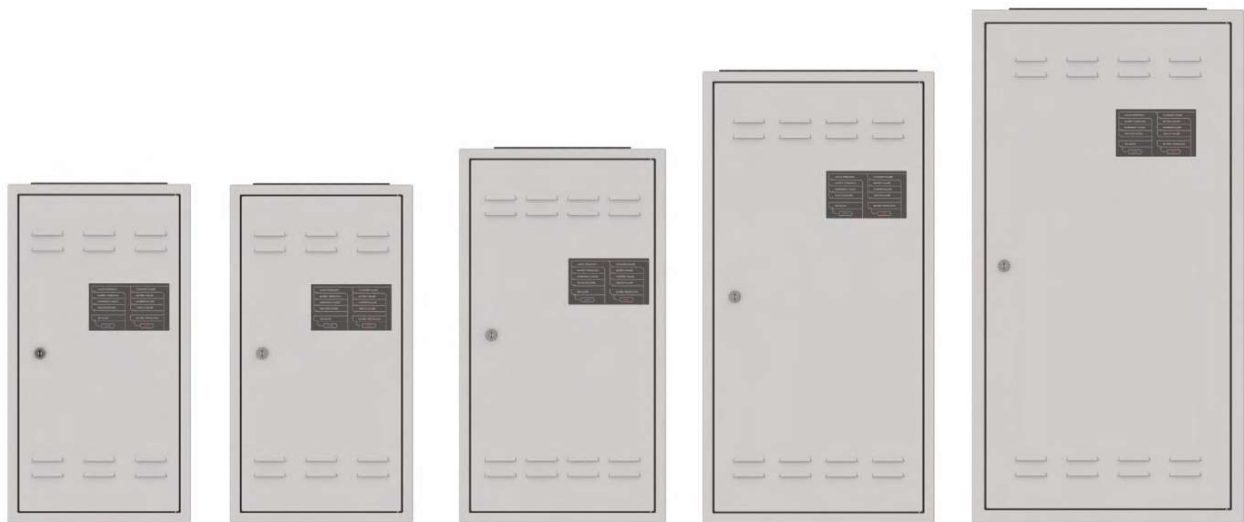


SYSTEMS

CENTRAL BATTERY SYSTEM SPS

The Central Battery System SPS provides emergency power supply when the mains power is lost or its parameters are inappropriate. The main purpose of the system is to supply power to emergency lighting luminaires and assure 100% of the power for at least 1 hour. The lighting which uses LED luminaires, fluorescent luminaires or compact fluorescent luminaires can combine them in the same system. It is possible to connect any type of luminaire and it is not necessary to install any additional internal module. When designing the device, all applicable standards were followed. The device is composed of an inverter which serves to maintain the voltage of 230 VAC ± 3 % 50 Hz on output circuits. The system is equipped with batteries whose capacity is dependent upon load and emergency luminaire supply period.

The batteries are self-operating accumulators with a 10-year operation life. SPS is based on the Offline technology, connected devices are supplied directly from the mains. The supply voltage is regularly monitored and in the event of a loss, the control system (after ca. 150 ms) disconnects the mains power and switches into accumulator mode. The device is secured against extensive load and short circuit. The circuit safety devices are continuously monitored and the damage notification is displayed on the front signaling panel. In spite of the simple structure, SPS has been provided with a set of modern functions. The unit can be configured and operated by means of the built-in www server and SmartVisio app (optional). The use of all-purpose Modbus and BACnet protocols allows integrating system from BMS. A small size of the cabinet allows installing the system in places where large-size central battery systems do not fit.



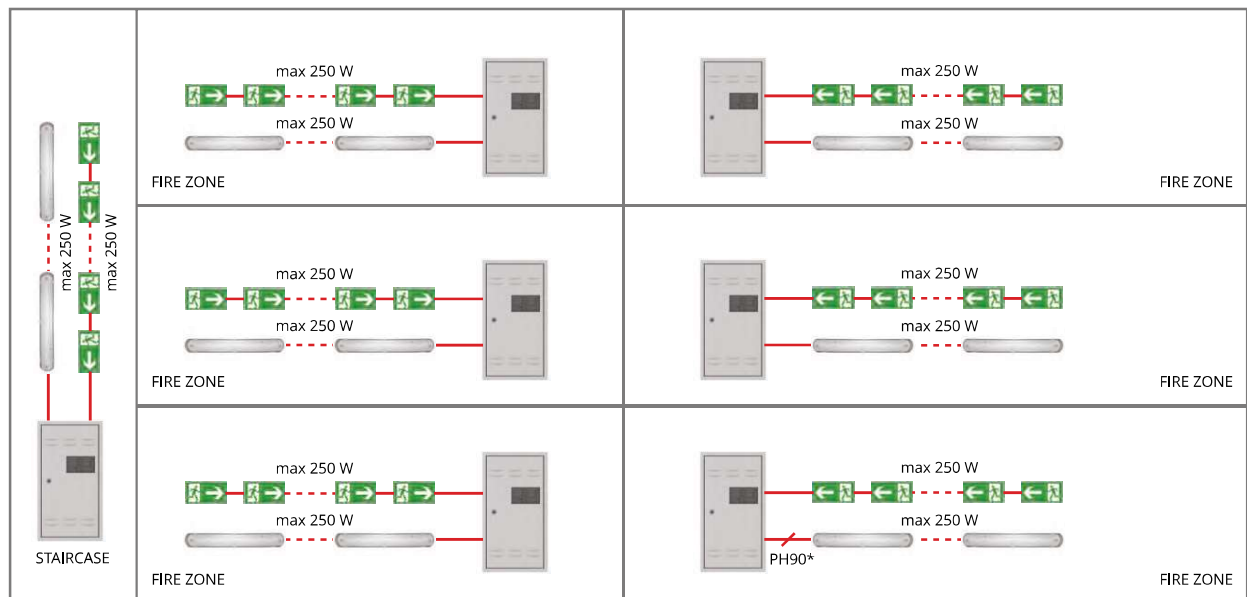
SPS 300

SPS 600

SPS 1000

SPS 1500

SPS 2000



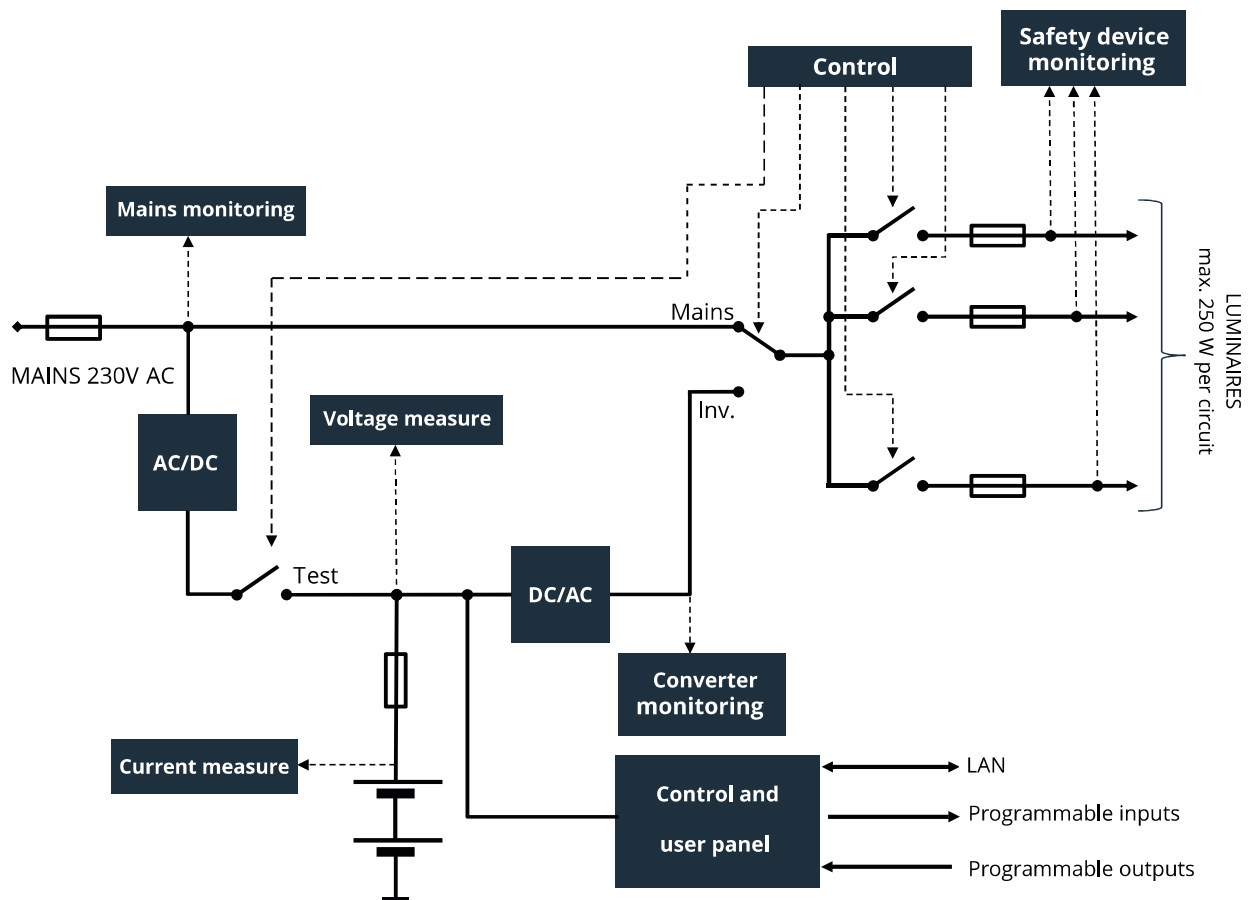
SYSTEMS

OFFLINE TECHNOLOGY - IF NEEDED

The Central Battery System SPS is based on the Offline technology. Thanks to this technology, it is possible to minimize energy losses during mains operation and thus increase durability and reduce operation costs. In practice, it is possible to supply devices connected to SPS directly from the mains. During a normal mains operation, the system control unit and a unit responsible for monitoring accumulator parameters are supplied with power. The supply voltage is monitored on a regular basis and in case of its loss (after about 150ms) the converter starts operating and converts the constant voltage of 24 VDC from accumulators into alternating voltage for output (230 VAC 50 Hz sinus).

Advantages OFFLINE:

- Inconsiderable energy losses during mains power operation
- low working temperature
- increased system component durability
- low operation costs due to low damage rate
- low noise emission during mains operation



The diagram of the emergency supply central system SPS.