



# **MARINE DIESEL ENGINES**

# 3JH5E

Configuration	In-line, 4-stroke, vertical, water-cooled diesel engine		
Max. output at crankshaft*	28.7 kW@3000 rpm	[39 mhp@3000 rpm]	
No. of cylinders	3 cylinder		
Displacement	1.642 L	[100 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		
Cooling system	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	173 kg [3	381 lbs]	
Engine dimensions† L x W x H	776 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:

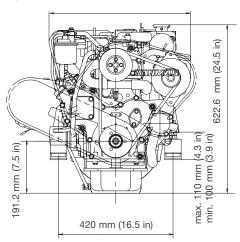
Fuel condition: Density at  $15^{\circ}C = 0.84 \text{ g/cm}^3$ ; 1 kW = 1.3596 mhp = 1.3410 HP

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

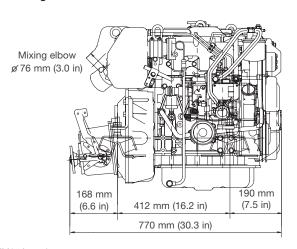
†Length includes KM35A marine gear (Dimensions may vary with other gears/elbow)

## DIMENSIONS

#### Rear view



## Right side view



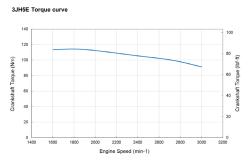
3JH5E with KM35A marine gear (Not to be used for engine installation)

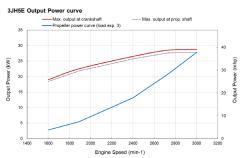
<sup>\*</sup> Fuel temperature 40°C at the inlet of the fuel injection pump (ISO 8665)

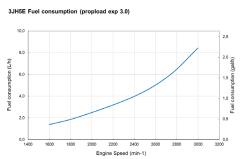




#### PERFORMANCE CURVES





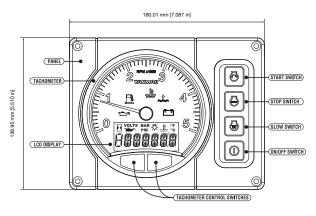


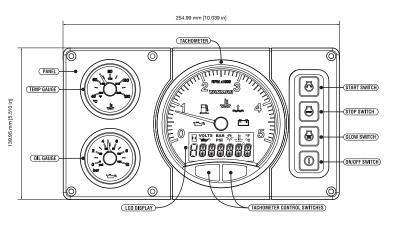
#### MARINE GEAR / DRIVE\*

Model	KM35P	KM35A [down angle: 7°]	Saildrive [SD60]
Clutch type	Mechanical cone clutch	Mechanical cone clutch	Mechanical multi-disc clutch
Dry weight	12 kg [26 lbs]	13 kg [29 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	2.23/2.23 2.49/2.49
Direction of rotation [viewed from stern]	Clockwise	Clockwise	Clockwise & counter clockwise
Lubrication system	Splash lubrication	Splash lubrication	Splash lubrication
Lube oil specifications	API class: CD or higher, SAE grade: #20 or #30	API class: CD or higher, SAE grade: #20 or #30	API class: CD or higher, SAE grade: 15W-40
Max. lube oil capacity	0.5 L	0.65 L	2.8 L
Dry weight - engine & gear/drive	185 kg [408 lbs]	186 kg [410 lbs]	217 kg [478 lbs]

 $<sup>^{\</sup>star}$  Other marine gearboxes and configurations available upon request. Contact your local supplier for more information

## INSTRUMENT PANELS





B20 panel C30 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
- On-board spare parts kit