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HiMSEN Dual Fuel Engine

Hi-touch Marine & Stationary Engine

H27DF



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H27DF HiMSEN Family...

» Design Philosophy

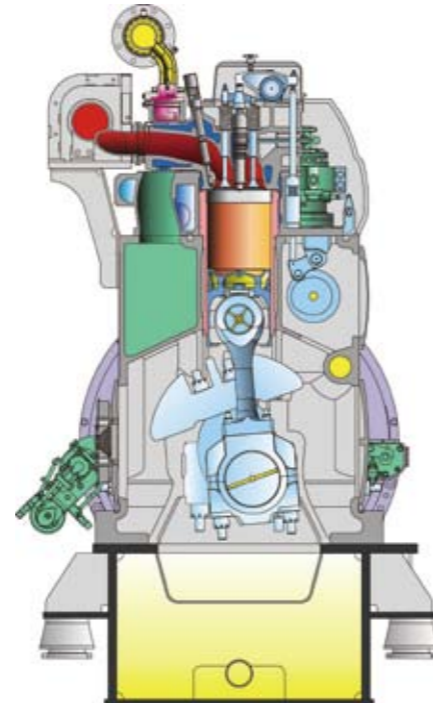
H27DF of HiMSEN Family has simple and smart design which is suitable for marine & stationary power generation application with gas diesel fuel with high reliability and performance. The key features are:

Economical and Ecological Engine with higher efficiency and lower emission, etc., which is based on the following specific designs;

- Optimized turbocharging with enhanced Miller Cycle.
- Lowest NOx emission satisfied with Tier II (Diesel mode) and Tier III(Gas mode) without after-treatment device.

Reliable and Practical Engine

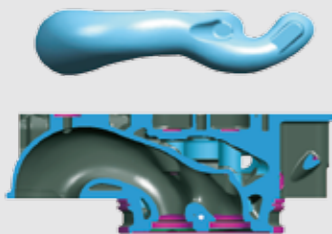
- Number of engine components is minimized for customer preference.
- Most of the components are directly accessible for easier maintenance.



No. of Cylinder	6, 7, 8, 9
Rated Speed	720/750/900/1000 rpm
Power / Cyl.	228/237/285/310 kW
Cylinder Bore	270 mm
Piston Stroke	330 mm
BMEP	20.1 bar (19.7 bar@1000rpm)

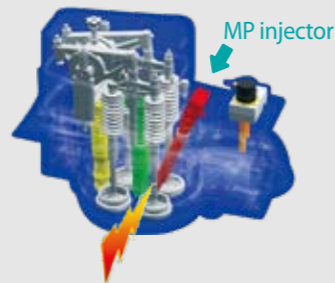
Cylinder Head

- Optimized port design
- High mixture flow



MicroPilot System

- High pressure injection
- Controllable fuel quantity



AFR Control

- Quick response for operation
- Efficiency, NOx control



■ Rated Power of Gen-Set at 100% Load

Engine Type	720 rpm		750 rpm		900 rpm		1000 rpm	
	60 Hz		50 Hz		60 Hz		50 Hz	
	Eng.kW	Gen.kW	Eng.kW	Gen.kW	Eng.kW	Gen.kW	Eng.kW	Gen.kW
6H27DF	1,368	1,300	1,422	1,351	1,710	1,625	1,860	1,767
7H27DF	1,596	1,516	1,659	1,576	1,995	1,895	2,170	2,062
8H27DF	1,824	1,733	1,896	1,801	2,280	2,166	2,480	2,356
9H27DF	2,052	1,949	2,133	2,026	2,565	2,437	2,790	2,651

Remarks

- The alternator outputs are calculated for an efficiency of 95%.

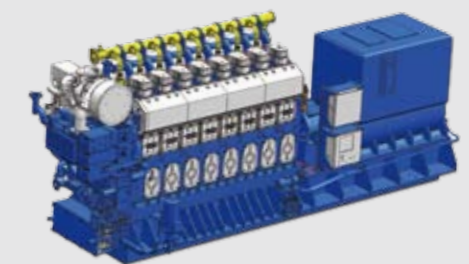
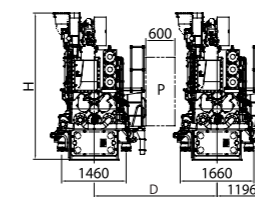
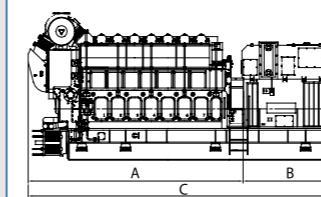
■ Specific Lubricating Oil Consumption: 0.6 g/kWh

(Tolerance: +25% depending on the operating conditions and 100% load)

■ Dimensions & Weights

Speed	Cyl.	Dimension (mm)				Dry Mass (ton)	
		A	B 1)	C 1)	H	Engine 2)	GenSet 1),3)
720 / 750 rpm	6	4,414	2,262	6,676	3,103	21.2	30.8
	7	4,794	2,262	7,056	3,241	23.5	34.9
	8	5,311	2,262	7,573	3,241	25.1	40.5
	9	5,691	2,262	7,953	3,371	27.2	46.0

Speed	Cyl.	Dimension (mm)				Dry Mass (ton)	
		A	B 1)	C 1)	H	Engine 2)	GenSet 1),3)
900 / 1000 rpm	6	4,414	2,262	6,676	3,103	21.2	30.8
	7	4,794	2,262	7,056	3,241	23.5	34.9
	8	5,311	2,340	7,651	3,371	25.1	40.5
	9	5,691	2,490	8,181	3,371	27.2	46.0



Remarks

- All dimensions and weight are approximate value and subject to change without prior notice.
- Free passage way, P, between engines, width 600 mm and height 2,000 mm.