



# MARINE DIESEL ENGINES

# **4JH5E**

Configuration	In-line, 4-stroke, vertical, water-cooled diesel engine					
Max. output at crankshaft*	39.6 kW@3000 rpm	[53.8 mhp@3000 rpm]				
No. of cylinders	4 cylinder					
Displacement	2.190 L	[134 cu in]				
Bore x stroke	88 mm x 90 mm	[3.46 in x 3.54 in]				
Aspiration	Natural					
Combustion system	Direct injection, mono plunger pump					
Starting system	Electric starting 12V - 1.4 kW					
Engine management	Mechanical					
Cooling system	Fresh water cooling by centrifugal fresh water pump					
	Seawater cooling by rubber impeller seawater pump					
Alternator	12V - 125A					
Lubrication system	Enclosed, forced lubricating system					
Engine lube oil specifications	API class: CD or higher, SAE grade: 10W-30 or 15W-40					
Direction of rotation at crankshaft	Counterclockwise (CCW) viewed from stern					
Dry weight without gear	201 kg [4	143 lbs]				
Engine dimensions <sup><math>\dagger</math></sup> L x W x H	871 x 560 x 623 mm					
Emission compliance	EU: RCD 2, BSO II, EMC	US: EPA Tier 2				
Flywheel housing size	SAE #5					
Controls	Mechanical					

NOTE:

Fuel condition: Density at  $15^{\circ}C = 0.84 \text{ g/cm}^3$ ; 1 kW = 1.3596 mhp = 1.3410 HP

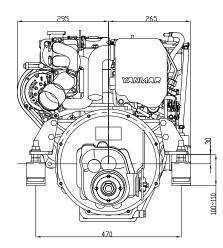
Technical data is according to (ISO 8665) / (ISO 3046)

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

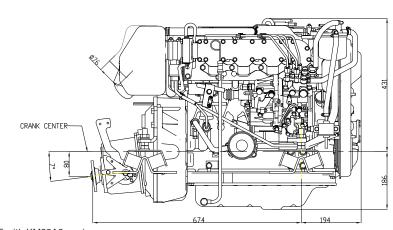
+Length includes KM35A marine gear (Dimensions may vary with other gears/elbow)

## DIMENSIONS

# Rear view



## **Right side view**



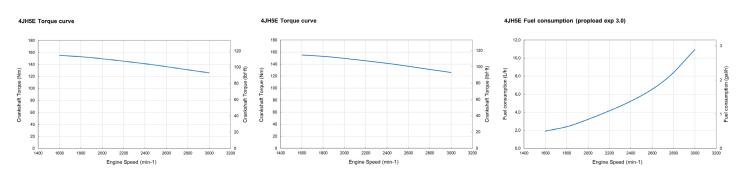
4JH5E with KM35A2 marine gear (Not to be used for engine installation)

www.yanmar.com/marine





#### PERFORMANCE CURVES

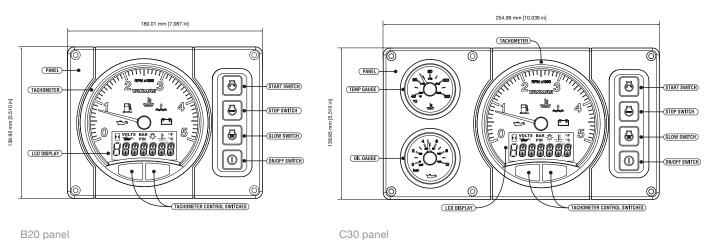


#### MARINE GEAR / DRIVE\*

Model	KM35P		KM35A2 [down angle: 7°]		KM4A1-5 [down angle: 7°]		ZF30M [parallel]		Saildrive [SD60]		
Clutch type	Mechanical cone clutch		Mechanical cone clutch		Mechanical cone clutch		Mechanical multi-disc		Mechanical multi-disc		
Dry weight	12 kg [26 lbs]		13 kg [29 lbs]		30 kg [66 lbs]		28 kg [61 lbs]		44 kg [97 lbs]		
Reduction ratio [fwd/asn]	2.36/3.16	2.61/3.16	2.33/3.04	2.64/3.04	1.47/1.47	2.14/2.14	2.63/2.63	2.15/2.64	2.70/2.64	2.23/2.23	2.49/2.49
Direction of rotation [viewed from stern]	Clockwise		Clockwise		Clockwise & counterclockwise		Clockwise		Clockwise & counter clockwise		
Lubrication system	Splash lub	vrication	Splash lubrication		Splash lubrication		Splash lubrication		Splash lubrication		
Lube oil specifications	API class: CD or higher, SAE grade: #20 or #30						ATF		API class: CD or higher, SAE grade: 15W-40		
Max. lube oil capacity (L)	0.5	L	0.65 L		2.3 L		1.8 L		3.1 L		
Dry weight - engine & gear	213 kg [46	9.5 lbs]	214 kg [471.7 lbs]		231 kg [509 lbs]		229 kg [505 lbs]		245 kg [540 lbs]		

\* Other marine gearboxes and configurations available upon request. Contact your local supplier for more information.

### **INSTRUMENT PANELS**



B20 panel

## ACCESSORIES

#### Standard engine package

- Exhaust mixing elbow [L-type]
- Alternator 12V 125A
- B20 panel
- Flexible mounts
- Expansion tank for fresh water cooling system
- Electric stop solenoid
- · Belt safety cover

# **Optional accessories**

- High-riser mixing elbow [instead of L-elbow]
- Secondary alternator 12V 130A or 24V 75A
- including smart regulator
- C30 panel
- Extension wire harness [4m, 6m 10m]
- Dual harness [for 2nd station]
- TFX Sidemount control head

- Hot water kit with cocks
- Extension saildrive leg [75 mm]
- Propeller cone nut kit SD60
- Air heater [glow]
- On-board spare parts kit

NOTE: All data subject to change without notice. Text and illustrations are not binding