

2. Specifications

2-1. Engine

Model		3JH2-(B)E	3JH2-T(B)E
Type		Vertical 4-cycle water cooled diesel engine	
Combustion system		Direct injection	
Aspiration		Normal aspiration	Exhaust gas turbocharger
Number of cylinders		3	
Bore × stroke		mm (in.) 82 × 86 (3.23 × 3.39)	
Displacement		ℓ (cu.in.) 1.363 (83.17)	
One hour rating output (DIN6270B) flywheel output	Output/crankshaft speed	HP/rpm (kW/rpm) 38/3600 (27.9/3600)	47/3600 (34.6/3600)
	Brake mean effective pressure	kg/cm ² (lb./in. ²) 6.97 (99.113)	8.62 (122.576)
	Piston speed	m/sec. (ft./sec.) 10.3	
Continuous rating output (DIN6270A) flywheel output	Output/crankshaft speed	HP/rpm (kW/rpm) 35/3400 (24.3/3400)	43/3400 (31.6/3400)
	Brake mean effective pressure	kg/cm ² (lb./in. ²) 6.80 (96.696)	8.35 (118.737)
	Piston speed	m/sec. (ft./sec.) 9.75	
Compression ratio		18.1	18.0
Fire order		1 240° 3 240° 2 240° 1	
Fuel injection pump		YPES-CL	
Fuel injection timing (b.T.D.C.)		degree 17°	
Fuel injection pressure		kg/cm ² (lb./in. ²) 200±5 (19.6±0.5)	
Fuel injection nozzle		Hole type	
Direction of rotation (Crankshaft)		Counter-clock wise viewed from stern	
Power take off		At Flywheel side	
Cooling system		Constant high temperature fresh water cooling Fresh water : Centrifugal pump Sea water : Rubber impeller pump	
Lubrication system		Forced lubrication with trochoid pump	
Starting system	Starting motor	DC 12V 1.4kW	
	AC generator	12V 55A (12V 80A : Option)	
Turbocharger	Type	—	RHB52 (I.H.I.)
	Model	—	—
	Cooling system	—	Water cooling
Air cooler system	Type	—	—
	Radiation area	m ² (in. ²)	—
Dimensions (with KMA)	Overall length	mm (in.) 760.2 (3JH2BE) / 782.3(3JH2E)	760.2 (29.93) / 782.3 (30.84)
	Overall width	mm (in.) 511.5	511.5 (20.65)
	Overall height	mm (in.) 587.5	587.5 (23.13)
Engine weight without marine gear (dry)		kg (lb.) 165	174
Lubricating oil capacity Effect/max.		ℓ (cu.in.) 2.1 / 4.9	
Cooling water capacity (Fresh water)	Fresh water tank	ℓ (cu.in.) 4.7	
	Sub tank	ℓ (cu.in.) 0.8 (48.82)	

2-2. Marine Gear

Marine gear system	Model		KBW-10E		KM3A		
	Type		Multiple friction disc clutch (Parallel drive)		Cone clutch (Angle drive)		
	Reduction ratio (Forward/Reverse)		2.14/2.50	2.45/2.50	2.33/3.04	2.64/3.04	3.21/3.04
	Direction of rotation (Forward) viewed from stern		Clock wise		Clock wise		
	Lubricating oil capacity	ℓ (cu.in.)	0.2/0.7 (12.204/42.714)		0.05/0.35 (3.051/21.357)		
	Lubricating oil						
	weight	kg (lb.)	17.5 (38.588)		13 (28.665)		

2-3. Applicability of Marine gear & Reduction ratio

●: Standard combination
○: Optional combination
x: Inapplicable

Marine gear		Engine model		3JH2F	3JH2-TE
		Reduction ratio	I.D Mark		
KBW10E	Model				
		2.14	S	●	●
		2.45	G	●	●
		2.83	GG	●	x
KM3A		2.33	S	●	●
		2.64	G	●	●
		3.21	GG	●	x