



GRUPEL
energy everywhere



GRUPEL GENERATORS

www.grupel.eu



TAKING YOUR PROJECT TO THE NEXT STAGE

At Grupel we are always looking out for the future... Of our business, of our planet and of the new generations.

So, we are dedicated to developing power generators aligned with a sustainable future, and adapted to our customers' needs and to the ever-changing market demands.

That is why our team works every day to design, produce, and distribute versatile and innovative solutions, complying with Stage V regulations in order to keep our generators' and lighting towers' emissions low.

The best Energy is the one that leaves a long-lasting example and a brighter future for the ones to come.

With over 45 years of experience in the production and selling of generators, we bring energy to the whole world.

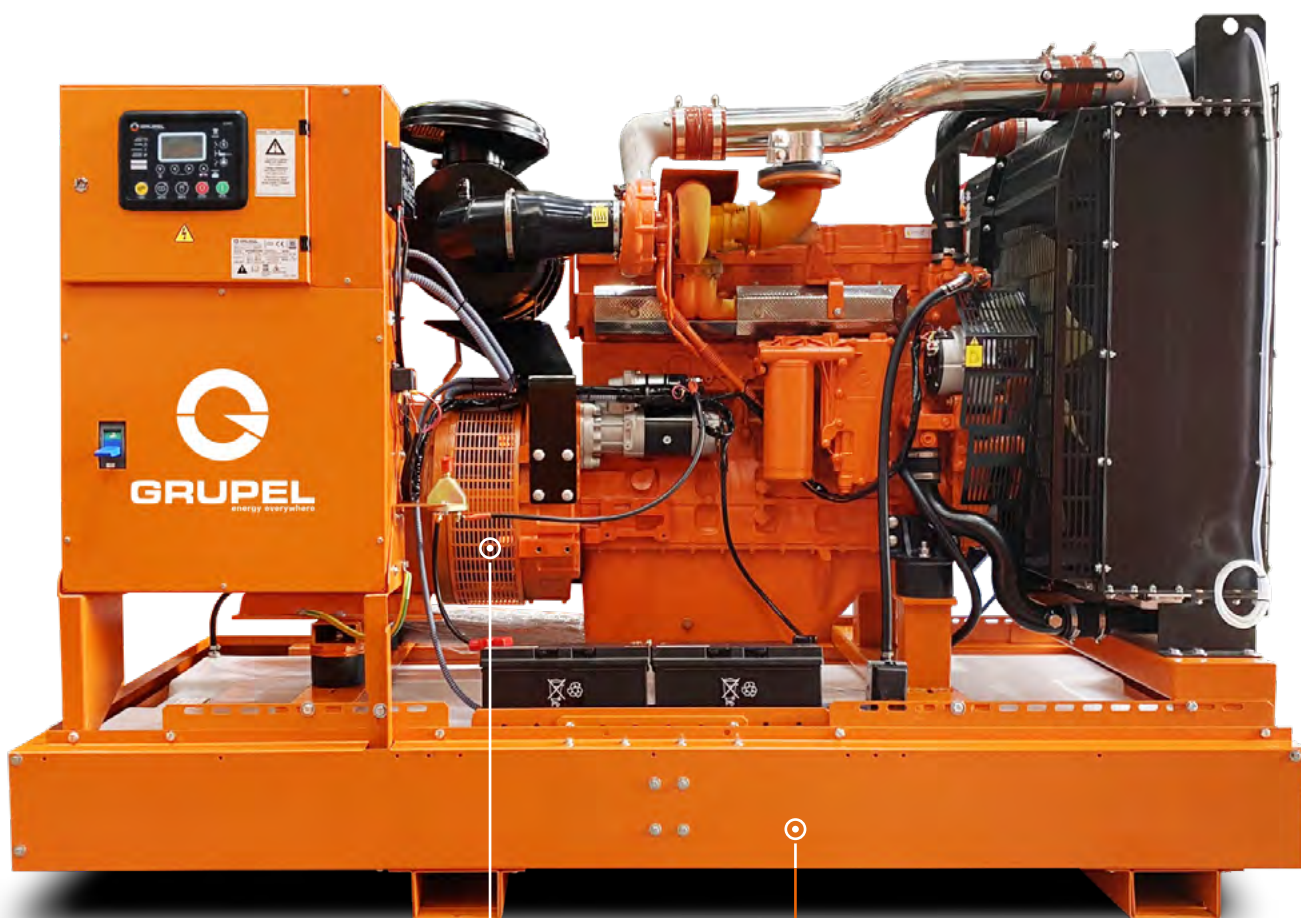
Grupel is a Portuguese company, founded in 1976, that produces and sells portable and stationary power generators up to 3500kVA, as well as portable lighting towers, with components from internationally renowned brands and our own.

With the largest production unit of power generators, in Portugal, equipped with state-of-the-art machinery and in a continuous process of digital transformation, Grupel develops solutions tailored to the needs of clients around the world, also ensuring services of technical assistance and supply of spare parts of great quality.

Grupel is distinguished with the Five Stars Award and holds the SME Leader Status, in Portugal. It is also internationally recognized, being present in over 70 countries.



GRUPEL GENERATORS



ALTERNATOR

Grupel guarantees quality and reliability, by using alternators from the renowned Leroy Somer and Stamford, as well as its own brand. With a wide range of powers, these alternators are easily coupled with several engines.

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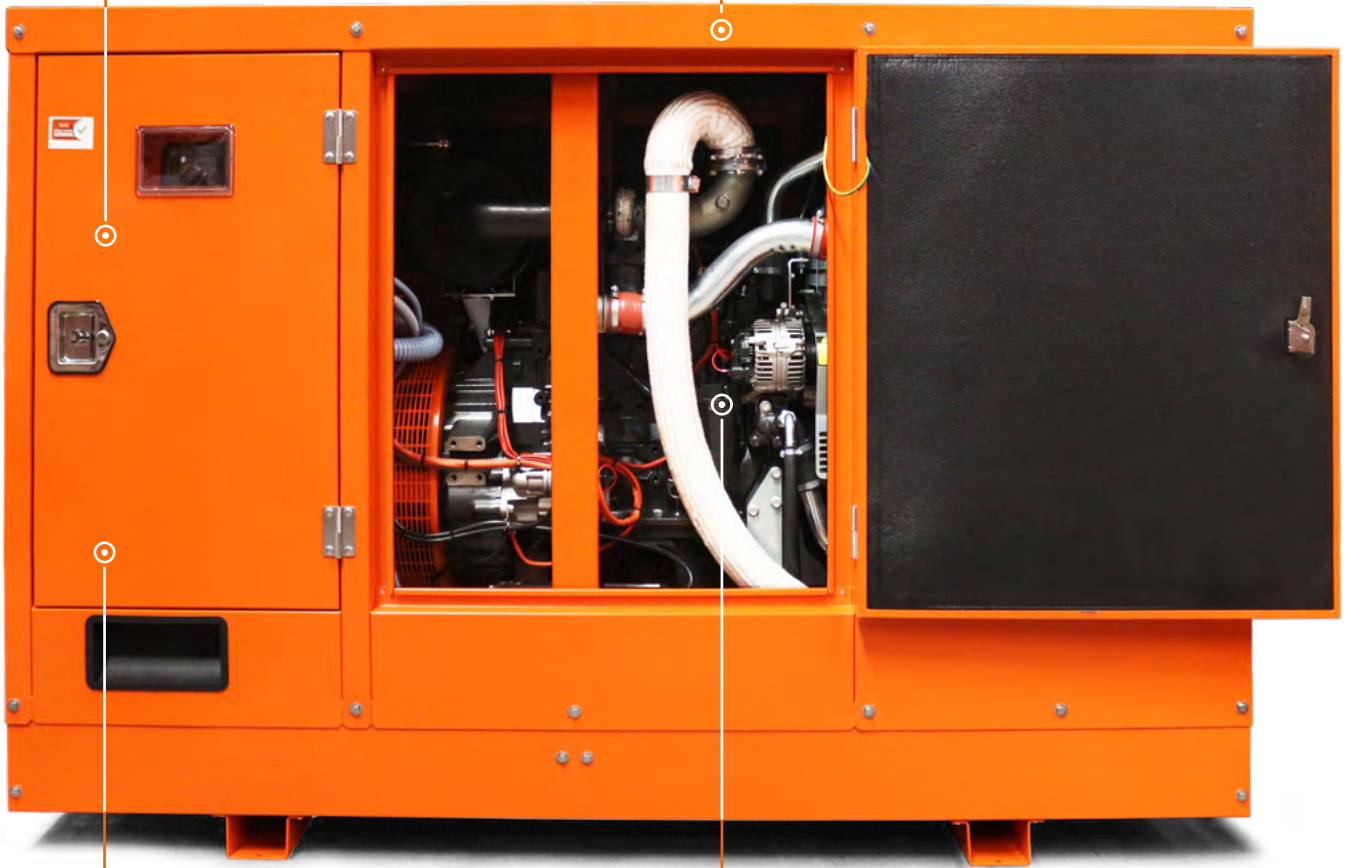
- ✓ Steel frame
- ✓ Anti-vibration system
- ✓ Paint with anti-corrosion treatment
- ✓ Lifting system
- ✓ Integrated tank

CONTROL PANEL

The control panel is responsible for monitoring and protecting Grupel's generators and can be considered the "brain" of the set. It can be found on the chassis, either in open or soundproofed versions.

CANOPY

- ✓ Reduced welding points, minimizing the risk of oxidation.
- ✓ Insulated with anti-noise and anti-fire material
- ✓ Polyester epoxy paint
- ✓ Efficient air flow for engine cooling
- ✓ Easily accessible control panel
- ✓ Side doors
- ✓ Anti-corrosion treatment
- ✓ Steel, stainless steel or aluminum plate
- ✓ Plastic fuel tank, which is more durable



AUTOMATIC TRANSFER SWITCH

The automatic transfer switch is responsible for the commutation between the electric grid and the genset (and vice-versa). While functioning automatically, it is also used to connect alternating generators.

ENGINE

Grupel uses different engines in its generators, in order to adapt to the needs of its clients and the requirements of the projects it undertakes.

GRUPEL GRUPEL

Over the years, we have been committed to the quality and differentiation of our products, always aiming to offer the best solutions to our customers.

That is why we have invested in the development of components of our own brand, which do not depreciate the quality of our generator sets and, on the contrary, add value to the final product.

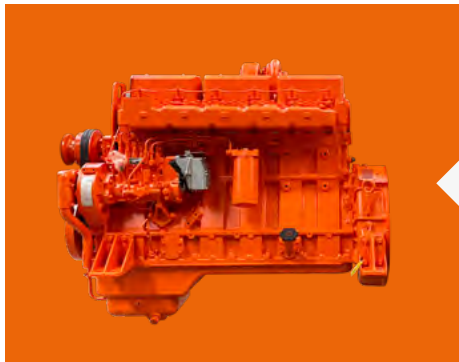
As a result, Grupel+Grupel generators come to be. These products are manufactured with high quality and efficient components, designed by our R&D&I team. They are high-performance and long-lasting solutions, with a wide range of powers, and the capacity to operate in several sectors and activities.



WHAT ARE THEIR **ADVANTAGES?**

- ▶ They are customizable, adapting to any need and requirement.
- ▶ They have a simple and easy-to-use technology but are resistant and robust.
- ▶ They are versatile and suitable to any application
- ▶ They have a competitive price and a warranty of 2 years or 2000 hours.
- ▶ They comply with EU quality standards
- ▶ They allow for more attractive delivery times and quick maintenance and parts replacement.

GRUPEL COMPONENTS



ENGINE

With powers from 10 to 1100kVA and electronic regulation, Grupel's engines are robust and reliable. They are available in 50 and 60Hz, which makes them suitable for any market.



ALTERNATOR

Grupel's alternators are highly efficient and stable, besides being more robust than other models in the market. They may have several extra components.



CONTROLLER

Very complete and intuitive, Grupel's controllers have numerous features thanks to the addition of plug-in modules for WIFI connection, or synchronization of generators, among others.



ATS

Grupel's ATS are multi-voltage and multi-frequency, therefore, suitable for any market worldwide. They are also easy to maintain and disassemble.



OTHER COMPONENTS: Circuit breaker; Battery; Current transformer; Terminal blocks; Diesel sensor; Battery charger



PR

PORTABLE RANGE

2 - 15 kVA

The **Portable Range** is ideal for supplying energy to low-power activities and equipment and can be used by both professionals and regular people.



GR2500



INVERTER TECHNOLOGY



PARALLEL OPERATION



GR3000



EASY MOBILITY



DIGITAL DISPLAY



GR6500



GREATER AUTONOMY



REMOTE/ELECTRIC START



GR12000



MORE POWER



REMOTE/ELECTRIC START

	GR2500	GR3000	GR6500	GR12000	
Main Features	Type	Single-Phase	Single-Phase	Single-Phase Three-Phase	Single-Phase Three-Phase
	Continuous Power (PRP) (W)	2.000	2.800	6.300	11.000
	Starting Power (W)	2.200	3.000	6.900	12.000
	Frequency (Hz)	50	50	50	50
	AC Voltage (V)	230	230	230 / 400	230 / 400
	Automatic Voltage Regulator (AVR)	Yes / Inverter	Yes	Yes	Yes
	Fuel tank capacity (L)	4.5	15	25	40
	Fuel type	Unleaded petrol	Unleaded petrol	Unleaded petrol	Unleaded petrol
	Engine type	4 stroke	4 stroke	4 stroke	4 stroke
	Starter system	Manual	Manual	Manual / Electric / Remote	Electric / Remote
	Emissions certificate	STAGE V	STAGE V	STAGE V	STAGE V
	Safety for lack of oil	Yes	Yes	Yes	Yes
	Noise level (dBA)	68 @ 7m	96	96	96
	Autonomy at 100% load (h)	3,2	8,6	7	5,5
	L x W x H (mm)	500 x 285 x 455	660 x 600 x 500	760 x 700 x 650	1020 x 670 x 850
Weight (kg)	22	52	104	183.5	
Other Features	Sockets	1 schuko 16amp	2 schuko 16amp	1 Schuko 16amp + 1 single phase industrial 32amp + 1 3P+N+T 16amp	1 16A schuko + 1 32A/230V 3P CEE 116A/230V 3P CEE + 1 32A/400V 3P+N+PE
	Circuit Breaker	Yes	Yes	Yes	Yes
	Hour Counter	Digital	Digital	Digital	Digital
	Wheels and Handles	-	Yes	Yes	Yes
	Battery	No	No	Yes	Yes
	Voltmeter	Digital	Digital	Digital	Digital
	Frequency meter	Yes	Yes	Yes	Yes
	Auto Start	No	No	Yes (via Grupel ATS)	Yes (via Grupel ATS)
	ATS (optional)	No	No	Yes (Single and Three-phase)	Yes (Single and Three-phase)
	Remote Start	No	No	Yes	Yes
	DC Output	Yes (12vdc 8amp)	No	No	No
	USB	Yes (1.0A + 2.1A)	No	No	No
	Parallel operation	Yes	No	No	No

PARALLEL KIT

With two GR2500 generators running in parallel it is possible to meet larger power needs. By connecting two sets of this model and using them simultaneously, you can power devices with more demanding loads or more equipment at the same time.

The power cables can be stored at the back of the unit when not in use.

Kit sold separately.





SR

SMART RANGE

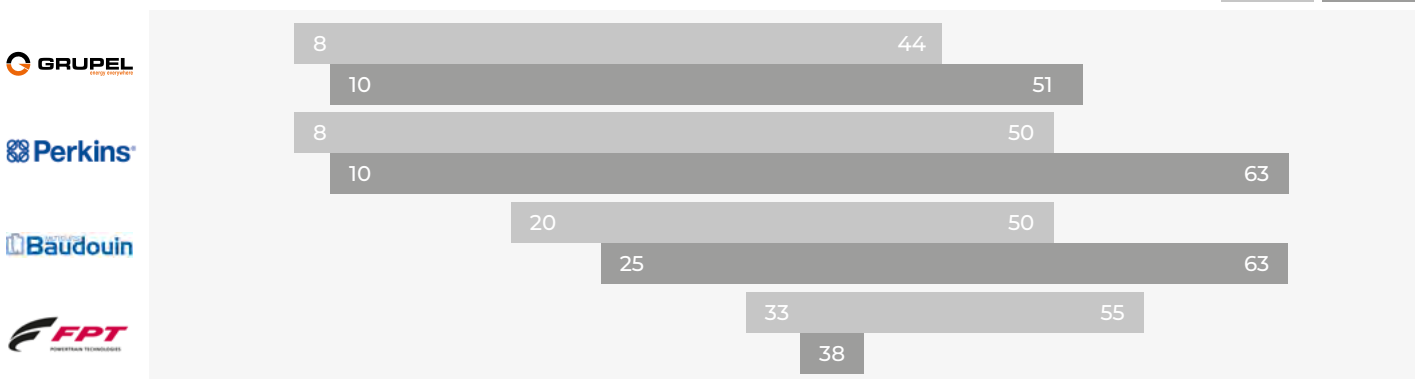
8 - 65 kVA

The Grupel **Smart Range** is composed of products with characteristics that are suitable for emergency applications. These gensets start operating automatically whenever there is a power failure, thus ensuring a competent and efficient supply



ENGINES POWER IN KVA | STANDBY

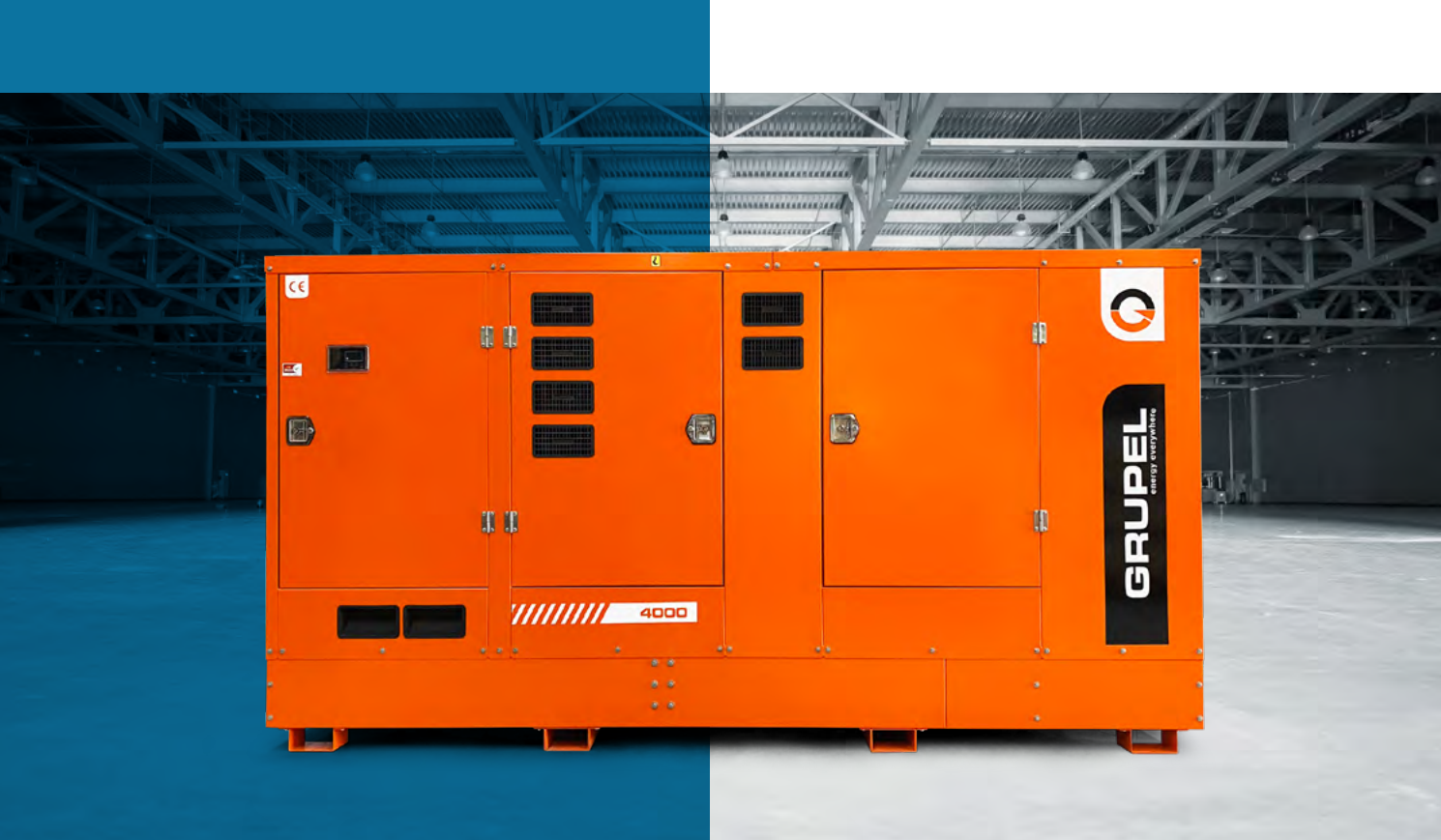
50Hz 60Hz



ALTERNATORS

STANDARD MODELS





IR

INDUSTRIAL RANGE

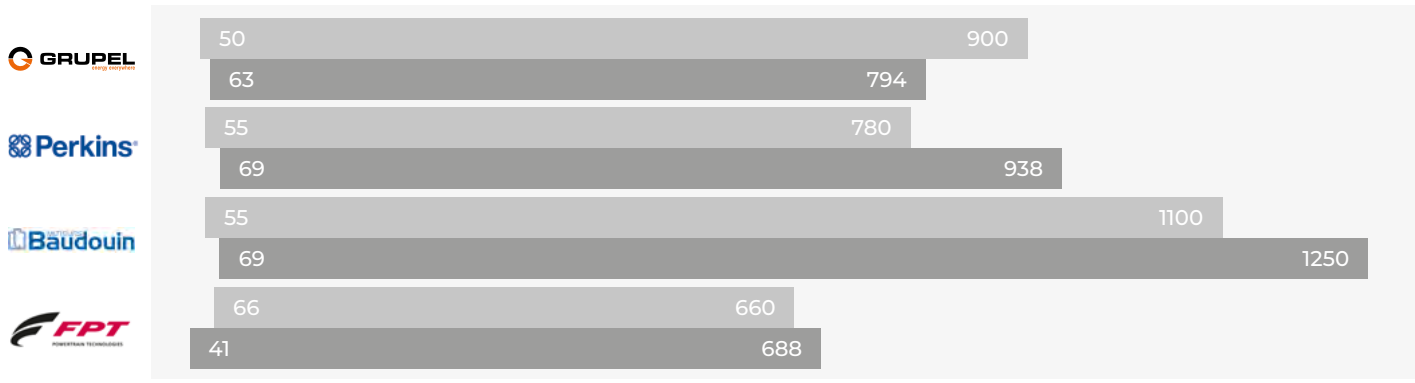
40 - 1250 kVA

The **Industrial Range** is aimed especially at industry and is designed to operate as a primary and emergency power source, in installations where there is no other source or where the existing one is very weak.



ENGINES POWER IN KVA | STANDBY

50Hz 60Hz



ALTERNATORS



STANDARD MODELS





HR

HEAVY RANGE

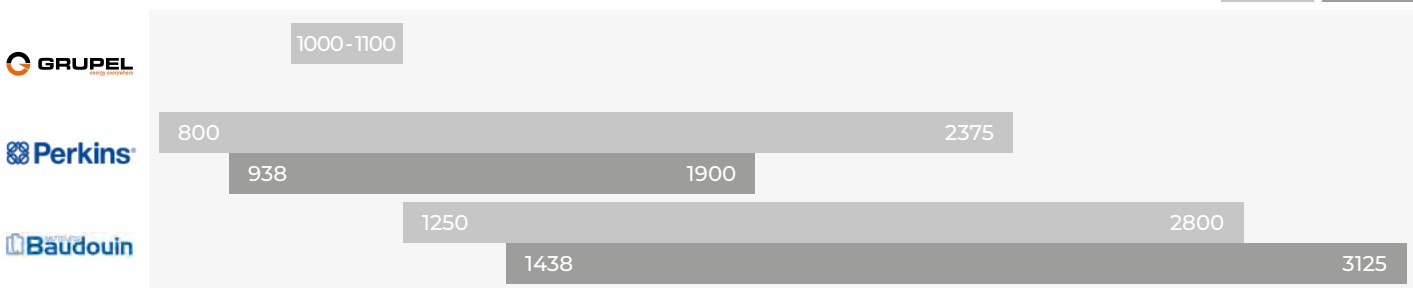
800 - 3150 kVA

The **Heavy Range**, made up of diesel generators in containers, is designed to provide low and / or medium voltage energy, in a continuous regime, as well as to act as a power source, in case of emergency.



ENGINES POWER IN KVA | STANDBY

50Hz 60Hz



ALTERNATORS

STANDARD MODELS

GRUPEL LEROY SOMER STAMFORD

5800 20' 40'



GR

GAS RANGE

The **Gas Range** has some advantages, since gas is the most economical and environmentally responsible option to power generators.

The increasing use of gas, in energy generation for industry and domestic use, has a significant impact, since applications with this type of fuel are generally more economical and ecological.

BASIC FEATURES

- ▶ 4-stroke combustion engine
- ▶ Self-excited alternator ip21 / ip23 class H
- ▶ Steel frame with anti-vibration pads
- ▶ Cooling radiator or heat exchanger
- ▶ Control panel with measuring devices
- ▶ Automatic circuit breaker
- ▶ Fully equipped gas ramp
- ▶ Steel exhaust system



Special biogas project to aid a livestock farm in Dumbria, Spain.

OPTIONS

- ▶ Soundproof and weather protection steel canopy
- ▶ Automatic oil level control
- ▶ Engine preheating
- ▶ Stainless steel exhaust system
- ▶ ATS
- ▶ Remote control
- ▶ Possibility of synchronism
- ▶ Soundproofed marine container suitable for the outdoors
- ▶ Heat recovery systems for refrigeration and / or exhaust circuits
- ▶ Natural gas, biogas, syngas, etc ...
- ▶ Remote cooling



SP

SPECIAL PROJECTS

Grupel's **Special Projects** have "flexibility" as its motto, as they are designed and produced entirely according to the specific needs of each client.



BLACK START SYSTEM FOR COMBINED CYCLE POWER PLANT

 Ivory Coast

Special project that consists of a medium voltage generation plant, composed of 5 generator sets of 3125 kVA, each inserted in a 40" HC container, and with a total power of 15.6 MVA. Each equipment has an independent fuel system with high autonomy (5000L), inside the container, but separated from the generator and the control room, through soundproof and fireproof panels. Each group also has a CO2 fire detection and extinguishing system, integrated in the container.

The Black Start is meant to guarantee the start of the combined cycle in the absence of a grid, and to assist the main auxiliary equipment of the plant. For this, it

has a fully automated control system with redundant PLCs and a Supervision and Data Acquisition System (SCADA) with connection to the command center (DCS) of the Azito's Combined Cycle Power Plant.



SPECIAL PROJECT SUPPORTING A WASTEWATER TREATMENT PLANT

 *Australia*

This Special Project, installed in Australia, is composed of 3 generators of 1900kVA (STP) with MITSUBISHI engine (S16R-PTA) and STAMFORD alternator (S9H1D-B4). It was specifically developed for emergency operation in a wastewater treatment plant (WWTP).

Its special features include 1200L fuel tanks, remote cooling systems, and voltage transformers with integrated fuses.



NATURAL GAS COGENERATION PLANT

 *Mexico*

Special project consisting of an 1875kVA PRP generator, which operates on gas and makes use of heat, both for the refrigeration circuit and for the exhaust. The generator is in a 40" soundproof container, divided into two spaces - an electrical room and a generation room that houses the entire auxiliary system, equipped with a gas and fire detection system.

The system was designed to produce energy continuously (24h / 365 days).



NSPA GENERATORS FOR THE SPANISH ARMY

 *Spain*

Special project composed of seven 600 kVA generators for military application. All generators are high performance, highly customizable, robust, soundproofed and ready to be airborne. The equipment was designed for parallel or island operation and for automatic start, in case of grid failure. Each generator is equipped with an electrical panel with CETAC sockets, to facilitate the connection and disconnection of loads.





LT

LIGHTING TOWERS

Grupel **Lighting Towers** are the ideal solution when natural light is scarce. They are robust and easily transportable, so they can be used in various applications and in adverse conditions.



MODELS M4.5 & P4.5



LIGHTED AREA

They can light an area of 2 500m² (min 10lux)



AUTONOMY

Depending on the generator used, they have an autonomy of up to 15.2h



MOBILITY

Mobile and easily transportable, they offer light to any place and application



SIMPLICITY

According to your needs, you may include the portable generator you want

MODELS M7 & P7



LIGHTED AREA

They can light an area of 4 500m² (min 15lux)



GREAT AUTONOMY

Depending on the chosen engine, they have an autonomy of up to 50 hours



ROBUSTNESS

With a steel canopy, they resist adverse conditions and winds up to 75km/h.



CONTROL AND SUPERVISION

They contain an automatic controller with access to all information



CHARACTERISTICS	UN.	M4.5 MODEL	P4.5 MODEL
Light coverage	m ²	2.500 (minimum 10 lux)	2.500 (minimum 10 lux)
Lamps		LED	LED
Lamp durability	h	50.000	50.000
Mast		Manual vertical	Pneumatic vertical
Engine		GRUPEL	GRUPEL
Alternator		GRUPEL	GRUPEL
Fuel tank	l	4.5 / 15 / 25	4.5 / 15 / 25
Autonomy (50% of charge)	h	5.4 / 15.2 / 10.9	5.4 / 15.2 / 10.9
Dimensions for transport with fixed tow bar (l x w x h)	m	1.38 x 0.88 x 1.90	1.38 x 0.88 x 1.90
Weight	kg	110 (without the generator)	130 (without the generator)



CHARACTERISTICS	UN.	M7 MODEL	P7 MODEL
Light coverage	m ²	4.500 (minimum 15 lux)	4.500 (minimum 15 lux)
Lamps		LED	LED
Lamp durability	h	50.000	50.000
Mast		Manual vertical	Pneumatic vertical
Engine		GRUPEL 3GA14D50	YANMAR 2TNV70
Alternator		GRUPEL - 164GB11	GRUPEL - 164GB11
Fuel tank	l	40	40
Autonomy (50% of charge)	h	27	50
Dimensions for transport with fixed tow bar (l x w x h)	m	2.70 x 1.22 x 2.55	2.70 x 1.22 x 2.55
Weight	kg	780	620

APPLICATIONS

Each application and context has specific requirements and energy needs, to which our teams try to respond with their daily work.

Whether you are looking for power generators for residential, industrial and business units, hospitals, telecommunications, construction or power plants, Grupel has the ideal solution for any challenge.



FARMING AND LIVESTOCK



POWER PLANTS



DATA CENTERS



CONSTRUCTION



WWTPS



COMPANIES AND RETAIL



EVENTS



INDUSTRY



INFRASTRUCTURES



MILITARY



OIL AND GAS



RESIDENTIAL



HEALTHCARE



COGENERATION SYSTEMS



TELECOMMUNICATIONS

TECHNICAL SUPPORT & AFTER-SALES SERVICES



TECHNICAL ASSISTANCE

Performed remotely, by phone or on site.



SPARE PARTS SERVICE

Spare parts for engines, alternators and generators of all brands.



GENERATOR MAINTENANCE

Full and personalized monitoring of your equipment.



STARTING AND TRAINING

Functional tests and training for the use of the equipment.



GENERATOR REMODELING

Improvement of obsolete generators or components in poor condition.



SOLUTIONS AND PROJECTS

Proposals tailored to your needs.

Order one of these services at
www.grupel.eu

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