## Engine Model 6DWD- 358F

## **POWER RATING**

Engine Speed	Type of Operation	Engine Gross Power		
		kW	PS	
1500 rpm	Prime Power	286	389	
	Standby Power	315	428	
1800 rpm	Prime Power	315	428	
	Standby Power	347	472	

- 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.

<b>Engine Specification</b>	S	Fuel Consul	nption Data				
						( Liter/ Hour	
<ul> <li>Engine Type</li> </ul>	In-Line type, 4 strokes,	Speed 1500		00 rpm 18		00 rpm	
	water-cooled Turbocharged	Rating	Prime	Standby	Prime	Standby	
	air-to-air intercooled		286 kW	315 kW	-	=	
<ul> <li>Combustion type</li> </ul>	Direct injection	100% Load	72.3	79.2	_	-	
Cylinder Type	Wet liner	75% Load	52.9		-		
<ul> <li>No. of Cylinders</li> </ul>	6	50% Load	37.4				
○ Bore × stroke	126 ×130 mm	25% Load	24.2		-		
<ul> <li>Displacement</li> </ul>	9.726 liter	×					
<ul> <li>Compression ratio</li> </ul>	16:1						
○ Firing order	1 - 5 - 3 - 6 - 2 - 4	Fuel Syste	m				
Injection timing	14.5 °BTDC	<ul> <li>Injection pump</li> </ul>		Direct Injection type			
○ Dry weight	Approx. 980 kg	<ul> <li>Governor</li> </ul>		Electronic type			
<ul><li>Dimension(LxWxH)</li></ul>	1772 × 864 × 1220 mm	○ Feed pump		Mech	Mechanical type		
Rotation Anti-clockwise		<ul> <li>Injection nozzle</li> <li>Multi-hole typ</li> </ul>		-hole type	уре		
	(Face to the flywheel)	<ul> <li>Opening pr</li> </ul>	essure	250 l	kg/cm2 (355	66 psi)	
<ul> <li>Fly wheel housing</li> </ul>	SAE NO. 1	<ul> <li>Fuel filter</li> </ul>		Full F	low, Cartric	lge type	
○ Fly wheel	SAE NO.14	<ul> <li>Used fuel</li> </ul>		Dies	el fuel oil		
○ Ring Gear Tooth	160 EA						
Mechanism		Lubrication	System				
○ Туре	Overhead valve	<ul> <li>Lub, Oil Gra</li> </ul>	ade	CF-4	oil		
Number of valve Intake 1, exhaust 1 per		○ Lub. Oil Pan Capacity 28		28 lit	28 liter		
	Cylinder	<ul> <li>Max. allowa</li> </ul>	ıble Oil Temp	115 (	degree C.		
<ul> <li>Valve lashes at cold</li> </ul>	Intake. 0.3~0.4 mm	<ul> <li>Low pressu</li> </ul>	re warning	200	кРа		
	Exhaust 0.4~0.5 mm	<ul><li>Low pressu</li></ul>	re Shutdown	160	кРа		
		<ul> <li>Oil Consum</li> </ul>	ption Rate	≤ 0.8	2 g/kWh		

Cooling System		Engineering	Data				
<ul> <li>Cooling method</li> </ul>	Fresh water forced type			1500 rpm		1800 rpn	n
<ul> <li>Water Pump</li> </ul>	Centrifugal, Belt driven	<ul> <li>Media Flow</li> </ul>		Prime	S/B	Prime	S/B
<ul> <li>Water capacity</li> </ul>	28 liter (engine only)	Combustion Air	m3/min	22.0	22.4	÷	=
<ul> <li>Max. Water Temp</li> </ul>	99 degree C.	Exhaust Gas	m3/min	38.9	42.5	-	-
<ul> <li>Thermostat</li> </ul>	Open 71°C / Full 82°C	Cooling Fan	m3/min	412	412	-	-
<ul> <li>Water in/outlet Dia</li> </ul>	45 mm						
		○ Heat Rejection					
		to Exhaust	kW				
		to Coolant	kW				
		to Intercooler	kW				
Intake & Exhaust Sys	tem	to radiation	kW				

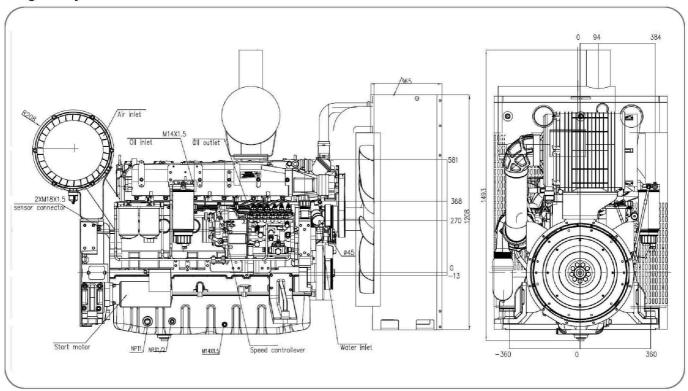
Max air restriction
 Clean 2 kPa / Dirty 5 kPa

O Exhaust back pressure Max 6 kPa

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

## Conversion Table

## **Engine Layout & Dimension**



6DWD-358F Revision B2. Aug. 2019