



MARINE DIESEL ENGINES

6HA2M-WHT Series

LONG STROKE | IMO Tier II Compliant | Mechanical Engine Control

Configuration	A cycle. Vertical Turbe charged with Fresh watercooled				
Configuration	4-cycle, Vertical, Turbo-charged with Fresh watercooled				
	intercooler diesel engine				
Maximum output at crankshaft	M: 257 kW@1950 rpm	[350 mhp@1950 rpm]			
	H: 204 kW@1880 rpm	[278 mhp@1880 rpm]			
Displacement	13.140 ltr				
Bore x stroke	130 mm × 165 mm				
Cylinders	6 in-line				
Combustion system	Direct injection				
Starting system	Electric starting motor [DC 24V]				
Flywheel housing size	SAE #1, 14 inch				
Cooling system	Constant high temperature cooling with Heat exchanger				
Cooling fresh water capacity	66 ltr + 1.5 ltr [reserve tank]				
Lubrication system	Forced lubrication with gear pump				
Lubricating oil capacity	38 ltr				
Lubricating oil grade	SAE30, 40				
Direction of rotation [crankshaft]	Counterclockwise viewed from stern				
Dry weight without gear	1455 kg				
Environmental	IMO Tier II				
Fuel consumption [at rated output]	M: 217 gr/kW hr	H: 217 gr/kW hr			

DIMENSIONS [UNIT: MM]

Front view, engine only

1016 499 517 CRANK CENTER 836 160 160 172 874 771 1260 130 386 Right side view, engine only

1585

438

No.1

271

199

CYL

870

1087

277

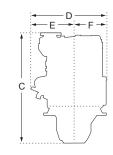
No.6

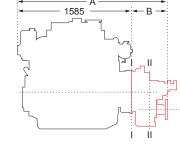
CYL

295

Front view with gearbox YX-120

Left side view with gearbox YX-120





Model	А	В	С	D	E	F
6HA2M-WHT×YX-120	2005	420	1272	1016	499	517
6HA2M-WHT×YX-120L	2039	454	1384	1016	499	517





PERFORMANCE CURVES

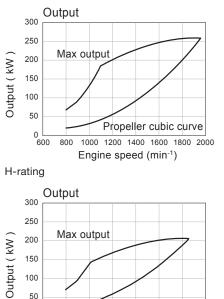
M-rating

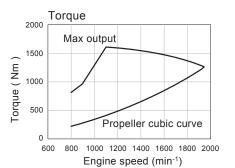
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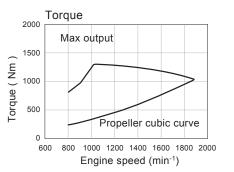
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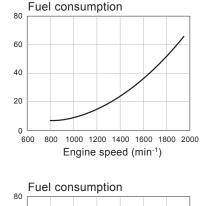
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600 800

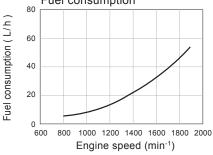








Fuel consumption (L/h)



Rating definitions: hp = 0.7355 kW Ratings are based on conditions of 100 kPa, 30% relative humidity at 25°C. M= For applications where use of rated power is less than 10 hours continuous and operation is less than 3000 hours per year. H= For applications where use of rated power is less than 24 hours continuous and operation is less than 4000 hours per year. Fuel rates: Specific gravity 0.835 g/cc, low calorific value 42700 kj/kg [10200kcal/kg], Cetane No.45.

Propeller cubic curve

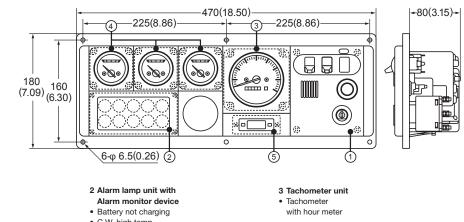
1000 1200 1400 1600 1800 2000

Engine speed (min⁻¹)

MARINE GEARS SPECIFICATIONS

Model		YX-120			YX-120L		
Туре	Hyd	Hydraulic multi-disc clutch			Hydraulic multi-disc clutch		
Dry Weight		315 kg			411 kg		
Reduction Ratio [Ahead]	2.03	2.57	3.04	4.00	4.59		
Prop. shaft speed [at rated output]	960	758	641	488	425		
Direction of rotation [propeller shaft]	Clockwise or co	ounter-clockwise view	ved from stern	Clockwise or counter-clockwise viewed from stern			

INSTRUMENT PANEL D-TYPE [UNIT: MM]



- 1 Switch unit Key switch Alarm buzzer
- Alarm buzzer stop switch
- Illumination switch

- C.W. high temp.
- · L.O. low pressure
- Clutch oil pressure
- L.O. filter clogged
- C.W.level

4 Sub meter unit

- L.O. pressure meter
- C.W. temp. meter
- Boost meter (Turbo)

5 Clock unit Clock