

**MARINE GENERATOR** 

# Q1500 Series



# **GENSET WEIGHT AND DIMENSIONS**

	Without	With Soundshield
Weight, kg [lbs]	279 [615,01]	310 [683,43]
Length, mm [in.]	945 [37,20"]	1050 [41,34"]
Width, mm [in.]	465 [18,30"]	580 [22,83"]
Height, mm [in.]	595 [23,43"]	640 [25,20"]

# **GENERATOR RATINGS**

Genset	Volts	Phase	Amps	kW prp	kW ltp
10WM50	230	1	41,7	9,6	10
10CM50	230	1	41,7	9,6	10
12WM60	120-240	1	48,8	11,7	12,3
12CM60	120-240	1	48,8	11,7	12,3

PRP = Prime Running Power

LTP = Limited Time Power

# Engine features

- Kubota Base
- Cast-iron motor block
- Diesel engine 4 strokes, 4 cylinders, 1498 cm3
- Gear driven valve train
- Indirect mechanical injection, E TVCS-Bosch MD Mini
- Automatic preheating system
- Lifting eyelets

# **Generator features**

- M.Alte 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
- Option button GCB (Generator Circuit Breaker)
- History log (150 records)
- 5 languages available
- Dimensions : 172 x 112 mm.

# **Standard equipement**

- Unipolar 12 V Electric System
- Wet exhaust
- Heat exchanger
- Raw water pump with Neoprene rotor
- Safeguards on the main parameters

# **Optional Equipement**

- Siphon breaker
- Fuel pre-filter
- Bipolar electrical system
- 24V Electrical system





# **ENGINE GENERAL DATA**

Air intake	Natural	
Compression ratio	24 :1	
Valves per cylinder	2	
Firing order	1-3-4-2	
Rotational direction flywheel side	CCW	
Rated speed rpm	1500 [50Hz]	-1800 [60 Hz]
Injection pressure	MPa	13.73
Governor regulation	+/- 5%	
Injection timing	15.5 to 17.5	
Fuel consumption	l/ h	2.8 [3.2*]
Oil pan capacity		4.8
Oil pump type	Tronchoid	
Oil filter type	Full-flow car	tridge
Pressure at rated rpm	2 to 4,5 bar	
Lubrication system	Forced	
Engine operating angle	20°continuo	us

# **ENGINE COOLING SYSTEM**

Seawater pump	Bronze, Neoprene rotor	
Seawater pump flow	l/min : 16 [20*]	
Coolant pump type	Belt-driven centrifugal pump	
Coolant capacity	I	5
Exhaust manifold	Fresh water cooled	
Max allowable back pressure	bar	0.071
Max exhaust gas temperature	°C	550

# **AIR REQUIREMENTS**

Combustion air at 25°C	m³/min	0.99 [1.19*]
	ft³/min	35 [42*]
Genset - Coolant air	m³/min	9.3 [12*]
	ft³/min	328.4 [423.8*]

# **ENGINE ELECTRICAL SYSTEM**

Engine Alternator	12 V/70 A
Battery recommended	75 A/h
Electrical Starter Motor	12 V / 1 kW
Command Panel provided	SI-2

# ALTERNATOR GENERAL CHARACTERISTICS

Brand	Mecc Alte
Model	NPE32 1M4 C
Insulation Class	Н
Frequency	50-60 Hz
Standard protection	IP23
Voltage regulation	+/-1%

# 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  $\leq$  500hrs/year. Load variation  $\leq$  75 % of rated power. 10 % overload is allowed for1hr every 12hrs.

# FUEL CONSUMPTION vs. LOAD [I/h]

Load	25 %	50 %	75 %	100 %
50 Hz	0,92	1,84	2,76	3,68
60 Hz	1,1	2,2	3,3	4,44

# **SHORE POWER 60Hz**

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 NANNI Genset range is set on this requirement. Need for120 V-60Hz/one phase-2 wires [L-N] voltage, must be forwarded to NANNI prior to placing an order.





# **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
- Inbuild 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, an ease of access for internal components maintenance or servicing. Brings lower service in maintaining components tidy at all times. Enclosure body is sturdy 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**

А	Raw water inlet line Int diam:	mm [in]	25 [1"]
B-C	Min Fuel line Int diam:	mm [in]	8 [0.31"]
D	Exhaust connexion:	mm [in]	50 [2"]
E-F	Battery connexion		
G-H	Electrical connector		
	Fuel Std pump max suction lift:	m [in]	0,5 [19,68"]
	Fuel Eletric pump max suction lift:	m [in]	1,8 [70,9"]

#### NOTE 1: Dimensions are given 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 equipements. All combination of equipment & accessory are not available. DGBXXC01181

# AUTHORIZED DEALER

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