



## 4BY3-150 / 4BY3-180 Series

Configuration	4-stroke, water-cooled diesel engine		
Maximum output at crankshaft	110 kW@4000 rpm	[150 mhp@4000 rpm]	
	132 kW@4000 rpm	[180 mhp@4000 rpm]	
Displacement	1.995 ltr	[122 cu in]	
Bore x stroke	84 mm x 90 mm	[3.31 in x 3.54 in]	
Cylinders	4 in line		
Combustion system	Direct injection with Bosch Common Rail System		
Aspiration	Turbocharger + charge air cooler		
Low Idle rpm	650 - 950 rpm	[adjustable]	
Electric system	12V		
Alternator	12V - 150A		
Start-assist	Glow-plug system		
Cooling system	Fresh water cooling by centrifugal fresh water pump Sea water cooling by rubber impeller seawater pump		
Lubrication system	Enclosed, forced lubricating system		
Direction of rotation [crankshaft]	Counterclockwise viewed from flywheel side		
Dry weight without gear	263 kg	[580 lbs]	
Environmental	EU: RCD	EMC	BSO II
	US: EPA Tier3	SOLAS MED 96/98/EC	
Engine mounting	Rubber type flexible mounting		

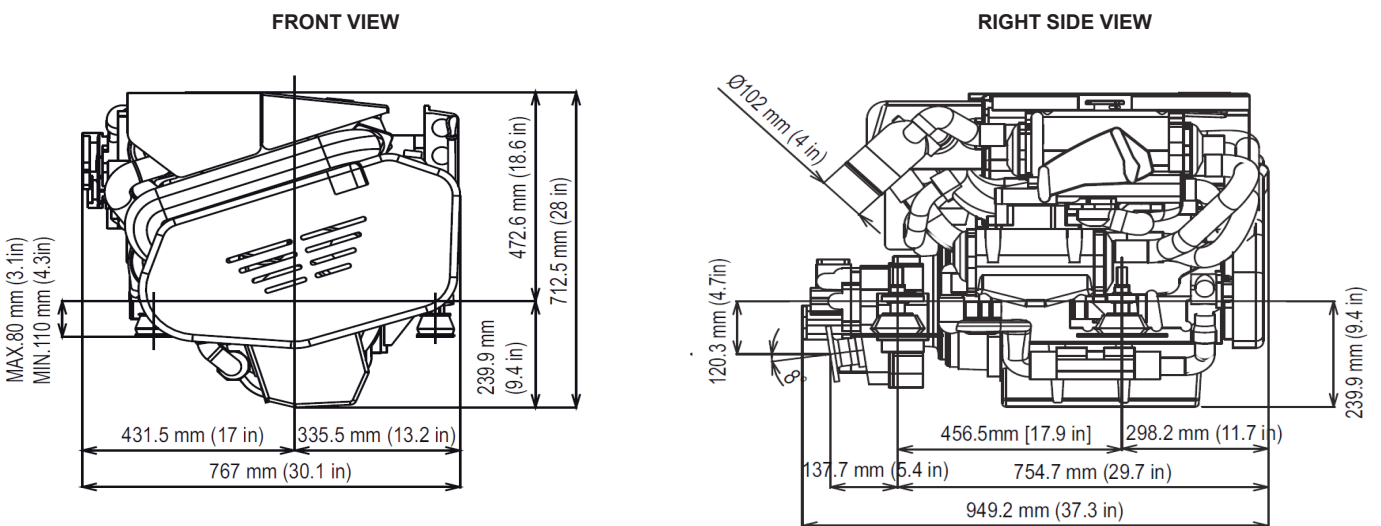
**NOTE:**

Fuel condition: Density at 15°C = 0.84 g/cm<sup>3</sup>

Fuel temperature 40°C at the inlet of the fuel injection pump [ISO 8665: 2006]

Technical data is according to ISO 8665: 2006/3046-1

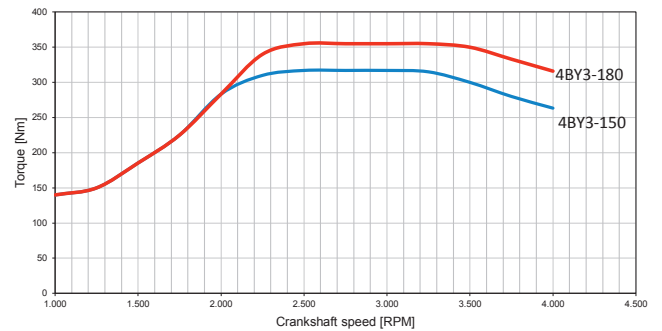
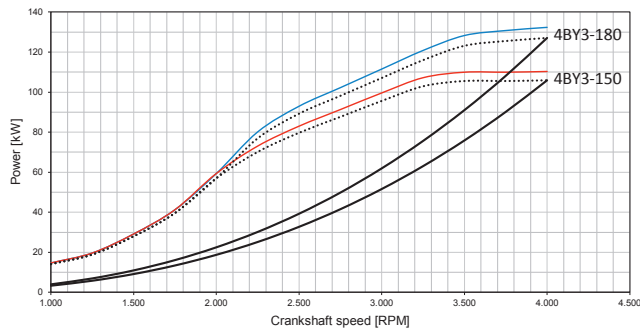
**DIMENSIONS**



4BY3-180 with KMH41A marine gear



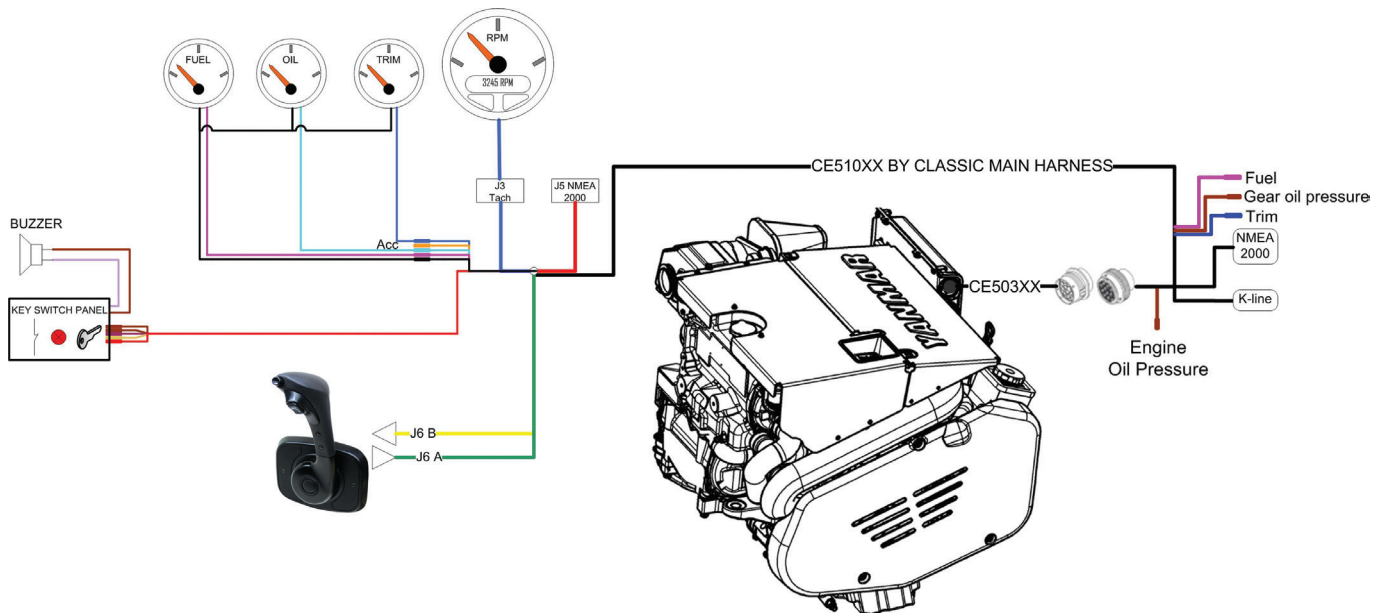
PERFORMANCE CURVES



DRIVE SYSTEMS

<b>Model</b>	<b>KMH41A [down angle 8°]</b>			
Type	Hydraulic Actuated Multi-friction disc clutch			
Dry weight	34 kg excl. cooler			
Reduction ratio [fwd/asn]	1.53	2.04	2.45	2.62
Direction of rotation	Clockwise & Counterclockwise viewed from the stern			
Lub oil specifications	API class: CF or higher SAE grade #30			
Dry weight - engine & gear	297 kg			

CONTROL SYSTEM "CLASSIC"



ENGINE ACCESORIES

**Standard engine package**

- Single pole, 150A Alternator
- Exhaust mixing elbow [L-type]
- Automatic glow-plug controller
- Flexible engine mounting
- Analogue throttle with redundancy function

**Optional accesories**

- High-riser mixing elbow [instead of L-elbow]
- Exhaust-side 2<sup>nd</sup> dipstick
- Electric gearshift
- Trolling on gearbox [mechanical and electrical]
- NMEA2000 digital display
- Full NMEA2000 electronic control system [CAN-bus]

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