

600

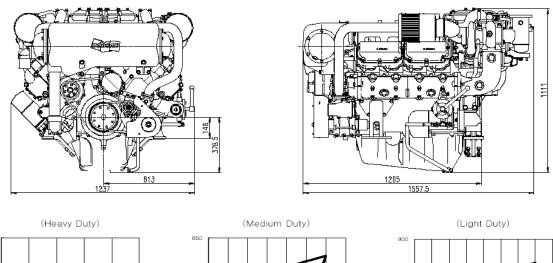
**4V158TI MARINE ENGINE** 

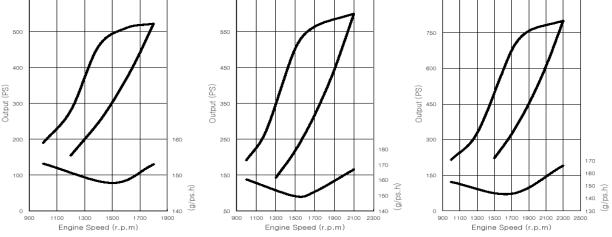


POWER RATING

MODEL	CONDITIONS	POWER	rpm	Base Engine
4V158TIH	HEAVY DUTY	390kW (530PS)	1,800	
4V158TIM	MEDIUM DUTY	441kW (600PS)	2,100	D2848LB
4V158TIL	LIGHT DUTY	588kW (800PS)	2,300	

**Note : 1)** No reduction in rating for intake air temperature is up to 45 °C (318K) and sea water temperature is up to 32 °C (305K), relative humidity is up to 60 % all data are based on operation to ISO 3046.





- Heavy Duty : Operation hours are unlimited per year, at average load is up to 90 %, at full load is up to 80 % Typical gearbox ratio: 2.5 ~ 6
  - (Fishing trawler, Tug boat, Pushing vessel, Cargo boat, Freighter, Ferry)
- Medium Duty : Operation hours are up to 3,000 per year, at average load is up to 70 % At full load is (up to 30 % / 4hrs per 12 hour operation period). Typical gearbox ratio: 2 ~ 3.5
  - (Fishing boat, Pilot boat, Escort boat, Passenger boat, Ferry, Cruising vessel)
- Light Duty : Operation hours are up to 1,000 per year, at average load is up to 50 % At full load is (up to 20 % / 2hrs per 12 hour operation period) Typical gearbox ratio: 1 ~ 2.5 (Light weight fishing host Yacht Coastguard host Fast host Fire pump Navy Period)

(Light weight fishing boat, Yacht, Coastguard boat, Fast boat, Fire pump, Navy, Bow thruster)





## **Engine Specification**

Model		Units	4V158TIH	4V158TIM	4V158TIL
Engine type			4 valve, 4 cycle, V type, direct- injection, water cooled with wet turbo charger & inter-cooler		
Rating output (B.H.P)		kW(PS)/rpm	390(530)/1,800	441(600)/2,100	588(800)/2,300
Displacement		сс	14,618		
Cylinder number - bore( $\phi$ ) x stroke		mm	8 - \$\phi128 x 142		
Valve clearance at cold	In / Ex	mm	0.40 / 0.50		
Low idling rpm		rpm	725 ± 25		
No load max. rpm		rpm	below 2,070	below 2,415	below 2,645
Mean effective pressure		kg/cm <sup>2</sup>	18.1	17.6	21.4
Mean piston speed		m/sec.	8.52	9.94	10.89
Compression ratio			14.3 : 1	14.3:1	14.3:1
Firing order			1 - 5 - 7 - 2 - 6 - 3 - 4 - 8		
Governor type of injection pump			Mechanical variable speed (R.Q.V)		
Fuel consumption		g / PS.h	153	167	166
		Lit / h	97	120	159
Starting system			Electric Starting by starter motor		
Starter motor capacity		V - kW	24 - 6.6		
Alternator capacity		V – A	24 - 50		
Battery		V - Ah	24 - 200		
Cooling system			Indirect sea water cooling with heat exchanger		
Cooling water capacity	Max. / Min.	lit.		94 / 83	
Fresh water pump type			Centrifugal type, driven by belt		
Sea water pump type			Bronze impeller type driven by belt		
Lubricating oil (Engine)	pan capacity	lit.	Max : 31, Min : 25 (Engine total : 35)		
	pressure	kg/cm <sup>2</sup>	Full : 3.5, Idle : 1.2		
Direction of revolution	crankshaft		Counter clockwise viewed from stern side		
Engine Size ( L x W x H )		mm	1,205 x 1,237 x 1,111		
Engine dry weight		kg	1,540	1,540	1,580

psi = kg/cm<sup>2</sup> x 14.22 lb/ft. = N.m x 0.737 kW = 0.2388 kcal/s lb=kg x 2.205 lb/PS.h = g/kW.h x 0.00162 $cfm = m^{3}/min x 35.3$  hp = PS x 0.98635 U.S gal. = liter x 0.264



Amsterdam Alexandria Marine Boekweitstraat 17 2153 GK, Nieuw Vennep The Netherlands

+31(0)252514588 info@aam-equipment.nl www.aam-equipment.nl www.aam-consulting.nl Head office 7-11, Hwasu-Dong, Dong-Gu, Incheon, Korea TEL : 82-32-211-2246, 2248 FAX : 82-32-761-2759 Seoul Office Doosan Infracore Co. Ltd., 21st Floor, Doosan Tower, 18-12, Euljiro 6-ga, Jung-gu, Seoul, Korea. TEL : 82-2-3398-8521~8536 FAX : 82-2-3398-8509 Web site : www.doosaninfracore.com

**\*** Specifications are subject to change without prior notice.