



**INNOVATION** 

R D

## 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		
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	192 kg	[423lbs]	
Engine dimensions <sup><math>\dagger</math></sup> 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	Mechanical (optional - VC20 system)		

NOTE:

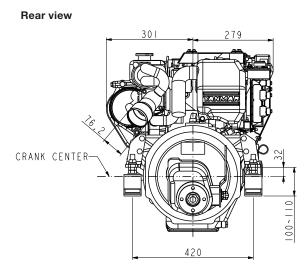
Fuel condition: Density at  $15^{\circ}$ C = 0.84 g/cm<sup>3</sup>; 1 kW = 1.3596 mhp = 1.3410 HP

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

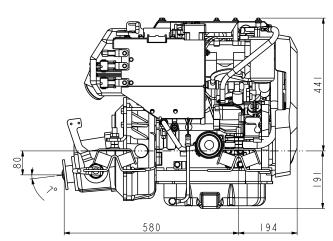
\* Fuel temperature 40°C at the inlet of the fuel injection pump (ISO 8665)

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

## DIMENSIONS



## **Right side view**



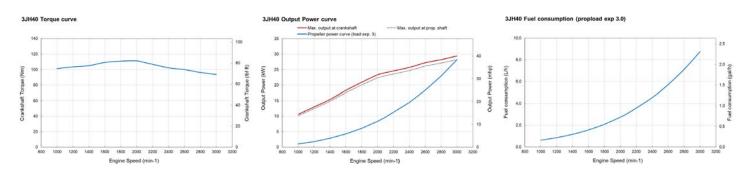
3JH40 with KM35A marine gear (Not to be used for engine installation)

## www.yanmar.com/marine





#### PERFORMANCE CURVES

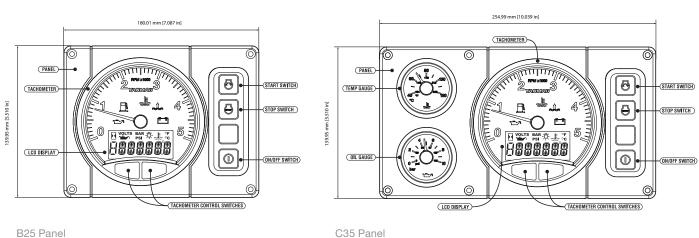


#### MARINE GEAR / DRIVE\*

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

### 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

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