Production tolerance : ± 3%

Spec. \ Model		Units	Auxiliary		
			AD158TI	AD180TI	AD222TI
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	410(302)/1,500 (AD158TIF)	485(357)/1,500 (AD180TIF)	606(446) /1,500 (AD222TIF)
	60 Hz		480(353)/1,800 (AD158TIS)	600(441)/1,800 (AD158TIS)	720(530) /1,800 (AD222TIS)
Displacement		cc	14,618	18,273	21,927
Cyl. No. – bore(ϕ) x stroke		mm	8 - Φ128 x 142	10 - Φ128 x 142	12 - Φ128 x 142
Valve clearance at cold		mm	0.3 / 0.3		
Low idling rpm		rpm	800 ± 50		
No load max. rpm (50Hz / 60Hz)		rpm	1,500 / 1,800		
Mean effective press. (Initial)		kg/㎠	16.83 / 16.42	15.93 / 16.42	16.58 / 16.42
Mean piston speed (50Hz / 60Hz)		m/sec.	7.1 / 8.52		
Compression ratio			15.5 : 1		
Governor type of inj. pump			Electric Governor		
Fuel consumption		g/PS.h	153 / 157	155 / 156	155 / 154
		liter/h	76 / 91	91 / 113	113 / 134
Injection timing (B.T.D.C)	50 Hz	deg.	14° ± 1°	16° ± 1°	16° ± 1°
	60 Hz	deg.	15° ± 1°	18° ± 1	18° ± 1°
Starting system			Electric Starting by starter motor		
Starter motor capacity		V- kW	24 V – 6.6		
Alternator capacity		V- A	24 V – 80		
Battery		V- Ah	24V – 200		
Cooling system			Indirect cooling by sea water with heat exchanger		
Cooling water capacity		lit	89 / 78	92 / 81	98 / 87
Fresh water pump type			Centrifugal type driven by V - belt		
Sea water pump type			Rubber impeller type driven by V - belt		
Lub. Oil (Engine)	Pan capacity	lit	Max : 31, Min : 25 (Engine total : 35)	Max : 35, Min : 28 (Engine total : 38)	Max : 40, Min : 33 (Engine total : 43)
	Pressure	kg/㎠	Full : 3.5 , Idle: 1.2		
Revolution of Crankshaft			Counter clockwise viewed from flywheel side		
Engine size (L x W x H)		mm	1,037 x 1,222 x 1,074	1,195 x 1,222 x 1,169	1,353 x 1,222 x 1,199
Engine dry weight		kg	1295	1545	1735

Production tolerance : ± 3%

Spec. \ Model		Units	Emergency		
			AD158TI	AD180TI	AD222TI
Engine type			4 cycle, V-type, direct- injection, water cooled with wet- turbo charger & inter-cooler		
Rating output (B.H.P)	60 Hz	PS(kW) / rpm	480(353)/1,800 (AD158TIS)	600(441)/1,800 (AD158TIS)	720(530) /1,800 (AD222TIS)
Displacement		cc	14,618	18,273	21,927
Cyl. No. – bore(ϕ) x stroke		mm	8 - Φ128 x 142	10 - Φ128 x 142	12 - Φ128 x 142
Valve clearance at cold		mm	0.3 / 0.3		
Low idling rpm		rpm	800 ± 50		
No load max. rpm (50Hz / 60Hz)		rpm	1,500 / 1,800		
Mean effective press. (Initial)		kg/㎠	16.83 / 16.42	15.93 / 16.42	16.58 / 16.42
Mean piston speed (50Hz / 60Hz)		m/sec.	7.1 / 8.52		
Compression ratio			16.0 : 1		
Governor type of inj. pump			Electric Governor		
Fuel consumption		g/PS.h	153 / 157	155 / 156	155 / 154
		liter/h	76 / 91	91 / 113	113 / 134
Injection timing (B.T.D.C)	50 Hz	deg.	14° ± 1°	16° ± 1°	16° ± 1°
	60 Hz		15° ± 1°	18° ± 1	18° ± 1°
Starting system			Electric Starting by starter motor		
Starter motor capacity		V- kW	24 V – 6.6		
Alternator capacity		V- A	24 V – 80		
Battery		V- Ah	24V – 200		
Cooling system			Indirect cooling by sea water with heat exchanger		
Cooling water capacity		lit	89 / 78	92 / 81	98 / 87
Fresh water pump type			Centrifugal type driven by V - belt		
Sea water pump type			Rubber impeller type driven by V - belt		
Lub. Oil (Engine)	Pan capacity	lit	Max : 31, Min : 25 (Engine total : 35)	Max : 35, Min : 28 (Engine total : 38)	Max : 40, Min : 33 (Engine total : 43)
	Pressure	kg/㎠	Full : 3.5 , Idle: 1.2		
Revolution of Crankshaft			Counter clockwise viewed from flywheel side		
Engine size (L x W x H)		mm	1,037 x 1,222 x 1,074	1,195 x 1,222 x 1,169	1,353 x 1,222 x 1,199
Engine dry weight		kg	1295	1545	1735