



MARINE COMMON RAIL ENGINES

3JH40

Configuration	In-line, 4-stroke, vertical, water-cooled diesel engine	
Max. output at crankshaft*	29.4 kW@3000 rpm	[40 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 with Bosch common rail system	
Starting system	Electric starting 12V - 1.4 kW	
Engine management	Electronic	
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	192 kg [42	23lbs]
Engine dimensions† L x W x H	774 x 580 x 632 mm	
Emission compliance	EU: RCD 2, BSO II, EMC	US: EPA Tier, 3 EPA-C
Flywheel housing size	SAE #5	AMI 20
Controls NOTE:	Mechanical (optional - VC20 system)	

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 CRANK CENTER-580 194 420

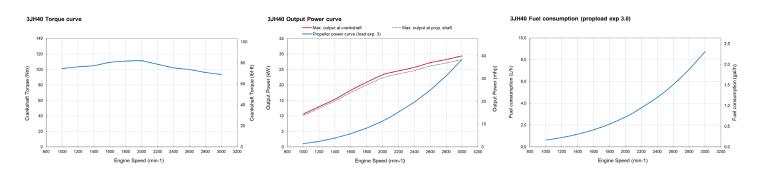
3JH40 with KM35A marine gear (Not to be used for engine installation)

 $^{^{\}star}$ Fuel temperature 40°C at the inlet of the fuel injection pump (ISO 8665)





PERFORMANCE CURVES

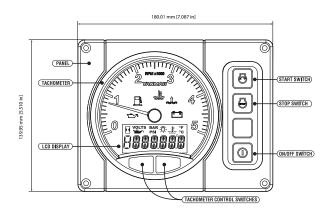


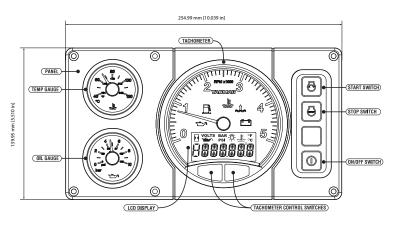
MARINE GEAR / DRIVE*

Model	KM35P [parallel]	KM35A [down angle: 7°]	Saildrive SD60
Clutch type	Mechanical cone clutch	Mechanical cone clutch	Mechanical multi-disc
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	204 kg [450 lbs]	205 kg [452 lbs]	236 kg [520 lbs]

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

INSTRUMENT PANELS





B25 Panel C35 Panel

ACCESSORIES

Standard engine package

- Exhaust mixing elbow [L-type]
- Alternator 12V 125A
- B25 panel
- Flexible mounts
- Mechanical throttle sensor
- Fuel pre-filter with water separator
- Fresh water expansion tank
- Belt safety cover

Optional accessories

- High-riser mixing elbow [instead of L-elbow]
- Secondary alternator 12V 125A or 24V 60A
- C35 panel
- Extension harness [3m, 5m, 10m]
- Second station
- TFX Sidemount control head
- VC20 Vessel Control System

- NMEA2000 Engine monitoring system
- Semi 2-pole
- SOLAS including Certificate [factory fit only]
- Hot water kit with cocks
- Extension saildrive leg [75 mm]
- Propeller cone nut kit SD60
- On-board spare parts kit