



6LPA Series - STP2 / STC

Max. output at rankshaft220 kW03800 rpm 320 kW03800 rpm[99 mhp03800 rpm] (15 mhp03800 rpm]No. of oplinders6 vinder(15 mhp03800 rpm]Displacement4.14 L(24 cu in)Apiration9 4 mm 100 mm(3.7 in x.3.4 in)Apiration0 trutocharged & intercooled	Configuration	In-line, 4-stroke, vertical, water-cooled diesel engine						
Displacement4.164 L[254 cu in]Bore x stroke94 mm x 100 mm[3.7 in x 3.94 in]AspirationTurbocharged & intercooledCombustion systemDirect, 2-Stage injectionStarting systemElectric starting 12V - 2.5 kWEngine managementMechanicalCooling systemSeawater cooling by centrifugal fresh water pump Seawater cooling by rubber impeller seawer pumpAlternator12V - 80ALubrication systemEnclosed, forced lubricating systemEngine lube oil specificationsAl class: CD or higher, SAE grade: 10W-3 ur 15W-40Direction of rotation at crankshaftCounterclockwise viewed from sternDry weight without gear408 kg[899 lbs]Engine dimensions' L x W x H120 x 666 x 739 mmEngise complianceEU: RCD 1, BSO II, IMO, EMCUs: EPA Tier 2Engise housing sizeBorg Warrer / SAE7	Max. output at crankshaft	,						
Bore x stroke94 mm x 100 mm[3.7 in x 3.94 in]AspirationTurbocharged & intercooledCombustion systemDirect, 2-Stage injectionStarting systemElectric starting 12V - 2.5 kWEngine managementMechanicalCooling systemFresh water cooling by centrifugal fresh water pump Seawater cooling by rubber impeller seawater pumpAlternator12V - 80ALubrication systemFnclosed, forced lubricating systemEngine lube oil specificationsAPI class: CD or higher, SAE grade: 10W-30 - 15W-40Direction of rotation at crankshaftCounterclockwise viewed from sternDry weight without gear408 kg[899 lbs]Engine dimensions' L x W x H1220 x 666 x 739 mmEmission complianceEU: RCD 1, BSO II, IMO, EMCUS: EPA Tier 2Finsein complianceEU: RCD 1, SSO II, IMO, EMCUS: EPA Tier 2	No. of cylinders	6 cylinder						
AspirationTurbocharged & intercooledCombustion systemDirect, 2-Stage injectionStarting systemElectric starting 12V - 2.5 kWEngine managementMechanicalCooling systemFresh water cooling by centrifugal fresh water pump seawater cooling by rubber impeller seawater pumpAlternator12V - 80ALubrication systemEnclosed, forced lubricating systemEngine lube oil specificationsAPI class: CD or higher, SAE grade: 10W-3U - 15W-40Direction of rotation at crankshaftCounterclockwise viewed from stemDry weight without gear408 kg[899 lbs]Engine dimensions" L x W x H1202 x 666 x 739 mmEngine dimensions gizeEU: RCD 1, BSO II, IMO, EMCUS: EPA Tier 2Findsion complianceEU: RCD 1, BSO II, IMO, EMCUS: EPA Tier 2	Displacement	4.164 L	[254 cu in]					
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Cooling system Fresh water cooling by centrifugal fresh water pump Seawater cooling by rubber impeller seawater pump Alternator 12V - 80A Lubrication system Enclosed, forced lubricating system Engine lube oil specifications API class: CD or higher, SAE grade: 10W-3 ∪ 15W-40 Direction of rotation at crankshaft Counterclockwise viewed from stern Dry weight without gear 408 kg [899 lbs] Engine dimensions ⁺ L x W x H 1220 x 666 x 739 mm Ister Zie	Starting system	Electric starting 12V - 2.5 kW						
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Lubrication systemEnclosed, forced lubricating systemEngine lube oil specificationsAPI class: CD or higher, SAE grade: 10W-3 or 15W-40Direction of rotation at crankshaftCounterclockwise viewed from sternDry weight without gear408 kg[899 lbs]Engine dimensions ⁺ L x W x H1220 x 666 x 739 mmEmission complianceEU: RCD 1, BSO II, IMO, EMCUS: EPA Tier 2Flywheel housing sizeBorg Warner / SAE7	Cooling system							
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Emission compliance EU: RCD 1 , BSO II, IMO, EMC US: EPA Tier 2 Flywheel housing size Borg Warner / SAE7	Dry weight without gear	408 kg	[899 lbs]					
Flywheel housing size Borg Warner / SAE7	Engine dimensions ^{\dagger} L x W x H	1220 x 666 x 739 mm						
	Emission compliance	EU: RCD 1 , BSO II, IMO, EMC	US: EPA Tier 2					
	Flywheel housing size	Borg Warner / SAE7						
Controls Mechanical	Controls	Mechanical						

NOTE:

Fuel condition: Density at 15°C = 0.84 g/cm³; 1 kW = 1.3596 mhp = 1.3410 HP Technical data is according to ISO 8665: 2006/3046-1

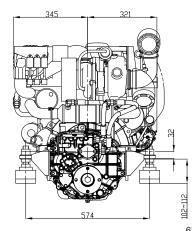
* Fuel temperature 25°C at the inlet of the fuel injection pump [ISO 3046-1]

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

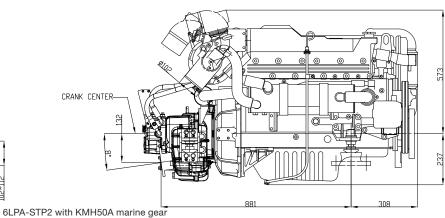
†Length includes KMH50A-LP gearbox & high-riser elbow (Dimensions may vary with other gears/elbow)

DIMENSIONS

Rear view



Right side view



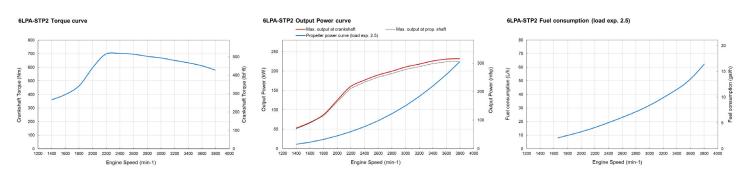
(Not to be used for engine installation)

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PERFORMANCE CURVES



MARINE GEAR*

Model	KMH50A [down angle 8]			ZF63A [down angle 8°]			KMH50V-LP [V-drive 12°]				
Clutch type	Hydraulic multi-disc			Hydraulic multi-disc				Hydraulic multi-disc			
Dry weight	51 kg [112 lbs] **			44 kg [97 lbs]			59** [130 lbs]				
Reduction ratio [fwd/asn]	1.67/1.67	2.13/2.13	2.43/2.43	1.22/1.21	1.56/1.58	2.04/2.10	2.52/2.53	1.22/1.22	1.58/1.58	2.08/2.08	2.47/2.47
Direction of rotation [viewed from stern]	Clockwise or counterclockwise			Counterclockwise			Clockwise or counterclockwise				
Lubrication system	Forced lubrication			Forced lubrication				Forced lubrication			
Lube oil specifications	API class: CF or higher, SAE grade: #30			ATF			API class: CF or higher, SAE grade: #30				
Max. lube oil capacity (L)	1.8 L			4.0 L			5.4 L				
Dry weight - engine & gear	459 kg [1012 lbs]			452 kg [996 lbs]			467 kg [1030 lbs]				

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

**Dry weight of Kanzaki marine gear with BW flange, but excludes foot, cooler & damper.

ACCESSORIES

- Standard engine package
- Exhaust mixing elbow [L-type]
- Alternator 12V 80A Water separator
- 3G instrument panel

Optional accessories

- High-riser mixing elbow [instead of L-elbow]
- Flexible mounts
- Extension wire harness [3m, 5m, 10m, 20m]
- Sensor for VDO instrument panels
- SOLAS including Certificate [factory fit only]
- Air venting device for cooling water tank
- Lub oil evacuation pump