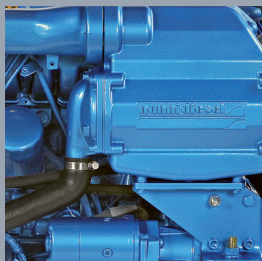




PRODUCT GUIDE



ENERGY CREATOR

SINCE 1952

www.nannidiesel.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 760 hp, and marine generator sets from 3.5 to 492 kW.

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

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Model designations, ratings, specifications and text in this brochure 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 nannidiesel.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.

By 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, a 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 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 nannidiesel.com.

Generator sets

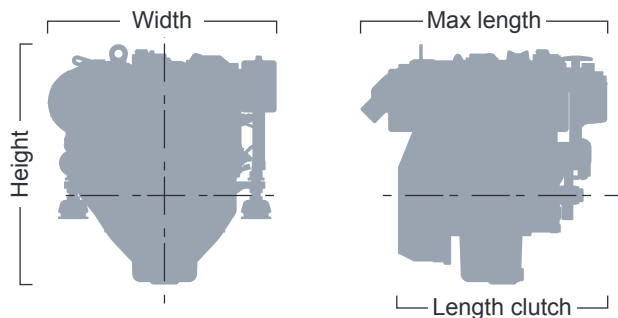
For generator sets, first refer to the overview on page 37 and determine the series that best corresponds to your the application. Proceed to the sizing step by making an inventory of on-board electrical appliances. Add their rated power together and foresee which appliances will operate simultaneously. 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 nannidiesel.com or consult your Nanni representative for assistance and for the most up-to-date information.

Dimensions & weight

The declared values are based on dry engines including standard equipment without coolant, oil and transmission. Dimensions and weight may vary according to the configuration selected. More detailed information is included within the specific installation schematic for each product.

The respectively made declaration of the dimensions will be defined according to the following schematic diagram:



For propulsion engines, performance data are given according ISO 8665-1, as follows:

- kW: Rated engine power in kilowatts
- hp: Rated engine power in metric horsepower
- rpm: Rated engine speed in rpm
- l/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. Weight are based on dry engines, without coolant and oil.

Ratings definition

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

M1 rating

Operating hours	24 hours per day
Load factor ¹	Over 65%
Duty cycle ²	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 ²	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 ¹	Up to 50%
Duty cycle ²	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 ²	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 rating

Operating hours	Up to 1000 hours per year
Load factor ¹	Up to 35%
Duty cycle ²	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 rating

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

¹ Load factor: Fuel burned over a period of time divided by the full-power fuel consumption over the same period.

² 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

Exhaust emissions

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 94/25/EC (RCD) as amended

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 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. (The N4.85 is available with a dedicated oil pan to withstand a boat inclination of 50°).
- 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 numbers indicated hereafter identify the regulations each propulsion engine will be certified to.

- 1. IMO MARPOL Annex VI compliant
- 2. RCD 94/25/EC as amended by 2003/44/RC
- 3. NRMM 97/68/EC as amended by 2003/44/RC
- 4. EPA Marine Tier 3
- 5. BSO 2

Engine	Rated Power [hp]	Rating	Emissions level	Page
N2.10	10	M5	2, 4, 5	14
N2.14	14	M5	2, 4, 5	15
N3.21	21	M5	2, 4, 5	16
N3.30	29	M5	2, 4, 5	17
N4.38	37.5	M4	2, 4, 5	18
N4.40	40	M4	2, 4	19
N4.50	50	M4	2, 4, 5	20
N4.60	60	M4	2, 5	21
N4.85	85	M4	2, 5	23
N4.100	100	M4	2, 5	24
N4.115	115	M4	2, 4, 5	25
N4.140	135	M4	2, 4, 5	25
T4.205	200	M6	1, 2, 4, 5	29
T4.230	230	M6	1, 2, 4, 5	29
T4.270	265	M6	1, 2, 4, 5	29
T6.280	275	M6	2, 5	30
T6.300	305	M6	2, 5	30
6.420TDI	320	M6	2, 5	30

Engine	Rated Power [hp]	Rating	Emissions level	Page
N5.150	152	M4	-	31
N5.140 E	137	M3	3	31
N5.160 CR2	160	M1	1, 3, 4	31
N5.180 CR2	182	M2	1, 3, 4	31
N5.200 CR2	202	M3	1, 3, 4	31
N5.230 CR2	228	M4	1, 3, 4	31
N6.200	202	M3	-	33
N6.240 E	239	M3	1, 3	33
N6.270 E	270	M4	1, 3	33
N6.300 E	304	M5	1, 3	33
N6.300 CR2	304	M3	1, 3, 4	33
N6.325 CR2	325	M3	1, 3, 4	33
N6.360 CR2	360	M4	1, 3, 4	33
N6.405 CR2	405	M5	1, 3, 4	33
N9.290 CR1	289	M1	1, 3	34
N9.380 CR2	380	M2	1, 3, 4	34
N9.430 CR2	431	M3	1, 3, 4	34
N9.510 CR2	507	M4	1, 3, 4	34
N9.600 CR2	560	M5	1, 3, 4	34
N13.370 CR1	370	M1	1, 3, 4	35
N13.430 CR2	431	M1	1, 3, 4	35
N13.510 CR2	507	M2	1, 3, 4	35
N13.580 CR2	583	M3	1, 3, 4	35
N13.660 CR2	659	M4	1, 3, 4	35
N13.800 CR2	760	M5	1, 3, 4	35

Sail Drive propulsion system

Available for engines up to 60 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

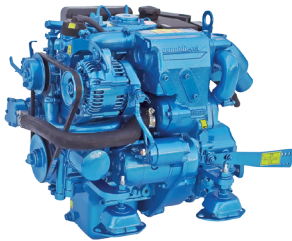
Reduction ratio	2.15 : 1	2.38 : 1
Max input power	66.6 hp [49 kW] @ 3000 rpm	59.8 hp [44 kW] @ 3600 rpm
Dry weight [kg]	35	
Oil capacity [litre]	3	
Oil type	ATF	
Propeller shaft	17 standard spline	
Propeller diameter	From 13" to 18" maxi	



N2.10

Propulsion

- Shaft Line
- Sail Drive



Performance data

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 l [29.2 in]
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
Emission	RCD 94/25/EC, 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 lb]

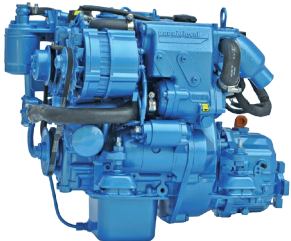
Features & Benefits

- Kubota engine base
 - Low rated rpm
 - Low fuel consumption
 - Gear driven valve train
 - Easy routine servicing
- Class-leading package size & Weight
 - Installation flexibility
 - Repowering made easy
 - Low installation costs

N2.14

Propulsion

- Shaft Line
- Sail Drive



Performance data

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

Engine overview

Configuration	2 cylinders in line 4-stroke Diesel
Fuel system	Mechanical Indirect (E-TVCS)
Displacement	0.479 l [29.2 in]
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
Emission	RCD 94/25/EC, 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]
Height	506 mm [19.9 in]
Dry weight	83 kg [183 lb]

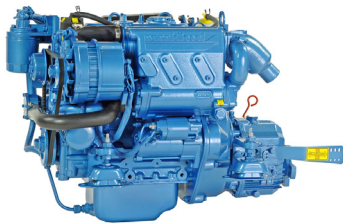
Features & Benefits

- Kubota engine base
 - Robust design
 - Low fuel consumption
 - Excellent power to weight ratio
 - Gear driven valve train
- Extensive range of options
 - Repowering made easy
 - Low installation costs
 - Installation flexibility
 - Easy routine servicing

N3.21

Propulsion

- Shaft Line
- Sail Drive



Performance data

Model	kW	hp	rpm	l/h	Rating
N3.21	15.4	21	3600	5	M5

Engine overview

Configuration	3 cylinders in line 4-stroke Diesel
Fuel system	Mechanical Indirect (E-TVCS)
Displacement	0.719 l [43.9 in]
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
Emission	RCD 94/25/EC, 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]
Height	506 mm [19.9 in]
Dry weight	97 kg [214 lb]

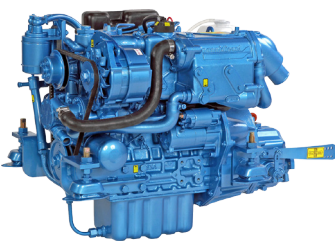
Features & Benefits

- 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

N3.30

Propulsion

- Shaft Line
- Sail Drive



Performance data

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

Engine overview

Configuration	3 cylinders in line 4-stroke Diesel
Fuel system	Mechanical Indirect (E-TVCS)
Displacement	1.123 l [68.5 in]
Bore & Stroke	78 x 78.4 mm [3.07 x 3.09 in]
Intake	Naturally aspirated
Cooling	Closed cooling with heat exchanger Keel Cooling (optional)
Gearbox	Shaft line or Sail Drive
Emission	RCD 94/25/EC, 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]
Height	589 mm [23.2 in]
Dry weight	136 kg [300 lb]

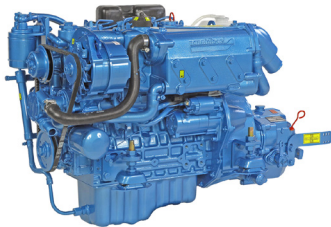
Features & Benefits

- 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

- Shaft Line
- Sail Drive



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 l [91.4 in]
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
Emission	RCD 94/25/EC, 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 in]

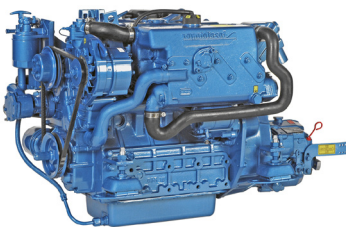
Features & Benefits

- Kubota engine base
 - Robust design
 - Low fuel consumption
 - Low rated rpm
 - High power density
 - Installation flexibility
- Extensive range of options
 - Low installation costs
 - Easy routine servicing
 - Gear driven valve train
 - SOLAS approved version available

N4.40

Propulsion

- Shaft Line
- Sail Drive



Performance data

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

Engine overview

Configuration	4 cylinders in line 4-stroke Diesel
Fuel system	Mechanical Indirect (E-TVCS)
Displacement	1.999 l [122 in]
Bore & Stroke	83 x 92.4 mm [3.26 x 3.63 in]
Intake	Naturally aspirated
Cooling	Closed cooling with heat exchanger Keel Cooling (optional)
Gearbox	Shaft line or Sail Drive
Emission	RCD 94/25/EC, 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 lb]

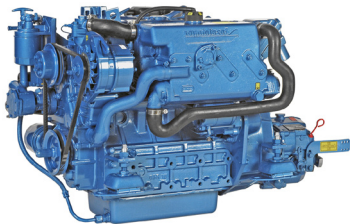
Features & Benefits

- 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
 - SOLAS approved version available

N4.50

Propulsion

- Shaft Line
- Sail Drive



Performance data

Model	kW	hp	rpm	l/h	Rating
N4.50	36.8	50	2800	11.7	M4

Engine overview

Configuration	4 cylinders in line 4-stroke Diesel
Fuel system	Mechanical Indirect (E-TVCS)
Displacement	2.197 l [134.1 in]
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
Emission	RCD 94/25/EC, 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 lb]

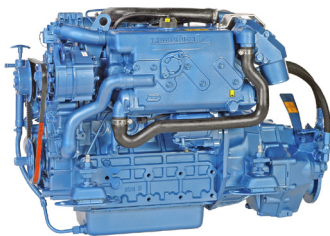
Features & Benefits

- Kubota engine base
 - Robust design
 - Low fuel consumption
 - Low rated rpm
 - High power density
 - Installation flexibility
- Extensive range of options
 - Low installation costs
 - Easy routine servicing
 - Gear driven valve train
 - SOLAS approved version available

N4.60

Propulsion

- Shaft Line
- Sail Drive



Performance data

Model	kW	hp	rpm	l/h	Rating
N4.60	44.2	60	2800	13.5	M4

Engine overview

Configuration	4 cylinders in line 4-stroke Diesel
Fuel system	Mechanical Indirect (E-TVCS)
Displacement	1.999 l [122 in]
Bore & Stroke	83 x 92.4 mm [3.26 x 3.63 in]
Intake	Turbocharged
Cooling	Closed cooling with heat exchanger Keel Cooling (optional)
Gearbox	Shaft line or Sail Drive
Emission	RCD 94/25/EC, BSO 2

Dimensions & weight

Max length	732 mm [28.8 in]
Length clutch	697 mm [27.4 in]
Width	505 mm [19.9 in]
Height	632 mm [24.9 in]
Dry weight	234 kg [516 lb]

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



N4.85

Propulsion

Shaft Line



Performance data

Model	kW	hp	rpm	l/h	Rating
N4.85	62.5	85	2800	17.8	M4

Engine overview

Configuration	4 cylinders in line 4-stroke Diesel
Fuel system	Mechanical Direct (E-CDIS)
Displacement	3.053 l [186.3 cu in]
Bore & Stroke	94 x 110 mm [3.7 x 4.33 in]
Intake	Turbocharged
Cooling	Closed cooling with heat exchanger Keel Cooling (optional)
Gearbox	Shaft line
Emission	RCD 94/25/EC, BSO 2

Dimensions & weight

Max length	781 mm [30.8 in]
Length clutch	698 mm [27.5 in]
Width	574 mm [22.6 in]
Height	709 mm [27.9 in]
Dry weight	328 kg [723 lb]

Features & Benefits

- Kubota engine base
- Robust design
- Low rated rpm
- Installation flexibility
- 2 balancing shafts
- Extensive range of options
- Low installation costs
- Easy routine servicing
- Gear driven valve train
- SOLAS approved version available

N4.100

Propulsion

Shaft Line



Performance data

Model	kW	hp	rpm	l/h	Rating
N4.100	73.6	100	2800	21.3	M4

Engine overview

Configuration	4 cylinders in line 4-stroke Diesel
Fuel system	Mechanical Direct (E-CDIS)
Displacement	3.053 l [186.3 cu in]
Bore & Stroke	94 x 110 mm [3.7 x 4.33 in]
Intake	Turbocharged & intercooler
Cooling	Closed cooling with heat exchanger Keel Cooling (optional)
Gearbox	Shaft line
Emission	RCD 94/25/EC, BSO 2

Dimensions & weight

Max length	825 mm [32.5 in]
Length clutch	742 mm [29.2 in]
Width	574 mm [22.6 in]
Height	717 mm [28.2 in]
Dry weight	335 kg [738.5 lb]

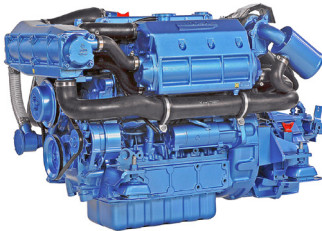
Features & Benefits

- Kubota engine base
- Low rated rpm
- Installation flexibility
- 2 balancing shafts
- Extensive range of options
- Low installation costs
- Easy routine servicing
- Gear driven valve train

N4.115/140

Propulsion

Shaft Line



Performance data

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

Engine overview

Configuration	4 cylinders in line 4-stroke Diesel
Fuel system	Mechanical Direct (E-CDIS)
Displacement	3.769 l [230 cu in]
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
Emission	RCD 94/25/EC, BSO 2, EPA Marine Tier 3

Dimensions & weight

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

Features & Benefits

- Kubota engine base
- Low rated rpm
- Installation flexibility
- Low installation costs
- Easy routine servicing
- Gear driven valve train
- Extensive range of options

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.

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",

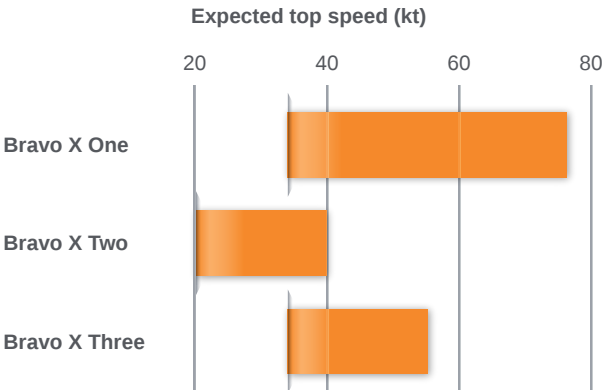
Bravo X Two

- 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 l [182 cu in]
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
Emission	IMO Annex VI compliant, RCD 94/25/EC, 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 lb]

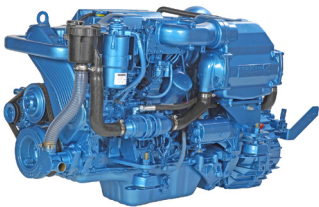
Features & Benefits

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

T6 series

Propulsion

Shaft Line	Stern Drive
Water Jet	



Performance data

Model	kW	hp	rpm	l/h	Rating
T6.280	202.4	275	3600	56.6	M6
T6.300	224.4	305	3600	62.6	M6
6.420 TDI	235.5	320	3600	66.3	M6

Engine overview

Configuration	6 cylinders in line 4-stroke Diesel
Fuel system	Mechanical Direct injection
Displacement	4.163 l [254 cu in]
Bore & Stroke	94 x 100 mm [3.7 x 3.93 in]
Intake	Turbocharged & intercooler
Cooling	Closed cooling with heat exchanger
Gearbox *	Shaft line, Stern Drive or Water jet
Emission	RCD 94/25/EC, 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 lb]

Features & Benefits

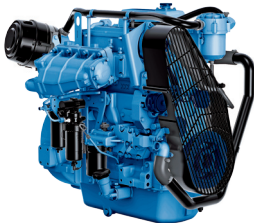
- Toyota engine base
- High power density
- 4 valves per cylinder
- Easy routine servicing
- Installation flexibility
- Low installation costs
- Low fuel consumption

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

N5 series

Propulsion

Shaft Line
Water Jet



Performance data

Model	kW	hp	rpm	Rating	Emissions
N5.150	112	152	2600	M4	-
N5.140 E	101	137	2600	M3	3
N5.160 CR2	119	160	2300	M1	1, 3, 4
N5.180 CR2	134	182	2400	M2	1, 3, 4
N5.200 CR2	149	202	2500	M3	1, 3, 4
N5.230 CR2	168	228	2600	M4	1, 3, 4

* Emissions: 1. IMO MARPOL Annex VI compliant, 2. RCD 97/68/EC, 3. NRMM 97/68/EC, 4. EPA Marine Tier 3

Engine overview

Configuration	4 cylinders in line 4-stroke Diesel
Fuel system *	Mechanical direct injection EDC Common Rail Direct injection
Displacement	4.5 l [276 cu in]
Bore & Stroke	106 x 127 mm [4.17 x 5.00 in]
Intake *	Turbocharged Turbo with air-to-coolant aftercooling Turbo with air-to-seawater aftercooling
Cooling	Closed cooling with heat exchanger Keel Cooling (optional)
Gearbox *	Shaft line or Water jet

Features & Benefits

- John Deere engine base
- Robust design
- High power density
- Internal Balancers
- Easy routine servicing
- Installation flexibility
- Replaceable Wet-type
Cylinder Liners

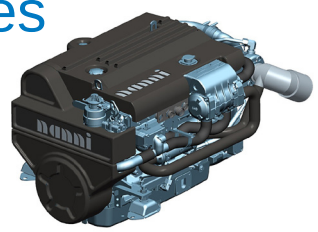
* Depending version. Refer to specific leaflet for more informations.



N6 silver series

Propulsion

Shaft Line	Surface Drive
Water Jet	



Performance data

Model	kW	hp	rpm	Rating	Emissions
N6.200	149	202	2500	M3	-
N6.240 E	176	239	2400	M3	1, 3
N6.270 E	199	270	2500	M4	1, 3
N6.300 E	224	304	2600	M5	1, 3
N6.300 CR2	224	304	2500	M3	1, 3, 4
N6.325 CR2	239	325	2600	M3	1, 3, 4
N6.360 CR2	265	360	2700	M4	1, 3, 4
N6.405 CR2	298	405	2800	M5	1, 3, 4

* **Emissions:** 1. IMO MARPOL Annex VI compliant, 2. RCD 97/68/EC, 3. NRMM 97/68/EC, 4. EPA Marine Tier 3

Engine overview

Configuration	6 cylinders in line 4-stroke Diesel
Fuel system *	Mechanical direct injection EDC Common Rail Direct injection
Displacement	6.8 l [415 cu in]
Bore & Stroke	106 x 127 mm [4.17 x 5.00 in]
Intake *	Turbocharged Turbocharged with air-to-coolant aftercooling Turbocharged with air-to-seawater aftercooling
Cooling	Closed cooling with heat exchanger Keel Cooling (optional)
Gearbox *	Shaft line, Water jet, Surface drive

Features & Benefits

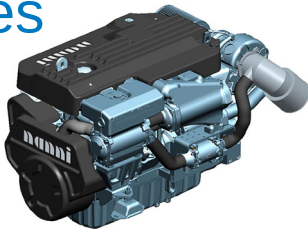
- John Deere engine base
- High power density
- Robust design
- Replaceable Wet-type Cylinder Liners
- Installation flexibility

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

N9 silver series

Propulsion

Shaft Line	Surface Drive
Water Jet	



Performance data

Model	kW	hp	rpm	Rating	Emissions
N9.290 CR1	213	289	2100	M1	1, 3
N9.380 CR2	280	380	2200	M2	1, 3, 4
N9.430 CR2	317	431	2300	M3	1, 3, 4
N9.510 CR2	373	507	2400	M4	1, 3, 4
N9.600 CR2	412	560	2500	M5	1, 3, 4

* **Emissions:** 1. IMO MARPOL Annex VI compliant, 2. RCD 97/68/EC, 3. NRMM 97/68/EC, 4. EPA Marine Tier 3

Engine overview

Configuration	6 cylinders in line 4-stroke Diesel
Fuel system *	Common Rail Direct injection
Displacement	9.0 l [549 cu in]
Bore & Stroke	118.4 x 136 mm [4.66 x 5.35 in]
Intake *	Turbocharged with air-to-coolant aftercooling Turbocharged with air-to-seawater aftercooling
Cooling	Closed cooling with heat exchanger Keel Cooling (optional)
Gearbox *	Shaft line, Water jet, Surface drive

Features & Benefits

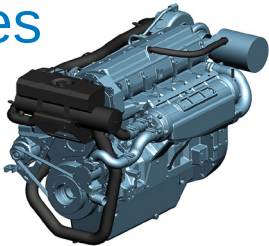
- John Deere engine base
- Robust design
- High power density
- 4 valves per cylinder
- Easy routine servicing
- Installation flexibility
- Replaceable Wet-type Cylinder Liners

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

N13 silver series

Propulsion

Shaft Line	Surface Drive
Water Jet	



Performance data

Model	kW	hp	rpm	Rating	Emissions
N13.370 CR1	272	370	1800	M1	1, 3, 4
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	M3	1, 3, 4
N13.660 CR2	485	659	2100	M4	1, 3, 4
N13.800 CR2	559	760	2200	M5	1, 3, 4

* **Emissions:** 1. IMO MARPOL Annex VI compliant, 2. RCD 97/68/EC, 3. NRMM 97/68/EC, 4. EPA Marine Tier 3

Engine overview

Configuration	6 cylinders in line 4-stroke Diesel
Fuel system *	Electronically controlled unit injectors
Displacement	13.5 l [824 cu in]
Bore & Stroke	132 x 165 mm [5.20 x 6.50 in]
Intake *	Turbocharged with air-to-seawater aftercooling
Cooling	Closed cooling with heat exchanger Keel Cooling (optional)
Gearbox *	Shaft line, Water jet, Surface drive

Features & Benefits

- John Deere engine base
- Robust design
- High power density
- Directed top-liner cooling
- 4 valves per cylinder
- Installation flexibility
- Replaceable Wet-type Cylinder Liners

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

Engine	Length clutch mm [in]	Width mm [in]	Height mm [in]	Weight kg [lb]
N5.150	885 [34.8]	712 [28]	912 [35.9]	462 [1017]
N5.140 E	885 [34.8]	712 [28]	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]
N6.200	1152 [45.3]	883 [34.8]	884 [34.8]	735 [1620]
N6.240 E	1152 [45.3]	883 [34.8]	884 [34.8]	735 [1620]
N6.270 E	1152 [45.3]	883 [34.8]	884 [34.8]	735 [1620]
N6.300 E	1152 [45.3]	883 [34.8]	884 [34.8]	735 [1620]
N6.300 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]
N9.290 CR1	1228 [48.3]	840 [33]	951 [37.4]	948 [2090]
N9.380 CR2	1228 [48.3]	840 [33]	951 [37.4]	948 [2090]
N9.430 CR2	1228 [48.3]	840 [33]	951 [37.4]	948 [2090]
N9.510 CR2	1228 [48.3]	840 [33]	951 [37.4]	948 [2090]
N9.600 CR2	1228 [48.3]	840 [33]	951 [37.4]	948 [2090]
N13.370 CR1	1426 [56.1]	1032 [40.6]	1166 [45.9]	1380 [3042]
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]

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 and 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, user-friendly 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.

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

Key Features and Advantages

- 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 provides 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.



Key Features and Advantages

- 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 maneuvering system

Maneuvering 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.

Key Features and Advantages

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

Generator sets

The generator set range covers a power range from 3.5 kW to 492 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.

QMF 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.

QLS 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	V	kW ¹	Hz	rpm	Page
QMF 3.5M	230	3.5	50	3000	41
QMF 6 M	230	5	50	3000	41
QMS 7.5M	230	7.5	50	1500	42
QMS 10M	230	10	50	1500	42
QMS 16M	230	16.2	50	1500	43
QMS 10T	400	7.7	50	1500	43
QMS 13T	400	10.2	50	1500	43
QMS 21T	400	16.7	50	1500	43
QMS 32T	400	25.5	50	1500	43
QLS 10T	400	7.9	50	1500	44
QLS 13T	400	10.7	50	1500	44
QLS 22T	400	17.7	50	1500	45
QLS 32T	400	25.7	50	1500	45
QLS 47T	400	37.8	50	1500	45
QLS 65T	400	52	50	1500	45
QLS 102T	400	82	50	1500	45
QLS 134T	400	107	50	1500	*
QLS 174T	400	140	50	1500	*
QLS 200T	400	160	50	1500	*
QLS 240T	400	192	50	1500	*
QLS 276T	400	220	50	1500	*
QLS 355T	400	285	50	1500	*
QLS 390T	400	312	50	1500	*
QLS 422T	400	337	50	1500	*
QLS 510T	400	408	50	1500	*
QLS 526T	400	421	50	1500	*
QLS 615T	400	492	50	1500	*

¹ Max power according ISO 8528
* Informations available on demand. Contact your representative.

QMF series

Generator Sets



		Model	QMF 3.5M	QMF 6M
Configuration			1 cylinder	2 cylinders In line
Engine base			Farymann	Kubota
Fuel system			Mechanical	Mechanical
Injection system			Direct	Indirect
Intake			Naturally aspirated	Naturally aspirated
Displacement	L [cu in]		0.290 [17.7]	0.479 [29.2]
Rated speed	rpm		3000	3000
Generator ratings				
Frequency	Hz		50	50
Continuous power	kW [kVA]		3.2 [3.2]	4.6 [4.6]
Limited-Time power	kW [kVA]		3.5 [3.5]	5 [5]
Voltage	V		230	230
Phase			1	1
Power factor			1	1
Dimensions				
Length	mm [in]		590 [23.3]	650 [25.9]
Width	mm [in]		405 [15.9]	480 [18.9]
Height	mm [in]		515 [20.3]	530 [20.9]
Dry weight	kg [lb]		105 [232]	128 [282]

QMS series

Generator Sets

		Model	QMS 7.5M	QMS 10M
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 [cu in]		1.1 [68.5]	1.5 [91.4]
Rated speed	rpm		1500	1500
Sound Shield option			✓	✓

Generator ratings

Frequency	Hz	50	50
Continuous power	kW [kVA]	6.6 [6.6]	8.8 [8.8]
Limited-Time power	kW [kVA]	7.5 [7.5]	10 [10]
Voltage	V	230	230
Phase		1	1
Power factor		1	1

Dimensions without sound enclosure

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 [lb]	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 [lb]	271 [598]	291 [641]

QMS 16M	QMS 10T	QMS 13T	QMS 21T	QMS 32T
4 cylinders In line	3 cylinders In line	4 cylinders In line	4 cylinders In line	4 cylinders In line
Kubota	Kubota	Kubota	Kubota	Kubota
Mechanical	Mechanical	Mechanical	Mechanical	Mechanical
Indirect	Indirect	Indirect	Indirect	Indirect
Naturally aspirated	Naturally aspirated	Naturally aspirated	Naturally aspirated	Naturally aspirated
2.2 [134]	1.1 [68.5]	1.5 [91.4]	2.2 [134]	3.3 [202.5]
1500	1500	1500	1500	1500
✓	✓	✓	✓	-

50	50	50	50	50
13.9 [13.9]	6.8 [8.5]	9.1 [11.4]	14.3 [17.9]	23.2 [29]
16.2 [16.2]	7.7 [9.6]	10.2 [12.8]	16.7 [20.9]	25.5 [31.9]
230	400	400	400	400
1	3	3	3	3
1	0.8	0.8	0.8	0.8
1014 [39.9]	840 [33.1]	925 [36.4]	1014 [39.9]	1304 [51.3]
548 [21.6]	489 [19.2]	489 [19.2]	548 [21.6]	636 [25]
691 [27.2]	620 [24.4]	620 [24.4]	691 [27.2]	766 [30.1]
328 [723]	224 [494]	244 [538]	328 [723]	550 [1213]

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

Generator Sets

Model		QLS 10T	QLS 13T
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 [cu in]	1.1 [68.5]	1.5 [91.4]
Rated speed	rpm	1500	1500
Generator ratings			
Frequency	Hz	50	50
Continuous power	kW [kVA]	7 [8.8]	9.5 [11.9]
Limited-Time power	kW [kVA]	7.9 [9.9]	10.7 [13.4]
Voltage	V	400	400
Phase		3	3
Power factor		0.8	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 [lb]	251 [553]	264 [582]

QLS 22T	QLS 32T	QLS 47T	QLS 65T	QLS 102T
4 cylinders In line	4 cylinders In line	4 cylinders In line	4 cylinders In line	6 cylinders In line
Kubota	Kubota	Kubota	John Deere	John Deere
Mechanical	Mechanical	Mechanical	Mechanical	Mechanical
Indirect	Indirect	Direct	Direct	Direct
Naturally aspirated	Naturally aspirated	Turbo	Turbo	Turbo
2.2 [134]	3.3 [202.5]	3.8 [230]	4.5 [276]	6.8 [414]
1500	1500	1500	1500	1500
50	50	50	50	50
15.1 [18.9]	23.4 [29.2]	34.4 [43]	52 [65]	82 [102.5]
17.7 [22.1]	25.7 [32.1]	37.8 [47.2]	-	-
400	400	400	400	400
3	3	3	3	3
0.8	0.8	0.8	0.8	0.8
1167 [46.6]	1304 [51.3]	1331 [52.4]	1570 [61.8]	1892 [74.5]
548 [21.6]	636 [25]	670 [26.4]	702 [27.6]	702 [27.6]
692 [27.2]	814 [32]	835 [32.9]	1062 [41.8]	1106 [43.5]
360 [794]	550 [1212]	561 [1237]	852 [1879]	1273 [2806]

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.

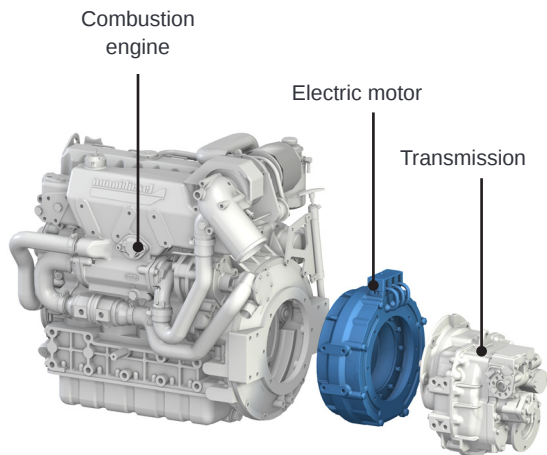
The hybrid system is the proof of Nanni's commitment to reducing exhaust emissions. It offers a clean, smooth and amazingly quiet boating experience, where mechanical and electric power work in unison.

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

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