



HDW-450 T5

Powered by:

DOOSAN P158FE

449 kVA - 50 Hz

Directiv. 97/68/EC (Stage II) 

Generating Set Performance		50 Hz	
SERVICE		Continuous Service	Intermittent Service
Rated output	kVA	449	494
Active power output *	kW	359	395
Rated speed	r.p.m.	1.500	
Standard Voltage	V	400	
Voltage available	V	400/230 - 230/132 - 230	

Performance data refers to Standard Reference Conditions of ISO 8528 : + 25 °C , 100 m ALT, relative humidity 30 %

During running-in period the output increases by approx. 5 % which is taken into consideration at delivery.

Power reduction acc. to DIN ISO 3046. Standard values: Above 100 m ALT approx. 1 % per 100 m. Above 25 °C (77 °F) approx. 4 % per 10 °C (50 °F).

* Considering cos phi= 0,8

Prime Mover Performance		1.500 r.p.m.	
SERVICE		Continuous Service	Intermittent Service
Rated output	kW	402	441
Manufacturer		DOOSAN	
Engine model		P158FE	
4 stroke Diesel Engine - Injection type		DIRECT	
Aspiration type		TURBO CHARGED & INTERCOOLER	
Cylinders, number and arrangement		8 - V	
Bore x stroke	mm	128 x 142	
Total displacement	L	14,618	
Cooling system		WATER	
Lube oil specifications		SAE 15W 40 - API CD/CE	
Compression ratio		14,2 : 1	
Specific fuel consumption	L/h	105,10 - 77,10 - 51,10 - 26,5	
Specific oil consumption (at full load)	%	--	
Lube oil maximum capacity	L	28	
Lube oil minimum capacity	L	26	
Speed governor	Type	ELECTRONIC	
Steady state frequency at constant load	Type	<1,5*	
Governor class according to ISO 8528		G2	
Air filter		DRY	

(ICFN) : ISO-STANDARD POWER (10% overload permissible) and ISO-STANDARD FUEL STOP POWER (no overload permissible) according to DIN ISO 3046.

For constant speed and constant load.

(IFN) : ISO BRAKE FUEL STOP NET POWER for intermittent load acc. to DIN ISO 3046.

Performance data refers to Standard Reference Conditions of DIN ISO 3046: + 25 °C , 100 m ALT, relative humidity 30 % During running-in period the output increases by approx. 5 % which is taken into consideration at delivery. Power reduction acc. to DIN ISO 3046. Standard values: Above 100 m ALT approx. 1 % per 100 m. Above 25 °C (77 °F) approx. 4 % per 10 °C (50 °F).

Synchronous Generator *		
Pôles	N°	4
Winding connections (standard)		Star - serie
Frame mounting		SAE1 / 14"
Insulation	class	H
Enclosure (according to IEC-34-5)		IP 23
Exciter system		3 + N
Voltage regulator		A.V.R. (electronic)
Steady voltage precision		within ± 1,5% from no load to full loading with cosφ=0,8+1
Maintained short circuit current		3 In

*Alternator used by HIMOINSA Gensets meet the requirements of following Standard: IEC 34-1; CEI 2-3; ; VDE 0530; BS 4999-5000:NF 51-100,11



Generating Set Installation Data		1.500 r.p.m.
EXHAUST SYSTEM		
Max. exhaust temperature at full load	° C	579
	° F	1.074,2
Exhaust outlet diameter (Open skid - Soundproofed)	mm	65 - 160
Exhaust gas flow	m ³ /m	77,1
Heat rejected to coolant	kcal/kWh	--
Max. permissible restrictions	mmH ² O	600
AIR REQUIREMENT		
Cooling air flow	m ³ /s	0,455
Cooling air flow alternator	m ³ /m	62,1
Total cooling air flow (engine, alternator, combustion)	m ³ /m	248 - 322 (Open skid - Soundproofed)
ELECTRIC STARTING SYSTEM		
Starting motor output	kW	7,00
	CV	9,52
Minimum recommended battery capacity	Ah	200
Auxiliary voltage	Vcc.	24
LIQUID CAPACITY		
Lube oil system including sump, filters, etc.	L	29
Cooling system capacity	L	125,6
Antifreeze recommended percentage	%	62,8
FUEL TANK		
Fuel tank capacity Open Skid Genset	L	740
Autonomy (100%-75%-50%-25%)	h	7,04 - 9,6 - 14,48 - 27,92
Fuel tank capacity Soundproofed	L	740
Autonomy (100%-75%-50%-25%)	h	7,04 - 9,6 - 14,48 - 27,92

Generating Set transport data		
WEIGHT AND DIMENSIONS OPEN SKID GENSET		
Length	m - ft	4,10 - 13,45 (a)
Width	m - ft	1,46 - 4,78
Height	m - ft	2,11 - 6,90
Shipping volume seaworthy (Standard supplier)	m ³ - ft ³	12,63 - 443,60
Dry weight (with standard accessories)	kg - lb	3.350 - 7.370
WEIGHT AND DIMENSIONS SOUNDPROOFED GENSET		
Length	m - ft	4,50 - 14,76
Width	m - ft	1,80 - 5,90
Height	m - ft	2,342 - 7,87
Shipping volume seaworthy (Standard supplier)	m ³ - ft ³	19,44 - 685,35
Dry weight (with standard accessories)	kg - lb	5.550 - 12.210

(a) Chassis type K9. The legth datum refers to model with an external control panel (optional). Please consult for other configurations.

HIMOINSA company with quality certification ISO 9001
HIMOINSA gensets are compliant with EC mark which includes the following directives:

- ISO 13857:2008 Machinery safety.
- 2006/95/EC Low voltage.
- 89/336/EEC Electromagnetic compatibility.
- 200/14/EC Sound Powr leve. Noise emissions outdoor equipment. (amended by 2005/88/EC)
- 97/68/EC Emissions of gaseous and particulate pollutants. (amended by 2002/88/EC & 2004/26/EC)

Local distributor



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