

Energy Module



Power Generation
and
Air Conditioning
in One Unit

The Energy Module

Due to the conditions in the field, mobile solutions must ensure a diverse and flexible operation under various climatic requirements, while taking energy efficiency into account. The Energy Module (EM) of the steep GmbH adapts to these special conditions. Because of its modular design, the system can be tailored specifically to the customer's needs and requirements.

Specifications

- Dimensions W x H x D (in mm)
approx. 1910 x 2011 x 900
- Performance SEA 28 kW
- Air-Conditioning from 5.5 kW to 15.5 kW
(continuous adjustment by frequency-controlled operation)
- Heating 9,0 kW (block heater) + 6,0 kW (electrical)
- Weight Energy Module complete 1.850 kg

Setup

In its basic configuration, the Energy Module consists of a power generating unit, an air-conditioning module and a heating unit.

Via a water chiller, the system is connected to the respective infrastructure by means of heat exchangers. Hence, it can be used both for cooling (e.g. IT technology) and for simultaneous heating (e.g. work stations). This way, dehumidification of the infrastructure can be achieved, as well.

In standby-mode, the power generating unit serves as a power distributor. In case of power failure, it can either be used as emergency power supply for the infrastructure, or as power supply for the heating- and air-conditioning units.

Modularity

Due to its modularity, the Energy Module offers the possibility to use all modules individually. In case of an increased demand for air-conditioning or heat, two air-conditioning or heating units can also be cascaded so that a power output of up to 30 kW is possible.

In the event of power failure, the generator unit can be used in continuous operation (oil change intervals are at 1000h) or with automatic start as an emergency power supply.

At a performance of 28 kW, up to 16 kW are available for the end user, aside from the supply of the air-conditioning and heating units.

Features and Possibilities

- The Energy Module is based on a water chiller.
- The connections are implemented with non-drip, quick-lock couplings.
- The Energy Module can be placed separately, attached to a container with a clip-on frame or placed in the installations room of the container.
- The Energy Module was developed with an air-conditioning capacity of 15.5 kW and a heating capacity of 9 kW (solid-fuel heating) + 6 kW (electrical heating).
- Additional heating or air-conditioning units can be added (cascaded) due to the modular construction.
- Similarly, two Energy Modules can be linked in power supply.
- Air-conditioning and heating is possible simultaneously.





www.steep.de

Stefan Ohlmann

Tel.: +49 228 6681 - 367

Mob.: +49 1761 6681 - 501

Fax: +49 228 6681 - 774

E-mail: stefan.ohlmann@steep.de

Justus-von-Liebig-Strasse 18
53121 Bonn, Germany