DOOSAN AD136/T/TI/086TI MARINE GENERATOR



Production tolerance: ± 3%

	Model	Units	Production tolerance : ± Auxiliary					
Spec.	Model		AD136	AD136T	AD136TI	AD086TI		
Engine type			4 cycle, in line, direct- injection, water cooled naturally aspirated	4 cycle, in line, direct- injection, water cooled with turbo charger	4 cycle, in line, direct- injection24, water cooled with turbo charger & inter-cooler	4 cycle, in line, direct- injection, water cooled with Wet-turbo charger & inter-cooler		
Rating output (B.H.P)	50 Hz	PS(kW) / rpm	105(77)/1,500 (AD136F)	145(107)/1,500 (AD136TF)	157(115)/1,500 (AD136TIF)	205(151) /1,500 (AD086TIF)		
	60 Hz		126(93)/1,800 (AD136S)	170(125)/1,800 (AD136TS)	188(138)/1,800 (AD136TIS)	253(186) /1,800 (AD086TIS)		
Displacement		cc	8,071					
Cyl. No. – bore(φ) x stroke		mm	6 - Ф111 х 139					
Valve clearance at cold		mm	0.3 / 0.3					
Low idling rpm		rpm	800 ± 50					
No load max. rpm			Mechanical governor: 1575 (52.5 Hz) / 1890(63Hz),					
		rpm	Electric governor : 1500 (50 Hz) / 1800(60Hz)					
Mean effective pres	Mean effective press. (Initial)		7.81 / 7.81	10.78 / 10.53	11.65 / 11.65	15.24 / 15.67		
Mean piston speed		m/sec.	6.95 / 8.34					
Compression ratio			17.6 16.7					
Comp. Press. (at 200 rpm)		kg/cm²	About 28 (Initial condition)					
Governor type of inj. pump			Electric Governor					
Fuel consumption		g/PS.h	160 / 160	153 / 155	153 / 153	150 / 151		
		liter/h	20 / 24	27 / 32	29 / 34	37 / 46		
Injection timing (B.T.D.C)		deg.	22° ± 1°	18° ± 1°	14° ± 1°	15° ± 1°		
Inj. nozzle opening press.		kg/cm²	224					
Starting system			Electric Starting by starter motor					
Starter motor capacity		V- kW	24 V – 4.5					
Alternator capacity		V- A	24 V – 80					
Battery		V- Ah	24V - 100					
Cooling system			Indirect cooling by sea water with heat exchanger					
Cooling water capacity		lit	Max.: 25 , Min.: 23					
Fresh water pump t	Fresh water pump type		Centrifugal type, driven by V- belt					
Sea water pump type			Rubber impeller type driven by gear					
Lub. Oil	Pan capacity	lit	Max: 23, Min: 17 (Engine total: 25)					
(Engine)	Pressure	kg/cm²	Full: 3.5, Idle: 1.2					
Revolution of Crankshaft			Counter clockwise viewed from Flywheel side					
Engine size (L x W x H) (Except reduction gear)		mm	1,182 x 770 x 925	1,182 x 770 x 925	1,182 x 825 x 925	1,182 x 825 x 962		
Engine dry weight (Except reduction gear)		kg	735	748	773	790		



DOOSAN AD136/T/TI/086TI MARINE GENERATOR



Production tolerance : $\pm 3\%$

Model		11	Production tolerance : ± Emergency				
Spec.		Units	AD136TI		AD086TI		
Engine type			4 cycle, in line, direct-injection, water cooled with turbo charger & inter-cooler		4 cycle, in line, direct-injection, water cooled with wet-turbo charger & inter-cooler		
Rating output (B.H.P)	60 Hz	PS(kW) / rpm	188(138)/1,800 (AD136TIS)		253(186) /1,800 (AD086TIS)		
Displacement		cc	8,071				
Cyl. No. – bore(φ) x stroke		mm	6 - Ф111 х 139				
Valve clearance at cold		mm	0.3 / 0.3				
Low idling rpm		rpm	800 ± 50				
No load max. rpm		rpm	Mechanical governor : 1575 (52.5 Hz) / 1890(63Hz),				
			Electric governor : 1500 (50 Hz) / 1800(60Hz)				
Mean effective press. (Initial)		kg/cm²	11.65 / 11.65			15.24 / 15.67	
Mean piston speed		m/sec.	6.95 / 8.34				
Compression ratio			17.6 16.7				
Comp. Press. (at 200 rpm)		kg/cm²	About 28 (Initial condition)				
Governor type of inj. pump			Electric Governor				
Fuel consumption		g/PS.h	153				
		liter/h	34		46		
Injection timing (B.T.D.C)		deg.	14° ± 1°			15° ± 1°	
Inj. nozzle opening press.		kg/cm²	224				
Starting system			Electric Starting by starter motor				
Starter motor capacity		V- kW	24 V – 4.5				
Alternator capacity		V- A	24 V – 80				
Battery		V- Ah	24V - 100				
Cooling system			Indirect cooling by sea water with heat exchanger				
Cooling water capacity		lit	Max.: 25 , Min.: 23				
Fresh water pump type			Centrifugal type, driven by V- belt				
Sea water pump type			Rubber impeller type driven by gear				
Lub. Oil (Engine)	Pan capacity	lit	Max: 23, Min: 17 (Engine total: 25)				
	Pressure	kg/cm²	Full: 3.5, Idle: 1.2				
Revolution of Crankshaft			Counter clockwise viewed from Flywheel side				
Engine size (L x W x H) (Except reduction gear)		mm	1,182 x 825 x 925 1,182 x 825 x 962				
Engine dry weight (Except reduction gear)		kg	773 790				



