

## Technical specifications

# ZBP2000

Voltage: 230 V

Frequency: 50HZ



*Energy storage Container Image for illustration purposes only*

## General description

Based in lithium ion batteries, this portable product is ready to supply power in the most demanding situation, working in island mode, has the capability to work parallel up to 5 units together. A greener solution for a more efficient outdoor performance (IP65) as small metropolitan construction areas, small events or camping applications.

### TECHNICAL INFORMATION

|                                   |       |                                |
|-----------------------------------|-------|--------------------------------|
| Rated power                       | kVA   | 2                              |
| Rated energy storage capacity     | kWh   | 2,16                           |
| Net energy storage capacity*      | kWh   | 2                              |
| Rated voltage (50Hz)              | VAC   | 230                            |
| Battery rated voltage             | VDC   | 48                             |
| Rated current discharge           | A     | 9                              |
| Recharge time 100% rated power    | h     | 3                              |
| Depth of discharge (DoD%)         | %     | 90                             |
| Total energy through output up to | MWh   | 4                              |
| End of Life (EoL%)                | %     | 80%                            |
| Battery type                      |       | Lithium Iron phosphate LiFePO4 |
| Operating temperature**           | °C    | -10 to 50                      |
| Dimensions (L x W x H)            | mm    | 570 x 367 x 478                |
| Weight                            | kg    | 37                             |
| Sound pressure level (7 meter)    | dB(A) | <70                            |

The standard reference conditions are: 25 °C, 100 kPa and 30% relative humidity. For nominal values efficiencies, deratings and DoD are not considered and tested parameter related to PF=1. \*Due to use this may decrease

\*\*Options for Cold weather (heaters) might be needed. Atlas Copco will keep the rights to change any date when necessary due to any reason.

EN-IEC 61000, EN-IEC 60335, EN-IEC 60335, EN-IEC 62109, EN 55014, UL1741, IEEE1547, UL1741, UL9540, NEMA250, ADR class 9, UN 3536, CE, NEN3140, NEN3840, ISO9001, ISO14001, Low Voltage Directive 2014/35/EU, EMC directive 2014/30/EU

## Batteries

Lithium-iron-phosphate (LiFePO<sub>4</sub> or LFP) is the safest of its family. Also does not need to be fully charged to perform correctly. Service life even slightly improves in case of partial charge instead of a full charge. This is a major advantage, in addition, its wide operating temperature range, excellent cycling performance, low internal resistance and high efficiency.

LFP is therefore the chemistry of choice for very demanding applications

|                      |      |                                     |  |
|----------------------|------|-------------------------------------|--|
| Quantity             | 1    | C-rate discharge                    | 1 C  |
| Rated voltage (VDC)  | 48   | Weight (kg)                         | 37   |
| Rated capacity* (Ah) | 45   | Expected cycle life (@DoD,EOL,25°C) | 2000   |
| Rated capacity* (Wh) | 2160 | Standards                           | IEC62619, IEC63056, CE, UN38.3, UL1973, UKCA |

\*@25°C

## Inverter

Power electronics that combines inverter and charger. It is needed to transform the energy supply from batteries (DC) to the loads (AC) with or without additional sources as diesel generators or grid.

|                              |    |                          |        |
|------------------------------|----|--------------------------|--------|
| Quantity                     | 1  | Peak efficiency %        | >90%   |
| Input DC voltage range (VDC) | 48 | Peak power %             | 130%   |
| Rated apparent power (kVA)   | 2  | Maximum power time (min) | 1      |
| Rated active power (kW)      | 2  | Power factor             | -1...1 |

Nominal values for standard conditions and performance

## Controller and performance

ECO Energy controller optimizer, provides intuitive control and monitoring for all batteries and power electronics integrated in the battery pack. A highly customizable start/stop system. Use state of charge, voltage, load and other parameters. Define a special set of rules for quiet times, and optionally a monthly test run.

|  |                        |                            |               |
|--|------------------------|----------------------------|---------------|
| Discharge autonomy 100% / 75% rate power (h) | 0,9 / 1,3              | Generator size recommended | 3,5 kVA       |
| Discharge autonomy 50% / 25% rated power (h) | 2 / 4                  | Derating Temperature       | > 30 °C       |
| Maximum auxiliary consumption (kW)           | 0,03                   | Heating & Cooling          | Air cooled    |
| Maximum passthrough current (A)*             | parallel up to 5 units | Monitoring & GPS           | Bluetooth App |

\* Option

Nominal values for standard conditions and performance

