

Distributed Energy Storage Module

EcoFlex eHouse to support EV charging with battery energy storage



Improved safety with type tested equipment and easy to install and operate



Easy to ship, load and offload



Maximize ROI with pre-engineered and factory tested solutions



Modular concept to allow ease of capability in power and capacity

EcoFlex ESM with for EV charging support

The ABB EcoFlex Energy Storage Module (ESM) for electric vehicle charging support provides a buffer of power and energy where sufficient power is not available from the grid.

EcoFlex ESM eHouse is a prefabricated and movable, plug-and-play solution allowing for immediate operation after connection to the LV grid. The ease of installation of this pre-wired solution drastically reduces the site activities in terms of manhours, excavation and civil works activities.

Solution can be easily connected to other ABB EcoFlex products. Robust and modular design allows stacking different EcoFlex solutions on each other in limited site conditions.

Solution features

- ISO dimensions for ease of transportation
- Compact design to reduce footprint installation
- Plug-and-play solution
- Pre-tested at factory
- Relocatable
- Robust design

Equipment description

The EcoFlex ESM houses the inverter, batteries, battery management system, protection equipment, internal power and control cabling.

ESM also contains the heating, ventilation and air condition system (HVAC) and fire suppression system which are designed to ensure safe operation and optimal environment for the installed components to maximize the **lifetime** of the system.

Technical data

Key specifications

Typical ratings	up to 500 kVA
Connection voltage	400-480 V
Storage power	Up to 500 kW
Storage capacity	Up to 500 kWh
Transformer type	Oil or dry
Protection degree	IP 54 IP 23D (for transformer compartment)
Dimensions	6060 x 2440 x 2900 mm

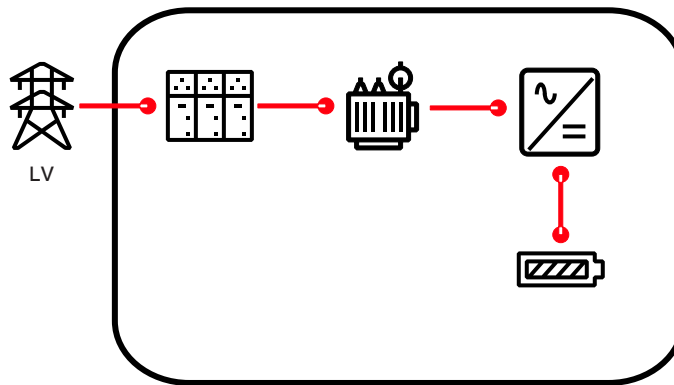
Additional equipment

- Energy management system
- Remote monitoring
- Remote monitoring and control
- SCADA ready
- HVAC
- Fire extinguishing system
- Seismic certifications

Installation

- One-piece delivery factory assembled and tested
- LV connection needed at site
- Reduced site works
- Compact design for reduced footprint
- Top lifting by crane
- Bottom lifting by forklift for ease relocation
- Standard lifting devices to be used
- Plug-and-play concept

Single line diagram



Energy storage module EcoFlex solution for EV charging support

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