Engine Model 6DWD-235A

DWD Series for Diesel Generator application

POWER RATING

Engine Speed	Type of Operation	Engine Gross Power		
		kW	PS	
1500 rpm	Prime Power	186	253	
	Standby Power	206	280	
1800 rpm	Prime Power	195	265	
	Standby Power	215	292	

- The engine performance is as per ISO 3046. Type of operation is based on ISO 8528.
- Prime power is available for an unlimited number of hours per year in a variable load application.
- The permissible average power output over 24 hours of operation shall not exceed 80% of the prime power rating.

Engine Specifications		Fuel Consumption Data				
						(Liter/Hour)
 Engine Type 	In-Line type, 4 strokes,	Speed 150		0 rpm	1800 rpm	
	water-cooled Turbocharged	Rating	Prime	Standby	Prime	Standby
	air-to-air intercooled		186 kW	206 kW	195 kW	215 kW
 Combustion type 	Direct injection	100% Load	47.5	51.5	51.0	55.5
 Cylinder Type 	Wet liner	75% Load	33.0		35.5	
 No. of Cylinders 	6	50% Load	24.0		26.0	
○ Bore × stroke	126 ×130 mm	25% Load	15.5		16.5	
 Displacement 	9.726 liter					
 Compression ratio 	16 : 1					
 Firing order 	1 - 5 - 3 - 6 - 2 - 4	Fuel Syster	m			
 Injection timing 	14.5 °BTDC	 Injection pur 	pump Dire		ect Injection type	
 Dry weight 	Approx. 980 kg	 Governor Electrical 		ectronic type		
Dimension(LxWxH)	1772 × 864 × 1220 mm	○ Feed pump Med		echanical type		
 Rotation 	Anti-clockwise	○ Injection nozzle		Mult	Multi-hole type	
	(Face to the flywheel)	 Opening pressure 		250	250 kg/cm2 (3556 psi)	
 Fly wheel housing 	SAE NO. 1	○ Fuel filter		Full	Full Flow, Cartridge type	
 Fly wheel 	SAE NO.14	 Used fuel 		Dies	el fuel oil	
 Ring Gear Tooth 	160 EA					
Mechanism		Lubrication	System			
○ Type	Overhead valve	○ Lub. Oil Gra	ide	CF-4	l oil	
 Number of valve 	Intake 1, exhaust 1 per	 Lub. Oil Par 	. Oil Pan Capacity 28		3 liter	
	Cylinder	 Max. allowa 	ble Oil Temp	115	degree C.	
 Valve lashes at cold 	Intake. 0.3~0.4 mm	 Low pressure warning 200 kPa 				
	Exhaust 0.4~0.5 mm	 Low pressur 	e Shutdown	160	kPa	
		Oil Consum	ption Rate	≤ 0.8	32 g/kWh	

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Cooling System		Engineering	Data				
 Cooling method 	Fresh water forced type			1500 rpm		1800 rpn	n
 Water Pump 	Centrifugal, Belt driven	Media Flow		Prime	S/B	Prime	S/B
 Water capacity 	28 liter (engine only)	Combustion Air	m3/min	15.0	16.6	15.7	17.3
 Max. Water Temp 	99 degree C.	Exhaust Gas	m3/min	29.5	32.6	31.0	34.1
 Thermostat 	Open 71°C / Full 82°C	Cooling Fan	m3/min	346	346		
 Water in/outlet Dia 	45 mm						
		○ Heat Rejection					
		to Exhaust	kW				
		to Coolant	kW				
		to Intercooler	kW				
Intake & Exhaust Sys	tem	to radiation	kW				

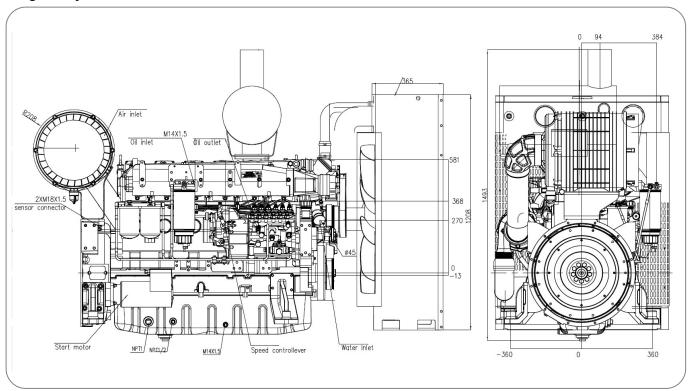
○ Max air restriction Clean 2 kPa / Dirty 5 kPa

○ Exhaust back pressure Max 6 kPa

Electric System	
 Charging generator 	28 V × 54 A (1500 W)
 Voltage regulator 	Build-in type IC regulator
 Starting motor 	24 V ×.7.5 kW
 Battery Voltage 	24 V
 Battery Capacity 	200 AH

Conversion Table

Engine Layout & Dimension



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