

Doosan Infracore Engines & Materials

Marine Diesel Engine V180TI

- Compact Design
- Excellent Performance
- Low Fuel Consumption
- Easy Maintenance

E 509

Rating output

603kW (820PS)

Displacement

18,273cc

Dimension (L × W × H)

1,495 × 1,223 × 1,169mm
Without Reduction Gear

	Main Specification						
	Model		Units	V180TI (D2840LB)			
				V180TIH	V180TIM	V180TIL	
	Engine type		4cycle, V type, direct-injection, water cooled with wet turbo charger & inter-cooler				
	Rating output		PS(kW)/rpm	600(441)/1,800	650(478)/2,100	820(603)/2,300	
	Displacement		C C	18,273			
	Cylinder number - bore $ imes$ stroke		mm	10 - 128×142			
	Low idling rpm		rpm	725 ± 25			
	No load max. rpm		rpm	below 2,070	below 2,415	below 2,645	
	Compression ratio			15 : 1 14.6 : 1		14.6 : 1	
	Firing order			1-6-5-10-2-7-3-8-4-9			
	Governor type of injection pump			Mechanical variable speed (R.Q.V)			
	Fuel consumption(only Ref.)		g / PS.h	150	156	158	
			Lit / h	109	122	156	
	Starting system			Electric Starting by starter motor			
	Starter motor capacity	Starter motor capacity		24 - 6.6			
	Alternator capacity	Alternator capacity		24 - 50			
	Battery	Battery		24 - 200			
	Cooling system			Indirect sea water cooling with heat exchanger			
	Cooling water capacity	Max. / Min.	lit	92 / 81			
	Fresh water pump type			Centrifugal type, driven belt			
	Sea water pump type			Bronze impeller type driven by belt			
	Lubricating oil(Engine)	Pan capacity	lit	Max : 35, Min : 28 (Engine total : 38)			
	Direction of revolution	Crankshaf		Counter clockwise viewed from stern side			
	Engine Size(L \times W \times H)	Without M/G	mm	1,495×1,223×1,169			
	Engine dry weight	Without M/G	kg	1,	550	1,630	

% H : Heavy Duty, M : Medium Duty, L : Light Duty

Engine Dimension





Performance Curve

- Heavy duty : 441kW(600PS)@1,800rpm
- Medium duty: 478kW(650PS)@2,100rpm
 Light duty : 603kW(820PS)@2,300rpm



Marine rating to ISO 3046

(1) Heavy Duty

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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)		

(2) 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)

(3) 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, Navy)

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Doosan Infracore Engines & Materials

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AUTHORIZED DEALER	

* Specifications are subject to change without prior notice.