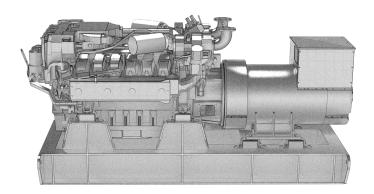


# Q24000 Series



#### **GENSET WEIGHT & DIMENSIONS**

Weight, kg [lbs]	5400 [11904,96]
Length, mm [in.]	3665 [144,29"]
Width, mm [in.]	1405 [55,31"]
Height, mm [in.]	1736 [68,34"]

#### **GENERATOR RATINGS**

Genset	Volts	Phases	Amps per Phase	kWe/kVA PRP
568WT50	200 415		1024,80	568/710
668WT50	380-415	3 -	1203,41	667/833
664WT60	440-480-690	2	1087,45	663/828
764WT60		3	1251,47	763/953

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, 12 cylinders, 24240 cm<sup>3</sup>
   [1479,21 in<sup>3</sup>]
- 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 equipement

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

# **Optional Equipement**

- 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







# **PERFORMANCE DATA ENGINE 50 Hz**

Genset model	568WT50	668WT50
Rated Power 100% (kW)	600	700
Max Power 110% (kW)	660	770
Speed (rpm)	1500	1500
Bore (mm)	128	128
Stroke (mm)	157	157
Displacement (liters)	24,24	24,24
Rated torque (Nm)	3820	4456
Compression ratio	17:1	17:1
Mean effect pressure (bar)	19,80	23,10
Mean piston speed (m/s)	7,85	7,85
Lube cons max (g/h)	150	175

### **PERFORMANCE DATA ENGINE 60 Hz**

Genset model	664WT60	764WT60
Rated Power 100% (kW)	700	800
Max Power 110% (kW)	770	880
Speed (rpm)	1800	1800
Bore (mm)	128	128
Stroke (mm)	157	157
Displacement (liters)	24,24	24,24
Rated torque (Nm)	3714	4244
Compression ratio	17:1	17:1
Mean effect pressure (bar)	19,25	22,00
Mean piston speed (m/s)	9,42	9,42
Lube cons max (g/h)	175	200

### **COMBUSTION PARAMETERS ENGINE 50 Hz**

Genset model	568WT50	668WT50
Intake air temp (°C)	45	45
Intake air vacuum (mbar)	30/60	30/60
Intake volume flow (m³/h)	2780	990
Air temp before cooler (°C)	195	160
Air temp after cooler (°C)	45	40
Exhaust gas temp (°C)	358	562
Exhaust gas vol flow (m³/h)	5850	2830
Exhaust gas mas flow (kg/h)	3180	1160
Exhaust bck pressure (mbar)	20/80	20/80

### **COMBUSTION PARAMETERS ENGINE 60 Hz**

COMBOSTION FANAMETERS ENGINE OF TIZ		
Genset model	664WT60	764WT60
Intake air temp (°C)	45	45
Intake air vacuum (mbar)	30/60	30/60
Intake volume flow (m³/h)	3320	2980
Air temp before cooler (°C)	205	228
Air temp after cooler (°C)	49	50
Exhaust gas temp (°C)	365	425
Exhaust gas vol flow (m³/h)	7010	7050
Exhaust gas mas flow (kg/h)	3470	3470
Exhaust bck pressure (mbar)	20/80	20/80

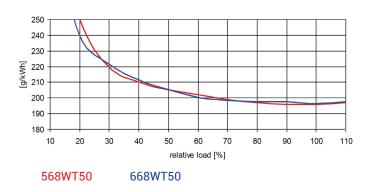
### **ENGINE ELECTRICAL SYSTEM**

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

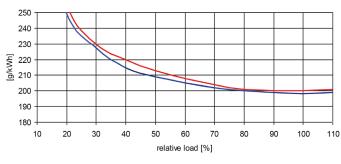
# **ALTERNATOR GENERAL CHARACTERISTICS**

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

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



# FUEL CONSUMPTION vs. LOAD [Grams/h] 60 Hz\*



674WT60 764WT60

<sup>\*</sup>Regarding Diesel fuel density of 850 kg/m<sup>3</sup>.



### 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 Controler via Ethernet
- User setpoints and protections
- Multilanguage
- One analog input, one binary output
- Compatible with InteliGen 1000 Marine and InteliMains 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 = 4q
- 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**

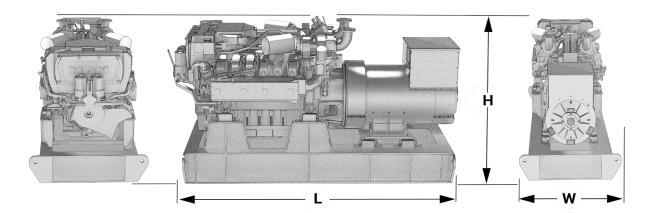
- Fuel pre-filter and/or fuel-water separators are highly recommended in view to avoid consequences of depleted or not complying fuel.
- Depending of requirements and needs, do not hesitate to consult the Nanni Catalog of Accessories to find the best suited prefilter or water-fuel separator.

### 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.



# **■ STANDALONE DIMENSIONS**



Q24000	
L, mm	3665
H, mm	1736
W, mm	1405
Dry Weight, kg	5400

# **■ GENSET CONNECTIONS**

Raw water inlet line Int diam mm [in]:	75 [2,95"]
Min Fuel line Int diam mm [in]:	12 [0,39"]
Exhaust connexion mm [in]:	2x100 [2x3,93"]
Fuel std eletric pump max suction lift m [in]:	2,4 [94,5"]

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 on standard equipements. All combination of equipment & accessory are not available.

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**AUTHORIZED DEALER** 

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