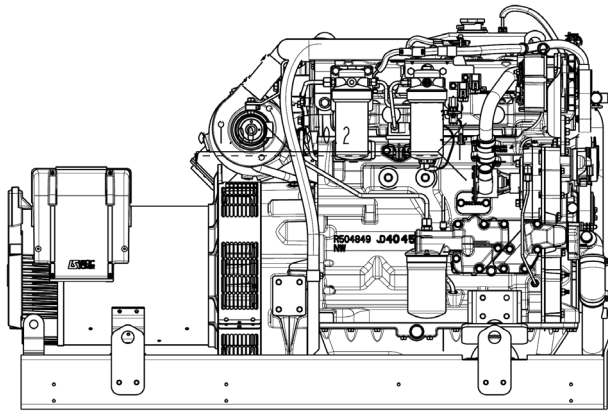


**MARINE GENERATOR**

# Q4500 Series



## GENSET WEIGHT & DIMENSIONS

	Without	With Soundshield
Weight, kg [lbs]	990 [2182]	1100 [2425]
Length, mm [in.]	1590 [62,59"]	1740 [68,50"]
Width, mm [in.]	770 [30,31"]	850 [33,46"]
Height, mm [in.]	965 [37,99"]	1045 [41,14"]

## GENERATOR RATINGS

Genset	Volts	Phase	Amps	kW/kVA prp	kW/kVA ltp
75ST50	230/400	3	131	72,8/91	80/100
75WT50					
80ST60	120/208	3	275	79,2/99	86,4/108
80WT60	240/416		137,5		

PRP = Prime Running Power

LTP = Limited Time Power

### Engine features

- John Deere Engine Base - EPA Tier III - 50/60 Hz
- IMO Marpol Annex VI exempt (<130kW) - SCR not required
- Cast-iron motor block
- Diesel engine 4 strokes, 4 cylinders, 4500 cm<sup>3</sup> [275 in<sup>3</sup>]
- Gear driven valve train
- Common-rail fuel injection
- Automatic preheating system
- Lifting eyelets

### Generator features

- Leroy Somer alternator
- Protection class: IP23
- Insulation class: H
- Voltage regulation
- Interference suppression

### SI-2 Digital Control panel

- Start & stop buttons
- Illustrated menu
- Display and management of engine parameters
- Displaying and managing of generator parameters
- Generator status indicator
- Display of alerts and fault codes
- History log (150 records)
- 5 languages available
- Dimensions : 172 x 112 mm.

### Standard equipment

- Bipolar 24 V Electric System
- Wet exhaust
- Heat exchanger
- Raw water pump with Neoprene rotor
- Safeguards on the main parameters

### Optional Equipment

- Siphon break
- Fuel pre-filter

## MARINE GENERATOR

### ENGINE GENERAL DATA

Air intake: Turbocharged and air to coolant aftercooled	
Compression ratio:	16,7 :1
Valves per cylinder:	4
Firing order:	1-3-4-2
Rotational direction flywheel side:	CCW
Rated speed rpm:	1500 [50Hz] -1800 [60 Hz]
Fuel injection pump:	HPCR
Governor type:	Electronic
Oil pressure at 1500-1800 rpm:	343 kPa
Max crankcase pressure:	2 kPa 8in.H2O
Primary fuel filter:	10 microns
Secondary fuel filter:	2 microns
Engine operating angle:	35° Continuous 45° Intermittent

### ENGINE COOLING SYSTEM

Aftercooling system:	Engine coolant
Seawater pump:	Bronze, Neoprene rotor
Seawater pump flow:	50 Hz: 155 l/min - 41 gal/min 60 Hz: 197l/min - 52 gal/min
Coolant pump type:	Belt-driven centrifugal pump
Exhaust manifold:	Fresh water cooled
Max exhaust gas temperature:	472°C

### AIR INTAKE SYSTEM

Engine air flow:	50 Hz: 6,5 m <sup>3</sup> /min 230 ft <sup>3</sup> /min 60 Hz: 8,5m <sup>3</sup> /min 301 ft <sup>3</sup> /min
Intake manifold pressure:	50 Hz: 135 kPa - 19,6 psi 60 Hz: 164 kPa - 23,7 psi
Manifold air temp:	50 Hz: 130°C/266°F 60 Hz: 130°C/266°F

### ENGINE ELECTRICAL SYSTEM

Battery recommended:	100 Ah / 925 CCA
Electrical Starter Motor:	24 V/600 A
Command Panel provided:	SI-2

### ALTERNATOR GENERAL CHARACTERISTICS

Brand:	Leroy Somer
Model:	LSAM 44.3 S5
Insulation Class:	H
Frequency:	50-60 Hz
Standard protection:	IP23
Voltage regulation:	+/- 0,5 %

### FUEL CONSUMPTION vs. LOAD [l/h]

Load	25 %	50 %	75 %	100 %	110 %
50 Hz	6,2	11,1	15,9	20,5	22,4
60 Hz	7,6	13,4	18,7	24,1	26,3

### FUEL CONSUMPTION vs. LOAD [U.S G/h]

Load	25 %	50 %	75 %	100 %	110 %
50 Hz	1,7	2,9	4,2	5,4	5,9
60 Hz	2	3,6	4,9	6,3	6,91

### POWER CLASS According to ISO 8528-1.

**Limited Time Power** - Limited number of hours is of 500hrs per year. Non-Variable Load. Applications not to exceed 100 % of the Prime Power rating (no overload is allowed).

**Prime Running Power** - Unrestricted running time. Time at full load ≤ 500hrs/year. Load variation ≤ 75 % of rated power. 10 % overload is allowed for 1hr every 12hrs.

### SHORE POWER 60Hz-ONE PHASE

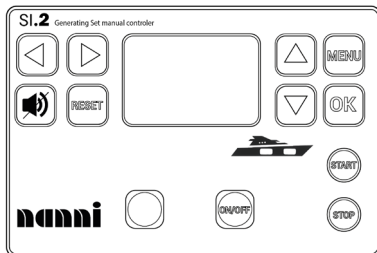
Complying with Ocean Going Vessels, the outputs of the NANNI Gensets are in accordance with the Shore Power 101 at disposal on U.S marina docks, (and associated waters, Carribean, Pacific and other countries such as N.Z).

Under this scheme, output delivered by Gensets is "Split Phase" 120/240 V-60 Hz [L1-N-L2]. The One Phase NANNI Genset range is set on this basis. Need for 120 V-60Hz/one phase-2 wires [L-N] voltage, must be forwarded to NANNI prior to placing an order. This paragraph does not apply to Star/Delta Gensets.

### MARINE GENERATOR

#### ADVANCED SI-2 DIGITAL CONTROL PANEL

- Genset controller for stand-by and prime-power
- All-in-one intuitive & powerful PC tool for configuration/monitoring/control, locally or remotely
- Easy to install, configure and use



#### KEY FUNCTIONS AND PROTECTIONS

- Stand-by and prime-power application in one unit
- Backlit symbols
- Inbuilt RS485
- RTC with battery back-up (full calendar)
- Zero power mode
- True RMS measurement
- Detailed history log with up to 350 records
- Dual Mutual Standby application support
- Remote display
- User setpoints and protections
- 5 languages in the controller & Translator functionality
- User Access Management
- Ready for alternative configurations

#### POWER SUPPLY & OPERATING CONDITIONS

- Power supply range: 8-36 V D.C
- Power consumption: 2.5W
- RTC Battery: 3 Volts replaceable
- E-Stop Fusing: 10 A
- Max Power Dissipation: 7W
- Protection degree: IP 65
- Operating temperature: -20 to + 70°C
- Operative humidity: 95 % non-condensing [EN 60068-2-30]
- Dash board foot-print: 172 x 112 mm.

#### ACCESSORIES

##### Soundshield enclosure

Designed for highly effective soundproofing, for an easy access of internal components maintenance or servicing. Brings lower service in maintaining components tidy at all times. Enclosure body is robust and is ensuring yet best safety available. Side connection panel includes connections for the following items:

- Battery (positive and negative)
- Ground binding post
- Fuel inlet and return lines
- Seawater inlet
- Water-cooled exhaust outlet
- Wiring power outlet easy access
- Circuit-breaker on front
- Digital control panel surface mounted
- Emergency switch
- Easy to open cover panels by levers.

##### Siphon break

- Siphon break is mandatory on Gensets installed below the vessel waterline. This device prevents direct siphoning of seawater into the engine via exhaust line.
- To this, provision is made at the bottom of the genset to fit inlet and outlet hoses lines.

##### Output power protection

- A heavy duty circuit breaker [C.E & U.L approved], protects the generator against extreme and adverse external overloads.

##### Fuel prefilter

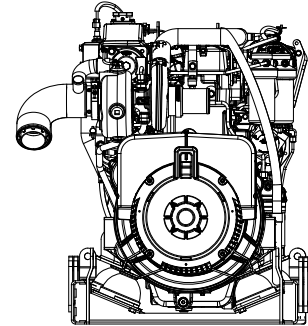
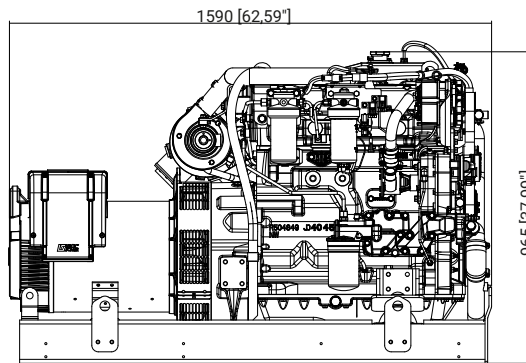
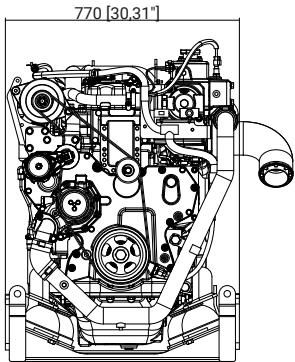
- Fuel pre-filter and/or fuel-water separators are highly recommended in view to avoid consequences of depleted or not complying fuel.
- Depending of requirements and needs, do not hesitate to consult the Nanni Catalog of Accessories to find the best suited prefilter or water-fuel separator.

##### Raw water system

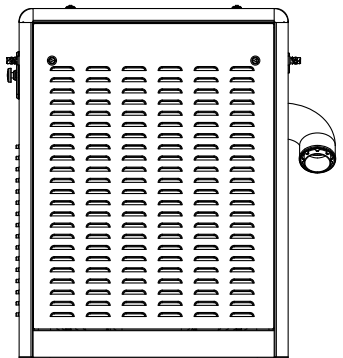
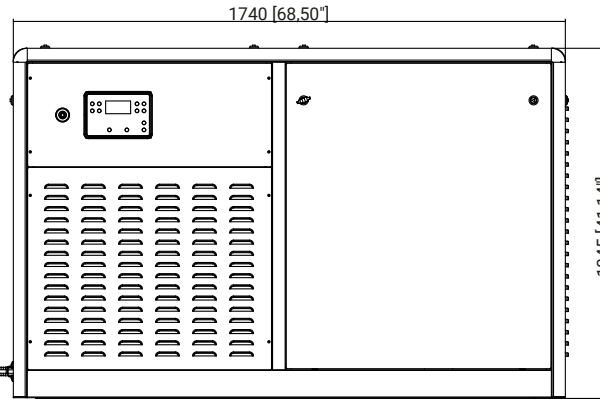
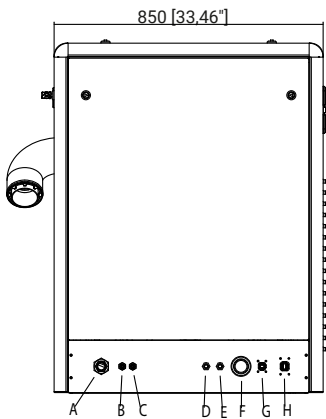
- A sturdy sea water filter prevents debris from entering the cooling system and to cause damage to your Genset cooling system.
- Do not hesitate to consult the Nanni Catalog of Accessories to find the best suited raw water system to ensure long life trouble free to your equipment.

### MARINE GENERATOR

#### ■ STANDALONE DIMENSIONS



#### ■ SOUNDPROOF DIMENSIONS



#### GENSET CONNECTIONS

A	Raw water inlet line Int diam:	mm [in]	50 [2"]
B-C	Min Fuel line Int diam:	mm [in]	10 [0.39"]
F	Exhaust connexion:	mm [in]	125 [5"]
D-E	Battery connexion		
G-H	Electrical connector		
Fuel std eletric pump max suction lift:		m [in]	2,4 [9,5"]

NOTE 1: Dimensions are shown in mm & [in.].

NOTE 2: This drawing is for reference only. Please do not use as installation planning. Refer to your nearest NANNI local distributor for more detailed information.

Technical data according to ISO 8528-1. This document is not contractual. Nanni reserves the right to modify any of the characteristics stated in this document without notice, in a constant effort to improve the quality of its products. Images and illustrations may shown non standard equipments. All combination of equipment & accessory are not available.

DGBXXC01194

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