

## hybrid emergency power system 400



### How the hybrid emergency power system (HEPS) works

The HEPS consists of a diesel engine with generator, a battery storage system, two inverters and a transformer.

The electricity generated by the diesel engine and generator is stored in the battery. When the battery is full, the diesel engine is switched off and the battery power is fed into the grid.

If the production from decentralised feeders in the network supplied by the HEPS exceeds consumption, the battery is charged. The diesel engine only starts up if the battery's state of charge (SoC) falls below a specific value. The HEPS is ideal for use in rural areas with short peak load phases or for use on construction sites.

### Overview

- Box trailer, silenced, four hydraulic supports and height-adjustable drawbar
- L x W x H: 5100 x 2550 x 2800 mm
- Total weight: 7.5 t
- Tandem axle with ABS and EBS

#### Interior divided into four areas:

1st area: energy preparation with diesel generator, EU Stage V diesel engine, 55 kW capacity, liquid cooling with splitter and exhaust silencer, diesel particulate filter

2nd area: supply unit consisting of two fuel tanks and buffer storage battery for uninterrupted operation

3rd area: transformer and power output, central operating unit

4th area: inverter

Easy access for maintenance:

removable roof, each area with large flap openings

## hybrid emergency power system HEPS

### Technical data

- Tandem bogie axle with EU ABS+EBS air brake
- Height-adjustable drawbar
- Four hydraulic adjustable supports
- Silenced Lpa 68 dBA
- 55 kW turbo diesel engine EU Stage V
- Length x width x height: 5100 x 2550 x 2800
- Total weight: 7500 kg
- Consumption: 12.5 l/h

### Power output

- 400 kW during 10 s
- 200 kW during 15 min
- 45+100 kW during 30 min
- 40 kW continuous generator output
- 10 kW during 8 h purely electric operation

### Operating modes

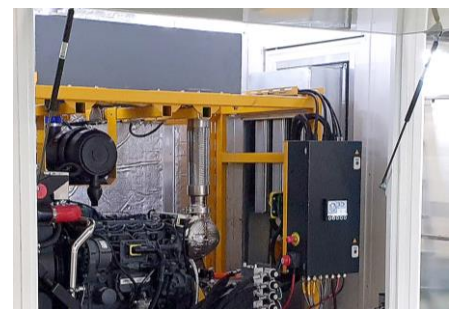
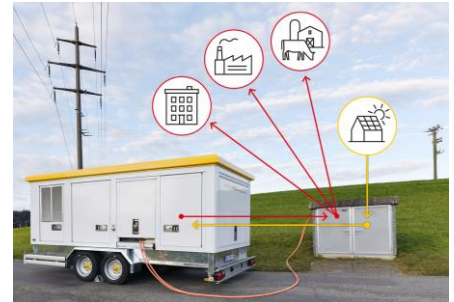
- Mains parallel operation
- Standby operation
- Isolated operation
- Back synchronisation

### Configuration options

- Capacity increase through additional battery
- Remote access to machine control system via GSM
- Site monitoring
- Fleet management

### Advantages for you

- 80% diesel savings
- 80% CO2 reduction
- Power feed-in from photovoltaic and other energy generators possible during operation of the HEPS
- 60% lower operating hours
- Massive reduction in noise pollution during night operation and therefore considerable savings on personnel costs
- High economic efficiency
  - > Payback of additional investment (energy buffering system) after 4.5 years
  - > Payback of entire HEPS after approx. 7 years
  - > Significant net profit after 10 years



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