Your clean and quiet source of energy

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Atlas Cope

Zenergi**Z**e

ZenergiZe range, Energy Storage Systems

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Your clean and quiet source of energy

ZERO NOISE EMISSIONS FUEL CONSUMPTION

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 lithiumion 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

Atlas Copco

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 to properly size cranes and other electric motors, for events celebrated in noisesensitive 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.











RECHARGING POINTS



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.

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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.



QUIET 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%**.

₹⁴ 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

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.

B 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.

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.

ZenergiZe, potential savings*



*per unit during its life cycle, working in a hybrid solution

www.atlascopco.com/ZenergiZe

Providing energy for a sustainable, green, and clean future

MICROGRIDS

ZenergiZe becomes a key piece of the microgrid. These are independent power network that uses 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

- 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

ZERO

ENVIRONMENTAL FRIENDLY

than 80 dB(A) at 0,5 m

• Reduce noise pollution, less

• Zero CO2 and NOx emissions

Provide clean and efficient renewable solutions

UEL AND

• Paralleling controller

Customized color

NCREASE

ZBP-ZBE, medium range **Energy Storage Systems Key benefits**

40.000 hour lifespan under normal operating conditions

• Perfect match for short cycles (charge and discharge)

Specifically designed to work at high and low ambient

• Large usable energy range compared to other technologies

LITHIUM-ION TECHNOLOGY

• Virtually no maintenance

performance

HIGH CAPACITY LITHIUM ION BATTERY

*Check options

• Overload capability up to 200%

temperatures, from -15° to 50°*

• Low total cost of ownership



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





- 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

Optional features

- Cold weather performance
- GPS + GSM 3G or WIFI
- Customized color

PLUG AND PLAY

• Emergency stop

• Earth pin

load

• Easy connection for solar panels

• Passthrough limitation 100A

Circuit Breakers and Earth leakage Relay

• Plug and play sockets with any genset and

- MPPT Smart Solar Charger
- Trailer

www.atlascopco.com/ZenergiZe





General technical data		ZBP 45	ZBE 45	ZBC 100-500	ZBC 150-500	ZBC 250-500	ZBC 500-250
Nominal rated power	kW / kVA	36 / 45	12 / 15	100 / 100	150 / 150	250 / 250	500 / 500
Nominal energy storage capacity	kWh	46	46	537	537	537	250
Rated voltage (50Hz)*	VAC	400 / 230	400 / 230	400 / 230	400 / 230	400 / 230	400 / 230
Battery system voltage	VDC	48	48	716,8	716,8	716,8	768
Nominal rated current	A	65	22	144	216	360	720
Operating temperature ¹	°C	-15 to 50	-15 to 50	-20 to 60	-20 to 60	-20 to 60	-20 to 60
Sound power level	dB(A)	<70	<70	<70	<70	<70	<70
Battery							
Quantity	units	12	12	42	42	42	30
Cell chemistry		Lithium iron phosphate LiFePO4					
Nominal Voltage	Vdc	12,8	12,8	51,2	51,2	51,2	51,2
Nominal capacity @ 25°C	Ah	300	300	250	250	250	160
DoD % (depth of discharge)	%	90	90	90	90	90	90
Energy density	Wh / kg	75	75	136	136	136	111
Overcurrent capability		up to 2 x nominal current	up to 2 x nominal current	up to 1,25 x nominal current	up to 1,25 x nominal current	up to 1,25 x nominal current	up to 1,25 x nominal current
Lifetime (70% DoD) ²	Cycles	3000	3000	6000	6000	6000	6000
Inverter							
Quantity	units	3	3	2	3	5	8
Total Peak power	kW	75	30	110	165	275	550
Charger voltage	Vdc	57,6	57,6	716,8	716,8	716,8	768
Total charger capacity	А	600	210	47	70	116	320
Max passthrough current	А	100	100	NA	NA	NA	NA
Performance ³							
Discharge autonomy 100% / 75% nominal power	h	1 / 1,4	3 / 4,1	5 / 6,6	3,3 / 4,4	2 / 2,6	0,4 / 0,6
Discharge autonomy 50% / 25% nominal power	h	2,1 / 4,7	6,2 / 13,1	10 / 20	6,6 / 13,3	4 / 8	0,9 / 1,8
Recharging time / Parking mode recharging (@DoD%)	h	1,8 / 18,3	4,4 / -	NA	NA	NA	NA
Recommended generator size	kVA	60-120	15-45	>20	>30	>50	>50
Max outlet hybrid system	А	165	122	Paralleling capability	Paralleling capability	Paralleling capability	Paralleling capability
Dimensions and weight							
Dimensions (L x W x H)	mm	1300 x 1160 x 1900	1300 x 1160 x 1900	2991 x 2438 x 2896			
Weight	ka	1325	1230	9460	9650	9900	8000

¹ Cold weather option advisable | ² Capacity above 80% of nominal | ³ Considering PF=1 & Useable energy 90% (DOD), Generator stop criteria: loads below 30% of its nominal power * For 60Hz, other voltages and other power/energy capacity please contact Atlas Copco support

Socket options

		ZBP45		ZBE45		
		OP1	OP2	OP3	OP1	OP2
IN	CEE 400V 5P 125A	1	-	1	1	-
	POWER LOCKS	-	1	-	-	-
	CEE 400V 5P 63A	-	-	-	1	-
	CEE 400V 5P 32A	-	-	-	-	1
	CEE 230V 3P 16A	1	1	1	1	1
Ουτ	CEE 400V 5P 125A	1	-	1	1	-
	CEE 400V 5P 63A	1	1	1	1	1
	CEE 400V 5P 32A	1	1	-	1	1
	POWER LOCKS	-	1	-	-	-
	CEE 230V 3P 63A	-	-	3	-	-
	*230V 3P 16A	2	2	-	2	2





*CEE, RIM and PIM available

Product portfolio

