

zeroCO₂ - XL Shell 100

Solution

zeroCO₂ - XL SHELL 100 is a plug & play system for managing, converting and exploiting energy in systems with high power requirements.

The size of the storage allows deferred use of all the accumulated energy for several hours.

Integrated EMS to maximize self-consumption and allow peak shaving.

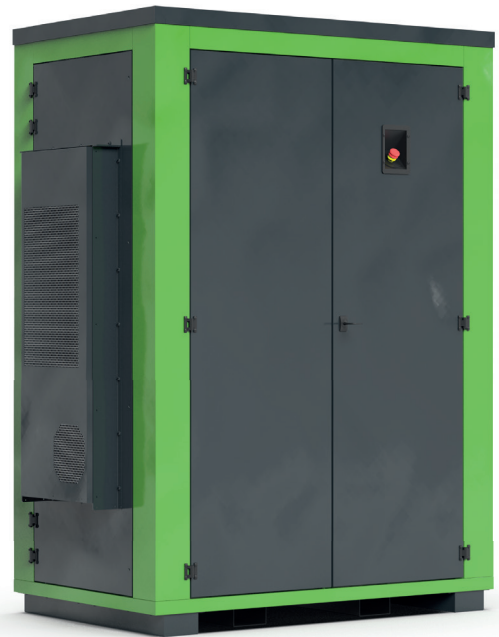
- 30 or 60kW compact design for outdoor installation up to 127 kWh;
- All in one LFP Pylontech H32148C batteries;
- Triple section bearing structure in polyester powder coated galvanized sheet;
- Degree of protection IP55;
- HVAC system to maintain optimum operating temperatures and promote design life.
- DC and AC circuit breakers and magnetic switch included;
- Batteries installed and factory pre-wired electrical panel up to the user side interfaces;
- AC 400V 3Ph +N + PE type power supply for On-Grid systems;
- Suitable for Ex Novo or Retrofit systems;
- Management of diversified, renewable or non-renewable sources (such as generators);

Dimensions:

Width:: 1610 mm

Height: 2305 mm

Depht: 1010 mm



zeroCO₂ - XL Shell 100



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| zeroCO ₂ - XL SHELL 100 | | 30K | 60K |
|--|--|--------------------|-----|
| Dimensions [WxHxD, mm] | 1610x2305x1010 | | |
| Weight [kg] | 2400 | | |
| Sound power [dB] | <79 | | |
| Sound pressure [dB(A)] | <65 (*) | | |
| PCS technology | Trasformerless | | |
| AC PARAMETERS | | | |
| Rated / apparent power [kW/kVA] | 30 / 33 | 60 / 66 | |
| AC input type | 5 wire (3Ph + N + PE) | | |
| Number and maximum connection cable section per phase [mmq] | 1 x 10/35 (L1, L2, L3, N, PE) screw connection | | |
| Voltage range [V] | 400 (±10%) | | |
| Rated / max electric current [A] | ±43 / ±56 | ±89 / ±100 | |
| Frequency [Hz] | 50/60 | | |
| Power factor | 0,8 ~ 1 (Leading / Lagging) | | |
| Current DC component [%] | ≤ 0,5 | | |
| Harmonic content THDi [%] | ≤ 3 | | |
| AC and DC start function | yes | | |
| Current switching time [ms] | ≤ 10 | | |
| Conversion efficiency [%] | ≥ 97 | | |
| Standby power consumption [W] | <1000 | | |
| Permissible short-circuit current of short duration [kA] | 6 (1") | | |
| DC PARAMETERS | | | |
| Rated power [kW] | 30 | 60 | |
| Rated/Max electric current [A] | ±72 / ±90 | ±72 / ±88 | |
| Voltage and current measurement accuracy [%] | ±1 | | |
| Current / Voltage limiting characteristic | yes | | |
| ENERGY STORAGE | | | |
| Battery module | H32148-C | | |
| Controller BMS | SC1000-200J-C | | |
| Battery module quantity [N] | 13 ~ 21 (one battery stack) 26 (two battery stacks) (**) | 23 ~ 27 | |
| Efficiency [%] | 95 | | |
| System rated voltage [V] | 32 x N | | |
| Charge/discharge system voltage range [V] | 27 x N / 36 x N (one battery stack) 351 / 468 (two battery stacks) (**) | 680 / (36 x N) | |
| Rated/usable capacity [kWh] | N x 4.74 ~ N x 4.27 | | |
| Depth of discharge DOD [%] | 90% (8 - 98% SOC) | | |
| AMBIENT CONDITIONS | | | |
| Working temperature range [°C] | 0 ~ 50 (derating above 45°C) | | |
| Working humidity range [RH%] | <95 (without condensation) | | |
| Storage temperature range [°C] | -20 ~ +60 | | |
| Storage humidity range [RH%] | 0 ~ 95 (without condensation) | | |
| PCS cooling | Forced convection (fan with smart regulation to reduce consumption and noise) | | |
| System cooling | Air cooled monoblock unit | | |
| Altitude | <3000 | | |
| COMMUNICATION | | | |
| Communication interfaces | RS485, LAN, WAN,CAN, ModBus RTU, TCP/IP | | |
| SAFETY | | | |
| Degree protection | IP55 | | |
| EMC features | 2014/35/CE LV Directive - 2014/30/CE Electromagnetic compatibility | | |
| MTBF [h] | 100000 | | |
| Compliance with connection standards | CEI 0-21, VDE 4105, EN 50549, G99, OVE R25:2020 | CEI 0-21, CEI 0-16 | |
| Electrical safety | EN 62109, EN 62477 | | |
| Warranty [years] | 2 | | |
| Design Life [years] | 15+ | | |
| LFP Batteries transport certificate | UN38.3 / ADR | | |
| (*) Sound pressure level referred to a 2m distance from the device and air conditioning unit running at full speed | | | |
| (**) To maximize system capabilities, two battery stacks can be configured within the same chassis | | | |

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| ACCESSORIES | Order Code |
|--|------------|
| Battery module H32148-C | 90040280 |
| Fire alarm system | 90900754 |
| Eastron three-phase meter kit with external CT 200A/5A | 90900315 |
| Eastron three-phase meter kit without CT | 90900305 |

Energy S.p.A.

Registered office:

Piazza Manifattura, 1

38068, Rovereto TN

Tel. +39 0464 350812 - Fax +39 0464 350512



www.energysynt.com
www.bandoaccumulo.com

Energy S.p.A.

Operations/Warehouse:

Via Zona Industriale, 10

35020, Sant'Angelo di Piove di Sacco (PD)

info@energysynt.com

Tel. +39 049 2701296 - Fax +39 049 8599098