Thermally Insulated Substations
Concrete Enclosure
HEJ A
HEJA thermally insulated, concrete substations are designed for use as power distribution points, prefabricated substations as well as for other power distribution applications in the power grid. The housing can, for example, contain medium and low voltage switchgear, an internal power supply, telemetry equipment and a power transformer. This rugged solution provides the grid operator with a high level of operational reliability and safety. Each substation is designed to match application-specific requirements.

**ADVANTAGES**
- prefabricated and tested at the manufacturing location
- accessible and maintainable from the inside
- thermally insulated
- easy to install, use and maintain
- for use in diverse applications

**CONSTRUCTION**
HEJA concrete substations are made of steel-reinforced, concrete elements with exterior surfaces that are finished according to customer wishes (polished, painted, or covered with fine granite gravel, simulated red brick, simulated wood, metal mesh, wooden siding, etc.). The one-piece roof can be removed; this allows for access to the equipment from the top. The walls and roof can be insulated. The exterior doors are made of zinc-coated sheet steel and are insulated with fiber glass. The exterior door hinges, locks and other hardware are made of corrosion-resistant zinc-coated steel. An optional door stopper can be added. The substation has been designed so that it can be installed on a standard base for cabling (35350 x 2100 x 800 mm).

**TRANSPORT AND INSTALLATION**
The enclosure is equipped with loops for lifting and can be moved with the equipment inside. Should the transformer already be installed, please contact the manufacturer for consultation. Each substation comes complete with installation and user manual.

**GENERAL SPECIFICATIONS**
- Ambient temperature: from -25°C to +40°C
- Height above sea level: up to 1,000 m
- Environmental classification: 2
- Ventilation: both active and passive available
- Enclosure protection level: IP23D (higher levels also available)
- Resistance to fire: TP-2

**STANDARD MODULE DIMENSIONS**
- Width: 3.5 m
- Length: 4.4 m (6.5; 8.6; 10.7; 12.8 m, ...)
- Height: according to equipment
- Insulated wall thickness: 100 mm

**EQUIPMENT**
- The following medium voltage switchgear equipment types are typically used: NEX, SM6, RM6, SIMOSEC and 8BT1. Other kinds of equipment are also possible (e.g., metering cabinets, modular ring main units, telemetry-controlled as well as motorized equipment).
- Low voltage equipment with diverse configurations up to a rated current of 4000 A can be used in output feeders with fuses and circuit breakers. Additional options are available such as metering capability, street lighting functionalities and reactive power compensation.
- Transformers up to 2500 kVA, oil insulated or dry, available with all collection bases for environmental protection.

**HEPOSM6 RACK**
Ambient temperature: from -25°C to +40°C
Height above sea level: up to 1,000 m
Environmental classification: 2
Ventilation: both active and passive available
Enclosure protection level: IP23D (higher levels also available)
Resistance to fire: TP-2

As a result of future product development and possible changes in the applied standards, the manufacturer reserves the right to change the product specifications and construction without prior notice. Please contact AS Harju Elekter Elektrotehnika to check the accuracy of the information in this publication.