CEC 7**	**CEM7 + CEC7**
Total hour counter	•	•	•	•
Partial hour counter	•	•	•	•
Kilowatt meter	•	•	•	•
Starts valid counters	•	•	•	•
Starts failure counters	•	•	•	•
Maintenance	•	•	•	•
Communications	**CEM 7**	**CEA 7**	**CEC 7**	**CEM7 + CEC7**
RS232	•	•	•	•
RS485	•	•	•	•
Modbus IP	•	•	•	•
Modbus	•	•	•	•

ISO 9001 SYSTEM CERTIFICATION
Ctra. Murcia - San Javier, km. 23,6 | 30730 San Javier (Murcia) SPAIN | Tel.: +34 902 19 11 28 / +34 968 19 11 28
Fax: +34 968 19 12 17 | Export Fax +34 968 19 04 20 | E-mail:info@himoinsa.com | www.himoinsa.com
HIMOINSA® THE ENERGY

MODEL
HDW-120 T5
INDUSTRIAL RANGE
Open Skid
Powered by DOOSAN

Controller features (III)

• : Standard
x : Not included
• : Optional

Communications	CEM 7	CEA 7	CEC 7	CEM7 + CEC7
CCLAN	•	•	x	•
Software for PC	•	•	•	•
Analogue modem	•	•	•	•
GSM/GPRS modem	•	•	•	•
Remote screen	•	•	x	•
Tele signal	• (8 + 4)	• (8 + 4)	x	• (8 + 4)
J1939	•	•	x	•
Features	**CEM 7**	**CEA 7**	**CEC 7**	**CEM7 + CEC7**
Alarm history	• (10) / (opc. +100)	• (10) / (opc. +100)	• (10) / (opc. +100)	• (10) / (opc. +100)
External start	•	•	•	•
Start inhibition	•	•	•	•
Mains failure start	x	•	•	•
Start under normative EJP	•	•	x	•
Pre-heating engine control	•	•	x	•
Genset contactor activation	•	•	•	•
Mains & Genset contactor activation	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	•	•	•	•
Special Functions	**CEM 7**	**CEA 7**	**CEC 7**	**CEM7 + CEC7**
GPS Positioning	•	•	x	•
Synchronisation	•	•	x	•
Mains synchronization	•	•	x	•
Second Zero elimination	•	•	x	•
RAM7	•	•	x	•
Remote screen	•	•	x	•
Programming timer	•	•	x	•

ISO 9001 SYSTEM CERTIFICATION
Ctra. Murcia - San Javier, km. 23,6 | 30730 San Javier (Murcia) SPAIN | Tel.: +34 902 19 11 28 / +34 968 19 11 28
Fax: +34 968 19 12 17 | Export Fax +34 968 19 04 20 | E-mail:info@himoinsa.com | www.himoinsa.com
HIMOINSA® THE ENERGY

MODEL
HDW-120 T5
INDUSTRIAL RANGE
Open Skid
Powered by DOOSAN

Generator set features

Engine

· Diesel engine
· 4-stroke cycle
· Water-cooled
· 24V electrical system
· Water separator filter (no visible level)
· Dry air filter
· Radiator with blower fan
· HTW sender
· LOP sender
· 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)
· 4-pole thermal magnetic circuit breaker
· Adjustable earth leakage protection (time & sensitivity) standard in M5 and AS5, with thermal magnetic protection
· 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 isolator

Open set version

· Steel chassis
· Emergency stop button
· Anti-vibration shock absorbers
· Chassis with integrated fuel tank
· Fuel level gauge
· Fuel tank drain plug
· Steel industrial silencer -15db(A) attenuation

Optional : · Fuel transfer pump
· Steel residential silencer -35db(A) attenuation.

ISO 9001 SYSTEM CERTIFICATION
Ctra. Murcia - San Javier, km. 23,6 | 30730 San Javier (Murcia) SPAIN | Tel.: +34 902 19 11 28 / +34 968 19 11 28
Fax: +34 968 19 12 17 | Export Fax +34 968 19 04 20 | E-mail:info@himoinsa.com | www.himoinsa.com
HIMOINSA® THE ENERGY

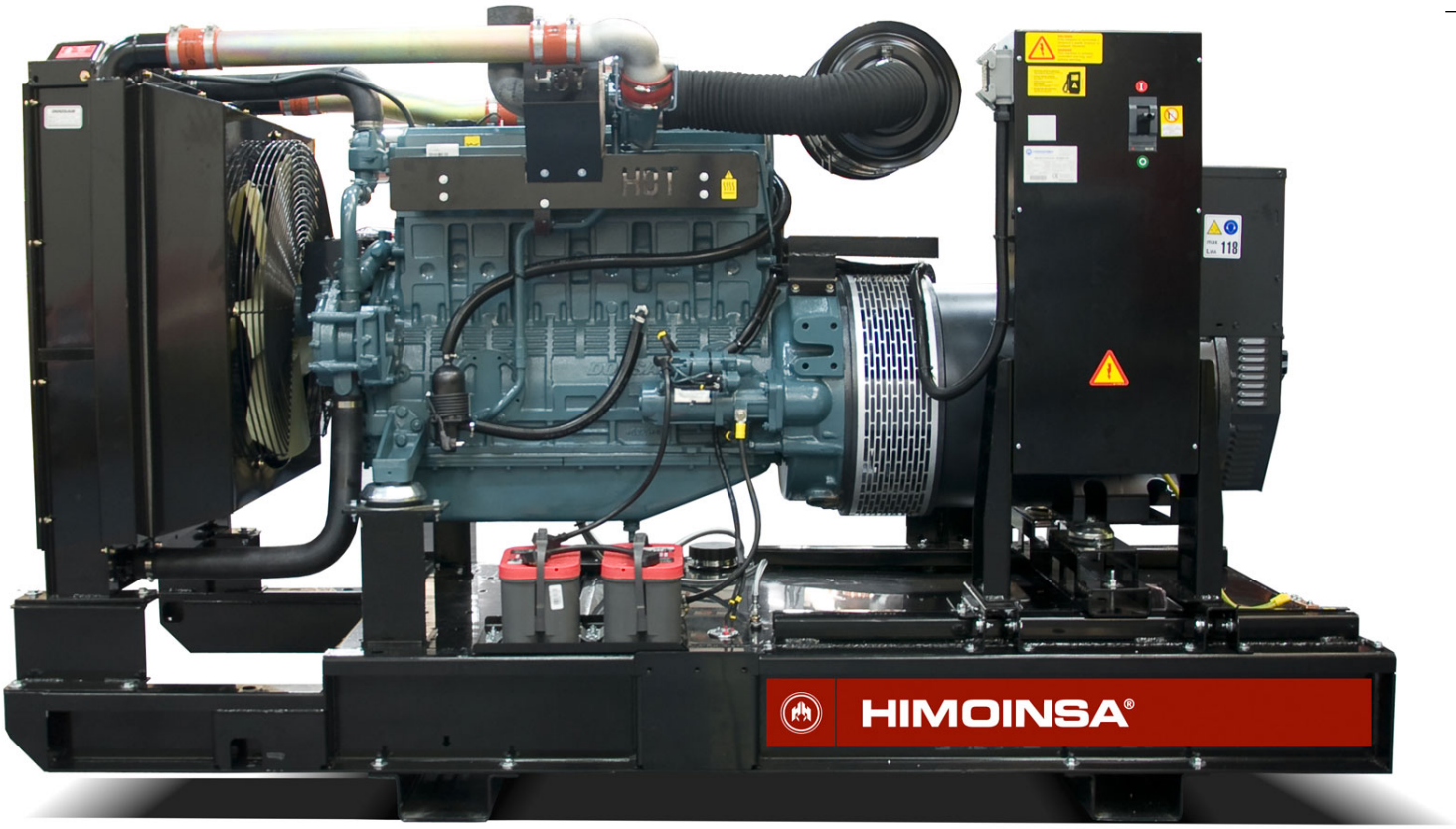
HIMOINSA

MODEL

HDW-120 T5

INDUSTRIAL RANGE
Open Skid
Powered by DOOSAN

PDF Summary

Created : 04/04/2019 08:18
Author : Himoinsa
Number of pages : 11
Report Type: Data Sheet - Industrial 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. Control Panel Model
Page 6. Control Panel Model
Page 7. Controller features (I)
Page 8. Controller features (II)
Page 9. Controller features (III)
Page 10. Generator Features & Options
Page 11. PDF Summary