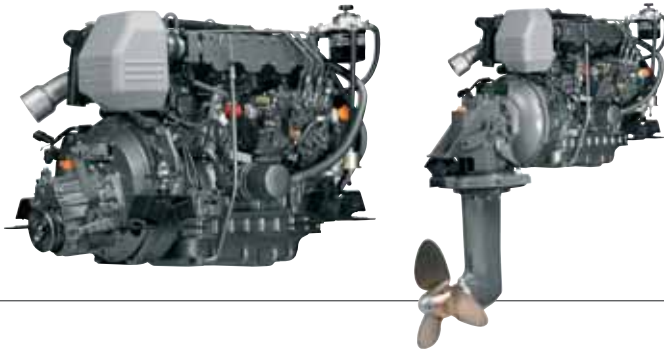


# Yanmar type 4JH4AE

## The Powerful Gem

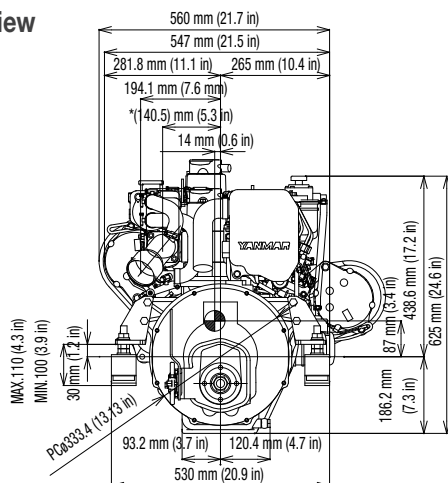


<b>Configuration</b>	4-stroke, vertical, water cooled diesel engine
<b>Maximum output at crankshaft</b>	* 39.6 kW (54 mhp) / 3000 rpm
<b>Continuous rating output at crankshaft</b>	36.0 kW (49 mhp) / 2907 rpm
<b>Displacement</b>	2.19 L (134 cu in)
<b>Bore x stroke</b>	88 mm x 90 mm (3.46 in x 3.54 in)
<b>Cylinders</b>	4 cylinders, 2-valves per cylinder
<b>Combustion system</b>	Direct injection
<b>Aspiration</b>	Natural aspiration
<b>Starting system</b>	Electric starting 12 V - 1.4 kW
<b>Alternator</b>	12 V - 80 A
<b>Cooling system</b>	Fresh water cooling by centrifugal water pump and rubber impeller sea water pump
<b>Lubrication system</b>	Enclosed, forced lubricating system
<b>Direction of rotation (crankshaft)</b>	Counter clockwise viewed from stern
<b>Dry weight without gear</b>	201 kg (443 lbs)
<b>Environmental</b>	Meets EPA Tier2, BSO Tier2 and RCD comprehensive emissions regulations introduced in EU and US in 2006
<b>Engine mounting</b>	Rubber type flexible mounts

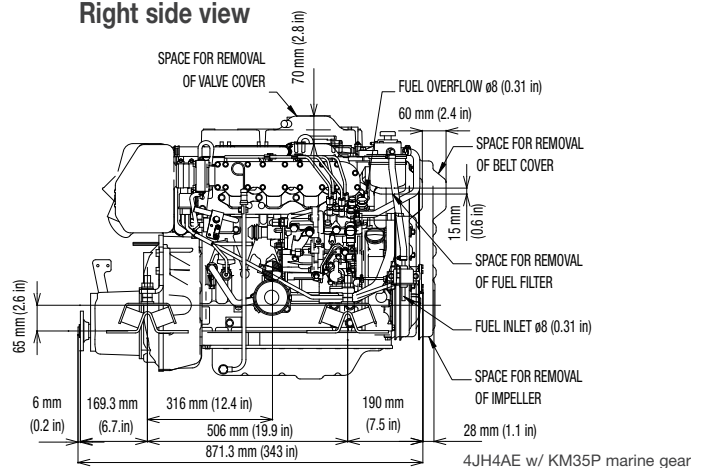
NOTE: Fuel condition: Density at 15°C = 0.84 g/cm<sup>3</sup>; 1kW = 1.3596 mhp = 1.3410 HP  
 \* Fuel temperature 40°C at the inlet of the fuel injection pump (ISO 8665)  
 Technical data is according to ISO 8665 / 3046

**Dimensions** (For detailed line-drawings, please refer to our web-site: [www.yanmarmarine.com](http://www.yanmarmarine.com) or contact your supplier)

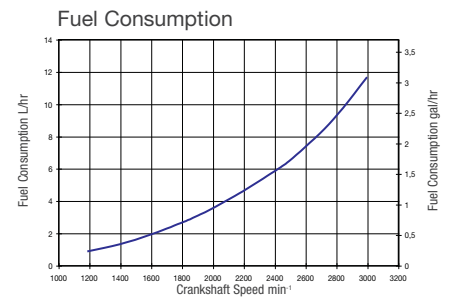
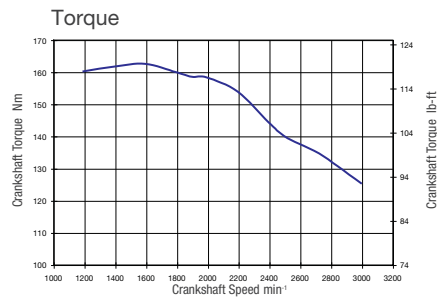
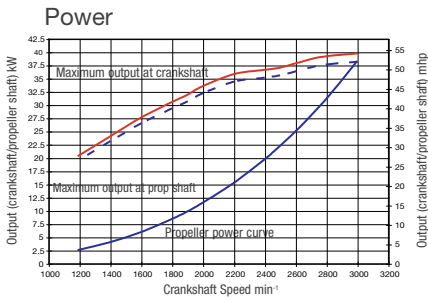
### Rear view



### Right side view



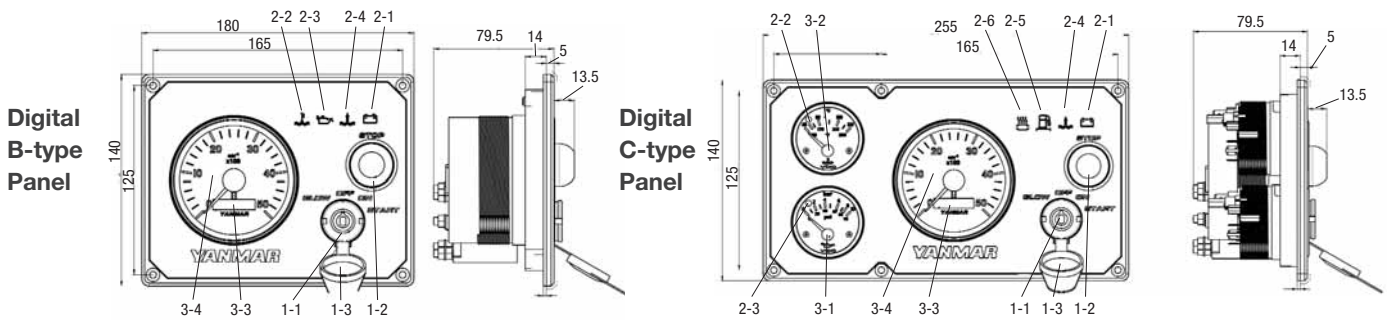
Performance Curves (Output is according ISO 8665)



Marine Gears/Drive

Model	KM35P		KM35A2 down angle: 7		KM4A1 down angle: 7			ZF30M		Saildrive SD50
Type	Mechanical cone clutch		Mechanical cone clutch		Mechanical cone clutch			Mechanical multy disc		Mechanical cone clutch
Dry weight	12 kg (27 lbs)		13 kg (29 lbs)		29 kg (64 lbs)			28 kg (61 lbs)		40 kg (88 lbs)
Reduction ratio (fwd/asn)	2.36/3.16	2.61/3.16	2.33/3.06	2.64/3.06	1.47/1.47	2.14/2.14	2.63/2.63	2.15/2.64	2.70/2.64	2.32/2.32
Propeller speed(fwd/asn)	1271/949	1149/949	1287/980	1136/980	2041/2041	1402/1402	1141/1141	1395/1136	1111/1136	1293/1293
Direction of rotation (propeller shaft - fwd)	Clockwise viewed from stern		Clockwise viewed from stern		Clockwise viewed from stern			Clockwise viewed from stern		Clockwise & counter clockwise viewed from stern
Dry weight engine and gear/drive	213 kg (469.5 lbs)		214 kg (471.7 lbs)		214 kg (471.7 lbs)			229 kg (505 lbs)		241 kg (531 lbs)
Length engine and gear/drive	871 mm (34.3 in)		864 mm (34.0 in)		922 mm (36.3 in)			950 mm (37.4 in)		1067 mm (42.0 in)

Instrument Panels



Function	Type of instrument panel	
	Digital B-type Panel	Digital C-type Panel
① <b>Switch unit</b>		
1-1 Key switch for GLOW/OFF/ON/START (4-position switch)	O	O
1-2 Push button switch for engine stop	O	O
1-3 Moisture cap for key switch	O	O
② <b>Alarm lamp unit</b>		
2-1 Battery low charge alarm	O	O
2-2 Coolant high temperature alarm	O	O
2-3 Lubricating oil low pressure	O	O
2-4 Water in sail drive seal alarm	O	O
2-5 Water in fuel filter alarm	X	O
2-6 Sea water insufficient flow alarm	X	O
③ <b>Meters</b>		
3-1 Lubricating oil pressure meter	X	O
3-2 Coolant temperature meter	X	O
3-3 Hour meter	O	O
3-4 Tachometer	O	O
④ <b>Audible alarm buzzer</b>	O	O

Note: O = Equipped on panel X = Not equipped on panel

Accessories

Standard Package

- Set Flexible Mounts
- Exhaust Mixing Elbow (L-Type)
- V-Belt Safety Cover
- Coolant Expansion Tank with bracket
- Alternator 12 V - 80 A

Optional

- Digital B-type Instrument Panel (Keyswitch or Keyless)
- Digital C-type Instrument Panel (Keyswitch or Keyless) including Coolant temperature- and Oil pressure sensors
- Primary Alternator 12V-60A instead of 12V-80A
- Secondary Alternator 12V-80A or 12V-130A or 24V-75A including bracket set and extended V-Belt Safety Cover
- Exhaust Mixing Elbow (U-Type)
- Various Instrument Panel extension wire harnesses (4 mtr or 6 mtr or 10 mtr)
- Y-Harness for secondary Instrument Panel
- Hotwater Fittings with or without cocks
- Lubrication oil evacuation pump
- Airheater

Texts and illustrations are not binding. Yanmar Marine reserves the right to introduce adaptations without prior notification.

4JH4AE Version: 2007-05