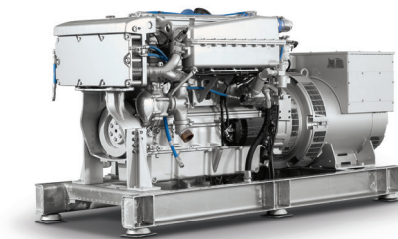




Marine

GENERATOR SET S60

for on-board power generation, diesel-electric propulsion or combined systems (3A/3B) - 50/60 Hz



Engine	Dimensions (L x W x H) mm (in)	Mass, dry kg (lbs)
S60	2850 x 1250 x 1450	3000

Based on engine S60; 50/60 Hz; IMO/EPA Tier 2; heat exchanger/keel cooler
All dimensions are approximate, for complete information refer to the installation drawing.

Engine		
Bore/stroke	mm (in)	133/168 (5.24/6.61)
No. of cylinder		6
Displacement/cylinder	l (cu in)	2.33 (142)
Displacement, total	l (cu in)	14.0 (855)
Fuel specification		EN590, DMX
*Fuel consumption @ 100% load in g/kWh		
320 kVA		50Hz: 200, 60Hz: 197 (212)
350 kVA		50Hz: 196, 60Hz: 196 (211)
380 kVA		50Hz: 196, 60Hz: 196 (211)

* Fuel efficiency values based upon kWm. Values shown in parenthesis are for EPA Tier 2 version.

Application	Continous duty, unrestricted operation (ICXN)	Prime power, continuous operation with variable load (ICXN)
Application group	3A	3B
Ratings 50 Hz	Nominal power @ 1500 rpm - (IMO certified, IMO 2 under evaluation)	
	257 kW _e (~320 kVA)	305 kW _e (~380 kVA)
	283 kW _e (~350 kVA)	-
Ratings 60 Hz	Nominal power @ 1800 rpm - (IMO 2 or EPA Tier 2 certified)	
	257 kW _e (~320 kVA)	305 kW _e (~380 kVA)
	283 kW _e (~350 kVA)	-

Power definition: 3A: Diesel engines for onboard power generation and dieselelectric drives in unrestricted continuous operation (ICXN)

3B: Diesel engines for onboard power drives in continuous operation with variable load (ICXN)

ICXN:
I = ISO power
C = Continuous power
X = Exceedable power
N = Net brake power

Standard equipment	
Basic engine	Liquid-cooled four-stroke diesel engine, anticlockwise direction of rotation (viewed on driving end), with direct fuel injection, exhaust gas turbo charging, charge-air cooling and the following basic equipment: Crankcase with bolted-on flywheel housing (SAE 1 flange); four-valve, one-piece cylinder head; gear train for valve gear and auxiliary PTO; forged crankshaft; forged connecting rods; two-piece pistons with steel crowns and aluminum skirts; overhead camshaft, all necessary on-engine air, exhaust, coolant, fuel and oil pipe-work
Starter	Electric starter (24 VDC; 7.5 kW; 2-pole)
Oil system	Oil pan for standard inclinations. Lube oil pump, oil dipstick and oil filler neck, engine mounted oil filter (non-classifiable version), baseframe mounted switchable duplex oil filter (classifiable version), lube oil heat exch.
Fuel system	Engine gear-driven fuel lift pump, electronically-controlled unit injectors, engine-mounted secondary fuel filter, duplex fuel pre-filter with water separator (switchable, supplied loose)
Cooling system	Coolant distributor housing with thermostat and integrated expansion tank with breather valve; coolant circulation pump. A/Keel cooler: Engine mounted expansion tank including low level sensor, separate circuit cooling pump, engine fuel cooler B/ Heat exchanger: Engine-mounted re-cooling equipment, consisting of: coolant-to-raw water titanium plate-core heat exchanger with integrated fuel cooler, self-priming rubber impeller raw water pump, raw water-cooled charge air cooler
Combustion air system	Engine-mounted closed crankcase air intake system eliminating vapour discharge into engine room, including integral intake silencer and air filter; compressed combustion air is charge-cooled using A/for Keel cooler separate low temperature keel-cooling circuit for coldest possible intake manifold air temperatures B/Heat exchanger sea water for coldest possible intake manifold air temperatures
Exhaust system	Water-jacketed exhaust system including optimized water-cooled turbocharger; pulse exhaust manifold for optimum low end torque - vertical outlet bend with exhaust bellows (supplied loose)
Engine control/monitoring system	DDEC electronic engine control unit/ComAp - IntelliDrive (LOP), communication via J1939, communication to ship system via RS 232 modbus RTU
Painting	Workboat blue
Alternator	Leroy Somer LSAM 47.2 S4/S5 - double bearing, excitation type-brushless, AREP excite, regulator type - R448 AVR, anti-condensation heaters, quadrature droop CT, SAE 14 adapter, IP23 protection
Power transmission	Flexible coupling for flange-mounted double bearing alternator (centa CM)
Baseframe	Genset mounted rigid on aluminium baseframe with resilient mounts for mounting on ship foundation
Optional equipment	
Starter	Air starter (operates at 10 bar (Ingersoll rand 150BM))
Auxiliary PTO	Charging generator (100A, 28VDC, two-pole) for 24VDC battery voltage including guard
Painting	Cobalt blue, aluminium white, primed
Packaging	Sea-worthy packaging

Transmission shown represents standard option marine gear.

Specifications are subject to change without notice.
All dimensions are approximate, for complete information refer to installations drawing. For further information consult your MTU distributor/dealer.

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