

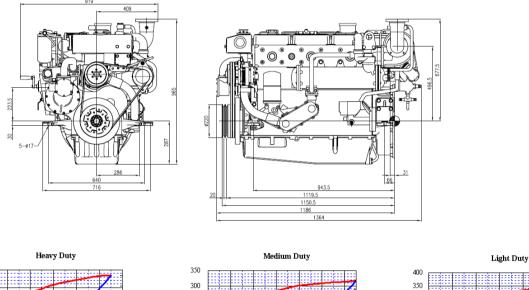
L086TI MARINE ENGINE

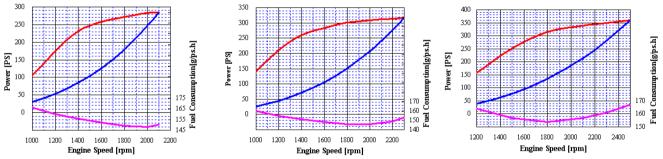


POWER RATING

Fioduction tolerance . 1					
MODEL	CONDITIONS	POWER	rpm	Base Engine	
L086TIH	HEAVY DUTY	285PS (210kW)	2,100		
L086TIM	MEDIUM DUTY	315PS (232kW)	2,300	D1146TIB	
L086TIL	LIGHT DUTY	360PS (265kW)	2,500		

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 boat, Yacht, Coastguard boat, Fast boat, Fire pump)





Engine Specification

Model		Units	L086TIH	L086TIM	L086TIL	
Engine type			4 cycle, In line, direct- injection, water cooled with wet turbo charger & inter-cooler			
Rating output (B.H.P)		PS(kW)/rpm	285(210)/2,100	315(232)/2,300	360(265)/2,500	
Displacement		сс	8,071			
Cylinder number - bore(ϕ) x stroke		mm	6 - \$111 x 139			
Valve clearance at cold In / Ex		mm	0.3 / 0.3			
Low idling rpm		rpm	750 ± 25			
No load max. rpm		rpm	below 2,310	below 2,530	below 2,750	
Mean effective pressure		kg/cm ²	15.14	14.55	16.06	
Mean piston speed		m/sec.	9.73	10.66	11.58	
Compression ratio			16.7 : 1 15.3:1			
Firing order			1 - 5 - 3 - 6 - 2 - 4			
Compression pressure	at 200 rpm	kg/cm ²	28 (Initial condition)			
Governor type of injection pump			Mechanical all speed (R.S.V)			
Fuel concumption		g/PS.h	152	163	167	
Fuel consumption		lit / h	52	62	72	
Injection timing (B.T.D.C)		deg	$15^{\circ} \pm 1^{\circ}$	$15^{\circ} \pm 1^{\circ}$	$15^{\circ} \pm 1^{\circ}$	
Fuel inj. Nozzle opening pressure		kg/cm ²	224			
Starting system			Electric Starting by starter motor			
Starter motor capacity		V- kW	24 - 4.5			
Alternator capacity		V- A	24 - 50			
Battery		V- Ah	24 - 100			
Cooling system			Indirect sea water cooling with heat exchanger			
Cooling water capacity Max. / Min.		lit	27 / 25			
Fresh water pump type			Centrifugal type, driven by V- belt			
Sea water pump type			Rubber impeller type driven by gear			
Lubricating oil	lit	Max : 23, Min : 17 (Engine total : 25)				
(Engine)	pan capacity pressure	kg/cm ²	Full : 3.5, Idle : 1.2			
Marine gear	Model	-	DMT 110A (Dong – I)			
	Gear ratio		1.77 2.09 2.42 2.82 3.19			
	crankshaft		Counter clockwise viewed from stern side			
Direction of revolution	propeller		Clockwise viewed from stern side			
Engine size without M/G		mm	1,364 x 919 x 965			
(L x W x H)	with M. gear	mm	1,552 x 919 x 1,062			
F 1 11.	without M/G	kg	790			
Engine dry weight	with M. gear	kg	1,015			

psi = kg/cm² x 14.22 lb/ft. = N.m x 0.737 kW = 0.2388 kcal/s $\label{eq:lb} \begin{array}{l} lb = kg \; x \; 2.205 \\ lb/PS.h = g/kW.h \; x \; 0.00162 \\ cfm = m^3/min \; x \; 35.3 \end{array}$

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hp = PS x 0.98635 U.S gal. = liter x 0.264



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

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