



#### **MARINE DIESEL ENGINES**

# 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:

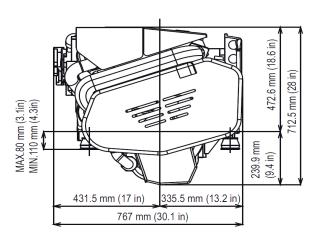
Fuel condition: Density at  $15^{\circ}C = 0.84 \text{ g/cm}^3$ 

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

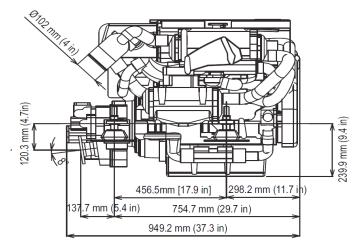
Technical data is according to ISO 8665: 2006/3046-1

### **DIMENSIONS**

## FRONT VIEW



## RIGHT SIDE VIEW

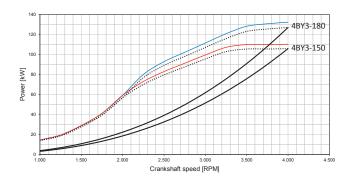


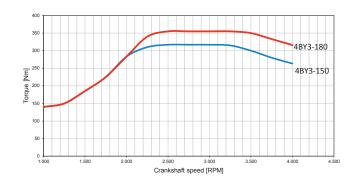
4BY3-180 with KMH41A marine gear





#### PERFORMANCE CURVES

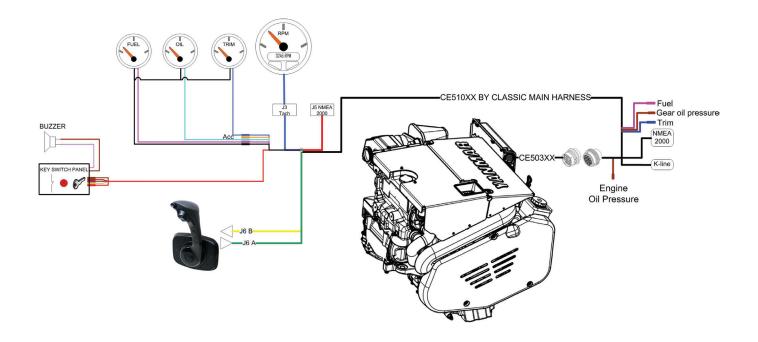




#### **DRIVE SYSTEMS**

Model	KMH41A [down angle 8°]				
Туре	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.