USR Marine & Yacht Generators

USR GENERATOR

Marine & Yacht Generator

About us

TEAM

We have a profess-ionaldevelopment team to meet customer needs

MANUFACTURER

One of the bigg-est manufacturer in China

TECHNOLOGY

We produce intelligent generators controlled by AI chips

CERTIFICATE

One of the quality Certificate manufacturer

Company brief

USR Industries Co., as an advanced generator manufacturer invested by Hong Kong USR Company, has been committed to the manufacture of marine and yacht generators for more than 15 years. It is a company integrating R&D, production and sales.

The company has a number of related patents.Founded in October 2005, the company is located in Qinxiyang Industrial Zone, Fuan City, and now has a high-quality talent team. The factory covers an area of 5,000 square meters, with an annual production capacity of 2,600 diesel generator sets and an annual output value of 56 million yuan. Over the years, the company has formed a set of software management system and corporate culture in line with the efficient operation of the company.

The company's products have formed a serialized and large-scale production of yacht and ship generators, including the compact series PMG Kubota generator 4-20kW, the low-speed ultra-quiet Kubota generator series 6-35Kw, and the open Cummins generator series 50-200kW. Passed ISO9001 certification in 2016, all products have obtained CE certification and Euro V emission, and are now applying for CCS classification society certification, and are expected to obtain CCS classification society certification in March 2024.

The main advantages of our company are cheap price, reliable quality, short delivery time, and the ability to adjust the volume of the generator according to customer needs, so that the generator can be better placed in the cabin.

The technology keeps improving, and the products are the first to enter the international market and are exported to Europe, America, Southeast Asia, the Middle East, and Africa, and are well received by domestic and foreign customers.

The company adheres to the principle of people-oriented and continuous innovation to provide customers with better products, and strives to achieve a win-win situation between the company and customers.

Advantages of our company

1. Price advantage: We purchase a large number of Honda engines, obtain lower prices than peers, optimize the production process, and adopt advanced production technology to reduce the overall cost.

2. After-sales advantage: If there is a quality problem, we can solve it as soon as possible. First, we can solve it through video conference. If we can't solve it in the end, we will go to the user's site to solve it.

3. Brand advantage: In order to maintain the brand and the interests of customers, we will take a technical team to go abroad to repair our generators.

4. Technical advantages: Our clear goal is to be the best generator in the world. We have a number of patented technologies, and only with strong technology can we become the first in the industry.

5. Delivery advantage: The company has a large inventory, and we can deliver the goods in a short time after the customer places an order.

Product Features

- Inverter technology, variable speed constant voltage and constant frequency, pure sine wave power, the world's first.Variable speed constant voltage and constant frequency make the noise lower, more fuel efficient, and longer generator life.

- Stainless steel sturdy housing, reliable performance become the leader in this industry development, for performance you can rely on.

- The snap-on detachable shell will provide you with more convenient repair and maintenance needs.

- A more humanized debugging method, which makes the complex debugging into pieces, making the debugging more humanized and simpler.

- Our generator has a built-in DSP control chip, which is connected to our original RSV technology to control the speed of the stepper motor more accurately and quickly, which ensures the constant voltage and constant frequency output of the motor, reduces noise and lowers noise, and saves fuel. .

- Built-in original air supercharging technology, which increases the power by 15%, and the engine has sufficient power to easily drive the alternator, allowing the engine to cool down and reduce noise, and the entire generator and engine have a longer life.

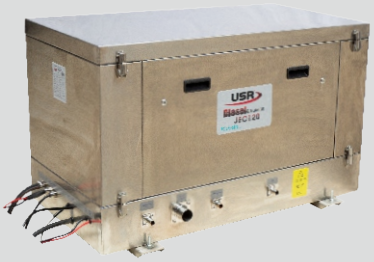
- Provides panel control and wireless remote control.

- USR generators are compact, quiet and powerful, saving up to 40% in weight and space! They are ideal for yacht owners who require low noise and vibration. The generator is characterized by its modern, innovative and environmentally friendly inverter technology.

- The speed of the diesel engine can be automatically adjusted according to the changing power requirements of the user, while the output voltage of the inverter is always kept constant. Variable speed control significantly reduces exhaust emissions and fuel consumption compared to conventional generators with fixed speeds. The maximum speed of the engine is 3000 rpm. A constant output voltage of 230 V/50 Hz or 120 V/60 Hz is provided to the electric load through the inverter.

Product Features

- Small size, light weight - compact installation
- High efficiency - maximum energy
- Variable speed - load dependent
- 230 V AC output - reliable power supply
- Pure sine wave ideal for sensitive electronics
- High starting capability of air conditioner/compressor
- Easy to install - no forced air circulation in the machine room
- Environmental protection - low fuel consumption



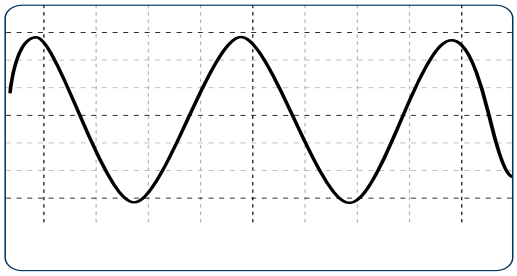
- quiet operation
- Less space required for installation
- Can be installed anywhere on the vehicle
- The generator can be installed at the center of gravity
- Sealed enclosure
- All connections are on the housing

Perfect sine wave

Providing high-quality electricity

The USR generator combines all the advantages of asynchronous generators with the voltage control of synchronous generators. The USRgenerator provides exceptionally clean sine waves and has achieved the best results in multiple tests in this category. This is crucial for the smooth operation of sensitive electronic devices such as air conditioners, charging devices, and laser printers. Voltage stability at a voltage control system tolerance of ± 3V.

The USR generator uses its own Electronic Voltage Control System (VCS) to control the generator and engine. The engine speed is gradually controlled. This can ensure that the output voltage of the asynchronous generator has a tolerance of ± 3V.



The outstanding sine wave of the Fischer Panda generator

Friendly human-computer interaction

Remote control-Easyto operate

The display panel with lighting system makes operation very easy, showing the relevant voltage, amperage, and start-up by alphanumeric Current, chronograph, etc., as well as a variety of alarm functions. No matter where you are

Remote control

Remote start and stop in 30 meters

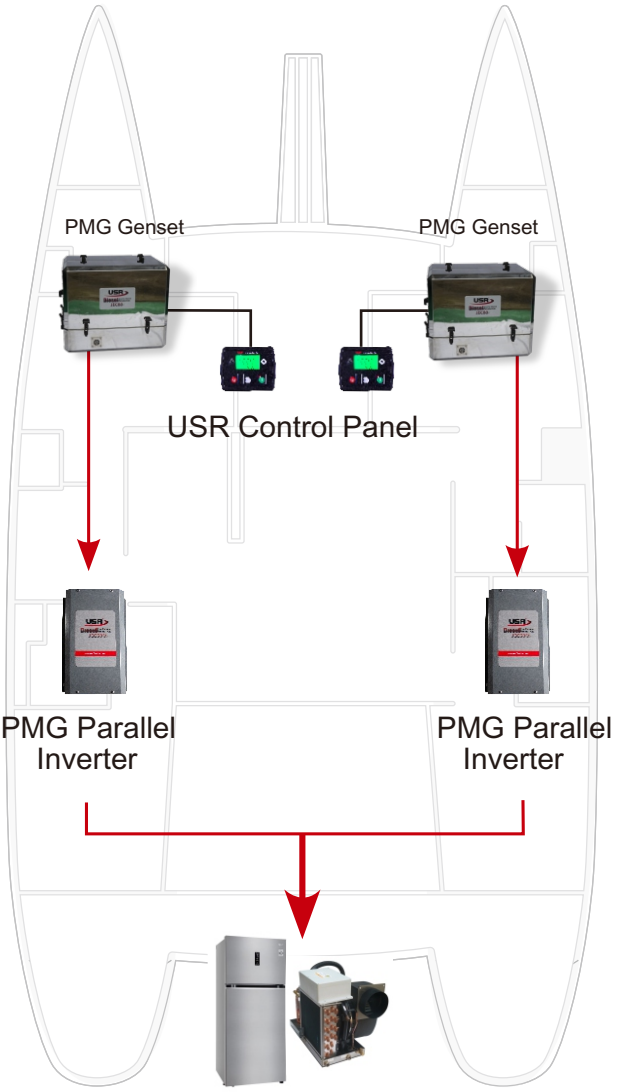
Advantages of Parallel Connections

High performance solutions for greater comfort and safety

USR generator also offers parallel PMG inverters as an option. This allows several generators of different types to be easily connected in parallel. No extra cables or extra cabinets are required. Each generator is completely independent and can be operated individually.
Multiple generators can be easily connected in parallel by connecting their generator output cables together.

•Load sharing: the power is doubled when two generators run in parallel.
• Ideal for applications where it may benefit (multihull catamarans, trimarans).
• The parallel connection scheme of multiple generators can better solve the power consumption concerns of the generators.
When one of the generators fails, the other generators can be used as backup generator used.

Installing multiple smaller generators improves weight distribution and makes the overall weight of the hull balanced.



PMG

Variable speed compact size Series

Model		JEC40 PMG	JEC60 PMG	JEC80 PMG	JEC100 PMG	JEC120 PMG	JEC150 PMG
Approx. capsule dimensions excl. fittings (L x W x H)	[mm]	470 x 470 x 540	620 x 480 x 600	620 x 480 x 600	640 x 510 x 600	660 x 510 x 600	760 x 560 x 600
Weight	[kg]	86	126	138	156	178	216
Sound level (7m / 3m / 1m)	[dB]	58 / 70 / 73	52 / 62 / 67	52 / 62 / 67	54 / 64 / 69	56 / 65 / 71	56 / 65 / 71
Cooling system		Seawater heat exchanger cooling					
Standard capsule		Soundproof stainless steel capsule					
Performance							
Nominal output	[kW]	0-4,0 (4 kVA)	0-6,0 (6 kVA)	0-8,0 (8 kVA)	0-10,0 (10 kVA)	0-12,0 (12 kVA)	0-15,0 (15 kVA)
Continuous output	[kW]	0-3,6	0-5.0	0-6.0	0-7.2	0-8.5	0-10.8
Output voltage	[V]	230 V	230 V	230 V	230 V	230 V	230 V
Voltage stability	[%]	± 3 %	± 3%	± 3 %	± 3 %	± 3 %	± 3 %
Frequency stability	[%]	50 Hz ± 0.1 Hz	50 Hz ± 0.1 Hz	50 Hz ± 0.1 Hz	50 Hz ± 0.1 Hz	50 Hz ± 0.1 Hz	50 Hz ± 0.1 Hz
Continuous cunrrents	[Amps]	15.6	21.7	26.1	31.3	36.9	47.0
Frequency regulation		electronic					
Control							
Starter system		12V electric starter					
Autostart		integrated					
Remote control panel		USR Control digital display					
Inverter		PMG 4600	PMG 6000	PMG 8000	PMG 1000	PMG 12000	PMG 15000
Inverter cooling		air-cooled	air-cooled	air-cooled	air-cooled	air-cooled	air-cooled
Inverter weight	[kg	8.5	9.2	10.5	13.5	18	23
Inverter dimensions	[mm]	400 x 230 x105	400 x 230 x105	400 x 230 x105	400 x 230 x105	400 x 280 x 105	460 x 320 x 160
Engine							
Engine manufacturer		USR	Kubota	Kubota	Kubota	Kubota	Kubota
Engine type		EF360	Z482	Z482	D722	D902	D1105
Engine displacement	[L]	0.367	0.479	0.479	0.719	0.898	1.123
Speed	[rpm]	2200 - 2800	2200 - 2800	2300 - 3000	2280 - 3000	2200 - 3000	2200 - 2800
Engine water temperature	[°C]	98					
Engine Heating	[s]	0-30					
Alternator							
Model		PMG50	PMG60	PMG80	PMG120	PMG150	PMG180
Alternator type		Brushless permanent magnet alternator					
Rated Power	[kVA]	0-5,0	0-7,0	0-8,5	0-12,0	0-15,0	0-18,0
Alternator cooling		air-cooled					
Voltage range	[V]	290-415					
Temperature rise	[°C]	-30-150					

ETCS

Electric throttle constant speed
RPM1500-1800

Model		JEC60 ETCS	JEC80 ETCS	JEC100 ETCS	JEC120 ETCS	JEC150 ETCS	JEC180 ETCS
Approx. capsule dimensions excl. fittings (L x W x H)	[mm]	980 x 560 x 600	980 x 560 x 640	1060 x 600 x 650	1160 x 620 x 700	1160 x 620 x 700	1260 x 620 x 700
Weight	[kg]	286	365	406	438	456	486
Sound level (7m / 3m / 1m)	[dB]	56 / 65 / 71	56 / 65 / 72	56 / 66 / 73	57 / 68 / 74	57 / 68 / 74	58 / 70 / 75
Cooling system		Seawater heat exchanger cooling					
Standard capsule		Soundproof stainless steel capsule					
Performance							
Nominal output	[kW]	0-8,0 (4 kVA)	0-8,0 (6 kVA)	0-10,0 (10 kVA)	0-12,0 (12 kVA)	0-15,0 (15 kVA)	0-18,0 (18 kVA)
Continuous output	[kW]	0-5.0	0-6.0	0-8.0	0-10.0	0-12.0	0-13.5
Output voltage	[V]	230 V	230 V	230 V	230 V	230 V	230 V
Voltage stability	[%]	± 3 %	± 3%	± 3 %	± 3 %	± 3 %	± 3 %
Frequency stability	[%]	50 Hz ± 1 Hz	50 Hz ± 1 Hz	50 Hz ± 1Hz	50 Hz ± 1 Hz	50 Hz ± 1 Hz	50 Hz ± 1 Hz
Continuous cunrrents	[Amps]	21.5	26.0	34.5	43.5	52.0	58.5
Frequency regulation		electronic					
Control							
Starter system		12V electric starter					
Autostart		integrated					
Remote control panel		USR Control digital display					
Pure sine wave regulation		AVR					
Engine							
Engine manufacturer		Kubota	Kubota	Kubota	Kubota	Kubota	Kubota
Engine type		D1105	D1105	V1505	V2203	V2203	V2403
Engine displacement	[L]	1.123	1.123	1.498	2.197	2.197	2.434
Speed	[rpm]	1500					
Engine water temperature	[°C]	98					
Engine Heating	[s]	0-30					
Alternator							
Model		EST60	EST80	EST10	EST12	EST15	IST18
Alternator type		Brushless permanent magnet alternator					
Rated Power	[kVA]	0-6,0	0-8,0	0-10,0	0-12,0	0-15,0	0-18,0
Alternator cooling		air-cooled					
Voltage range	[V]	220-240					
Temperature rise	[°C]	-30-150					

ETCS

Electric throttle constant speed
RPM1500-1800

Model		JEC200 ETCS	JEC250 ETCS	JEC300 ETCS	JEC400 ETCS	JEC500 ETCS	JEC650 ETCS
Approx. capsule dimensions excl. fittings (L x W x H)	[mm]	1260 x 620 x 700	1360 x 650 x 800	1380 x 650 x800	1480 x 650 x 850	1480 x 650 x 850	1760 x 800 x 850
Weight	[kg]	538	560	623	986	1072	1160
Sound level (7m / 3m / 1m)	[dB]	58 / 70 / 75	58 / 70 / 75	60 / 71 / 76	60 / 71 / 76	60 / 71 / 76	60 / 70 / 75
Cooling system		Seawater heat exchanger cooling					
Standard capsule		Soundproof stainless steel capsule					
Performance							
Nominal output	[kW]	0-20 (20 kVA)	0-25 (6 kVA)	0-30 (30kVA)	0-40 (40 kVA)	0-50 (50 kVA)	0-65 (65kVA)
Continuous output	[kW]	0-15.0	0-18.0	0-22.5	0-30.0	0-37.5	48.5
Output voltage	[V]	230 V	230 V	230 V	230 V	230 V	230 V
Voltage stability	[%]	± 3 %	± 3%	± 3 %	± 3 %	± 3 %	± 3 %
Frequency stability	[%]	50 Hz ± 1 Hz	50 Hz ± 1 Hz	50 Hz ± 1Hz	50 Hz ± 1 Hz	50 Hz ± 1 Hz	50 Hz ± 1 Hz
Continuous cunrrents	[Amps]	65.0	78.0	97.5	130.0	163.0	210.5
Frequency regulation		electronic					
Control							
Starter system		12V electric starter					
Autostart		integrated					
Remote control panel		USR Control digital display					
Pure sine wave regulation		AVR					
Engine							
Engine manufacturer		Kubota	Kubota	Kubota	Kubota	Kubota	Cummins
Engine type		V2403-CR-T	V3300DI	V3300DI-T	V3600-T	V3800DI-T	4BTa3.9
Engine displacement	[L]	2.434	3.318	3.318	3.620	3.769	1498
Speed	[rpm]	1500					
Engine water temperature	[℃]	98					
Engine Heating	[s]	0-30					
Alternator							
Model		EST200	EST250	EST350	EST450	EST600	IST800
Alternator type		Brushless permanent magnet alternator					
Rated Power	[kVA]	0-20,0	0-25,0	0-35,0	0-45,0	0-60,0	0-80,0
Alternator cooling		air-cooled					
Voltage range	[V]	220-240					
Temperature rise	[℃]	-30-150					

Hybrid DC Generators

Variable-speed

for all electric boats

Suitable for voltage range

DC24–360V, Possible for battery charging,
or direct drive DC motor of propeller

Enjoyment

1.Silent Drive
2.On-board electric power in abundance
3.Unique manoeuvrability

Future technology

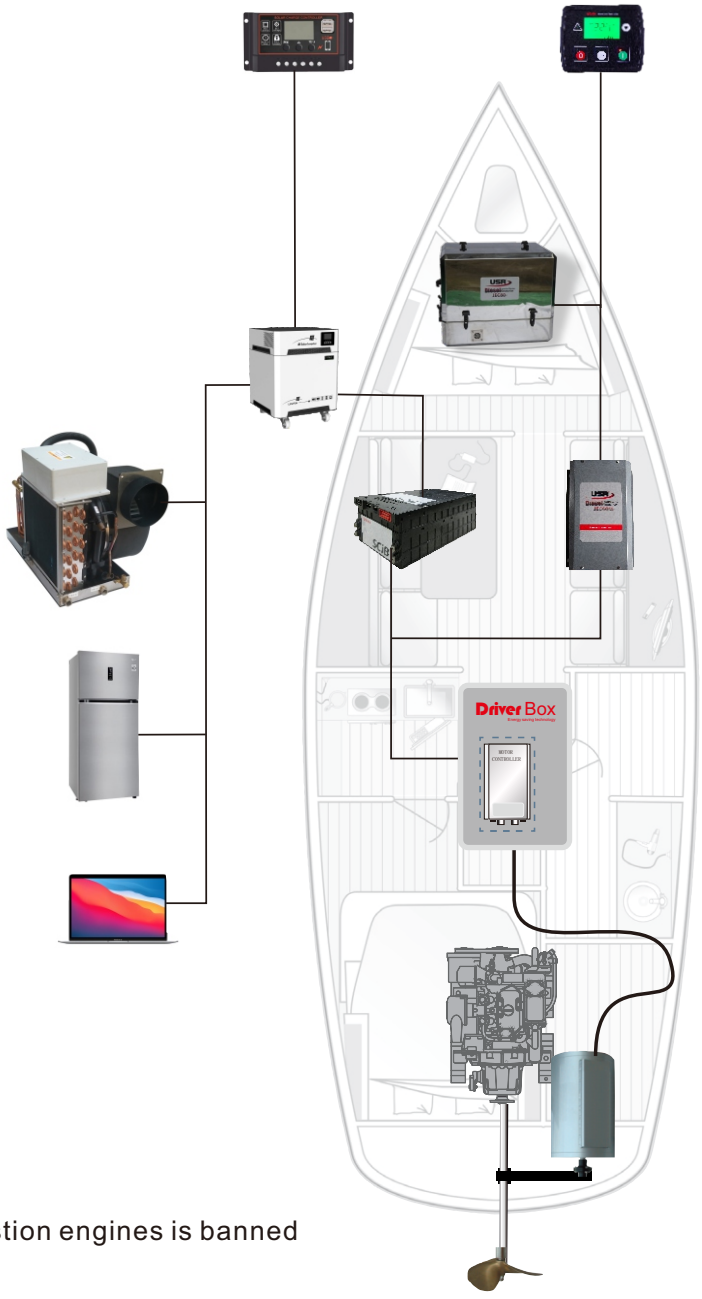
4.Future technology available now
5.New design possibilities
6.Professional 24 hour support

Ecologically friendly

7.Extremely low running costs
8.Up to 100 % emission-free
9.Efficient motor (efficiency up to 96%)

Intelligent

10. Complete - one system from one source
11. Full automation possible
12. Optimal weight distribution



Advantages in detail

Possible to cruise on waters where use of combustion engines is banned
Available as shaft or podded motor
Both Serial- and Parallel- Hybrid Systems can be delivered

Practically silent when operating using battery bank – even more comfort
Also available as complete hybrid system with quiet USR Generator
Battery-supported electric motor available at all times - even without having to start the main engine

Product Features

USR variable speed DC generators are specially designed for electric propulsion on board ships. These generators are compact, quiet, powerful and affordable. They are characterized by their modern, innovative and electronically regulated hybrid chargers, which enable a wide rev range at constant voltage.

This technology is a big step forward in the advancement of electricity to promote green development. Compared with the engines of conventional ships, the independence between the rotational speed and output power of the propeller variable speed hybrid DC generator allows the engine to run smoothly with the required propeller power. This design provides significant fuel savings, especially at low and medium loads.

Variable speed hybrid DC generators are available in various output voltages up to 300 A and output power up to 30 kW. An auto-start feature can also be set to prevent battery drain.

An autostart function prevents the batteries from being drained. A CAN bus connection transfers and receives information from a ship's control system.

The new Fischer Panda "super silent" variable-speed Hybrid DC generator provides you the comfort for nearly endless electrical cruising (if required).

Variable-speed Hybrid DC generators feature:

- Small size and low weight- compact installation
- Highly efficient– maximum energy
- Variable speed – load–dependent
- Easy to install – no forced-air circulation required in machine room
- Environmentally friendly – low fuel consumption
- Digital display – up to date all the time

Hybrid DC generator variable-speed

Electric Drive System

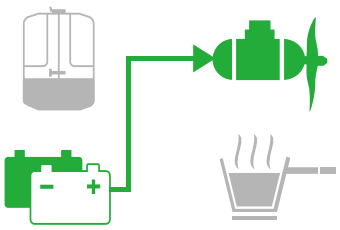
Battery bank

Shorepower

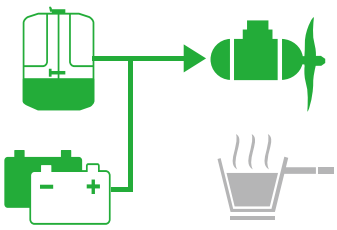
Electrical distribution

Domestic electric consumers

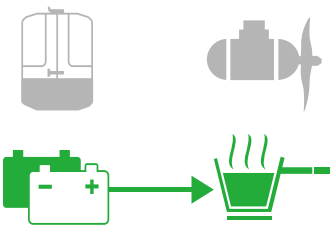
The multi-usage of your electric propulsion allows:



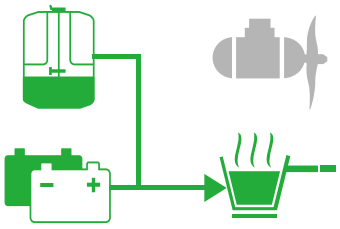
Electric cruising with battery only



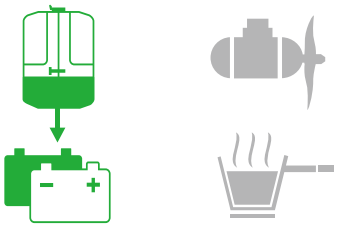
Hybrid cruising with battery and generator



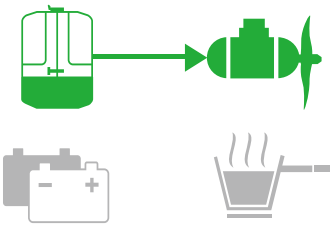
Silent onboard power with battery only for your appliances



Hybrid onboard power with battery and generator (high power demand)



Battery charging with generator



Emergency mode - generator cruising without batteries

PMS

Variable speed
Hybrid DC Generators

Model		JEC60 PMS	JEC80 PMS	JEC100 PMS	JEC150 PMS	JEC200 PMS	JEC300 PMS
Approx. capsule dimensions excl. fittings (L x W x H)	[mm]	620 x 480 x 600	620 x 480 x 600	640 x 510 x 600	760 x 560 x 600	1160 x 560 x 650	1360 x 560 x 750
Weight	[kg]	118	126	138	156	178	216
Sound level (7m / 3m / 1m)	[dB]	58 / 70 / 73	52 / 62 / 67	54 / 64 / 69	56 / 65 / 71	61 / 71 / 75	61 / 71 / 75
Cooling system		Seawater heat exchanger cooling					
Standard capsule		Soundproof stainless steel capsule					
Performance							
Nominal output	[kW]	0-4,0 (4 kVA)	0-6,0 (6 kVA)	0-8,0 (8 kVA)	0-10,0 (10 kVA)	0-12,0 (12 kVA)	0-15,0 (15 kVA)
Continuous output	[kW]	0-3,6	0-5.0	0-6.0	0-7.2	0-8.5	0-10.8
Output voltage	[V]	24 V - 400 V versions available. Current dependent upon voltage					
Voltage stability	[%]	± 3 %	± 3%	± 3 %	± 3 %	± 3 %	± 3 %
Control							
Starter system		12V electric starter					
Autostart		integrated					
Remote control panel		USR Control digital display					
Inverter		INS 60	INS 80	INS 100	INS 150	INS 200	INS 300
Inverter cooling		air-cooled	air-cooled	air-cooled	air-cooled	air-cooled	air-cooled
Inverter weight	[kg	8.5	9.2	10.5	13.5	35	48
Inverter dimensions	[mm]	400 x 230 x105	400 x 230 x105	400 x 230 x105	400 x 230 x105	400 x 280 x 450	460 x 320 x 500
Engine							
Engine manufacturer		Kubota	Kubota	Kubota	Kubota	Kubota	Kubota
Engine type		Z482	Z482	D722	D902	V2403	V3300
Engine displacement	[L]	0.479	0.479	0.719	0.898	2.434	3.620
Speed	[rpm]	2200 - 2800	2200 - 2800	2300 - 3000	2280 - 3000	1500	1500
Engine water temperature	[°C]	98					
Engine Heating	[s]	0-30					
Alternator							
Model		PMS60	PMS80	PMS100	PMS150	PMS200	PMS300
Alternator type		Brushless permanent magnet alternator					
Rated Power	[kVA]	0-5,0	0-7,0	0-8,5	0-15,0	0-20,0	0-30,0
Alternator cooling		air-cooled					
Voltage range	[V]	30-450					
Temperature rise	[°C]	-30-150					

USR GENERATOR
Marine & Yacht Generator

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