

TRANSFORMER STATION / CSS

- delivered complete and fully assembled on-site



Safety, Quality, Functionality, and Short Delivery Time

Safety is our top priority – we place great emphasis on both personal safety and operational reliability.

Our technical cabinets comply with standard 62271-202 and meet the strictest electrical safety requirements. They are robust, durable, and a sound investment. The buildings are constructed on strong concrete or steel foundations, depending on the customer's choice. The frame construction ensures optimal rigidity and robustness. The building is clad with side modules that can be adapted to the choice of doors, and the materials used are of the highest quality, ensuring optimal adaptation to the final location.

Design Flexibility and Delivery as Requested

We specialize in customized solutions and accommodate all requirements, adapting the cabinets dimensions, functions, and design to its intended purpose.

Delivered Complete and Fully Assembled On-Site

We always deliver fully assembled and ready-to-use CSS on-site, including transformer, medium-voltage switch gear, and low-voltage distribution panel.

Cabinets for Power Supply and Charging Infrastructure (E-Mobility)

Our cabinets are exceptionally robustly constructed. In addition to high structural strength in both the building and base, the materials have a long lifespan and meet C5 requirements for all exterior surfaces.

All critical components are painted before assembly, ensuring that all important edges are treated and that the assembled materials have an extended lifespan. Additionally, the paint smooths the edges, making them more comfortable to touch – a safety advantage for those working inside the cabinets.



**ALWAYS DELIVERED
COMPLETE AND FULLY
ASSEMBLED ON-SITE**

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Color

The cabinets are available in any desired color. As standard, we recommend three colors: light gray (RAL 7035), gray (RAL 7037), and green (RAL 6014).

The technical cabinets are powder-coated with a special outdoor paint that provides UV protection and is highly resistant to impacts.

Locking System

All doors come with a robust 3-point locking system. The lock housing is durable and designed to be secured with a strong padlock. Other locking methods are also available upon request.

Ventilation

The cabinet is equipped with passive ventilation, which is adapted to the size of the transformer and switch gear. Ventilation is primarily located in the roof structure, along the sides of the roof, under the overhang, and through filters in the doors. The roof construction comes with foam insulation as standard, which, combined with the ventilation system, effectively prevents condensation.

Pad mounted

The concrete base is designed with cutouts at both ends to allow for easy cable connection. Above the base, a heavy-duty cable relief system is installed, which secures cables with cable ties to reduce strain. After installation, the cutouts are neatly sealed with a front plate, ensuring a clean and functional finish.

Rail System

The rail systems comply with EN 61439, parts 1 and 5, and the entire cabinet is EN 62271-200 A/B approved.

Doors and Safety

All doors are marked with a yellow/black warning sign with the text "High Voltage". To enhance personal safety, the installations at both ends of the building are fully shielded to prevent access to the transformer. A safety bar is installed near the door to prevent unintended entry.

**STRONG CONSTRUCTION CAN
WITHSTAND DOORS OPEN AT WIND
SPEEDS UP TO 28 m/s**

**REPLACEMENT OF PARTS IN CASE OF
IMPACT DAMAGE OR VANDALISM**

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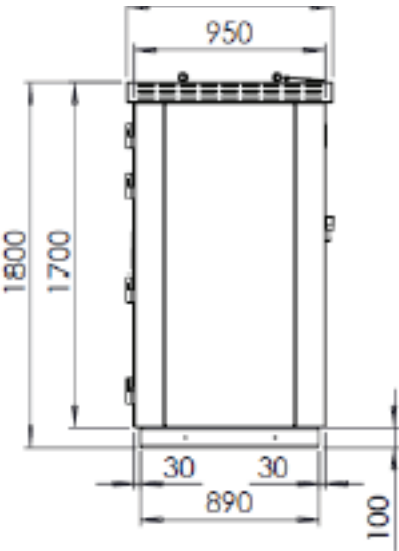
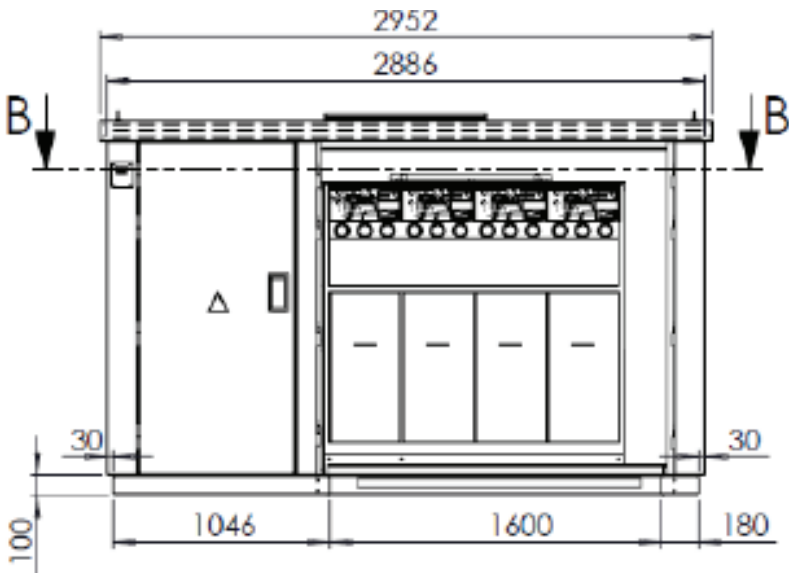
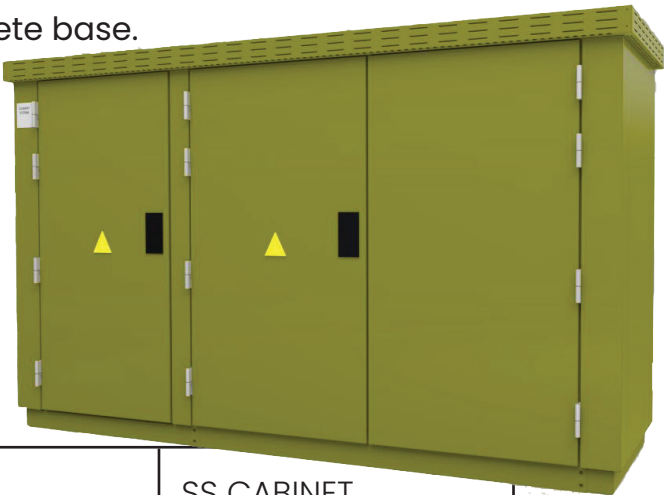
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SS CABINET

Standard or Customized – Always Delivered Complete and Fully Assembled On-Site

SS Cabinet for Medium Voltage Systems

Delivered on a 100 mm concrete base.



Type	SS CABINET
Item number	3000
Description	Pad mounted cabinet
Width	2929
Height	1800
Debth	950

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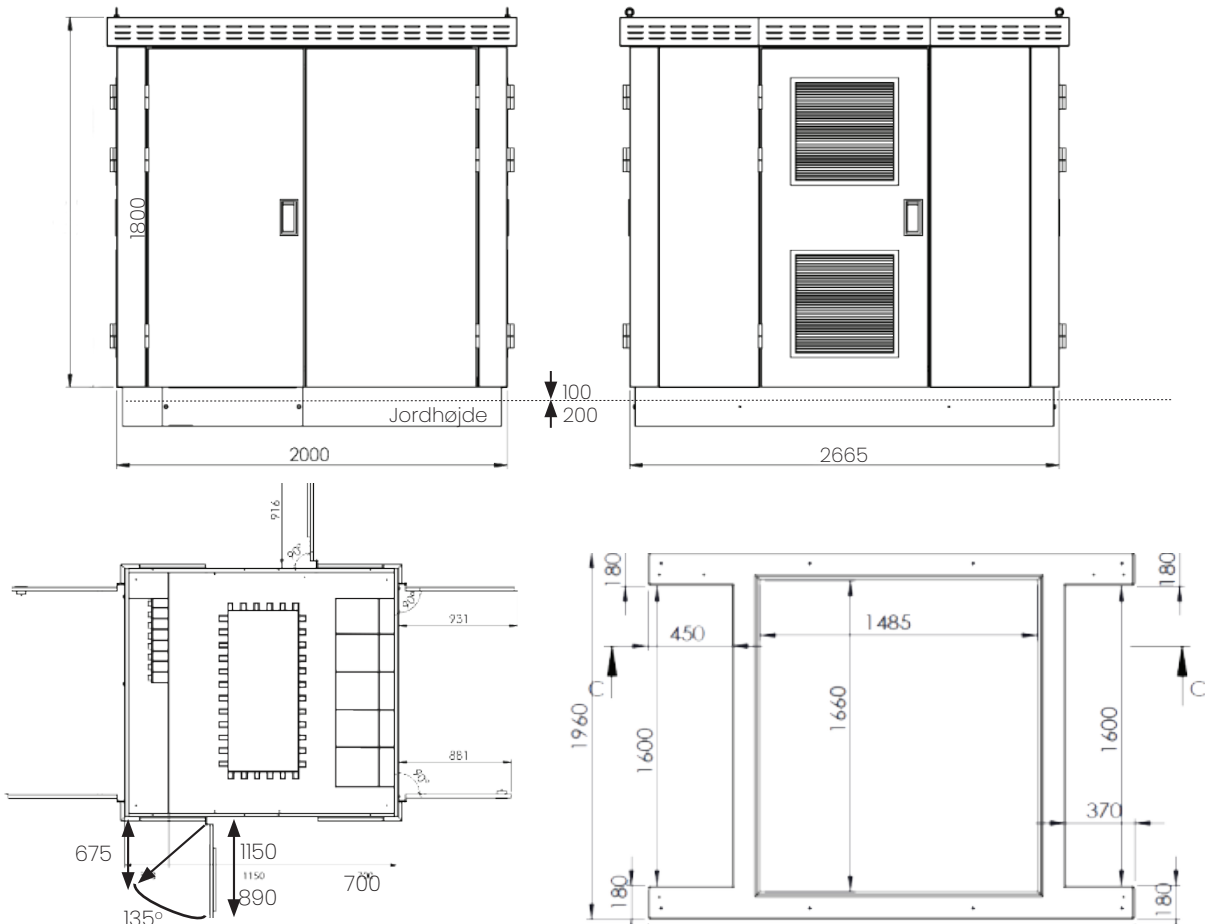
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TRANSFORMER STATION 400kVA



Type	400kVA
Station: (BxHxD)	w:2000 H:1800 D:2665
Oil tray	YES
Switch gear max width	1440
Low-Voltage Distribution Board Total Number of Modules	6M
Type	3001

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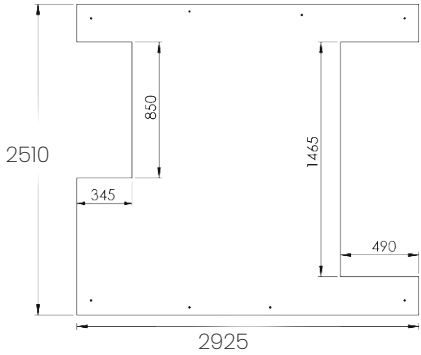
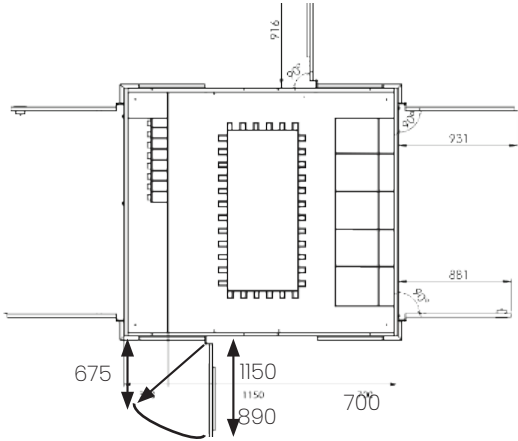
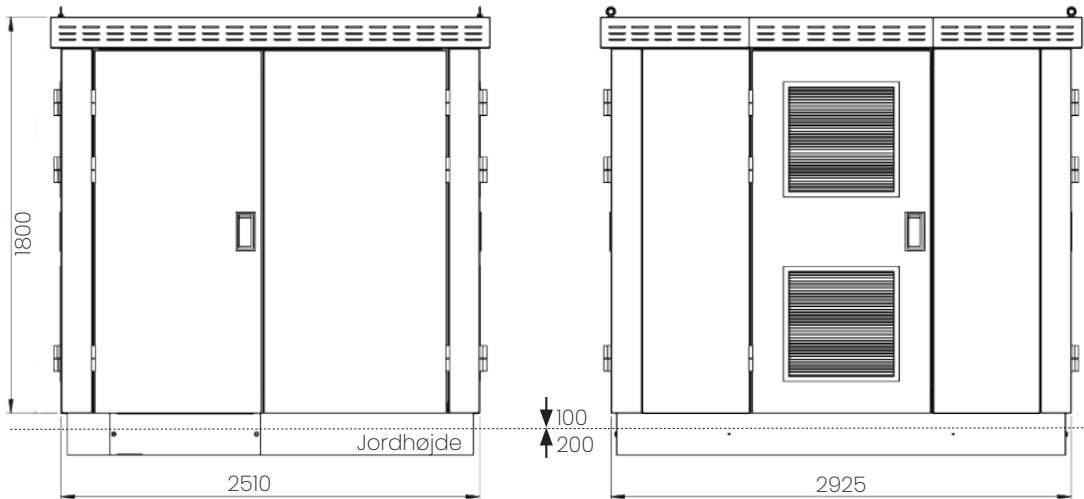
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TRANSFORMER STATION 630kVA



Type	800kVA
Station: (BxHxD)	B:2510 H:1800 D:2925
Oil tray	YES
Switch gear max width	1640
Low-Voltage Distribution Board Total Number of Modules	8M
Type	3002

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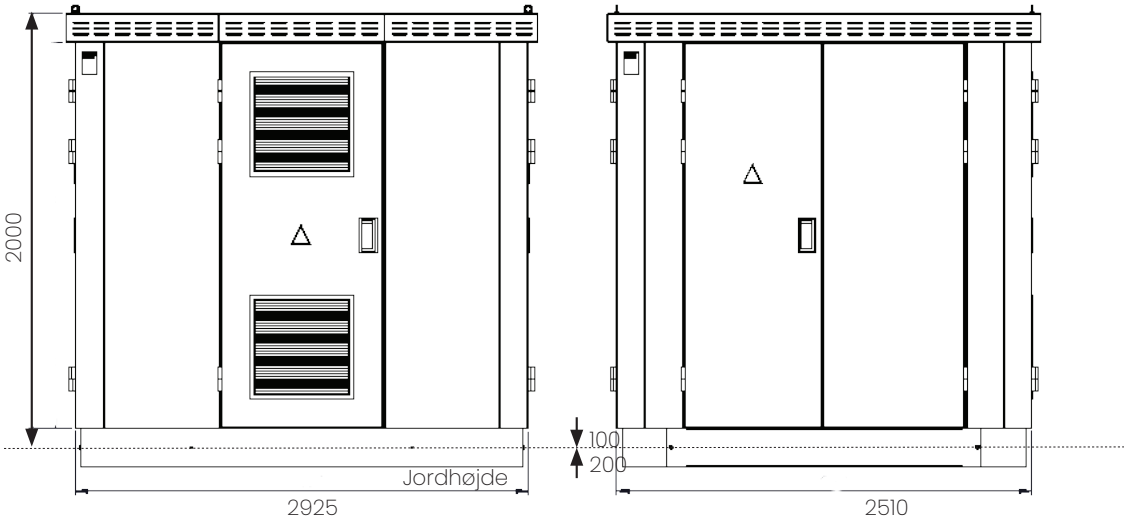
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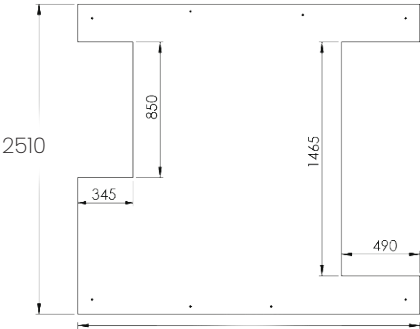
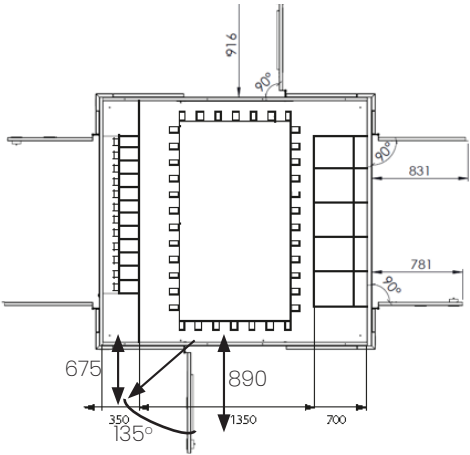
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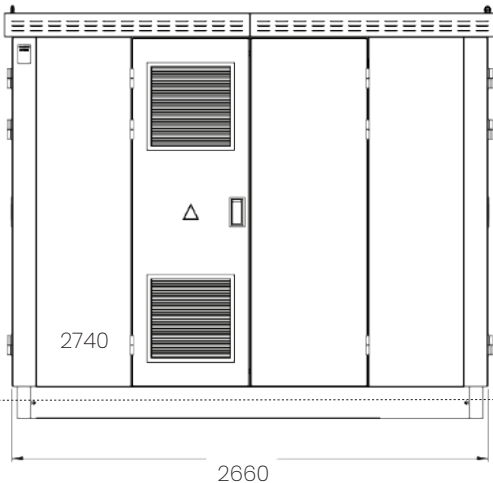
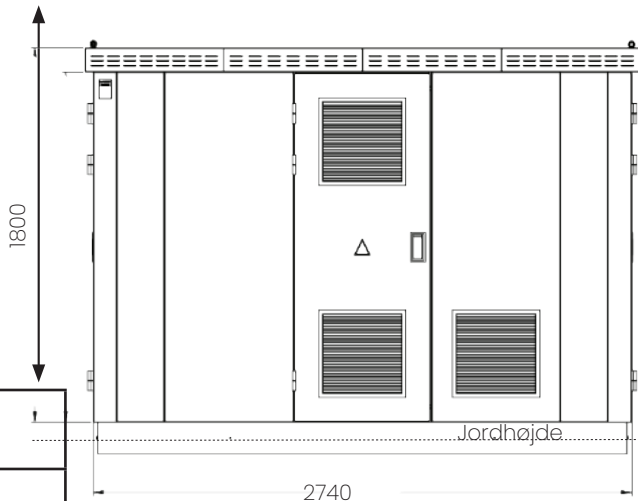
TRANSFORMER STATION 1000kVA



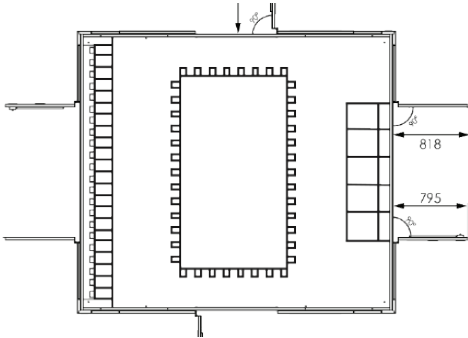
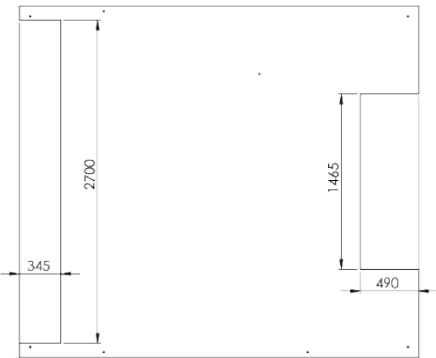
Type	1000kVA
Station: (BxHxD)	B:2510 H:2000 D:2950
Oil tray	YES
Switch gear max width	1900
Low-Voltage Distribution Board Total Number of Modules	Op til 13M
Type	3003



TRANSFORMER STATION 1600KVA



Type	1600kVA
Station: (BxHxD)	B:2660 H:2300 D:2740
Oil tray	YES
Switch gear max width	2700
Low-Voltage Distribution Board Total Number of Modules	8M
Type	3005



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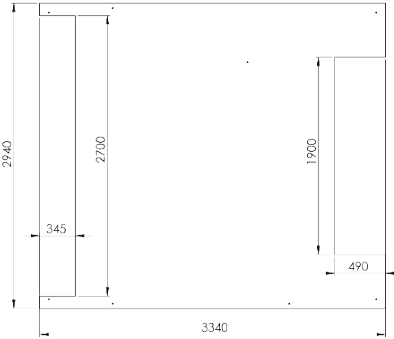
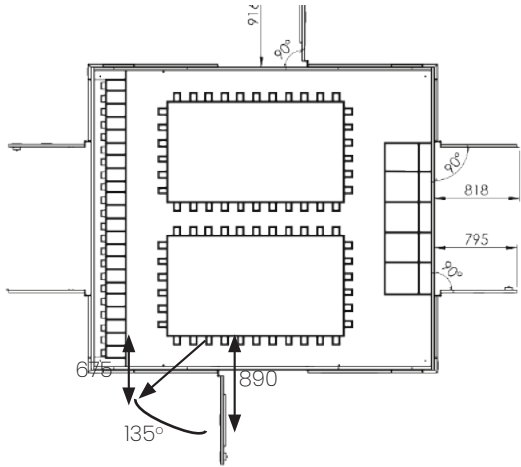
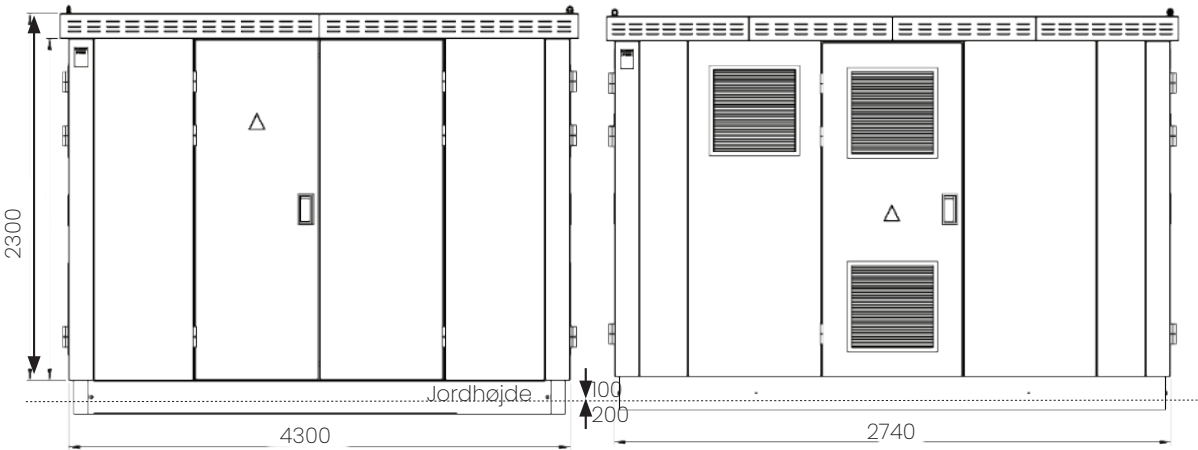
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TRANSFORMER STATION 2X1000KVA



Type	2X1000kVA
Station: (BxHxD)	B:4300 H:2300 D:2740
Oil tray	YES
Switch gear max width	2700
Low-Voltage Distribution Board Total Number of Modules	2 X 10M
Type	3004



TECHNICAL CABINETS

– Specifications and functions apply to all variants.

Description	<p>The technical cabinet is delivered with a robust concrete socket, including cutouts for cables and heavy-duty lifting eyes adapted to the total weight of the building. The construction is based on a solid frame structure, onto which the cladding is mounted.</p> <p>To ensure maximum stability, the cabinet is further reinforced with double corner posts and several strategically placed reinforcements.</p> <p>The roof structure is designed for easy removal and is equipped with lifting eyes. Depending on the requirements, the roof can be chosen as either a gable roof or a flat roof – both options can be easily dismantled for access.</p> <p>The technical cabinet features a symmetrical design, with the transformer room centrally positioned and accessible via doors on both sides. At each end of the cabinet, the low-voltage distribution board and the switch gear are located, ensuring an optimized and functional layout.</p>
Material	<p>We use Aluzinc with the highest zinc alloy composition, ensuring an exceptionally long lifespan. In addition to its outstanding durability, Aluzinc offers excellent paint adhesion, providing an optimal surface treatment.</p> <p>All steel plates are painted on both sides before assembly, which not only extends the lifespan but also minimizes the risk of sharp edges. The material has a minimum lifespan of 40 years and meets the C5 corrosion class requirements for all exterior surfaces.</p> <p>Alternatively, other materials can be selected, such as seawater-resistant aluminum, which is particularly suitable for environments with high corrosion resistance requirements.</p>
Colour	<p>The technical cabinets are available in any desired color, but we recommend three standard colors: light gray (RAL 7035), gray (RAL 7037), and green (RAL 6014).</p> <p>The buildings are powder-coated with a specially developed outdoor paint that includes UV protection and is highly resistant to impacts and environmental influences.</p>
Locking system	<p>All doors are equipped with a robust 3-point locking system for enhanced security. The lock housing is durable and designed to be secured with a solid padlock.</p> <p>Other locking systems are also available depending on specific needs and security requirements.</p>
Insulation/ventilation	<p>The technical cabinet is equipped with passive ventilation, adapted to the size of the transformer and medium-voltage system. The ventilation is integrated into the roof structure, positioned along the sides of the roof, under the overhang, and through filters in the doors.</p> <p>As a standard feature, the roof structure includes foam insulation, which, together with the ventilation system, effectively reduces the risk of condensation.</p> <p>If additional insulation is required, we offer a 60 mm insulation solution along with a mounted inner wall for enhanced climate protection.</p>
Cable -connection	<p>The concrete base is designed with cutouts at both ends to allow for easy and flexible cable connection.</p> <p>Above the base, a heavy-duty cable relief system is installed, where cables can be secured with cable ties for optimal strain relief. If a fiber installation area is required, we also provide strain relief options for conduits and a backplate for mounting a BUDI box or similar equipment.</p> <p>Once the cables are connected, the cable cutouts are neatly sealed with a front plate, ensuring a clean and functional finish.</p>
Safety/ marking/ norms	<p>The busbar systems comply with EN 61439-1 and EN 61439-5, and the technical building as a whole is EN 62271-200 A/B approved.</p> <p>To enhance personal safety, all doors are equipped with yellow/black warning signs labeled "High Voltage". The installations at the ends of the cabinet are fully shielded to prevent unintended access to the transformer. Additionally, a safety bar is installed at the doors, providing extra protection against accidental entry.</p>
Oil tray	<p>The oil tray is integrated into the base and designed to accommodate the transformer's total oil capacity, ensuring effective containment and environmental protection.</p>
Signs	<p>We install signage according to the customer's instructions.</p>

HANDLING GUIDE

The technical cabinet is mounted on a concrete base, which is prepared for lifting. The foundation is designed to be lifted without the transformer, which is inserted later through the easily removable roof.

The roof can be detached by loosening a bolt in each corner and is equipped with lifting eyes, which are solely intended for lifting the roof.

The base has threaded inserts for lifting eyes, which can be ordered separately and easily mounted onto the concrete base.

For safe lifting, a certified lifting beam must be used to ensure a vertical pull on the lifting straps. This maintains both safety and product integrity.

The weight of the cabinet is specified on a nameplate located inside the cabinet.



Lift of roof



Lift of station

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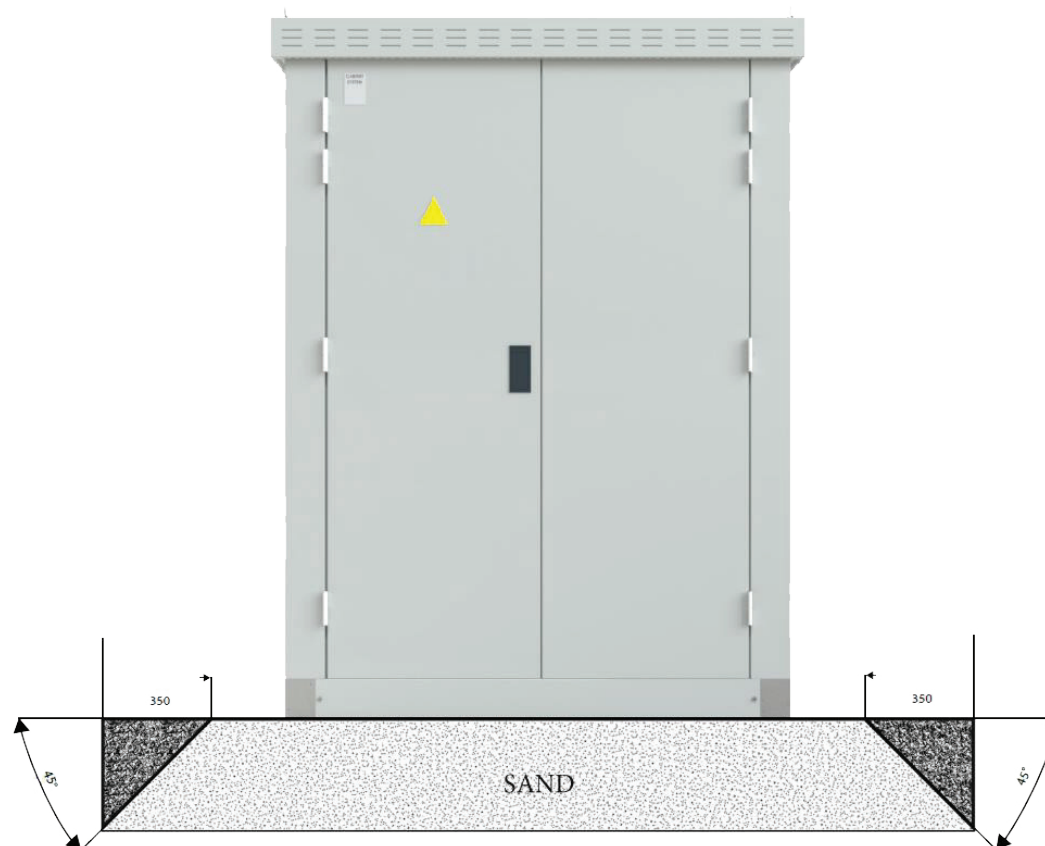
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SAND CUSHION

The excavation is carried out until a firm and stable subsoil is reached. A compacted sand cushion is then established to ensure a solid and stable base.

The sand cushion must be 30 cm wider and longer than the concrete foundation, and its sides must have a minimum slope of 45 degrees relative to the foundation.

If the sand cushion is installed at temperatures above freezing, it is recommended to install a perimeter drain to protect against frost effects and ensure long-term stability.



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