



# Yanmar type 4JH3-HTE

The Powerful Gem



<b>Configuration</b>	4-stroke, vertical, water cooled diesel engine
<b>Maximum output at crankshaft</b>	* 73.6 kW (100 hp) / 3800 rpm ** 71.4 kW (97 hp) / 3800 rpm
<b>Continuous rating output at crankshaft</b>	67.7 kW (92 hp) / 3700 rpm
<b>Displacement</b>	1.995 L (122 cu in)
<b>Bore x stroke</b>	84 mm x 90 mm (3.31 in x 3.54 in)
<b>Cylinders</b>	4
<b>Combustion system</b>	Direct injection
<b>Aspiration</b>	Turbocharged with intercooler
<b>Starting system</b>	Electric starting 12 V - 1.4 kW
<b>Alternator</b>	12 V - 60 A (80 A optional)
<b>Cooling system</b>	Fresh water cooling by centrifugal fresh 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>	228 kg (503 lbs)
<b>Environmental</b>	BSO II, SAV, EMC compliant and will meet the 2003/44/EC emission requirements to be effective from 2006
<b>Engine mounting</b>	Rubber type flexible mounting

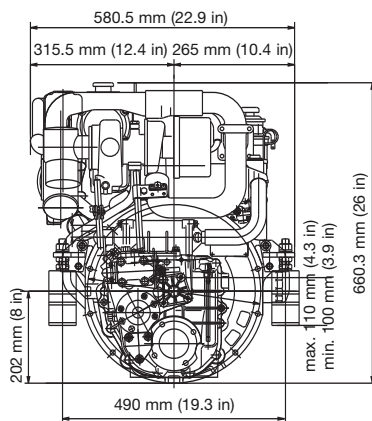
NOTE: Fuel condition: Density at 15°C = 0.842 g/cm<sup>3</sup>; 1 hp = 0.7355 kW

\* Fuel temperature 25°C at the inlet of the fuel injection pump (ISO 3046-1)

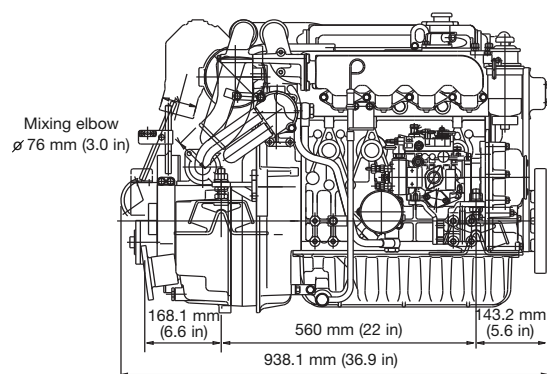
\*\* Fuel temperature 40°C at the inlet of the fuel injection pump (ISO 8665)

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

## Front view

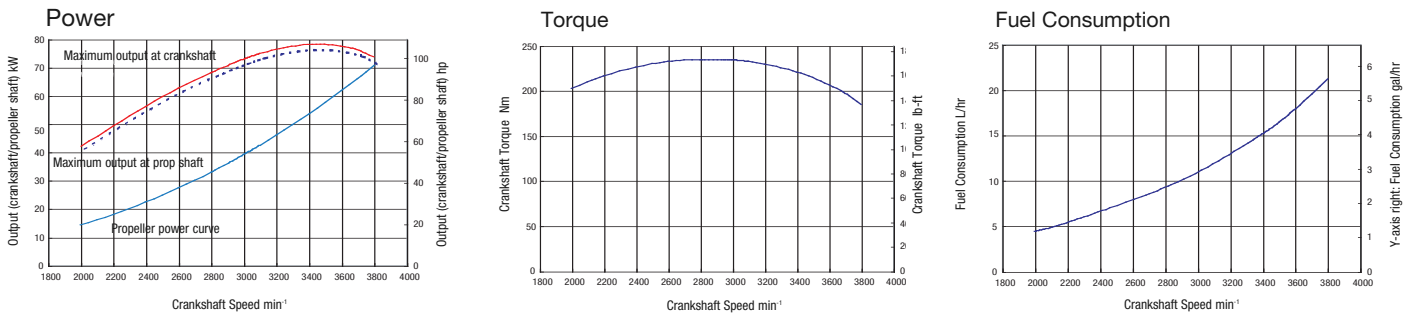


## Right side view



4JH4E w/ KM4A1 marine gear

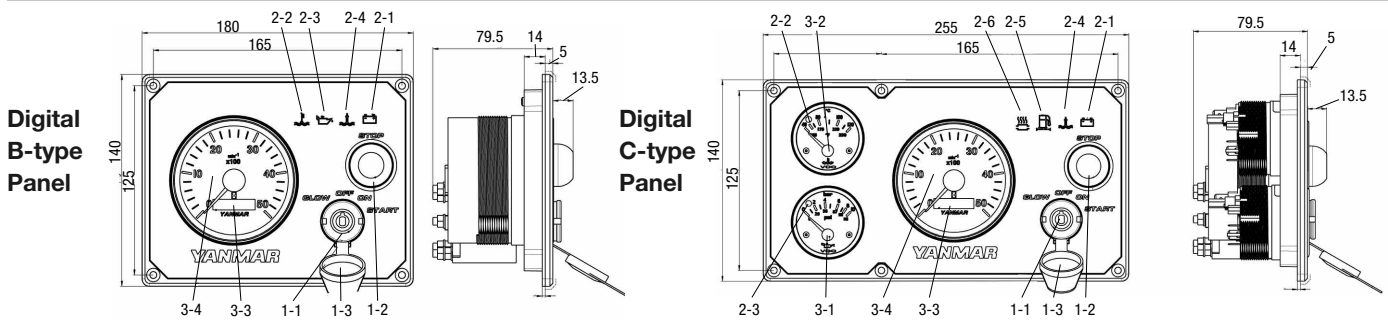
## Performance Curves (Output is according ISO 8665 - Output includes +/- 3% tolerance)



## Marine Gears/Drive

Model	ZF30M		KM4A1 (down angle: 7)				KMH4A1 (down angle: 8)		ZF25A	
Type	Mechanical Multi Plate clutch		Mechanical cone clutch				Hydraulic clutch		Hydraulic clutch	
Dry weight	28 kg (61 lbs)		28 kg (62 lbs)				31 kg (68 lbs)		30 kg (66 lbs)	
Reduction ratio (fwd/asn)	2.15/2.64	2.70/2.64	1.47/1.47	2.14/2.14	2.63/2.63	3.30/3.30	2.04/2.04	2.45/2.45	1.93/1.93	2.48/2.48
Propeller speed (fwd/asn)	1722/1404	1372/1404	2523/2523	1731/1731	1408/1408	1122/1122	1814/1814	1507/1507	1917/1917	1492/1492
Direction of rotation (propeller shaft - fwd)	Clockwise viewed from stern		Clockwise & counter clockwise viewed from stern				Clockwise & counter clockwise viewed from stern		Clockwise & counter clockwise viewed from stern	
Dry weight engine and gear/drive	256 kg (564 lbs)		256 kg (564 lbs)				259 kg (51 lbs)		258 kg (569 lbs)	
Length engine and gear/drive	933 mm (37 in)		888 mm (35 in)				886 mm (35 in)		1001 mm (39 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 of flexible mounting
- Exhaust/water mixing elbow (L-type)
- Expansion tank for fresh water cooling system
- Alternator 12 V - 60 A
- Electric stop solenoid

### Optional

- Additional Digital B-type instrument panel
- Additional Digital C-type instrument panel
- Analog (B-type, C-type, New B-type, and New C-type) instrument panels
- Alternator bracket and cover for second alternator
- Exhaust/water mixing elbow, U-type (high riser)
- Various extension wire harnesses
- Various couplings (straights, tapers, slits)

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