

EcoFlex eHouse

Product overview



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EcoFlex

The EcoFlex eHouse is designed to accommodate a range of applications from the most common industry segments. Robust in design and construction utilizing design concepts proven in the harshest of environmental conditions, the EcoFlex eHouse is ideal for remote locations, harsh environments, temporary or permanent power installations and applications requiring fast supply and installation.

The EcoFlex eHouse is designed to be easily and economically transported via traditional methods. Also, due to its modularity, it is easily installed at site as pre-tested complete modules.

Typical segment applications

- Renewable – wind and solar
- Mining
- EV charging
- Temporary power
- Oil and gas
- Utility
- Data centers
- Infrastructure

Features

- Pre-engineered, modular configurations
- Configurable, by joining multiple pre-designed modules
- Robust construction providing equipment protection
- Fully assembled and routine tested in the factory



Economical eHouse solutions, reducing lead time, transport costs and most importantly, the cost and risk of site works



Risk mitigation via standardization of designs, proven technology, robust construction and required site works



Modular concept with pre-engineered designs to be combined to meet project requirements

- Compact design and configured for ease of transportation
- Minimized site work requirements
- Reliable – proven components from a single source
- Secure via lockable doors
- Configurations with:
 - Medium voltage air-insulated switchgear (AIS)
 - Medium voltage gas-insulated switchgear (GIS)
 - Oil-filled transformers
 - Dry-type transformers
 - LV switchgear
 - UPS
 - Battery racks
 - Station transformer
 - Remote terminal unit
- Natural ventilation, forced air cooling or ACU

Housing

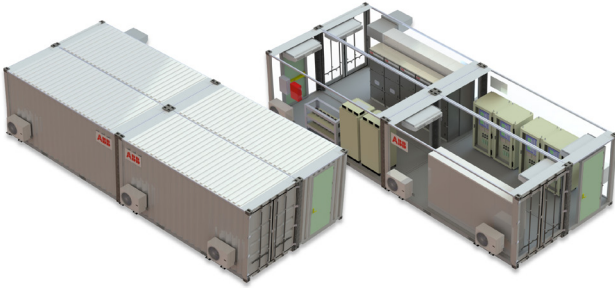
EcoFlex, in accordance with ISO/1161, is provided with corner fittings for lifting and transport. Enclosure standard dimensions are according to ISO 1496-1. EcoFlex is constructed with steel frames, full vertical corrugated steel side and end walls, steel flooring, die-stamped corrugated steel roof and corrugated double hinged doors. All the steelwork is constructed by semi-automatic and automatic MIG arc welding. All exterior welding seams, including that on the base structure, are continuous to give perfect water-tightness.



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02



03



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01 Typical layout for EcoFlex one module solution

02 Example layout for EcoFlex two module solutions, can also be joined on long wall

03 Typical layout for EcoFlex four module solution

04 Typical layout for EcoFlex temp. power solution

General technical data

Maximum voltage rating, kV	Up to 40.5 kV
Ambient temperature range, °C	-25 to +40 °C
Relative humidity, non-condensing	95%
Max altitude above sea level without derating	Dependent upon switchgear
Corrosion class (ISO 12944)	C5M
IP rating, MV compartment/transformer	IP54/IP23 or IP43
Standard dimensions (mm)	6058 x 2438 x 2896

Typical configurations - module design

- 1 module design: Medium voltage (MV) AIS or GIS, transformer, LV switchgear, or combination of these items together
- 2 module design: MV switchgear AIS or GIS and auxiliary equipment (battery rack, charger, RTU, UPS)
- 3 module design: MV switchgear AIS or GIS, LV switchgear, auxiliary equipment (battery rack, charger, RTU, UPS)
- 4 module design: MV switchgear AIS or GIS, LV switchgear, auxiliary equipment

Example single line diagrams/layouts

