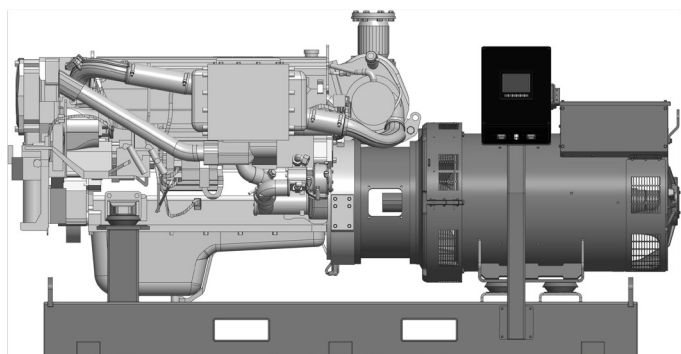


Q12000 Series



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
177WT50	380-415	3	317,54	176/220
262WT50			474,51	263/330
355WT50			640,50	355/443
205WT60	440-480-690	3	321,62	205/256
310WT60			486,35	310/387
422WT60			662,07	422/527

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 \leq 5500hrs/year. Load variation \leq 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 II - 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	177WT50	262WT50	355WT50
Rated Power 100% (kW)	190	280	375
Max Power 110% (kW)	209	308	413
Speed (rpm)	1500	1500	1500
Bore (mm)	126	126	126
Stroke (mm)	166	166	166
Displacement (liters)	12,42	12,42	12,42
Rated torque (Nm)	1210	1782	2387
Compression ratio	18:1	18:1	18:1
Mean effect pressure (bar)	12,24	18,04	24,16
Mean piston speed (m/s)	8,3	8,3	8,3
Lube cons max (g/h)	48	70	94

PERFORMANCE DATA ENGINE 60 Hz

Genset model	205WT60	310WT60	422WT60
Rated Power 100% (kW)	220	330	455
Max Power 110% (kW)	242	363	490
Speed (rpm)	1800	1800	1800
Bore (mm)	126	126	126
Stroke (mm)	166	166	166
Displacement (liters)	12,42	12,42	12,42
Rated torque (Nm)	1167	1751	2361
Compression ratio	18:1	18:1	18:1
Mean effect pressure (bar)	11,81	17,71	23,89
Mean piston speed (m/s)	9,96	9,96	9,96
Lube cons max (g/h)	55	83	111

COMBUSTION PARAMETERS ENGINE 50 Hz

Genset model	177WT50	262WT50	355WT50
Intake air temp (°C)	45	45	45
Intake air vacuum (mbar)	30/60	30/60	30/60
Intake volume flow (m³/h)	710	990	1350
Air temp before cooler (°C)	115	160	176
Air temp after cooler (°C)	37	40	43
Exhaust gas temp (°C)	548	562	548
Exhaust gas vol flow (m³/h)	2010	2830	3800
Exhaust gas mas flow (kg/h)	845	1160	1580
Exhaust bck pressure (mbar)	20/80	20/80	20/80

COMBUSTION PARAMETERS ENGINE 60 Hz

Genset model	205WT60	310WT60	422WT60
Intake air temp (°C)	45	45	45
Intake air vacuum (mbar)	30/60	30/60	30/60
Intake volume flow (m³/h)	960	1390	1620
Air temp before cooler (°C)	153	196	184
Air temp after cooler (°C)	38	41	43
Exhaust gas temp (°C)	486	475	540
Exhaust gas vol flow (m³/h)	2510	3520	4510
Exhaust gas mas flow (kg/h)	1130	1630	1910
Exhaust bck pressure (mbar)	20/80	20/80	20/80

ENGINE ELECTRICAL SYSTEM

Battery recommended:	2X 12 V/145 Ah / 800CCA
Electrical Starter Motor:	24 V/5,5 kW
Engine Alternator:	Three phase 28 V/110 A

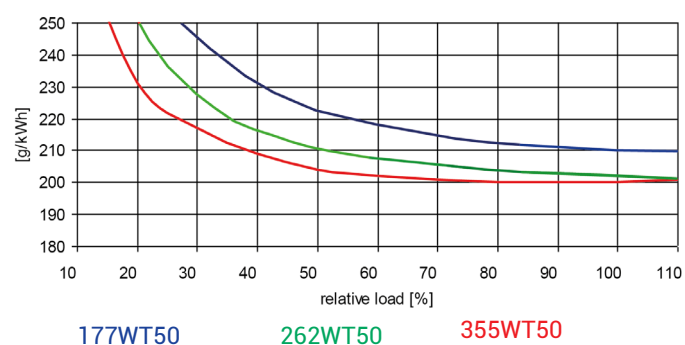
ALTERNATOR GENERAL CHARACTERISTICS

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

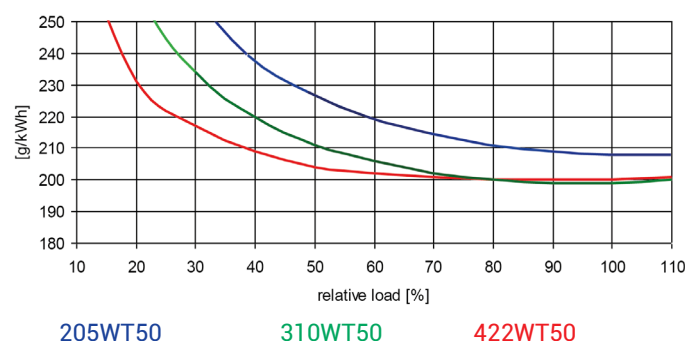
FUEL CONSUMPTION vs. LOAD [l/h] 50 Hz

50 Hz	177WT50	262WT50	355WT50
25%	n/a	52,52	49,4
50%	49,62	46,94	44,60
75%	47,83	45,82	44,70
100%	46,94	45,15	44,70
110%	46,94	45,15	44,70

FUEL CONSUMPTION vs. LOAD [Grams/h] 50 Hz*



FUEL CONSUMPTION vs. LOAD [Grams/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

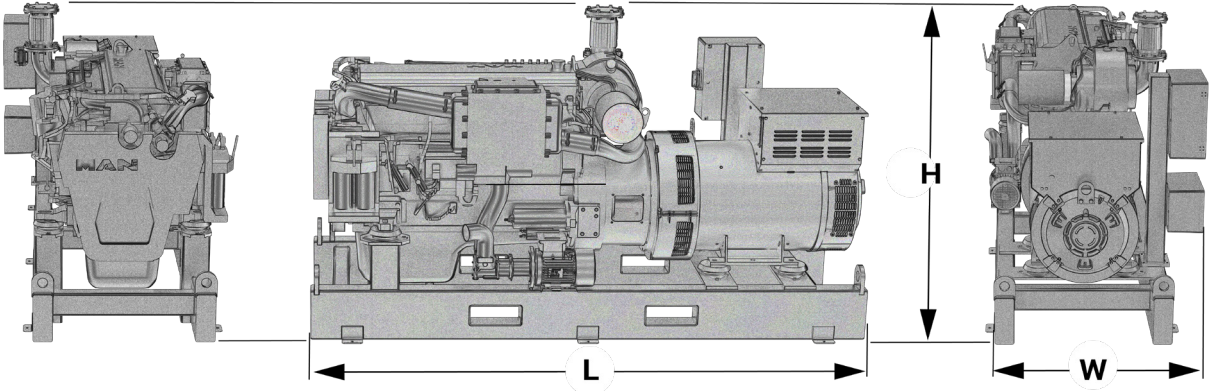
- Fuel pre-filter and/or fuel-water separators are highly recommended in view to avoid consequences of depleted or not complying fuel.
- Depending of requirements and needs, do not hesitate to consult the Nanni Catalog of Accessories to find the best suited prefilter or water-fuel separator.

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.

DGBXXC01400

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