



**4AD158TI/4AD222TI
MARINE GENERATOR ENGINE**



Production tolerance : ± 3%

Spec.		Model	Units	4AD158TI	4AD222TI
Engine type				4 cycle, V-type, direct- injection, water cooled with wet- turbo charger & inter-cooler	
Rating output (B.H.P)	50 Hz	PS(kW) / rpm		442(325)/1,500 (4AD158TIF)	667(491) /1,500 (4AD222TIF)
	60 Hz			530(390)/1,800 (4AD158TIS)	800(588) /1,800 (4AD222TIS)
Displacement			cc	14,618	21,927
Cyl. No. – bore(φ) x stroke			mm	8 - Φ128 x 142	12 - Φ128 x 142
Valve clearance at cold			mm	0.4 / 0.5	
Low idling rpm			rpm	800 ± 50	
No load max. rpm (50Hz / 60Hz)			rpm	1,500 / 1,800	
Mean effective press. (Initial)			kg/cm ²	18.1 / 18.1	18.3 / 18.2
Mean piston speed (50Hz / 60Hz)			m/sec.	7.1 / 8.52	
Compression ratio				14.3 : 1	
Governor type of inj. pump				Electric Governor	
Fuel consumption			g/PS.h	165 / 171.5	159 / 169
			liter/h	88 / 110	128 / 163
Injection timing (B.T.D.C)	50 Hz	deg.	CCnR2	9° ± 1°	9° ± 1°
			EIAPP	15° ± 1°	15° ± 1°
	60 Hz		CCnR2	11° ± 1°	11° ± 1°
			EIAPP	15° ± 1°	15° ± 1°
Starting system				Electric Starting by starter motor	
Starter motor capacity			V- kW	24 V – 6.6	
Alternator capacity			V- A	24 V – 50	
Battery			V- Ah	24V – 200	
Cooling system				Indirect cooling by sea water with heat exchanger	
Cooling water capacity			lit	94 / 83	103 / 92
Fresh water pump type				Centrifugal type driven by V - belt	
Sea water pump type				Centrifugal type driven by V - belt	
Lub. Oil (Engine)	Pan capacity		lit	Max : 31, Min : 25 (Engine total : 35)	Max : 40, Min : 33 (Engine total : 49)
	Pressure		kg/cm ²	Full : 3.5 , Idle: 1.2	
Revolution of Crankshaft				Counter clockwise viewed from flywheel side	
Engine size (L x W x H)			mm	1,205 x 1,237 x 1,117	1,521 x 1,243 x 1,236
Engine dry weight			kg	1540	1920

* Specifications are subject to change without prior notice.