Your clean and quiet source of energy
ZenergiZe range, Energy Storage Systems
Your clean and quiet source of energy

The new ZenergiZe range from Atlas Copco takes modular energy storage to a new level. Developed with sustainability in mind, it helps operators dramatically reduce their fuel consumption and CO2 emissions, while delivering optimal performance with zero noise and virtually no maintenance. Leveraging the benefits of high-density lithium-ion batteries, the ZenergiZe units are compact and light compared to traditional alternatives, yet capable of providing over 12 hours of power with a single charge.

They are ideally suited for noise-sensitive environments, such as event or metropolitan construction sites, telecoms, or rental applications, or to resolve low load problems.

Data may change depending on models
ZenergiZe
Clean and quiet energy, optimal performance
The solution to meet your needs

The ZenergiZe range perfectly fits with applications that require a continuous and demanding flow of electrical power energy. It is ideal for properly size cranes and other electric motors, for events celebrated in noise-sensitive locations and for other stationary applications such as hospitals or recharging points for electrical cars.

Also, the ZenergiZe can be synchronized with other Energy Storage Systems, which allows the machine to become the storage of all the energy sources connected to a microgrid.
Our Energy Storage Systems can be used combined with generators or renewables, to make a hybrid power solution for construction sites, as well as to create microgrids, to provide energy to several applications, like residential, commercial, industrial or public services.
One solution, multiple options

ISLAND Mode
The island mode enables our Energy Storage Systems to be used as a standalone power solution. It is an ideal way to meet the needs of zero noise environments like night operations, remote telecom applications, or to resolve low load challenges.

QUICK TECHNOLOGY
ZenergiZe models are silent in operation, delivering zero noise emissions, thereby contributing to a safer working environment. They are a perfect choice for noise-sensitive applications, such as events and metropolitan construction sites. Allowing to increase the productivity of the core business up to 50%.

FAST CHARGING
In Island mode, the machines are ready to perform in a very easy way. Connect them directly to the loads and start working. But as they need to be ready at any moment, fast charging is a must, the ZenergiZe can be fully recharged in less than 3 hours.

COMPACT DESIGN
Lithium-ion allows us to reach high power machines in the most compact version, making them easier to transport and up to 70% lighter in weight than other battery technologies. Modularity is a big benefit while talking about transportability.

CLEAN TECHNOLOGY
When used in island mode, the CO2 savings can reach up to 100% if the units are powered by renewable energy sources. You can scale the solution to reach the needed clean energy demand with the smart paralleling system.
HYBRID Mode

In hybrid mode, the ZenergiZe Energy Storage Systems can be used together with any diesel generator to enable smart load management. With the benefit of zero noise emissions, the hybrid solution is ideal for use in a range of demanding applications, for example, any construction site where low loads or peaks can become a problem for the generator.

24 HOURS at a construction site

<table>
<thead>
<tr>
<th>Time (h)</th>
<th>Power (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Max. load</td>
</tr>
<tr>
<td>6</td>
<td>Generator working</td>
</tr>
<tr>
<td>9</td>
<td>Construction site load</td>
</tr>
<tr>
<td>13</td>
<td>Recharging</td>
</tr>
<tr>
<td>15</td>
<td>Energy Storage Systems working</td>
</tr>
</tbody>
</table>

HYBRID SYSTEM

The units are easy to connect to the generator thanks to a wide offer of socket options. Also, paralleling ZenergiZe unit with our smart management controllers will allow you to increase the power offer according to the demand.

VERSATILITY

The ZenergiZe Energy Storage Systems enables versatile smart load management. The units help the generator reach the peaks of power, optimizing its performance, extending its lifespan up to 15%, and decreasing general maintenance and overhaul in overhaul by 50%. This means that a 40% smaller generator can be used. The ZenergiZe range is also ideal for managing low load requirements.

ENVIRONMENTALLY FRIENDLY

In hybrid mode, users can reduce daily fuel consumption by up to 80%, saving more than 200 tons of CO2 during its operating life.

ZenergiZe, potential savings*

- **CO₂**: 200 tons
- **Trees**: 900
- **Cars off the road**: 70
- **Waste**: 100,000 m³

*per unit during its life cycle, working in a hybrid solution
Providing energy for a sustainable, green, and clean future

MICROGRIDS

ZenergiZe becomes a key piece of the microgrid. These are independent power networks that use local, distributed energy resources to provide grid backup or off-grid power to meet local electricity needs.

The Energy Storage Systems will help to benefit as much as possible renewable energy, as they are unpredictable energy sources although the most sustainable.

In combination with generators thanks to the paralleling system of Atlas Copco machines, this will become a total decentralized solution that will support the grid if needed.
ZBC, large range Energy Storage Systems Key benefits

EXCELLENT PERFORMANCE
- Paralleling capability – scalable solution
- Micro grid possibility with genset
- Photovoltaic management
- Temperature control
- Lithium-ion benefits

PLUG AND PLAY
- External connections Input and output for an easier hybridization
- External main control
- Alarms and emergency button access
- Fire extinguisher system

ENVIRONMENTAL FRIENDLY
- Reduce noise pollution, less than 80 dB(A) at 0,5 m
- Zero CO2 and NOx emissions
- Provide clean and efficient renewable solutions

LOWER COST OF OWNERSHIP
- Increase the lifespan of hybrid fleet
- Reduce fuel consumption up to zero
- Low maintenance
- Improvement of hybrid solution maintenance
- Proper sizing means more efficiency
- Increase your productivity avoiding new emission/noise legislations

Optional features
- Paralleling controller
- Customized color
- Connections
ZBP medium range Energy Storage Systems

Key benefits

**LITHIUM-ION TECHNOLOGY**
- 40,000 hour lifespan under normal operating conditions
- Overload capability up to 200%
- Virtually no maintenance
- Perfect match for short cycles (charge and discharge) performance
- Large usable energy range compared to other technologies
- Specifically designed to work at high and low ambient temperatures, from -15º to 50º*
- Low total cost of ownership

**THE ERA OF CONNECTIVITY**
- Smart start and stop
- Energy Management system (EMS) with Battery management communication (BMS)
- Remote monitoring system and Bluetooth mobile application
- Parking mode

**A MODULAR AND PORTABLE SOLUTION**
- Galvanized skid
- Integrated lifting structure with single elevation point
- Doors for maintenance and door restraints
- Sling guides
- Compact size and light weight for easy transport

**PLUG AND PLAY**
- Easy connection for solar panels
- Earth pin
- Emergency stop
- Circuit Breakers and Earth leakage Relay
- Plug and play sockets with any genset and load
- Passthrough limitation 100A

**Optional features**
- Cold weather performance
- GPS + GSM 3G or WIFI
- Customized color
- Trailer
- MPPT Smart Solar Charger
### General technical data

<table>
<thead>
<tr>
<th></th>
<th>ZBP 45</th>
<th>ZBC 100-575</th>
<th>ZBC 150-575</th>
<th>ZBC 250-575</th>
<th>ZBC 500-250</th>
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</thead>
<tbody>
<tr>
<td>Nominal rated power</td>
<td>kVA</td>
<td>45</td>
<td>100</td>
<td>150</td>
<td>250</td>
</tr>
<tr>
<td>Nominal energy storage capacity</td>
<td>kWh</td>
<td>50</td>
<td>576</td>
<td>576</td>
<td>576</td>
</tr>
<tr>
<td>Rated voltage (50Hz)</td>
<td>VAC</td>
<td>400 / 230</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Battery system voltage</td>
<td>VDC</td>
<td>48</td>
<td>768</td>
<td>768</td>
<td>768</td>
</tr>
<tr>
<td>Nominal rated current</td>
<td>A</td>
<td>65</td>
<td>144</td>
<td>217</td>
<td>360</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>°C</td>
<td>-15 to 50</td>
<td>-20 to 60</td>
<td>-20 to 60</td>
<td>-20 to 60</td>
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<tr>
<td>Sound power level</td>
<td>dB(A)</td>
<td>&lt;80</td>
<td>&lt;80</td>
<td>&lt;80</td>
<td>&lt;80</td>
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</table>

### Battery

<p>| | | | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>units</td>
<td>12</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Cell chemistry (3)</td>
<td>LiFePO4</td>
<td>LiFePO4</td>
<td>LiFePO4</td>
<td>LiFePO4</td>
</tr>
<tr>
<td>Nominal battery voltage</td>
<td>Vdc</td>
<td>12,8</td>
<td>76,8</td>
<td>76,8</td>
</tr>
<tr>
<td>Nominal capacity @ 25°C</td>
<td>Ah</td>
<td>330</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>C-rate discharge</td>
<td></td>
<td>1</td>
<td>0,5</td>
<td>0,5</td>
</tr>
<tr>
<td>Max recommended DoD % (depth of discharge)</td>
<td>%</td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Lifetime (% DoD) @ 25°C (4)</td>
<td>Cycles</td>
<td>6000</td>
<td>6000</td>
<td>6000</td>
</tr>
<tr>
<td>SoH (state of health)</td>
<td>%</td>
<td>70</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Battery balanced (recharge up to 100%)</td>
<td>Once per month</td>
<td>Once per 3 months</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Inverter

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>units</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total Peak Power (seconds)</td>
<td>kVA</td>
<td>67,5</td>
<td>110</td>
<td>165</td>
</tr>
<tr>
<td>Max passthrough current (5)</td>
<td>A</td>
<td>100</td>
<td>No limitation</td>
<td></td>
</tr>
<tr>
<td>Build in transformer</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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### Performance

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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Discharge autonomy 100% / 75% nominal power</td>
<td>h</td>
<td>1 / 1,4</td>
<td>5 / 6,6</td>
<td>3,3 / 4,4</td>
</tr>
<tr>
<td>Discharge autonomy 50% / 25% nominal power</td>
<td>h</td>
<td>2,1 / 4,7</td>
<td>10 / 20</td>
<td>6,6 / 13,3</td>
</tr>
<tr>
<td>Recharging time (@DoD%)</td>
<td>h</td>
<td>1,8</td>
<td>5,5</td>
<td>3,7</td>
</tr>
<tr>
<td>Hybrid recommendation (generator size)</td>
<td>kVA</td>
<td>60-120</td>
<td>&gt;20</td>
<td>&gt;30</td>
</tr>
<tr>
<td>Cooling system</td>
<td>Air cooled</td>
<td>HVAC</td>
<td>HVAC</td>
<td>HVAC</td>
</tr>
<tr>
<td>Fire extinguisher system included</td>
<td>N/A</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>CE compliant</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Dimensions and weight

<p>| | | | | | |</p>
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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Dimensions (L x W x H)</td>
<td>mm</td>
<td>1300 x 1160 x 1900</td>
<td>2991 x 2438 x 2896</td>
<td>2991 x 2438 x 2896</td>
<td>2991 x 2438 x 2896</td>
</tr>
<tr>
<td>Weight</td>
<td>kg</td>
<td>1325</td>
<td>11000</td>
<td>11000</td>
<td>11000</td>
</tr>
</tbody>
</table>

(1) Switchable 50/60Hz, Voltage range 380-415V (check with technical support) | (2) Cold weather option advisable | (3) Lithium iron phosphate | (4) Check technical documentation for years-lifespan | (5) Paralleling capabilities available (check with technical support) | Standards: UN, CE, IEC, IEEE (check with technical support) || Atlas Copco is not responsible for any problem that may occur due to errors or changes of these data. They can also be changed or rectify without prior notification

### Socket options

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td><strong>IN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEE 400V 5P 125A</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>POWER LOCKS</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>CEE 400V 5P 63A</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CEE 400V 5P 32A</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CEE 230V 3P 16A</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>OUT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEE 400V 5P 125A</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>CEE 400V 5P 63A</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>CEE 400V 5P 32A</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>POWER LOCKS</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>CEE 230V 3P 16A</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>*230V 3P 16A</td>
<td>2</td>
<td>2</td>
<td>-</td>
</tr>
</tbody>
</table>

*CEE, RIM and PIM available

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**OP1 for ZBP45**

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**OP2 for ZBP45**
Product portfolio

**GENERATORS**

- **PORTABLE**
  - 1.6–12 kVA

- **SPECIALIZED**
  - 9–660* kVA

- **VERSATILE**
  - 9–1250* kVA

- **LARGE POWER**
  - 800–1450 kVA

*Multiple configurations available to produce power for any size application

**DEWATERING PUMPS**

- **ELECTRIC SUBMERSIBLE**
  - 250–16,200 l/min

- **SURFACE PUMPS**
  - 833–23,300 l/min

- **ZENERGIZE**
  - 45–500* kVA

Diesel and electric options available

**ENERGY STORAGE SYSTEMS**

**LIGHT TOWERS**

- **DIESEL**

- **BATTERY**

- **ELECTRIC**

**ONLINE SOLUTIONS**

- **SHOP ONLINE PARTS ONLINE**
  - Spare parts for power equipment. We handle your orders 24 hours a day.

- **POWER CONNECT**
  - Scan the QR code on your machine, and go to the QR Connect Portal to find all the information about your machine.

- **LIGHT THE POWER: YOUR SIZING TOOL**
  - A useful calculator to help you choose the best solution for your power and light needs.

- **PUMP SIZING CALCULATOR**
  - With a few inputs, this pump sizing calculator will help you to compare dewatering submersible models and find the right one for you.

- **VISIT THE POWER ISLAND**
  - Live a 360° experience to discover a selection of products and solutions that we offer, in an almost real environment.

Atlas Copco Power Technique
www.atlascopco.com