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# WE KNOW THE CONSEQUENCES OF A POWER OUTAGE



It results in financial losses, sometimes very serious ones. The shutdown of production or construction, even for a short period, can be devastating for a business.



The threat to security - without electricity, there is no communication, video surveillance, magnetic locks, or security systems.



The danger to life and health: hospitals, maternity hospitals, wastewater treatment plants - everything depends on electricity!



We ensure your energy security, cost savings, peace of mind, and comfort. We know how equipment will work with different components and in various conditions, so we will find the optimal solution for you at a reasonable price.



# DESIGN FEATURES AND OPERATIONAL ADVANTAGES OF DIESEL GENERATOR SET





### SUPERIOR PERFORMANCE

We supply engines from leading global manufacturers and high-efficiency alternating current generators with various electronic control systems, which ensure the best performance of our products. The power and efficiency of the design are ensured by voltage stability and output frequency under nonlinear loads



### ADAPTABILITY TO ENVIRONMENTAL CONDITIONS

Our products can operate in a range from -40°C to +55°C, with the ability to start confidently at any temperature. They can work in cold, tropical climates, in regions with sandstorms and high humidity. They can provide uninterrupted operation at an altitude of 5000 meters above sea level with minimal power loss



### "SMART" CONTROL SYSTEMS

The control system is equipped with a controller with an auto-start function, automatic protection, network and generator switching control, parallel operation, remote communication, etc. Full, intelligent, and network management make the operation of the generator set simple and prevent accidental failures. The ease of control is also provided by an intuitive interface.



### ENERGY SAVING AND ENVIRONMENTAL PROTECTION

The choice of engines from leading global manufacturers, together with a highly efficient vibration absorption system and a rigid support frame, as well as a design with a compact structure, allows for vibration reduction, lower noise levels, and improved emission performance



### ECONOMIC EFFICIENCY

The standard design and high standardization of spare parts simplify equipment maintenance. Choosing engines from well-known global brands ensures high reliability and long overhaul periods. Developments combining advanced fuel mixture combustion systems and high-performance AC generators allow for fuel savings and cost reduction

## ADVANTAGES OF DIESEL GENERATOR SET IN CONSTRUCTION



AUTONOMOUS DIESEL GENERATOR SETS ARE A RELIABLE, EFFICIENT, AND CONVENIENT SOLUTION FOR PROVIDING POWER SUPPLY TO CONSTRUCTION SITES IN DESERT CONDITIONS, WHERE CENTRALIZED POWER GRIDS MAY BE INACCESSIBLE OR UNSTABLE



Reliability and stability of power supply: diesel generator sets provide independent and reliable power supply even in conditions where there is no centralized power grid, which is especially important in desert areas.



Mobility and flexibility: autonomous diesel generator sets are easy to transport and install in remote construction sites where there is no access to grid electricity.



Automation and control: modern autonomous diesel generator sets are equipped with remote access and control systems, which ensure reliable and efficient operation of the equipment even without constant operator presence.



Economic efficiency: the use of an autonomous diesel generator set helps reduce energy costs for construction work in desert conditions, which contributes to resource savings and project competitiveness.

# ADVANTAGES OF DIESEL GENERATOR SET IN AGRICULTURE





THANKS TO THEIR ACCESSIBILITY, SIMPLICITY, EASE OF USE, AND HIGH PERFORMANCE, DIESEL GENERATOR SETS ARE BECOMING INCREASINGLY POPULAR AMONG OWNERS OF FARMS ENGAGED IN THE CULTIVATION OF VARIOUS CROPS IN REMOTE LOCATIONS.



Fuel efficiency: diesel generators have high energy efficiency and can operate on various qualities of fuel, which is important in conditions where access to resources may be limited.



Autonomy: diesel generator sets are ideal for operation in any remote locations. For example, a diesel generator can easily provide power or lighting for a room, power tools, pumps and pumping stations, milking machines, dryers, and greenhouses.



Resistance to climatic conditions: diesel units can operate effectively in high humidity and extreme weather conditions such as drought, sandstorms, strong winds, and rapid temperature changes.



Economic stability: power outages cause significant financial damage to agricultural facilities and disrupt production. Therefore, reliable power supply and the ability of the system to provide energy to facilities at any time are extremely important for businesses.

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# MODEL RANGE

Today, the company "**DieselEnergoResource**" supplies diesel generator set of any design and configuration based on engines from the following manufacturers.

# **BAUDOUIN** (600–3000 kW)

- High reliability and durability due to the use of high-quality and high-tech components and assemblies.
- High engine responsiveness in terms of instantaneous load acceptance.
- Engines are based on marine engine designs.
- Extended engine service life: operating time before overhaul up to 32,000 operating hours depending on the engine model



Low fuel and engine oil consumption.



Extended service interval, including replacement of filters and oil.



Cooling radiators are designed for an air temperature of 50°C and allow the power plant to operate in conditions of extremely high temperatures without power loss.



Low noise and vibration levels.



Increased frequency of technical maintenance, including filter and oil replacement.



# **YUCHAI** (60-3000 kW)

- Comprehensive factory quality control system for assembly and testing of equipment using high-tech equipment.
- ISO Compliance with ISO European standards.
- Wide range of power capacities: from 60 to 3000 kW.
- High-pressure direct fuel injection system

- High torque with good response.
- Long service life and reliability.
- Minimal environmental impact. The level of harmful substances emitted by the engines into the atmosphere does not exceed the European Euro-3 standard.





# **CUMMINS** (20-2680 kW)





Fuel consumption for large capacities (from 600 kW and above) is one of the lowest in the class.



Wide availability of spare parts.



Very wide power range: from 12 to 2680 kW



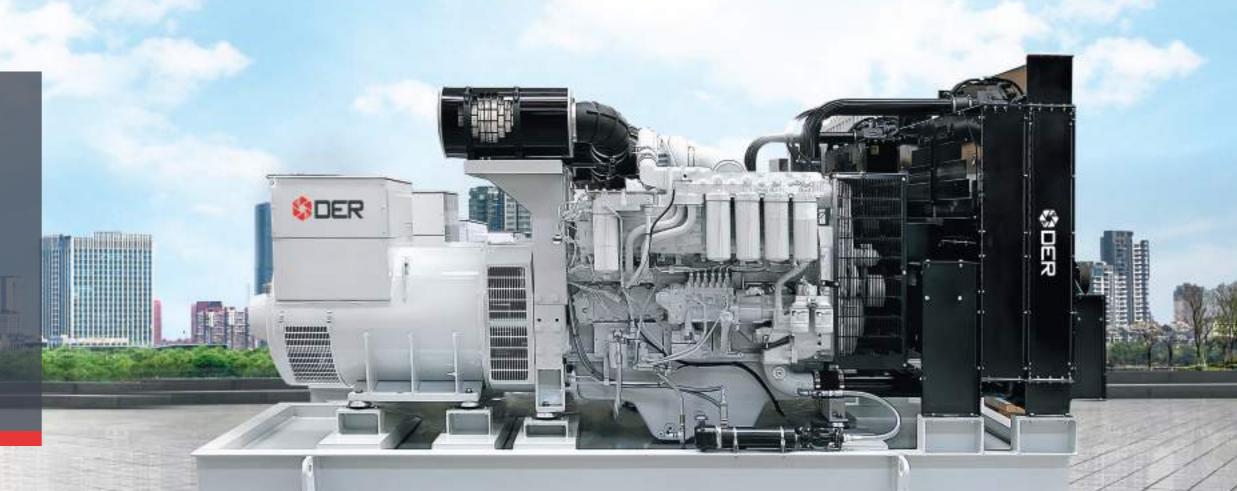
Cummins engines are among the most compact and lightweight in their class.



There is always a choice: engines with an advanced electronic fuel injection control system or with a classic high-pressure fuel pump.



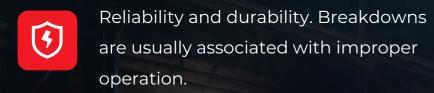
Almost all Cummins engines are equipped with a turbine. It increases the power of the power unit without increasing its size. The use of turbocharging allows you to increase the power of the engine by 20-40% in comparison with classic "atmospheric engines".





# **PERKINS** (10–1800 KW)







Perkins motors, especially of high power, have a life of 30,000 hours.



A wide range of models: Perkins produces engines at a power plant from 10 to 2500 kW.



High performance, economical fuel consumption, low operating costs.



Perkins engines comply with strict environmental standards and technical and operational safety standards.



They are suitable for operation in difficult conditions, especially where standby operation and high power are required.



# **FPT IVECO** [60-480 kW]

- Highest reliability and durability. FPT-Iveco engines have been tested in the most severe operating conditions and in various fields of application.
- Increased load capacity. FPT-Iveco industrial engines are specifically designed to operate continuously at maximum load and can withstand very intensive loads.
- Durability up to 35,000 operating hours before overhaul. This is more than 4 years of continuous operation or 8.5 years of operation in 12-hour shifts.
- Low fuel consumption. Some of the best fuel efficiency indicators on average, 2-5% better than competitors.

- Ease of maintenance. F32 and NEF series engines have a simple design without electronic systems, which makes maintenance easier and reduces maintenance costs.
- Affordable cost of consumables and spare parts. Along with low fuel consumption and virtually trouble-free operation, this ensures low ownership costs one of the best in the industry.
- Record maintenance interval 600/800 operating hours. You will have to worry about power plant downtime during maintenance, payment for the services of service specialists, and the purchase of consumables 1.6-4 times less frequently.



TANKSHAMET 1 1 1 1 1 1 1 1 1 1

# **ISUZU** (16-64 kW)

- Modern ISUZU engines are equipped with a Common Rail fuel injection system with variable geometry, turbocharging and an additional POC neutralizer in the exhaust system.
- Reduced emissions and compliance with the Euro-5 environmental standard.
- Unpretentiousness to fuel quality, economical maintenance.

- Time-tested reliability and various operating conditions, ease of management and maintenance.
- The motors are characterized by great endurance, they remain operational in any climatic zone.
- High performance and economical fuel consumption.





# **OPTIONS FOR IMPLEMENTATION**

### DIESEL GENERATOR SETS IN

### A SOUNDPROOF ENCLOSURE



Small size, compactness, use of modern technologies, excellent appearance, ease of transportation and installation.



The top of the enclosure has lifting lugs and loops for cable attachment, and the chassis has slots for a forklift, holes for traction chain attachment, and mounting holes.



Safety of operation is ensured by the use of protective grounding, an emergency stop button, and an alarm system.



An efficient ventilation and cooling system ensures proper heat dissipation and air removal. If the enclosure is taller than 1800 mm, a ladder is provided.



For generator sets with a power of over 320 kW, a double suspension design is used.



Equipment operation down to -10°C, protection against precipitation.







### **MOBILE DIESEL GENERATOR SETS**



A mobile power plant is an autonomous power source designed for quick transportation using vehicles



Based on a truck



On the chassis of a trailer



On the chassis of a tractor trailer

### **DIESEL GENERATOR SETS IN A CONTAINER**



An ideal option when there is no prepared room. The container provides comfortable work for personnel, protection, and operation of equipment in various weather conditions.



The container is of increased strength, with dimensions of 20 or 40 feet, and can be easily transported. It meets the requirements for loading and unloading operations and ground transportation.



Increased tightness provides a high level of protection against moisture



The non-slip floor is made of special sheet steel.



The generator set is characterized by low noise levels, as it is equipped with a soundproof modular panel inside.



A fuel tank is installed inside the container, supplying fuel for the unit to operate at full load for 6 hours. Upon request, an additional fuel capacity can be installed.



The internal wiring block is equipped with an aluminum alloy slot for cable



The integrated control system makes the operation of the unit simple, and the connection convenient.



Firefighting equipment meets safety standards.







### **FINAL THOUGHTS:**

Our main priority is high reliability, functionality, cost-effectiveness, and ease of use for each product. Qualified personnel, top-quality components, in-house engineering, professional service, and honest warranty.

WE DO NOT SKIMP ON OUR CUSTOMERS!



# **CUSTOM SOLUTIONS**

Are you not satisfied with standard equipment from leading global manufacturers? Welcome to "DieselEnergoResource". We have no unsolvable tasks!

Our extensive experience in implementing complex energy projects and our own engineering developments allow us to offer customers truly well-thought-out technical solutions.

In addition to standard serial models of diesel generator sets, we can offer customers optimal individual design solutions.



# OPTIONS FOR IMPLEMENTATION



