# PRODUCT GUIDE





ENERGY CREATOR

SINCE 1952

www.nannienergy.com

# NANNI POWER SYSTEMS

With a range of high quality propulsion engines and generator sets, Nanni is able to provide complete power systems for marine applications.

This product selection guide includes a comprehensive range of propulsion engines from 10 to 1200 hp, and marine generator sets from 6 to 500 kW.

This guide is intended to provide an overview of our product range while helping the prospective buyer to select the appropriate Nanni product.

### CONTENT

Nanni at a giance	02
Sail with confidence	03
Using this guide	04
Dimensions & Weight	05
Ratings outline	06
Regulations	10
Propulsion engines	12
Sail Drive propulsion system	14
Stern Drive propulsion system	28
Marex control systems	44
Interactive control systems	48
Generator sets	50
Nanni Hybrid system	62

Despite all the care taken in publishing this brochure, Nanni Industries cannot be held responsible for any error introduced in the content.

In the interest of progress, please kindly note that model designations, ratings and specifications are subject to change without prior notice.

# NANNI AT A GLANCE

Nanni is an independent international company founded in 1952 and is now France's leading marine engine manufacturer.

The company designs, develops, manufactures and markets engines and generator sets designed specifically for the challenge of marine applications. Nanni also provides all related technologies, including fuel systems, controls, air handling, filtration, emission solutions and electrical power generation systems. With its comprehensive product range, Nanni offers content in all power and application categories, and is able to provide a full range of solutions, from bobtail engines to complete power systems.

Headquartered in France, the production unit and the design office are certified as compliant with ISO 9001 standards.

Learn more about Nanni on nannienergy.com

#### Worldwide customer support network

Nanni products are supported at every major port thanks to a worldwide network of independent distributor facilities and dealer locations, delivering the expertise and parts needed to keep customer's products running smoothly.

In choosing a Nanni product, you gain an extensive worldwide sales and service network to help you achieve maximum engine life and sustained reliability.



## SAIL WITH CONFIDENCE

Nanni has been a global marine engine manufacturer for over 60 years, offering customers industry-leading durability and reliability. As a result, many of Nanni's legacy engines are still powering boats around the globe.

Known for their reliability, its products are the driving force behind many power systems worldwide. The long and successful partnership with customers including major shipyards and governmental agencies provides further evidence that you can rely on a solid partner.

Robust, efficient & built to last. These are the qualities that have made Nanni's reputation. We design simple, yet effective and reliable products able to withstand the toughest conditions, year after year.

And when it comes to fuel consumption and maintenance costs, Nanni is also an attractive choice. Not only because of products quality, but also thanks to an established know-how in marine power systems and full engineering team support throughout project realization. From the first stage, through the sales process and commissioning, to parts supply, maintenance, repair and upgrade, Nanni offers a full range of services.

Nanni, your single source for complete power systems.

# USING THIS GUIDE

#### PROPULSION ENGINES

For propulsion engines, the application ratings reflect various boat operation needs. Knowledge of the engine's operating requirements is therefore essential to establish a proper match of engine rating to boat operating requirements.

Consider the expected annual operating hours based on the a 12-month period. Also consider the duty cycle, which refer to the amount of time the engine is required to be operated at rated rpm during a period of time. Then review the presented application ratings and decide which rating best defines the application. Also foresee the regulations that the engine will have to meet. Once you have decided which rating and emission level fit your needs, refer to the specification tables beginning on page 6 and on page 10 for ratings and regulations availability by engine model.

Finally, use the engine model pages for additional information to help you decide which Nanni engine best fits your operating needs. The type of transmissions that are available for each engine are indicated.

More information is provided on specific product brochures available for each engine on www.nannidiesel.com.

### **GENERATOR SETS**

For generator sets, first refer to the overview on page 40 and determine the series that best suits your application. Proceed to the sizing step by making an inventory of on-board electrical appliances. Add their rated power together and foresee which appliances will operate simultaneously. Also establish important project parameters such as load capacity, voltage, single or three-phase, maximum allowable voltage and frequency drop, etc.

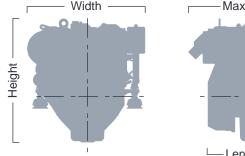
As always, refer to www.nannidiesel.com or consult your Nanni representative for assistance and for the most up-to-date information.

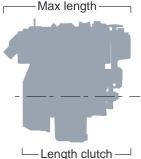
# **DIMENSIONS & WEIGHT**

Dimensions and weight may vary according to the configuration selected. More detailed information is included within the specific installation schematic for each product.

Stated weight values are based on dry engines including standard equipment without coolant, oil and transmission.

Sizing is defined according to the following schematic diagram:





For propulsion engines, performance data are provided in accordance with ISO 8665-1, as follows:

- kW: Rated engine power in kilowatts
- hp: Rated engine power in metric horsepower
- rpm: Rated engine speed in revolutions per minute
- I/h: Max fuel consumption at rated engine speed in litres per hour. Fuel consumption has a tolerance of +/- 5%

For generator sets, power rating are given according ISO 8528-1. Dimensions are given as the maximum overall length, width and height. Weights are based on dry engines, without coolant and oil.

# **RATINGS OUTLINE**

For an exact determination of the appropriate rating, contact your local Nanni representative.

### M1.L rating

Operating hours	Unlimited
Load factor 1	Up to 100%
Duty cycle <sup>2</sup>	Uninterrupted full power
Application example	ICFN (continuous)

### M1.S rating

Operating hours	Unlimited
Load factor 1	Up to 80%
Duty cycle <sup>2</sup>	Full power for no more than 1 hour out of each 3 hours of operation
Application example	IFN (intermittent)

### M1 rating

Operating hours	24 hours per day
Load factor 1	Over 65%
Duty cycle <sup>2</sup>	Uninterrupted full power
Application example	Line hauls tugs and towboats, trawlers/draggers, displacement hull fishing boats

### M2 rating

Operating hours	Up to 5000 hours per year
Load factor 1	Up to 65%
Duty cycle <sup>2</sup>	Full power for no more than 16 hours out of each 24 hours of operation
Application example	Short-range tugs and towboats long- range ferryboats, large passenger vessels and offshore displacement hull fishing boats

# M3 rating

Operating hours	Up to 4000 hours per year
Load factor <sup>1</sup>	Up to 50%
Duty cycle <sup>2</sup>	Full power for no more than 4 hours out of each 12 hours of operation
Application example	Coastal fishing boats offshore crew boats, research boats. Short range ferryboats and dinner cruise boats

# M4 rating

Operating hours	Up to 3000 hours per year
Load factor 1	Up to 40%
Duty cycle <sup>2</sup>	Full power for no more than 1 hour out of each 12 hours of operation
Application example	Inshore crew boats, charter fishing boats, pilot boats, dive boats, and planning hull commercial fishing boats

# M5.L rating

Operating hours	Up to 2000 hours per year
Load factor 1	Up to 77%
Duty cycle <sup>2</sup>	Full power for no more than 1 hour out of each 6 hours of operation
Application example	Patrol craft long

# M5.S rating

Operating hours	Up to 1200 hours per year
Load factor 1	Up to 77%
Duty cycle <sup>2</sup>	Full power for no more than 1 hour out of each 12 hours of operation
Application example	Patrol craft short

### M5 rating

Operating hours	Up to 1000 hours per year
Load factor 1	Up to 35%
Duty cycle <sup>2</sup>	Full power for no more than 30 minutes out of each 8 hours of operation
Application example	Recreational boats, tactical military vessels and rescue boats

### M6.S rating

Operating hours	Up to 500 hours per year
Load factor 1	Up to 50%
Duty cycle <sup>2</sup>	Full power for no more than 1 hour out of each 20 hours of operation
Application example	Pleasure craft

### M6 rating

Operating hours	Up to 500 hours per year
Load factor <sup>1</sup>	Up to 35%
Duty cycle <sup>2</sup>	Full power for no more than 30 minutes out of each 8 hours of operation
Application example	Recreational boats

<sup>&</sup>lt;sup>1</sup> Load factor: fuel burned over a period of time divided by the full-power fuel consumption over the same period.

<sup>&</sup>lt;sup>2</sup> Duty cycle: the remaining operation time must be at or below cruising speeds. Cruising speed is at least 200 rpm below the rated engine speed. No wide-open throttle below rated engine speed.



## **REGULATIONS**

#### **FXHAUST FMISSIONS**

#### IMO-MARPOL Annex VI

Main international convention concerning the prevention of marine environment pollution by shipping. Only applies to diesel engines above 130 kW.

### EU-Directive 2013/53/EU (RCD 2)

European Union design regulations for recreational craft up to a hull length of 24 m.

### EU-Directive 97/68/EC (NRMM) as amended

The Nonroad Mobile Machinery Directive regulates exhaust emissions from marine propulsion and auxiliary engines used aboard inland waterway vessels operating in the European Community.

#### **EPA** marine Tier 3

Managed by the Environmental Protection Agency of the U.S.A, the EPA certification regulates exhaust emissions from diesel engines installed on U.S. registered marine vessels.

#### **BSO 2**

The BSO standard applies to recreational marine engines operating on lake Constance

#### On-demand certifications

Some regions in the world have local regulations for a specific area or water (ie., NKK, RMRS, CCR, etc.). Contact your Nanni representative for details and availability of further engine certification in these cases.

Certain products may not be available for sale in all areas due to emissions compliance.

#### CLASSIFICATION SOCIETY

Nanni works with various marine classification societies to allow the use of our engines in vessels designed and built to a society's particular requirements. For more information, please contact your local Nanni representative.

#### SOLAS

The SOLAS (Safety Of Life At Sea) is an international treaty that prescribes several rules regarding the safety of ships. Our SOLAS approved engines are designed and manufactured to meet these regulations for use in life, rescue and crew tender boats. Special features do include:

- Immediate starting in very low temperatures (down to −15°C, and −25°C with additional heater).
- Operation at an angle up to 30° in intermittent operation and 20° in continuous operation.
- All SOLAS approved engines have been engineered to be installed in free fall life boats and are able to withstand a drop from a height of more than 30 meters.

# PROPULSION ENGINES

The references indicated hereafter identify the regulations each propulsion engine will be certified to:

- 1. IMO MARPOL Annex VI compliant
- 2. RCD2 2013/53/EU
- 3. NRMM 97/68/EC AS AMENDED OK FOR RCD2 2013/53/EU AND CCNR2
- 4. EPA Marine Tier 3
- 5. BSO 2

Engine	Rated Power [hp]	Rating	Emissions level	Page
N2.10	10	M5	2, 4, 5	18
N2.14	14	M5	2, 4, 5	19
N3.21	19.6	M5	2, 4, 5	20
N3.30	29	M5	2, 4, 5	21
N4.38	37.5	M4	2, 4, 5	22
N4.40	40	M4	2, 4	23
N4.50	47.5	M4	2, 4, 5	24
N4.65	59	M4	2, 4	25
N4.80	79	M5	2, 4, 5	26
N4.115	115	M4	2, 4, 5	27
N4.140	135	M5	2, 4, 5	27
T4.205	200	M6	1, 2, 4, 5	30
T4.230	230	M6	1, 2, 4, 5	30
T4.270	265	M6	1, 2, 4, 5	30
6.420 TDI	320	M6	5	32
T8V.320	320	M6	1, 2, 4	33
T8V.350	350	M6	1, 2, 4	33
T8V.370	370	M6	1 ,2, 4	33
N5.150	152	M4	n/a	34
N5.160 CR2	162	M1	1, 4	34
N5.180 CR2	182	M2	1, 4	34
N5.200 CR2	202	M3	1, 4	34
N5.230 CR2	228	M4	1, 4	34
N6.160	156	M1	n/a	36
N6.180	177	M2	n/a	36
N6.200	202	M3	n/a	36
N6.230	228	M4	n/a	36
N6.250 CR2	250	M1	1, 4	36

Engine	Rated Power [hp]	Rating	Emissions level	Page
N6.285 CR2	284	M2	1, 4	36
N6.325 CR2	325	МЗ	1, 4	36
N6.360 CR2	360	M4	1, 4	36
N6.405 CR2	405	M5	1, 4	36
N9.330 CR2	329	M1	1, 4	37
N9.380 CR2	380	M2	1, 4	37
N9.430 CR2	431	M3	1, 3, 4	37
N9.510 CR2	507	M4	1, 3, 4	37
N9.600 CR2	557	M5	1, 3, 4	37
N13.430 CR2	431	M1	1, 3, 4	39
N13.510 CR2	507	M2	1, 3, 4	39
N13.580 CR2	583	M3	1, 3, 4	39
N13.660 CR2	659	M4	1, 3, 4	39
N13.800 CR2	760	M5	1, 3, 4	39
N13.650 CR3 HD	650	M1.S	1, 3, 4	41
N13.700 CR3 HD	650	M1.S	1, 2, 4	41
N13.700 CR3	700	M1.S	1, 2, 4	41
N13.750 CR3	751	M6.S, M5.L	1, 2, 4	41
N13.800 CR3	800	M6.S, M5.L	1, 2, 4	41
N13.900 CR3	900	M6.S	1, 2, 4	41
N13.930 CR3	925	M6.S	1, 3	42
N16.900 CR3	900	M1.S	1, 3	42
N16.1000 CR3	1000	M6.S, M5.I	1, 3	42
N16.1100 CR3	1100	M6.S, M5.L	1, 3	42
N16.1150 CR3	1150	M5.S	1, 3	42
N16.1200 CR3	1200	M6.S	1, 3	42

### NANNI RANGE (hp)



"P.S.: PLATINUM SERIES

# SAIL DRIVE PROPULSION SYSTEM

Available for engines up to 135 hp, the Sail Drive transmission system provides to both the OEM manufacturer and boat owners a unique, still proven design.

It offers quiet and virtually vibration free operation, with very low water resistance under sail, plus increased propulsion efficiency due to the thrust direction being parallel to the boat's waterline.



#### FEATURES & BENEFITS

- Installation and service made easy in comparison to conventional inboard shaft drive installations,
- Forced lubrication system, integrated oil cooling system,
- Structure made of high strength aluminium alloy with corrosion resistant protection, electrically isolated from the engine,
- Can be matched with a variety of fixed or foldable propeller configurations.





### TECHNICAL CHARACTERISTICS

		SP60
Reduction ratio	2.15 : 1	2.38 : 1
Max input power	66.6 hp [49 kW] @ 3000 rpm	59.8 hp [44 kW] @ 3600 rpm
Dry weight [kg]		35
Oil capacity [litre]		3
Oil type		ATF
Propeller shaft		17 standard spline
Propeller diameter		From 13" to 18" maxi

#### OPTIONNAL SPP

- The pivoting leg, operated by a robust industrial electric motor with special marine protection, gives always the requested power in the right direction.
- Joystick maneuvering is comfortable, easy, intuitive and reliable. You can exploit your engine full power when maneuvering with just two fingers!
- It SPP comes with latest electronic technology, plug and play components and electric pre-wired parts. System status can be easily read in every moment through the LEDs lighting on the joystick.



#### TECHNICAL CHARACTERISTICS

	SD12	SD15
Reduction ratio	2.31 : 1	2.49 : 1
Max input power	72 hp [53 kW] @ 2700 rpm	135 hp [99.4 kW] @ 2600 rpm
Dry weight [kg]	45	100
Oil capacity [litre]	2.8	6
Oil type	SAE 15W40	ATF
Propeller shaft	16/32 standard spline	DIN 5480 W33x1 25x30x25 9d
Propeller diameter	21" maxi	23" maxi

# N2.10







Model	kW	hp	rpm	l/h	Rating
N2.10	7.36	10	3000	2.4	M5

#### **ENGINE OVERVIEW**

Configuration 2 cylinders in line

4 stroke Diesel

Fuel system Mechanical Indirect (E-TVCS)

**Displacement** 0.479 | [29.2 in<sup>3</sup>]

**Bore & Stroke** 67 x 68 mm [2.64 x 2.68 in]

Intake Naturally aspirated

Cooling Closed cooling with heat exchanger

Keel Cooling (optional)

Gearbox Shaft line or Sail Drive

Emissions RCD2 2013/53/EU, EPA marine Tier 3, BSO 2

#### **DIMENSIONS & WEIGHT**

 Max length
 476 mm [18.7 in]

 Length clutch
 399 mm [15.7 in]

 Width
 428 mm [16.9 in]

 Height
 495 mm [19.5 in]

 Dry weight
 78 kg [172 lbs]

#### FEATURES & BENEFITS

Kubota engine base
 Class-leading package size

Low rated rpm
 Low fuel consumption
 Weight
 Installation flexibility

Gear driven valve train Repowering made easy

Easy routine servicing
 Low installation costs

# N2.14 **PROPULSION**







Model	kW	hp	rpm	l/h	Rating
N2.14	10.3	14	3600	3.6	M5

#### **ENGINE OVERVIEW**

2 cylinders in line Configuration

4 stroke Diesel

Fuel system Mechanical Indirect (E-TVCS)

Displacement 0.479 I [29.2 in<sup>3</sup>]

67 x 68 mm [2.64 x 2.68 in] **Bore & Stroke** 

Intake Naturally aspirated

Closed cooling with heat exchanger Cooling

Keel Cooling (optional)

Gearbox Shaft line or Sail Drive

**Emissions** RCD2 2013/53/EU, EPA marine Tier 3. BSO 2

#### DIMENSIONS & WEIGHT

Max length 510 mm [20.1 in] Length clutch 433 mm [17.1 in] Width 463 mm [18.2 in] 506 mm [19.9 in] Height Dry weight 83 ka [183 lbs]

#### FEATURES & BENEFITS

Kubota engine base

Robust design Low fuel consumption

Excellent power to weight

Gear driven valve train

Extensive range of options

Repowering made easy

Low installation costs

Installation flexibility

Easy routine servicing

# N3.21 **PROPULSION**





#### PERFORMANCE DATA

Model	kW	hp	rpm	l/h	Rating
N3.21	14.6	19.6	3600	5	M5

#### **ENGINE OVERVIEW**

3 cylinders in line Configuration

4 stroke Diesel

Fuel system Mechanical Indirect (E-TVCS)

Displacement 0.719 I [43.9 in<sup>3</sup>]

**Bore & Stroke** 67 x 68 mm [2.64 x 2.68 in]

Intake Naturally aspirated

Closed cooling with heat exchanger Cooling

Keel Cooling (optional)

Gearbox Shaft line or Sail Drive

**Emissions** RCD2 2013/53/EU, EPA marine Tier 3, BSO 2

#### DIMENSIONS & WEIGHT

Max length 578 mm [22.8 in] Length clutch 500 mm [19.7 in] Width 473 mm [18.6 in] 506 mm [19.9 in] Height Dry weight 97 ka [214 lbs]

#### FEATURES & BENEFITS

Kubota engine base

Low fuel consumption

Installation flexibility

Low installation costs

Gear driven valve train

Excellent power to weight

ratio

Extensive range of options

Repowering kits

Easy routine servicing

<sup>\*</sup>Contact your Nanni representative for more details.

# N3.30 **PROPULSION**







Model	kW	hp	rpm	l/h	Rating
N3.30	21.3	29	3600	7.4	M5

#### **ENGINE OVERVIEW**

3 cylinders in line Configuration

4 stroke Diesel

Fuel system Mechanical Indirect (E-TVCS)

Displacement 1.123 I [68.5 in<sup>3</sup>]

**Bore & Stroke** 78 x 78.4 mm [3.07 x 3.09 in]

Intake Naturally aspirated

Closed cooling with heat exchanger Cooling

Keel Cooling (optional)

Gearbox Shaft line or Sail Drive

**Emissions** RCD2 2013/53/EU, EPA marine Tier 3, BSO 2

#### DIMENSIONS & WEIGHT

Max length 667 mm [26.2 in] Length clutch 570 mm [22.4 in] Width 467 mm [18.39 in] 589 mm [23.2 in] Height Dry weight 136 kg [300 lbs]

#### FEATURES & BENEFITS

Kubota engine base

Low fuel consumption

Gear driven valve train

Easy routine servicing

Repowering made easy

Installation flexibility

Extensive range of options

Low installation costs

Class-leading package size

SOLAS approved version

available

# N4.38 Propulsion





#### PERFORMANCE DATA

Model	kW	hp	rpm	l/h	Rating
N4.38	27.6	37.5	3000	8.7	M4

#### **ENGINE OVERVIEW**

Configuration 4 cylinders in line

4 stroke Diesel

Fuel system Mechanical Indirect (E-TVCS)

Displacement 1.498 | [91.4 in<sup>3</sup>]

Bore & Stroke 78 x 78.4 mm [3.07 x 3.08 in]

Intake Naturally aspirated

Cooling Closed cooling with heat exchanger

Keel Cooling (optional)

Gearbox Shaft line or Sail Drive

Emissions RCD2 2013/53/EU, EPA marine Tier 3, BSO 2

#### **DIMENSIONS & WEIGHT**

 Max length
 749 mm [29.5 in]

 Length clutch
 655 mm [25.8 in]

 Width
 465 mm [18.3 in]

 Height
 605 mm [23.8 in]

 Dry weight
 139 kg [306 lbs]

#### FEATURES & BENEFITS

Kubota engine baseRobust design

Low fuel consumptionLow rated rpm

High power density

Installation flexibility

Extensive range of options

Low installation costs

Easy routine servicingGear driven valve train

SOLAS approved version

available

# N4.40 Propulsion





#### PERFORMANCE DATA

Model	kW	hp	rpm	l/h	Rating
N4.40	29.4	40	2800	9.3	M4

#### **ENGINE OVERVIEW**

4 cylinders in line Configuration

4 stroke Diesel

Fuel system Mechanical Indirect (E-TVCS)

Displacement 1.999 | [122 in<sup>3</sup>]

**Bore & Stroke** 83 x 92.4 mm [3.26 x 3.63 in]

Intake Naturally aspirated

Closed cooling with heat exchanger Cooling

Keel Cooling (optional)

Gearbox Shaft line or Sail Drive

**Emissions** RCD2 2013/53/EU, EPA marine Tier 3

#### DIMENSIONS & WEIGHT

Max length 763 mm [30 in] Length clutch 719 mm [28.3 in] Width 544 mm [21.4 in] Height 623 mm [24.5 in] Dry weight 214 kg [472 lbs]

#### FEATURES & BENEFITS

Kubota engine base

Low rated rpm

Extensive range of options

Low fuel consumption

Gear driven valve train

Installation flexibility

Repowering made easy

Low installation costs

Easy routine servicing

# N4.50

# Propulsion







Model	kW	hp	rpm	l/h	Rating
N4.50	35.4	47.5	2800	11.7	M4

#### **ENGINE OVERVIEW**

Configuration 4 cylinders in line

4 stroke Diesel

Fuel system Mechanical Indirect (E-TVCS)

Displacement 2.197 | [134.1 in<sup>3</sup>]

Bore & Stroke 87 x 92.4 mm [3.43 x 3.63 in]

Intake Naturally aspirated

Cooling Closed cooling with heat exchanger

Keel Cooling (optional)

Gearbox Shaft line or Sail Drive

Emissions RCD2 2013/53/EU, EPA marine Tier 3, BSO 2

#### **DIMENSIONS & WEIGHT**

 Max length
 763 mm [30 in]

 Length clutch
 719 mm [28.3 in]

 Width
 544 mm [21.4 in]

 Height
 623 mm [24.5 in]

 Dry weight
 216 kg [476.2 lbs]

#### FEATURES & BENEFITS

Kubota engine baseRobust design

Low fuel consumptionLow rated rpm

High power density

Installation flexibility

Extensive range of options

Low installation costs

Easy routine servicingGear driven valve train

SOLAS approved version

available

# N4.65 Propulsion





#### PERFORMANCE DATA

Model	kW	hp	rpm	l/h	Rating
N4.65	43.4	59	2700	13.5	M4

#### **ENGINE OVERVIEW**

Configuration 4 cylinders in line

4 stroke Diesel

Fuel system Mechanical Indirect (E-TVCS)

Displacement 2.434 I [148.5 in<sup>3</sup>]

**Bore & Stroke** 87 x 102.4 mm [3.43 x 4.03 in]

Intake Turbocharged

Closed cooling with heat exchanger Cooling

Keel Cooling (optional)

Gearbox Shaft line or Sail Drive

Emission RCD2 2013/53/EU, EPA marine Tier 3, BSO 2

#### DIMENSIONS & WEIGHT

Max length 732 mm [28.8 in] Length clutch 697 mm [27.4 in] Width 505 mm [19.9 in] Heiaht 632 mm [24.9 in] 248 kg [546.75 lbs] Dry weight

#### FEATURES & BENEFITS

Kubota engine base

Class-leading package size

High power density Extensive range of options

Low fuel consumption

Repowering made easy

Low installation costs

Gear driven valve train

Easy routine servicing

SOLAS approved version

available

Installation flexibility

# N4.80

# Propulsion



#### PERFORMANCE DATA



Model	kW	hp	rpm	l/h	Rating
N4.80	57.4	79	2700	15.6	M5
N4.80 SD	52.9	72	2700	14.4	M5

#### **ENGINE OVERVIEW**

Configuration 4 cylinders in line

4 stroke Diesel

Fuel system Mechanical Indirect (E-TVCS)

**Displacement** 2.434 | [148.5 in<sup>3</sup>]

Bore & Stroke 87 x 102.4 mm [3.43 x 4.03 in]
Intake Turbocharged & Intercooler

**Cooling** Closed cooling with heat exchanger

Keel Cooling (optional) Shaft line or Sail Drive

Emission RCD2 2013/53/EU, EPA marine Tier 3, BSO 2

Compliancies underway

#### **DIMENSIONS & WEIGHT**

Gearbox

 Max length
 898 mm [35.35 in]

 Width
 545 mm [21.45 in]

 Height
 664 mm [26.14 in]

 Dry weight
 258 kg [568.8 lbs]

#### FEATURES & BENEFITS

Kubota engine base

Class-leading package size

High power density

Extensive range of options

Low fuel consumption

Repowering made easy

Low installation costs

Gear driven valve train

Easy routine servicing

SOLAS approved version

available

Installation flexibility

# N4.115/140

# Propulsion







Model	kW	hp	rpm	l/h	Rating
N4.115	84.6	115	2600	24.1	M4
N4.140	99.4	135	2600	28.7	M5

#### ENGINE OVERVIEW

Configuration 4 cylinders in line

4 stroke Diesel

Fuel system Mechanical Direct (E-CDIS)

Displacement 3.769 I [230 in<sup>3</sup>]

Bore & Stroke 100 x 120 mm [3.93 x 4.72 in] Intake Turbocharged & Intercooler

Cooling Closed cooling with heat exchanger

Keel Cooling (optional)

Gearbox Shaft line or Sail drive

**Emissions** RCD2 2013/53/EU, EPA marine Tier 3, BSO 2

#### **DIMENSIONS & WEIGHT**

Max length 960 mm [37.8 in] Lenath clutch 796 mm [31.3 in] Width 580 mm [22.8 in] Height 728 mm [28.7 in] Dry weight 350 kg [772 lbs]

#### FEATURES & BENEFITS

Kubota engine base

Easy routine servicing

Low rated rpm

Gear driven valve train

Installation flexibility Low installation costs Extensive range of options

<sup>\*</sup> N4.115 only

# STERN DRIVE PROPULSION SYSTEM

One of the most efficient propulsion systems designed for pleasure planing boat. Combining the best of both worlds, the Stern Drive propulsion system brings inboard reliability together with outboard convenience and space saving.

This system offers boat builders increased design flexibility, more versatility in engine placement and a smaller footprint.

For boat owners, it results in more efficient thrust under power, thanks to the propeller shaft being parallel to the boat's waterline

boat's waterline.

As a marine propulsion specialist, Nanni provides an optimal package combining our engines renowned reliability along with Bravo X One, Bravo X Two or Bravo X Three Stern-Drives.

#### FEATURES & BENEFITS

- Ease of installation
- Integrated exhaust system
- Power trim and Power Steering
- Clutch assembly for effortless gear shifting
- Excellent manoeuvrability
- Outperforming a shaft line engine at equal power level
- Mercathode system for protection against galvanic corrosion
- Counter-rotating propeller on twin engine installation
- Aluminium or stainless steel propeller

#### BRAVO MODEL SELECTION

Each drive has its own characteristics and has been designed for a specific application.

#### Bravo X One

- Designed for high speed boats
- Small gearcase for high hydrodynamic performance
- Maximum propeller diameter 16"

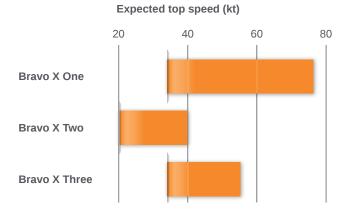
#### Bravo X Two

- Intended for heavier & slower applications
- Larger gearcase for use of a 20" diameter propeller
- Heavy duty gearcase shafts, bearings and gears

#### Bravo X Three

Counter-rotating propellers, designed for outstanding acceleration

Boat top speed is a critical parameter when choosing an appropriate Bravo model. As a reference, refer to the graph below when selecting a Bravo model.



As for any propulsion system, contact Nanni for further assistance when selecting a Stern Drive model and its reduction ratio.

# T4 SERIES

## Propulsion

Shaft Line Stern Drive
Water Jet



#### PERFORMANCE DATA

Model	kW	hp	rpm	l/h	Rating
T4.205	147.2	200	3600	40.7	M6
T4.230	169.1	230	3600	46.7	M6
T4.270	194.9	265	3600	53.6	M6

#### **ENGINE OVERVIEW**

Configuration 4 cylinders in line

4 stroke Diesel

Fuel system Common Rail Direct injection

**Displacement** 2.982 | [182 in<sup>3</sup>]

Bore & Stroke 96 x 103 mm [3.78 x 4.06 in]
Intake Turbocharged & Intercooler

Cooling Closed cooling with heat exchanger

Gearbox Shaft line, Stern Drive or Water jet

Emissions IMO Annex VI compliant, RCD2 2013/53/EU,

EPA marine Tier 3, BSO 2

#### **DIMENSIONS & WEIGHT**

 Max length
 1042 mm [41 in]

 Length clutch
 800 mm [31.5 in]

 Width
 702 mm [27.6 in]

 Height
 738 mm [29 in]

 Dry weight
 350 kg [771.6 lbs]

#### FEATURES & BENEFITS

Toyota engine base
 Robust design
 Compact package
 High power density
 Easy routine servicing
 Installation flexiblity
 4 valves per cylinder
 2 balancing shafts



Propulsion engines | Product Guide | 3

# 6.420 TDI

## Propulsion

Shaft Line Stern Drive

Water Jet



#### PERFORMANCE DATA

Model	kW	hp	rpm	l/h	Rating
6.420 TDI	235.5	320	3600	65.7	M6

#### **ENGINE OVERVIEW**

Configuration 6 cylinders in line

4 stroke Diesel

Fuel system Mechanical Direct injection

Displacement 4.2 | [254 in<sup>3</sup>]

Bore & Stroke 94 x 100 mm [3.7 x 3.94 in]
Intake Turbocharged & Intercooler

Cooling Closed cooling with heat exchanger
Gearbox Shaft line, Stern Drive or Water jet

Emissions BSO 2

#### **DIMENSIONS & WEIGHT**

 Max length
 1242 mm [48.9 in]

 Length clutch
 989 mm [38.9 in]

 Width
 669 mm [26.3 in]

 Height
 756 mm [29.8 in]

 Dry weight
 426 kg [940 lbs]

#### FEATURES & BENEFITS

Toyota engine base
 Robust design
 Compact package
 High power density
 Easy routine servicing
 Installation flexiblity
 4 valves per cylinder
 Balancing shafts

# T8V SERIES

## Propulsion





#### PERFORMANCE DATA

Model	kW	hp	rpm	l/h	Rating
T8V.320	235	320	3800	40.7	M6
T8V.350	257	350	3800	46.7	M6
T8V.370	272	370	3800	53.6	M6

#### **FNGINF OVERVIEW**

8 cylinders V design 90° Configuration

4 stroke Diesel

Fuel system Common Rail Direct injection

Displacement 4.5 I [275 in<sup>3</sup>]

Bore & Stroke 86 x 96 mm [3.39 x 3.78 in] Intake Twin turbocharger & Intercooler Cooling Closed cooling with heat exchanger

Gearbox Shaft line or Water jet

Emissions IMO Annex VI compliant, RCD2 2013/53/EU, EPA

marine Tier 3

#### DIMENSIONS & WEIGHT

Max length 1389 mm [54.6 in] Length clutch 1032 mm [40.6 in] Width 841 mm [33.1 in] Height 756 mm [29 in] Dry weight 435 kg [959 lbs]

#### FEATURES & BENEFITS

Toyota engine base Easy routine servicing Robust design Installation flexiblity 4 valves per cylinder Compact package Internal balancers High power density

# N5 SERIES

## Propulsion





#### PERFORMANCE DATA

Model	kW	hp	rpm	Rating	Emissions
N5.150	112	152	2600	M4	n/a
N5.160 CR2	119	162	2300	M1	1, 4
N5.180 CR2	134	182	2400	M2	1, 4
N5.200 CR2	149	202	2500	МЗ	1, 4
N5.230 CR2	168	228	2600	M4	1, 4

#### **ENGINE OVERVIEW**

Configuration 4 cylinders in line

4 stroke Diesel

Fuel system \* Mechanical direct injection

Common Rail Direct injection (CR models)

Displacement 4.5 | [276 in<sup>3</sup>]

Bore & Stroke 106 x 127 mm [4.17 x 5.00 in]

Intake \* Turbocharged

Turbo with air-to-coolant aftercooling

Easy routine servicing

Cooling Closed cooling with heat exchanger

Keel Cooling (optional)

Gearbox \* Shaft line or Water jet

Emissions \* IMO MARPOL Annex VI compliant, EPA Marine

(CR models) Tier 3

#### FEATURES & BENEFITS

John Deere engine base

Robust design Installation flexibility

High power density
 Internal balancers
 Replaceable wet-type cylinder liners

Internal balancers cylinder liners
 \* Depending version. Refer to specific leaflet for more informations.



# N6 SILVER SERIES

# Propulsion

Shaft Line

Surface Drive

# Water Jet

PERFORMANCE DATA



Model	kW	hp	rpm	Rating	Emissions
N6.160	115	156	2300	M1	n/a
N6.180	131	177	2400	M2	n/a
N6.200	149	202	2500	М3	n/a
N6.230	168	228	2600	M4	n/a
N6.250 CR2	186	250	2400	M1	1, 4
N6.285 CR2	209	284	2500	M2	1, 4
N6.325 CR2	239	325	2600	МЗ	1, 4
N6.360 CR2	265	360	2700	M4	1, 4
N6.405 CR2	298	405	2800	M5	1, 4

#### **ENGINE OVERVIEW**

Configuration 6 cylinders in line

4 stroke Diesel

Mechanical direct injection Fuel system \*

Common Rail Direct injection (CR models)

Displacement 6.8 I [415 in<sup>3</sup>]

**Bore & Stroke** 106 x 127 mm [4.17 x 5.00 in]

Intake \* Turbocharged

Turbocharged with air-to-coolant aftercooling

Closed cooling with heat exchanger Cooling

Keel Cooling (optional)

Gearbox \* Shaft line, Water jet, Surface drive

Emissions \* IMO MARPOL Annex VI compliant, EPA Marine

(CR models) Tier 3

### FEATURES & BENEFITS

John Deere engine base

High power density

Robust design

Replaceable wet-type cylinder liners

Installation flexiblity

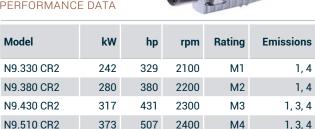
<sup>\*</sup> Depending version. Refer to specific leaflet for more informations.

# N9 SILVER SERIES

# Propulsion

Surface Drive Shaft Line Water Jet

#### PERFORMANCE DATA



557

2500

M5

1, 3, 4

### **ENGINE OVERVIEW**

N9.600 CR2

6 cylinders in line Configuration

4 stroke Diesel

Fuel system Common Rail Direct injection

410

Displacement 9.0 I [549 in<sup>3</sup>]

**Bore & Stroke** 118.4 x 136 mm [4.66 x 5.35 in]

Intake Turbocharged with air-to-seawater aftercooling

Closed cooling with heat exchanger Cooling

Keel Cooling (optional)

Gearbox \* Shaft line, Water jet, Surface drive

Emissions \* IMO MARPOL Annex VI compliant, EPA Marine

Tier 3, NRMM 97/68/EC, ok for RCD2 2013/53/EU

and CCNR2

#### FEATURES & BENEFITS

John Deere engine base

Robust design

High power density

4 valves per cylinder

Easy routine servicing

Installation flexiblity

Replaceable wet-type

cylinder liners

<sup>\*</sup> Depending version. Refer to specific leaflet for more informations.



# N13 SILVER SERIES

# Propulsion

Surface Drive Shaft Line Water Jet

#### PERFORMANCE DATA

Model	kW	hp	rpm	Rating	Emissions
N13.430 CR2	317	431	1800	M1	1, 3, 4
N13.510 CR2	373	507	1900	M2	1, 3, 4
N13.580 CR2	429	583	2000	МЗ	1, 3, 4
N13.660 CR2	485	659	2100	M4	1, 3, 4
N13.800 CR2	559	760	2200	M5	1, 3, 4

#### **ENGINE OVERVIEW**

6 cylinders in line Configuration

4 stroke Diesel

Fuel system Electronically controlled unit injectors

Displacement 13.5 I [824 in<sup>3</sup>]

**Bore & Stroke** 132 x 165 mm [5.20 x 6.50 in]

Intake Turbocharged with air-to-seawater aftercooling

Closed cooling with heat exchanger Cooling

Keel Cooling (optional)

Gearbox \* Shaft line, Water jet, Surface drive

Emissions \* IMO MARPOL Annex VI compliant, EPA Marine

Tier 3, NRMM 97/68/EC, ok for RCD2 2013/53/EU

and CCNR2

### FEATURES & BENEFITS

John Deere engine base

Robust design

High power density

4 valves per cylinder

Installation flexiblity

Replaceable wet-type cylinder liners

\* Depending version. Refer to specific leaflet for more informations.



# N13 PLATINUM SERIES

# Propulsion

Shaft Line

Surface Drive

Water Jet



#### PERFORMANCE DATA

Model	kW	hp	rpm	Rating	Emissions
N13.650 CR3 HD	478	650	2100	M1.S	1, 2, 4
N13.700 CR3 HD	515	700	2100	M1.S	1, 2, 4
N13.700 CR3	515	700	2300	M5.L M6.S	1, 2, 4
N13.750 CR3	552	751	2300	M5.L M6.S	1, 2, 4
N13.800 CR3	588	800	2300	M5.L M6.S	1, 2, 4
N13.900 CR3	662	900	2300	M6.S	1, 2, 4
N13.930 CR3	680	925	2300	M6.S	1, 3

### **ENGINE OVERVIEW**

Configuration 6 cylinders in cylinders

4 stroke Diesel

Fuel system Common Rail Direct Injection Extra High Pres-

sure (XPI)

Displacement 12.7 I [775 in<sup>3</sup>]

**Bore & Stroke** 130 x 160 mm [5.1 x 6.3 in]

Intake Turbocharged with after cooler

Closed cooling with heat exchanger and charge Cooling

air cooler

Keel Cooling (optional)

Gearbox \* Shaft line, Water jet, Surface drive

US Tier 3, IMO Tier II, RCD2, NRMM 97/68/EC, ok Emissions \*

for RCD2 2013/53/EU and CCNR2

#### FEATURES & BENEFITS

Scania engine base

High power density

Robust design

High torque at low RPM

 Optimized fuel consumption at maximum torque

Replaceable wet-type cylinder liners

Installation flexiblity

Best in class on power to

weight Ratio

N16 PLATINUM SERIES

# Propulsion

Shaft Line

Surface Drive

Water Jet

#### PERFORMANCE DATA

				0>	
Model	kW	hp	rpm	Rating	Emissions
N16.900 CR3	662	900	2300	M1.S	1, 3
N16.1000 CR3	736	1000	2300	M5.L M6.S	1, 3
N16.1100 CR3	809	1100	2300	M5.L M6.S	1, 3
N16.1150 CR3	846	1150	2300	M5.S	1, 3
N16.1200 CR3	882	1200	2300	M6.S	1, 3

#### **ENGINE OVERVIEW**

Configuration 8 cylinders in V

4 stroke Diesel

Fuel system Common Rail Direct Injection Extra High Pres-

sure (XPI)

Displacement 16.4 I [1000.5 in<sup>3</sup>]

**Bore & Stroke** 130 x 154 mm [5.1 x 6.1 in] Intake Turbocharged with after cooler

Cooling Closed cooling with heat exchanger and charge

air cooler

Keel Cooling (optional)

Gearbox \* Shaft line, Water jet, Surface drive

Emissions \* IMO Tier II, NRMM 97/68/EC, ok for RCD2

2013/53/FU and CCNR2

#### FEATURES & BENEFITS

 Scania engine base High power density

Robust design

High torque at low RPM

Optimized fuel consumption

at maximum torque

Replaceable wet-type cylinder liners

Installation flexiblity

Best in class on power to weight Ratio

<sup>\*</sup> Depending upon version. Refer to specific leaflet for more informations.

# Dimensions & Weight for N5 / N6 / N9 / N13 / N16 series

Engine	Engine length *	Width mm [in]	Height mm [in]	Weight kg [lb]
N5.150	885 [34.8]	712 [28.0]	912 [35.9]	462 [1017]
N5.160 CR2	885 [34.8]	770 [30.3]	964 [37.9]	578 [1274]
N5.180 CR2	885 [34.8]	770 [30.3]	964 [37.9]	578 [1274]
N5.200 CR2	885 [34.8]	770 [30.3]	964 [37.9]	578 [1274]
N5.230 CR2	885 [34.8]	770 [30.3]	964 [37.9]	578 [1274]
N6.160	1152 [45.3]	883 [34.8]	884 [34.8]	735 [1620]
N6.180	1152 [45.3]	883 [34.8]	884 [34.8]	735 [1620]
N6.200	1152 [45.3]	883 [34.8]	884 [34.8]	735 [1620]
N6.230	1152 [45.3]	883 [34.8]	884 [34.8]	735 [1620]
N6.250 CR2	1152 [45.3]	883 [34.8]	884 [34.8]	735 [1620]
N6.285 CR2	1152 [45.3]	883 [34.8]	884 [34.8]	735 [1620]
N6.325 CR2	1152 [45.3]	883 [34.8]	884 [34.8]	735 [1620]
N6.360 CR2	1152 [45.3]	883 [34.8]	884 [34.8]	735 [1620]
N6.405 CR2	1152 [45.3]	883 [34.8]	884 [34.8]	735 [1620]
N9.330 CR2	1228 [48.3]	840 [33.0]	951 [37.4]	948 [2090]
N9.380 CR2	1228 [48.3]	840 [33.0]	951 [37.4]	948 [2090]
N9.430 CR2	1228 [48.3]	840 [33.0]	951 [37.4]	948 [2090]
N9.510 CR2	1228 [48.3]	840 [33.0]	951 [37.4]	948 [2090]
N9.600 CR2	1228 [48.3]	840 [33.0]	951 [37.4]	948 [2090]
N13.430 CR2	1426 [56.1]	1032 [40.6]	1143 [45]	1380 [3042]
N13.510 CR2	1426 [56.1]	1032 [40.6]	1143 [45]	1380 [3042]
N13.580 CR2	1426 [56.1]	1032 [40.6]	1143 [45]	1380 [3042]
N13.660 CR2	1426 [56.1]	1032 [40.6]	1143 [45]	1380 [3042]
N13.800 CR2	1426 [56.1]	1032 [40.6]	1143 [45]	1380 [3042]
N13.650 CR3 HD	1392 [54.8]	1073 [42.2]	1198 [47.2]	1285 [2833]
N13.700 CR3 HD	1392 [54.8]	1073 [42.2]	1198 [47.2]	1285 [2833]
N13.700 CR3	1389 [54.7]	1073 [42.2]	1115 [43,9]	1285 [2833]
N13.750 CR3	1389 [54.7]	1073 [42.2]	1115 [43,9]	1285 [2833]
N13.800 CR3	1389 [54.7]	1073 [42.2]	1115 [43,9]	1285 [2833]
N13.900 CR3	1389 [54.7]	1073 [42.2]	1115 [43,9]	1285 [2833]
N13.930 CR3	1389 [54.7]	1073 [42.2]	1115 [43,9]	1285 [2833]
N16.900 CR3	1362 [53.6]	1278 [50,3]	1136 [44,7]	1660 [3659]
N16.1000 CR3	1362 [53.6]	1278 [50,3]	1136 [44,7]	1660 [3659]
N16.1100 CR3	1362 [53.6]	1278 [50,3]	1136 [44,7]	1660 [3659]
N16.1150 CR3	1362 [53.6]	1278 [50,3]	1136 [44,7]	1660 [3659]
N16.1200 CR3	1362 [53.6]	1278 [50,3]	1136 [44,7]	1660 [3659]

<sup>\*</sup> From front end to edge of flywheel housing mm [in]

# MAREX CONTROL & MONITORING SYSTEMS

### FULL CONTROL FOR ANY TYPE OF VESSEL. UNRIVALLED MODULARITY LEVEL

As an experienced marine equipment manufacturer, we offer solutions and products such as remote controls, joysticks, ship monitoring and alarm systems. You can take advantage of configuration, parameterization, delivery and commissioning from a single source.

Installation are made easy thanks to the systems modular architecture. We can rapidly determine the required functions and adapt each system to the vessel specific requirements. Both, basic components as well as operating and control modules are quickly coordinated and programmed.

#### CONTROL SYSTEMS

The remote control systems are perfectly tailored to diverse requirements for virtually every type of propulsion and ship, including work vessels with classification, passenger liners and yachts. Whether electronic or electro-mechanical control, the modular system design allows a flexible configuration while easing installation and configuration.

#### ALARM & MONITORING SYSTEMS

Ship alarm and monitoring systems provide structured and clear access to the vast information and functions provided by the different systems on board.

This powerful marine instrument features a clearly arranged, userfriendly design. This permits prompt signaling of safety-related operational data such as overspeed and loss of oil pressure. You can also monitor all operating conditions and operate many systems centrally or automate their control.

# MARFX OS III

### DESIGNED TO KEEP THE COURSE

The Marex OS III ensures effective control and can be installed in ships with classic reversing gears, jet propulsions and controllable propellers.

The hardware of the Marex OS III consists of only a few modular units that are extremely powerful thanks to their bus connection.

All components are ready to connect, which simplifies the installation in new buildings and retrofits

All components correspond to the highest demands of safety and fulfill the requirements of the most important classification societies.

- Multi-engine systems
- Engine control, speed curves and engine stall protection
- Gear operation, reversing maneuver curves
- Bridge components can also be used in the outside area
- Various control head designs
- Dynamic, asymmetric levers
- Integrated keypad
- Easy installation thanks to pre-assembly
- Approval of drawing and FAT upon request

# MAREX ECS

# THE EASY CONTROL SYSTEM

The Marex ECS (Easy Control System) is designed for both recreational and work boats.



Easy to operate, unique design, universal possibilities. The Marex ECS meets the highest production and quality standards, with endurance testing of one million lever actuations.

Its hardware comes from proven automotive applications with reliable CAN bus technology, and a self-diagnosis system that sends any alarm to the system. It also provide easy handling resulting in reduced installation and commissioning efforts and uncomplicated operation features.

The enhanced version features a separate backup Hall sensor which makes it even more reliable and safe. The control of the boat will be maintained, even if CAN communication is interrupted.

- Exclusive chrome surfaces, contrasted with black
- Language-independent icons
- Subtle backlight illumination
- Dynamic, asymmetric levers
- ABYC compliant system
- Plug-and-play connections for ease of installation
- Auto-configuration

# JOYSTICK MANOFUVRING SYSTEM

### MANOEUVRING WITH EASE

The Joystick Manoeuvring system provides the helmsman with simple and intuitive boat control. The operator moves the joystick and the ship mirrors the movement exactly. The controller automatically compensates for external influences, such as wind or current.



Functional and room-saving, both the joystick and its operating module provides essential functions to operate. The joystick can be used as a separate control element (stand-alone solution) or combined with a control head at a station (pairing). Further functions, such as direct thruster actuation in thruster mode, provide operating comfort and reliability.

- Modern, ergonomic design
- Intuitive operation
- Direction compensation
- Flexible interface
- Plus-and-play installation
- Configuration, parameterization, delivery, and commissioning from a single source

# INTERACTIVE CONTROL DISPLAYS

#### UNPRECEDENTED COMFORT

SI.4

New innovative dependable Nanni interactive control displays are the ultimate solution for all marine situations.

While being the most tiny of all controllers (170 x 104 mm), the SI.4 will replace a dozen of analog gauges.



Powerful, intuitive, interactive and reliable, these new monitoring and control systems are included in the accessory range of Nanni to provide all over the world, a complete engine package of high quality for professional applications and for pleasure.

### INTUITIVE AND POWERFUL

SI.7 & SI.9



SI.7 and SI.9 – the powerful new multifunction navigation systems from Nanni. With available built-in RealVision 3D™ sonar, the all new LightHouse 3 operating system, and blazing fast quad core performance, SI.7 and SI.9 will transform your time on the water.

SI.7 and SI.9 are expandable so their capabilities can grow as needed.



#### **ACCESSORIES OPTIONS**

- Chart application
- Weather mode
- CHIRP Sonar (Realvision 3D)
- Radar application
- Dashboard application
- Camera application
- Audio application
- Mobile application

### SI.19 Ultra Wide display



- Survey of all engine parameters multi alarms systems
- Ultimate engine control, speed curves and engine protection
- Available for engines from 21 to 2000 hp
- Hassle free installation thanks to harness pre-assembly



# **GENERATOR SETS**

The generator set range covers a power range from 6 kW to 500 kW. All generator sets are delivered assembled and ready for installation. As always, Nanni is able to provide all installation related equipment, from fuel tank to exhaust system.

### OMF series

Designed specifically for pleasure duty applications, generators sets of the QMF series come as standard with a sound attenuated enclosure. Both the engine and the alternator are water-cooled, ensuring a maximal life span and smooth functioning.

### QMS series

Alternators used in the QMS range are manufactured by Mecc Alte, a world leader in the production of compact synchronous alternators. Most generator sets of the QMS series are available with an optional sound enclosure

On both the QMF and QMS range, the sound enclosure is made of insulated panels in painted marine aluminium, with multiple access ports for all necessary connections and maintenance items including lifting visual access.

#### OLS series

The QLS generator range comes with Leroy Somer alternators, internationally renowned for built-in quality, reliability and versatility. As well as providing quiet, dependable power for pleasure duty applications, these generator sets are also perfectly suitable for continuous duty applications.

# GENERATOR SET RANGE

MODEL		kW*		OUTPUT VOLTS		PAGE	
50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
QMF 6M	n/a	5	n/a	230	n/a	53	n/a
QMS 7.5M	QMS 9M60 <sup>1</sup>	7.5	9.1	230	120	54	58
QMS 10M	QMS 12M60 <sup>1</sup>	10	12	230	120-240	54	58
QMS 16M	QMS 20M60	16.2	19.6	230	120-240	54	59
QMS 25M	n/a	22.9	n/a	230	n/a	54	n/a
QMS 35M	n/a	34.7	n/a	230	n/a	55	n/a
QMS 10T	QMS 12T60 <sup>1</sup>	7.7	11.8	230-400	120-240	55	59
QMS 13T	QMS 16T60 <sup>1</sup>	10.2	11.8	230-400	120-240	55	59
QMS 21T	QMS 25T60	16.7	25.3	230-400	120-240	55	59
QMS 32T	n/a	25.5	n/a	230-400	n/a	55	n/a
QMS 35M	n/a	34.7	n/a	230	n/a	55	n/a
QMS 46T	n/a	36.7	n/a	230-400	n/a	55	n/a
QLS 10T	QLS 12T60 <sup>1</sup>	7.9	12.4	230-400	120-240	56	60
QLS 13T	QLS 16T60 <sup>1</sup>	10.7	13.7	230-400	120-240	56	60
QLS 22T	QLS 27T60	17.7	26.8	230-400	120-240	56	61
QLS 32T	n/a	25.7	n/a	230-400	n/a	57	n/a
QLS 38M	n/a	37.5	n/a	230	n/a	57	n/a
QLS 47T	n/a	37.8	n/a	400	n/a	57	n/a
QLS 65T	n/a	52	n/a	400	n/a	57	n/a
QLS 102T	n/a	82	n/a	400	n/a	57	n/a
n/a	QLS 115T60	n/a	107	n/a	480	n/a	61

<sup>\*</sup> Prim power according to ISO 8528-1

For gensets above QLS 102T, Please contact your Nanni representative.

<sup>&</sup>lt;sup>1</sup> EPA Tier 3

# QMF SERIES



Model	QMF 6M
Configuration	2 cylinders in line
Engine base	Kubota
Fuel system	Mechanical
Injection system	Indirect
Intake	Naturally aspirated
Displacement L [in³]	0.479 [29.2]
Rated speed rpm	3000
GENERATOR RATINGS	
Frequency Hz	50
Continuous power kW [kVA]	4.6 [4.6]
Prime power kW [kVA]	5 [5]
Voltage V	230
Phase	1
Power factor	1
DIMENSIONS & WEIGHT	
Length mm [in]	650 [25.9]
Width mm [in]	480 [18.9]
Height mm [in]	530 [20.9]
Dry weight kg [lbs]	128 [282]

# QMS SERIES



	Model	QMS 7.5M	QMS 10M	QMS 16M	QMS 25M	
		4	4			
Configuration		3 cylinders in line	4 cylinders in line	4 cylinders in line	4 cylinders in line	
Engine base		Kubota	Kubota	Kubota	Kubota	
Fuel system		Mechanical	Mechanical	Mechanical	Mechanical	
Injection syste	m	Indirect	Indirect	Indirect	Indirect	
Intake		Naturally aspirated	Naturally aspirated	Naturally aspirated	Naturally aspirated	
Displace- ment	L [in³]	1.1 [68.5]	1.5 [91.4]	2.2 [134]	3.3 [202.5]	
Rated speed	rpm	1500	1500	1500	1500	
<u>.</u>					1300	
Sound Shield o	ption	<b>v</b>	<b>V</b>	<b>V</b>	<b>V</b>	
GENERATOR RATINGS						
Frequency	Hz	50	50	50	50	
Cont power	kW [kVA]	6.6 [6.6]	8.8 [8.8]	13.9 [13.9]	20.8 [20.8]	
Prime power	kW [kVA]	7.5 [7.5]	10 [10]	16.2 [16.2]	22.9 [22.9]	
Voltage	V	230	230	230	230	
Phase		1	1	1	1	
Power factor		1	1	1	1	
DIMENSIONS W	viтноит so	UND ENCLOS	URE			
Length	mm [in]	840 [33.1]	925 [36.4]	1014 [39.9]	1304 [51.3]	
Width	mm [in]	489 [19.2]	489 [19.2]	548 [21.6]	636 [25]	
Height	mm [in]	620 [24.4]	620 [24.4]	691 [27.2]	766 [30.1]	
Dry weight	kg [lbs]	224 [494]	244 [538]	328 [723]	378 [833]	
DIMENSIONS WITH SOUND ENCLOSURE						
Length	mm [in]	950 [37.4]	1050 [41.3]	1130 [44.5]	1590 [62.6]	
Width	mm [in]	540 [21.3]	540 [21.3]	600 [23.6]	700 [27.5]	
Height	mm [in]	710 [28]	710 [28]	700 [27.6]	900 [35.4]	
Dry weight	kg [lbs]	271 [598]	291 [641]	378 [833]	550 [1213]	



QMS 35M	QMS 10T	QMS 13T	QMS 21T	QMS 32T	QMS 46T
4 cylinders in line	3 cylinders in line	4 cylinders in line			
Kubota	Kubota	Kubota	Kubota	Kubota	Kubota
Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical
Indirect	Indirect	Indirect	Indirect	Indirect	Direct
Turbo- charged	Naturally aspirated	Naturally aspirated	Naturally aspirated	Naturally aspirated	Turbo- charged
3.8 [230]	1.1 [68.5]	1.5 [91.4]	2.2 [134]	3.3 [202.5]	3.8 [230]
1500	1500	1500	1500	1500	1500
✓	✓	✓	✓	✓	✓
50	50	50	50	50	50
32 [32]	6.8 [8.5]	9.1 [11.4]	14.3 [17.9]	22.1 [27.6]	33.7 [42.1]
34.7 [34.7]	7.7 [9.6]	10.2 [12.8]	16.7 [20.9]	24.3 [30.4]	36.7 [45.9]
230	230-400	230-400	230-400	230-400	230-400
1	3	3	3	3	3
1	0.8	0.8	0.8	0.8	0.8
1394 [54.9]	840 [33.1]	925 [36.4]	1014 [39.9]	1304 [51.3]	1394 [54.9]
644 [25.4]	489 [19.2]	489 [19.2]	548 [21.6]	636 [25]	644 [25.4]
792 [31.2]	620 [24.4]	620 [24.4]	691 [27.2]	766 [30.1]	792 [31.2]
398 [877]	224 [494]	244 [538]	328 [723]	378 [833]	398 [877]
1590 [62.6]	950 [37.4]	1050 [41.3]	1130 [44.5]	1590 [62.6]	1590 [62.6]
700 [27.6]	540 [21.3]	540 [21.3]	600 [23.6]	700 [27.6]	700 [27.6]
900 [35.4]	710 [28]	710 [28]	700 [27.6]	900 [35.4]	900 [35.4]
570 [1257]	271 [598]	291 [641]	378 [833]	550 [1213]	570 [1257]

# QLS SERIES



	Model	QLS 10T	QLS 13T	QLS 22T
Configuration		3 cylinders in line	4 cylinders in line	4 cylinders in line
Engine base		Kubota	Kubota	Kubota
Fuel system		Mechanical	Mechanical	Mechanical
Injection system		Indirect	Indirect	Indirect
Air intake		Naturally aspirated	Naturally aspirated	Naturally aspirated
Displacement	L [in³]	1.1 [68.5]	1.5 [91.4]	2.2 [134]
Rated speed	rpm	1500	1500	1500
GENERATOR RATING	s			
Frequency	Hz	50	50	50
Cont. power	kW [kVA]	7 [8.8]	9.5 [11.9]	15.1 [18.9]
Prime power	kW [kVA]	7.9 [9.9]	10.7 [13.4]	17.7 [22.1]
Voltage	V	400	400	400
Phase		3	3	3
Power factor		0.8	8.0	0.8
DIMENSIONS				
Length	mm [in]	959 [37.8]	1081 [42.5]	1167 [46.6]
Width	mm [in]	489 [19.3]	486 [19.1]	548 [21.6]
Height	mm [in]	624 [24.6]	620 [24.4]	692 [27.2]
Dry weight	kg [lbs]	251 [553]	264 [582]	360 [794]



QLS 32T	QLS 38M	QLS 47T	QLS 65T	QLS 102T
4 cylinders in line	6 cylinders in line			
Kubota	Kubota	Kubota	John Deere	John Deere
Mechanical	Mechanical	Mechanical	Mechanical	Mechanical
Indirect	Direct	Direct	Direct	Direct
Naturally aspirated	Turbo	Turbo	Turbo	Turbo
3.3 [202.5]	3.8 [230]	3.8 [230]	4.5 [276]	6.8 [414]
1500	1500	1500	1500	1500
50	50	50	50	50
23.4 [29.2]	34.5 [34.5]	34.4 [43]	52 [65]	82 [102.5]
25.7 [32.1]	37.5 [37.5]	37.8 [47.2]	57.2 [71.5]	98.4 [123]
400	230	400	400	400
3	1	3	3	3
0.8	1	8.0	0.8	0.8
1304 [51.3]	1361 [53.6]	1331 [52.4]	1510 [59.4]	1798 [70.8]
636 [25]	636 [25]	670 [26.4]	723 [28.5]	693 [27.3]
814 [32]	792 [31.2]	835 [32.9]	1050 [41.3]	1097 [43.2]
550 [1213]	571 [1258.8]	561 [1237]	852 [1879]	1273 [2806]

# QMS SERIES



	Model	QMS 9M60	QMS 12M60			
Configuration		3 cylinders in line	4 cylinders in line			
Engine base		Kubota	Kubota			
Fuel system		Mechanical	Mechanical			
Injection system		Indirect	Indirect			
Intake		Naturally aspirated	Naturally aspirated			
Displacement	L [in³]	1.1 [68.5]	1.5 [91.4]			
Rated speed	rpm	1800	1800			
Sound Shield option		✓	✓			
GENERATOR RATINGS						
Frequency	Hz	60	60			
Cont. power	kW [kVA]	8 [8]	10.7 [10.7]			
Prime power	kW [kVA]	9.1 [9.1]	12 [12]			
Voltage	V	120-240	120-240			
Phase		1	1			
Power factor		1	1			
DIMENSIONS WITHOUT	SOUND EI	NCLOSURE				
Length	mm [in]	840 [33.1]	925 [36.4]			
Width	mm [in]	489 [19.2]	489 [19.2]			
Height	mm [in]	620 [24.4]	620 [24.4]			
Dry weight	kg [lbs]	224 [494]	244 [538]			
DIMENSIONS WITH SOUND ENCLOSURE						
Length	mm [in]	950 [37.4]	1050 [41.3]			
Width	mm [in]	540 [21.3]	540 [21.3]			
Height	mm [in]	710 [28]	710 [28]			
Dry weight	kg [lbs]	271 [598]	291 [641]			



QMS 20M60	QMS 12T60	QMS 16T60	QMS 25T60
4 cylinders in line	3 cylinders in line	4 cylinders in line	4 cylinders in line
Kubota	Kubota	Kubota	Kubota
Mechanical	Mechanical	Mechanical	Mechanical
Indirect	Indirect	Indirect	Indirect
Naturally aspirated	Naturally aspirated	Naturally aspirated	Naturally aspirated
2.2 [134]	1.1 [68.5]	1.5 [91.4]	2.2 [134]
1800	1800	1800	1800
✓	✓	✓	✓
60	60	60	60
16.4 [16.4]	8.3 [10.4]	11.0 [13.8]	16.8 [21.0]
19.6 [19.6]	9.4 [11.8]	12.4 [15.5]	20.2 [25.3]
120-240	120-240	120-240	120-240
1	3	3	3
1	0.8	0.8	0.8
1014 [39.9]	840 [33.1]	925 [36.4]	1014 [39.9]
548 [21.6]	489 [19.2]	489 [19.2]	548 [21.6]
691 [27.2]	620 [24.4]	620 [24.4]	691 [27.2]
328 [723]	224 [494]	244 [538]	328 [723]
1130 [44.5]	950 [37.4]	1050 [41.3]	1130 [44.5]
600 [23.6]	540 [21.3]	540 [21.3]	600 [23.6]
700 [27.6]	710 [28]	710 [28]	700 [27.6]
378 [833]	271 [598]	291 [641]	378 [833]

# QLS SERIES



	Model	QLS 12T60	QLS 16T60			
Configuration		3 cylinders in line	4 cylinders in line			
Engine base		Kubota	Kubota			
Fuel system		Mechanical	Mechanical			
Injection system		Indirect	Indirect			
Intake		Naturally Aspirated	Naturally Aspirated			
Displacement	L [in³]	1.1 [68.5]	1.5 [91.4]			
Rated speed	rpm	1800	1800			
Sound Shield option		✓	✓			
GENERATOR RATINGS						
Frequency	Hz	60	60			
Cont. power	kW [kVA]	8.7 [10.9]	11.7 [14.6]			
Prime power	kW [kVA]	9.9 [12.4]	13.1 [16.4]			
Voltage	V	120-240	120-240			
Phase		1	3			
Power factor		1	0.8			
DIMENSIONS						
Length	mm [in]	959 [37.8]	1081 [42.5]			
Width	mm [in]	489 [19.3]	486 [19.1]			
Height	mm [in]	624 [24.6]	620 [24.4]			
Dry weight	kg [lbs]	251 [553]	264 [582]			



QLS 27T60	QLS 115T60
4 cylinders in line	6 cylinders in line
Kubota	John Deere
Mechanical	Mechanical
Indirect	Direct
Naturally Aspirated	Turbo
2.2 [134]	6.8 [414]
1800	1800
✓	
60	60
17.9 [22.4]	92.1 [115.1]
21.4 [26.8]	107 [133.8]
120-240	480
3	3
0.8	0.8
1167 [46.6]	2202.4 [86.7]
548 [21.6]	745.5 [29.35]
692 [27.2]	1205.9 [40.4]
360 [794]	1273 [2806.5]

# NANNI HYBRID SYSTEM

For many years, Nanni's development focus has been the environmental performance of its propulsion systems. We aim to make engines progressively cleaner and more efficient.

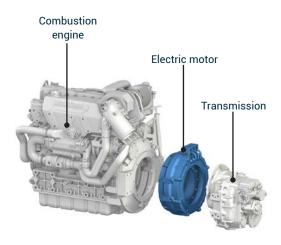
The hybrid system is the proof of Nanni's commitment to reducing exhaust emissions. It offers a clean, smooth and amazingly quiet boating experience, where mechanical and electric power work in unison.

### **ECO-SENSITIVE & USER-FRIENDLY TECHNOLOGY**

The hybrid system seamlessly integrates an electric motor and a diesel engine.

The electric motor is a compact yet formidable power source. In propulsion mode, it is used at low speeds, propelling the boat with no emissions, noise and vibrations. In generator mode, it produces electrical energy to recharge the batteries by converting the mechanical power supplied by the combustion engine.

The hybrid technology results in a highly reliable propulsion system, where the propeller can be driven either by the electric motor or by the combustion engine, which remains the main source for propulsion at high speed



# NOTES

# NOTES



#### NANNI INDUSTRIES S.A.S.

11, Avenue Mariotte 33260 La Teste France Tel: +33 (0)5 56 22 30 60 Fax: +33 (0)5 56 22 30 79 www.nannienergy.com