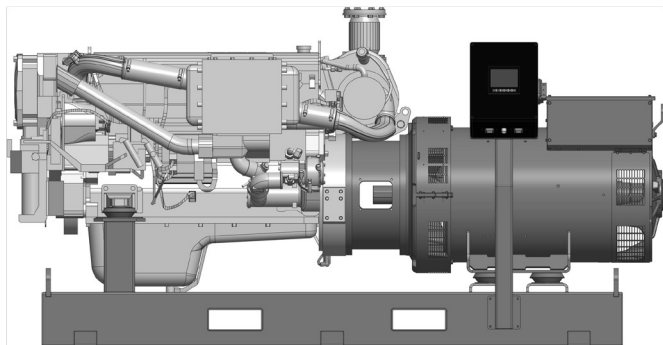


Q12000 Series



GENSET WEIGHT & DIMENSIONS

Weight, kg [lbs]	2400 [5291,09]
Length, mm [in.]	3004 [118,26"]
Width, mm [in.]	984 [38,74"]
Height, mm [in.]	1549 [68,98"]

GENERATOR RATINGS

Genset	Volts	Phases	Amps per Phase	kWe/kVA PRP
278WT50	380-415	3	488,94	271/338
340WT50			615,24	341/426
278WT60	440-480-690	3	449,41	274/342
389WT60			634,76	387/483

Cos Phi = 0,8

PRP = Prime Running Power

POWER CLASS According to ISO 8528-1.

Prime Running Power - Unrestricted running time. Time at full load ≤ 5500 hrs/year. Load variation ≤ 75 % of rated power. 10 % overload is allowed for 1hr every 12hrs.

General Characteristics

- Designed, Assembled and Tested by NANNI
- Standard arrangement with 2-bearing motor and alternator, connected by a clutch housing and resiliently supported on the support frame
- Common Rail Electronic Injection
- Integrated lubrication system with extraction pump
- Motor-integrated raw water cooling with pump, heat exchanger and expansion tank
- Control box with 3-meter cable for flexible installation in engine compartment

Engine features

- MAN Engine Base - EPA Tier III - 50/60 Hz
- Cast-iron motor block
- Diesel engine 4 strokes, 6 cylinders, 12420 cm³ [757,92 in³]
- Gear driven valve train
- Common-rail fuel injection with high pressure pump
- Automatic preheating system
- Lifting eyelets

Generator features

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

Standard equipment

- Bipolar 24 Volts Electric system
- Wet Exhaust
- Heat Exchanger
- Raw water Pump with neoprene rotor
- Safeguards on the main parameters
- Presetting for paralleling system

Optional Equipment

- Pneumatic Air start
- Vessel-side cooling (HT and LT systems)
- Exhaust compensator and silencer
- Alternator heating
- Winding temperature sensors
- Alternator repair kit (Diodes, AVR, Varistor)
- Set of alternator bearings
- Set of 2 filters (Air, Fuel, & Engine Oil)
- Warranty extension
- System Commissioning
- Support & After Sales by NANNI
- Sound shield cabin

MARINE GENERATOR

PERFORMANCE DATA ENGINE 50 Hz

Genset model	278WT50	340WT50
Rated Power 100% (kW)	290	360
Max Power 110% (kW)	319	396
Speed (rpm)	1500	1500
Bore (mm)	126	126
Stroke (mm)	166	166
Displacement (liters)	12,42	12,42
Rated torque (Nm)	1846	2292
Compression ratio	18:1	18:1
Mean effect pressure (bar)	18,68	23,19
Mean piston speed (m/s)	8,3	8,3
Lube cons max (g/h)	73	90

PERFORMANCE DATA ENGINE 60 Hz

Genset model	278WT60	389WT60
Rated Power 100% (kW)	290	410
Max Power 110% (kW)	319	451
Speed (rpm)	1800	1800
Bore (mm)	126	126
Stroke (mm)	166	166
Displacement (liters)	12,42	12,42
Rated torque (Nm)	1538	2175
Compression ratio	18:1	18:1
Mean effect pressure (bar)	15,57	22,01
Mean piston speed (m/s)	10	10
Lube cons max (g/h)	73	103

COMBUSTION PARAMETERS ENGINE 50 Hz

Genset model	278WT50	340WT50
Intake air temp (°C)	45	45
Intake air vacuum (mbar)	30/60	30/60
Intake volume flow (m³/h)	1070	1350
Air temp after cooler (°C)	41	42
Exhaust gas temp (°C)	534	526
Exhaust gas vol flow (m³/h)	2980	3650
Exhaust gas mas flow (kg/h)	1270	1580
Exhaust bck pressure (mbar)	20/80	20/80

COMBUSTION PARAMETERS ENGINE 60 Hz

Genset model	278WT60	389WT60
Intake air temp (°C)	45	45
Intake air vacuum (mbar)	30/60	30/60
Intake volume flow (m³/h)	1380	1740
Air temp after cooler (°C)	42	45
Exhaust gas temp (°C)	444	505
Exhaust gas vol flow (m³/h)	3420	4600
Exhaust gas mas flow (kg/h)	1640	2030
Exhaust bck pressure (mbar)	20/80	20/80

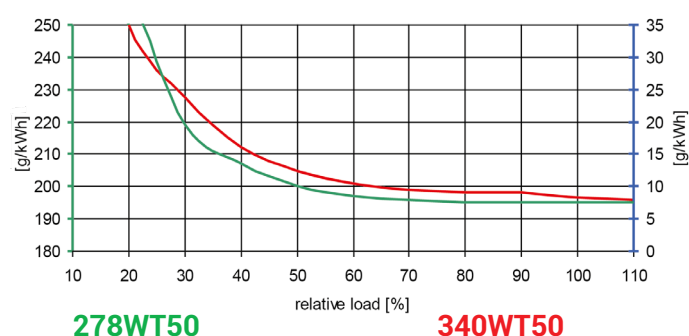
ENGINE ELECTRICAL SYSTEM

Battery recommended:	2x12 V /145 Ah / 800 CCA
Electrical Starter Motor:	24 V/5,5 kW
Engine Alternator:	Three phase 28 V/110 A

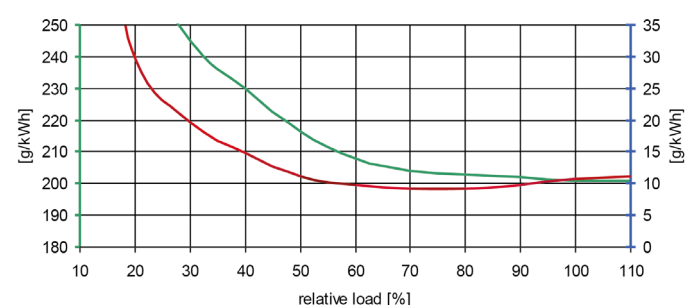
ALTERNATOR GENERAL CHARACTERISTICS

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

FUEL CONSUMPTION vs. LOAD [l/h] 50 Hz



FUEL CONSUMPTION vs. LOAD [l/h] 60 Hz



*Regarding Diesel fuel density of 850 kg/m³.

MARINE GENERATOR

ADVANCED DIGITAL CONTROL PANEL

- Marine certified hardware
- Resilience to marine environment
- 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
- TFT 5" LCD Panel (800 x 400 px)
- Possibility of screens customization (Screen Editor)
- Inbuild RS485
- Ethernet Port 10/100 Mbit RJ45
- Plug and Play Operation
- 5 Configurable user buttons under the screen
- Trends monitoring screen (up to 4 channels)
- Communication with Controller via Ethernet
- User setpoints and protections
- Multilanguage
- One analog input, one binary output
- Compatible with IntelliGen 1000 Marine and IntelliMains 1010 Marine controllers

POWER SUPPLY & OPERATING CONDITIONS

- Power supply range: 8-36 V D.C
- Power consumption: 6 W
- Front Panel protection: IP 65
- Vibration: 5-25 Hz, +/- 1,6 mm. 25-100 Hz a = 4g
- Operating temperature: -20 to + 70°C
- Operative humidity: 95 % non-condensing [EN 60068-2-30]
- Dash board foot-print: 187 x 132 mm.

ACCESSORIES

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

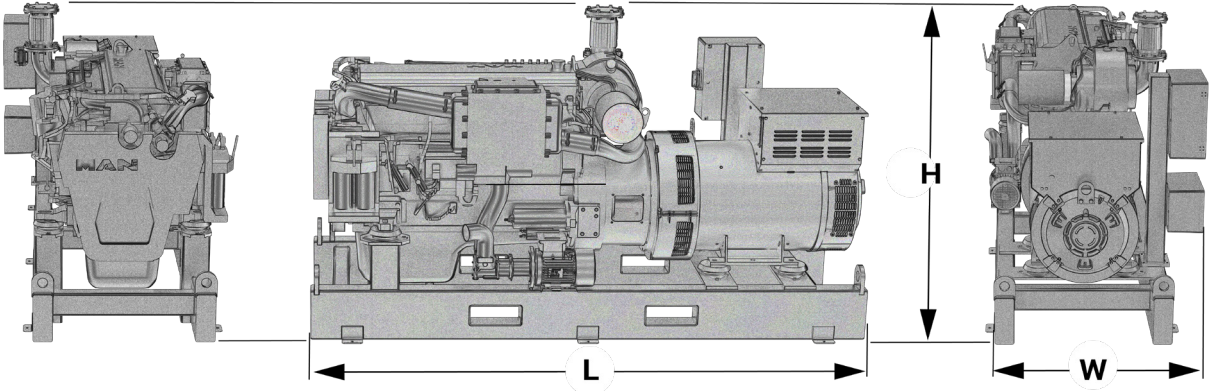
- Fuel pre-filter and/or fuel-water separators are highly recommended in view to avoid consequences of depleted or not complying fuel.
- Depending of requirements and needs, do not hesitate to consult the Nanni Catalog of Accessories to find the best suited prefilter or water-fuel separator.

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



Q12000	
L, mm	3004
H, mm	1549
W, mm	984
Dry Weight, kg	2400

GENSET CONNECTIONS

Raw water inlet line Int diam mm [in]:	75 [2,95"]
Min Fuel line Int diam mm [in]:	12 [0.47"]
Exhaust connexion mm [in]:	100 [3,93"]

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 show non standard equipments. All combination of equipment & accessory are not available.

DGBXXC01401

AUTHORIZED DEALER

NANNI INDUSTRIES S.A.S.
11, Avenue Abbé Mariotte
33260 La Teste - France
Tel +33 (0)5 56 22 30 60
www.nannienergy.com

NANNI SRL
Via degli Olmetti, 44
00060 Formello - Roma - Italia
Tel +39 06 30 88 42 51
www.nannienergy.com