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About the company

ELPLAST-KPZ Rokycany company continues in several year production of cabinets and electrical meter cabinets in the Czech Republic. Our company replaced traditional materials for cabinets production (mainly steel and concrete) by composite SMC plastic material meeting the difficult criteria of the European and world standards.

The electrical meter cabinets production is concentrated in the place of business in Mlečice, Rokycany district.

The **ELPLAST-KPZ Rokycany** company has been working in the field of cabinets and electrical meter cabinets production almost 30 years. All the production takes place in the Czech Republic and is made exclusively of high-quality components and on devices of own or European production. Assembly is made entirely by trained personnel with experience and verified practice in our company. Majority of electrical meter cabinets components are almost exclusively of local production.

Our company pays attention to customer satisfaction as well as own professional reputation. All our staffs are prepared to help you with product application, working, electrical meter cabinets service during whole long lifespan.

Almost thirty years of market activity proves our reliability and stability. All products are tested and certified according to European standards. Electrical meter cabinets made in our company are granted by quality label ESČ and Czech quality. Electrical meter cabinets development and production is kept and certified according to ČSN EN ISO 9001:2009 in all our establishments.

Our offer of electrical meter cabinets consists of more than 1000 catalogue items. We provide custom modification and adjustment of electrical meter cabinets as well as completely custom-made electrical meter cabinets. Our production is flexible and makes modifications precisely meeting customers placing and demands. During electrical meter cabinets adjustment mainly development operatives are fully available for customers. Delivery time is usually no longer than 14 days in all above mentioned cases, including custom built electrical meter cabinets and also extensive one-time orders. Transport is provided by our company, contracting party or by haulage contractor.

Custom-made production

Custom-made electrical meter cabinets production is used to construction optimization with respect to requirements. Oversized catalogue electrical meter cabinets have not to be used then. This solution enables to low acquisition costs, not costs increasing as is current when custom-made production is prepared.

If you have not found required electrical meter cabinets our development operatives are ready to help you. We are able to make new devices made of certified units and components or adjust catalogue products so that it fully meets your requirements. Our technicians are able to prepare custom-made production set. This can be integrated into series production in case of frequent purchasing.

SMC Material

SMC (Sheet Molding Compounds) is thermosetting composite material on the base of non-saturated polyester resins and other components reinforced by glass fibers.

This material shows even after a long-term exposure to the weather conditions (30 years and more), marks of visual changes only, which do not have, according to the performed measurements, practically any impacts on the change of mechanical and electrical material properties.

Using SMC material for electrical meter cabinets and other cabinets shows a lot of advantages in comparison with thermoplastic materials, where long term exposure to weather conditions can cause irreversible changes of mechanical properties - for example distinct loss of impact resistance due to the UV radiation.

Toughened SMC material is harmless. Glass fibers present no risk also in case of surface erosion after long-term use. It is non-toxic material, which does not cause any disease in case of outer skin injury.

Product disposal after lifespan (it is not time limited up to now) has no negative impact on environment. Subsequent shredding and recycling can be used.

Most important advantages of SMC material for electrotechnical products

- high level of short- term and permanent mechanical, statistical and dynamical material strain
- permanent thermal load without mechanical strength loss of material
- shape heat stability of the material without warping
- size stability of parts without shrinking
- high fire resistance and producing arc resistance
- excellent electrical insulation properties of the material with stray current protection
- chemical resistance without corrosive microcracks

The physical and mechanical SMC material properties have been proven according to valid standard (DIN, IFC, ISO etc.). The supplier of the SMC moulding material is subject to certification procedures according to the relevant ISO standards.

Colouring of SMC cabinets

Colouring of cabinets is not necessary. If the colour of RAL 7035 shade is not suitable because of architectural reasons, the SMC surface can be additionally refined by traditional methods such as polyurethane-based or acrylic-based top coatings. Thus, desired appearance of the product can be ensured.

Environment and disposal conditions

The SMC material used to produce cabinets is harmless and environmentally safe. Used plastic material is recyclable and **ELPLAST-KPZ Rokycany** company makes a commitment to take it back and arrange a disposal of damaged or end-life products.

Notes

Notes

Modular 3D cabinets system

Cabinets are designed as a set of 300, 500, 600, 700 and 900 mm height, 290, 390 and 550 mm width and 240 and 350 mm depth. Individual components are made of SMC material, which meets the V0 and HB40 flammability requirements with weatherproofing and suitable properties for electrotechnics.

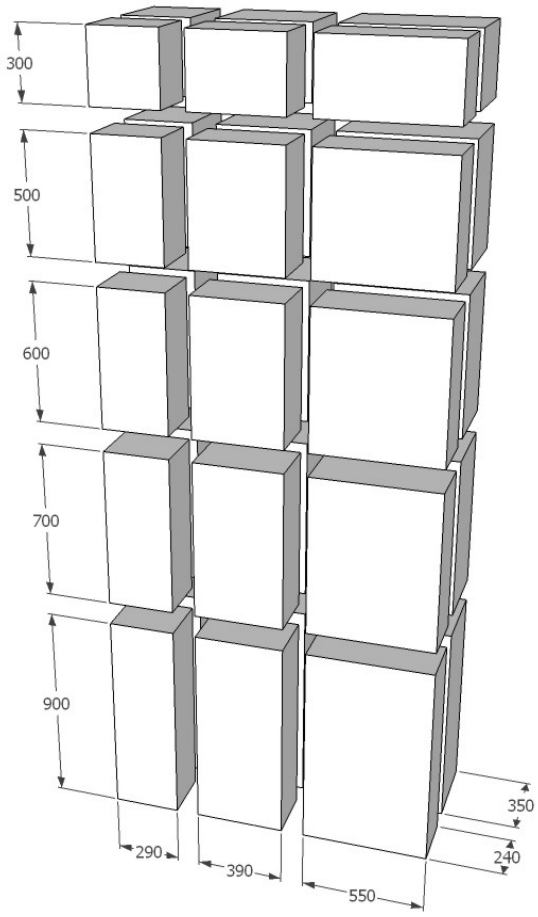
Individual cabinets can be arbitrarily assembled side by side or superimposed in cabinets or pillars of various depth. Individual sections are designed to be easy for assembling. Usage meets a wide range of electrical engineering requirements in individual sectors. 3D cabinets can be installed on a pole, wall-mounted, recessed and placed in the open space as a standalone pillar.

Cabinet door is fitted with ribs on the outer surface. That makes it difficult to put posters on it. Material and door construction eliminate distortion and material to bend. Door is sufficiently resistant to mechanical damage or destruction. Door opening is arranged at an angle of 200 °, what makes perfect access to the device in the switchgear for installer and eliminates door unintentional damage. Inner side of the door is prepared to incorporate auxiliary instrument holder and documentation casing. Door locking is possible using up to three-point leverage lock system. Door dismantling is simple and can be done after opening the door by pressing catch spring and pin extension. The door assures cabinet ventilation without covering IP44 damage. Ventilation can be easily prevented by a foam (silicone) seal, thus can be achieved IP54. Cabinets design makes it possible to fit the door from both sides of the cabinet. Also to place the devices into the centre of the cabinet.

Sides of the cabinets are lightly fitted with ribs on the outer surface too. These ribs make difficult to pull the cabinet out from the masonry. The overall treatment of the sides secures individual cabinets side by side and superimposed in an endless series. The sides are moulded at two basic depths.

Cabinet roof has one side angle of inclination. This solution allows to choose a side of slope and thus to drain the water forward or backward. Cabinets can be installed next to the wall and on the pillars next to the wall without water flowing down on the plaster.

Rear side of the cabinet, which is intended for installation of devices primarily, is supplied with moulded pal-nuts M6 or M8. It is also possible to make this part openable. The weight of the devices installed above cabinet must be taken into consideration. The cabinet door can be statically weighted with a maximum of 1.5 kg.



Assembly procedure for recessed cabinets

Cabinets are usually placed outside the building in recesses or loosely on pillars. There must be a space for operators in front of cabinet at least 800 mm depth. In case of installation near other distribution devices, safe distance must be kept. Fuse cabinets and switchboards are located according to the requirements of distributors.

Cabinet door is dismantled and the dimensions of the recess are checked before mounting. Plastic cabinets used in masonry are provided with perforations to prevent the cabinets to slip out of the wall.

Using the wooden wedges, cabinet is arranged to fit with the masonry surface. After recesses moisten, cabinet is fastened into it using the cement mortar (or the mounting foam). Cabinets sides should be set alongside with plaster, upper and lower parts should slightly protrude from the masonry. It is necessary to ensure size of cabinets before final masonry fixing, to avoid deformation (for example wooden spacer). Cabinet is then cleaned from the rest of cement mortar. It is good to disassemble the closing lath when connecting the power cables. The conductor ends and cables must be insulated, alternatively fitted with terminal crimp or terminal clamp. Conductors are shaped and earthing is connected to clamp (marked with an earthing mark). Cable entry must be sealed to prevent water getting into cabinets. This is ensured by thin layer of cement mortar or possibly walling the entire cabling space up. The ventilation of the cabinet is sufficiently ensured by an IP44 door labyrinth.

After cables assembly, closing bar is fitted and the wires are marked as necessary. Then the door is fitted and the door closing and locking is tested. Cabinet locks are made with a brass core and greased during production. Further greasing is no longer required.

Assembly procedure for pole mount cabinets

Pole mount cabinets are supplied with mounting stabilizers. There must be a space for operators in front of cabinet at least 800 mm depth. In case of installation near other distribution devices, safe distance must be kept. Disconnect cabinets are located according to the requirements of distributors.

Stabilizers for pole mounting are attached to the rear wall of the cabinets. The UP-370 stainless fastening strap or "BANDIMEX" system is used to fasten the cabinet to the pole.

Grommets for conductors' entry/exit must be cut with a sharp device in the pre-pressed groove and chosen diameter (50, 63, 76 mm), before installing the protective power plastic pipes. Power plastic pipes bracket base (supplied separately as an accessory) is attached by the straps to the pole so that the top is approximately 0.5 m below the upper end of the pipes, and the lower to the centre between the cabinet and the upper bracket. For poles over 9 m in length, it is recommended to use three pieces of pipe brackets. The plastic pipes are fixed with a lower end on the grommets of the cabinet and attached to the base of the bracket by a divided part.

The door is removed from the cabinet and the conductors are pulled into the fixed pipes. The conductors are insulated and alternatively fitted with terminal crimp or "V" or "P" terminal clamps. Then the conductors are marked as needed. Before connecting to the grid, outlet pipes are fitted with covering (supplied separately as an accessory).

If the earthing outlet is fitted into the cabinet, it must also be protected by a plastic pipe. This pipe is attached to the pole in the same way as the outlet pipes for the conductors outgoing to overhead power line. The brass terminal M8 on the rear outer side of the cabinet is optionally

connected to the housing ground. Cabinet earthing is connected to the outer rear part on the M8 brass bolt.

After that, the door is fitted and the door closing and locking is tested. Cabinet locks are made with a brass core and greased during production. Further greasing is no longer required.

Assembly procedure for wall-mounted cabinets

Wall-mounted cabinets are only those where cable entry can be secured. They are called as wall-mounted cabinets in the catalogue. There must be a space for operators in front of cabinet at least 800 mm depth. In case of installation near other distribution devices, safe distance must be kept. Cabinets are installed at least 0.6 m above the terrain.

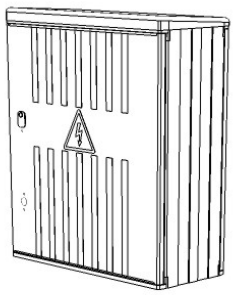
Door and internal devices are removed from the cabinet and the mounting holes are drilled into the rear wall of the cabinet. The layout and number of holes must be adapted to the interior facilities of the cabinet and to the state and character of wall on which the cabinet is installed. For cabinet fastening common fasteners (plastic anchors, screws) are used. After fastening the cabinet to the wall, all devices are installed back.

Entry/exit conductors must be sufficiently protected from mechanical damage. When the conductors are plugged into the cabinet, they are insulated and alternatively fitted with terminal crimp or "V" or "P" terminal clamps. Then they are plugged in and the conductors are marked as needed.

All the coverings and cabinet door is mounted back and the door closing and locking is tested. Cabinet locks are made with a brass core and greased during production. Further greasing is no longer required.

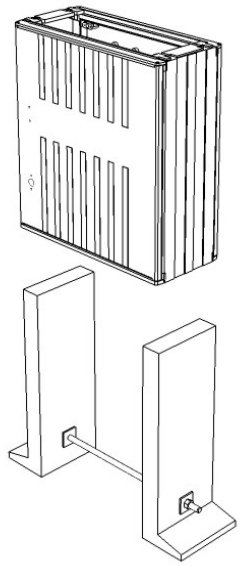
Mounting procedure for standalone pillar cabinets

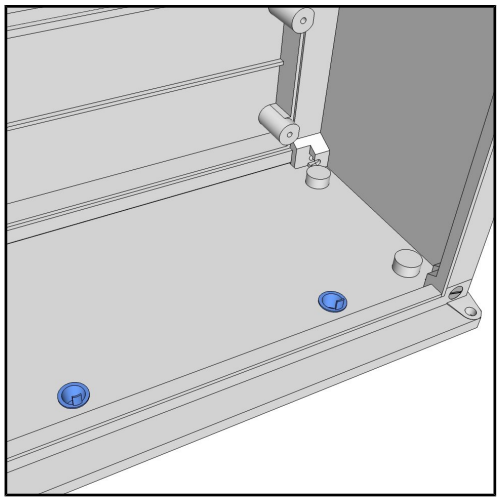
Standalone pillar cabinets are placed with the plinth as a pillar freely in the field or close to the buildings and fences. There must be a space for operators in front of cabinet at least 800 mm depth. Safe distance must be kept in case of installation near other distribution devices. The pillar consists of three basic parts: cabinet, the plinth and the base of the pillar. These parts can be ordered as a separate items. The plinth and the base of the pillar can be installed first in the open space and after finishing all the terrain adjustments, cabinet is mounted and plugged in.

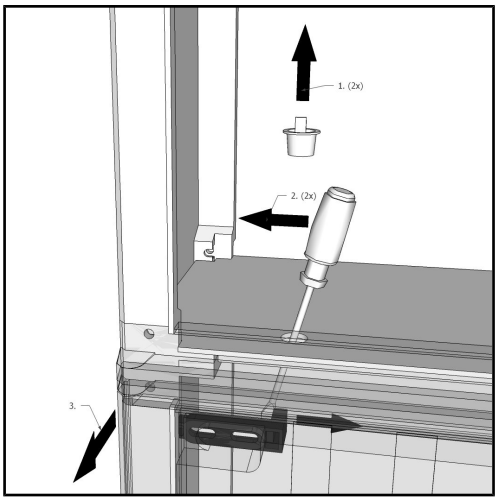


At first, plastic or concrete base of the pillar is assembled. Two base pieces are precisely, according to plinth width, spread out with the aid of provided bar brace, so that the pre-drilled holes (countersunk-head bolt) fit tightly in the plinth base holes. Then the base is assembled with a plinth. Set of the plinth and the base of the pillar are placed in the digged hole so that the plinth base is approximately 5 cm below the final terrain level. The plinth is put straight and ground is added on the sides if needed. If necessary (bearing capacity of the soil is reduced) plinth can be concreted. Then cabinet can be fastened to the plinth.

Cabinet cover is removed from the plinth by moving two stops toward the plinths axis and opening the cover forwards. Door is removed from the cabinet and then the cabinet is fastened to the plinth using provided fasteners. Then locking strips are demounted at the base of the plinth and at the bottom of the cabinet. Cable compartment is equipped with "L" console for cable attachment and to prevent cables from mechanical stress on the printed circuits too. The conductor ends and cables must be insulated, alternatively fitted with terminal crimp or terminal clamps. Conductors are shaped and connected to the clamps and marked as earthing (if the clamp is provided). Grounding conductor is connected there too.







When the cable mounting is completed, we continue with the pillar base covering. The base is covered step by step with inert material. After filling the entire base, locking laths are fixed and conductors are marked as necessary. Then the cover of the cable space and cabinet door are placed and the door closing and locking is tested. Cabinet locks are made with a brass core and greased during production. Further greasing is no longer required. Finally, the last terrain adjustments are made.

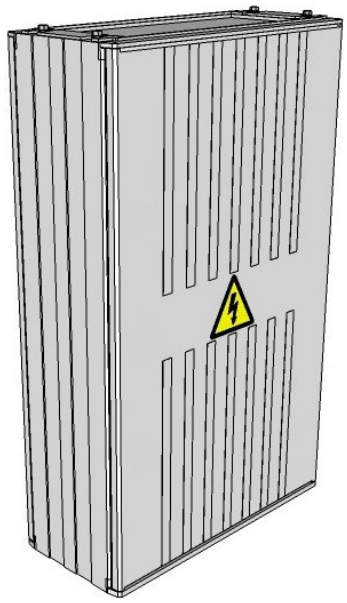
■ Recessed cabinets IP44

Cabinets for using in masonry (in recesses or brick pillars), or loosely on pillars in case of cabinets stacked up (between „plinth cabinet“ and „plinth“).

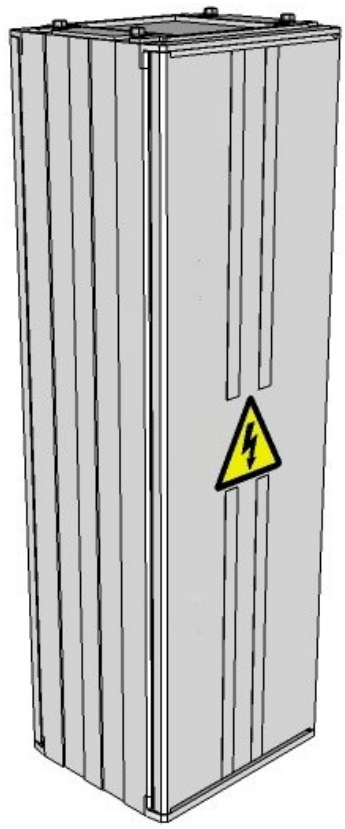
Type:	Catalogue no.	Height [mm]	Depth [mm]	Width [mm]
PR 1.1.1 recessed	70YZ 1.1.1	300	240	290
PR 1.1.2 recessed	70YZ 1.1.2			390
PR 1.1.3 recessed	70YZ 1.1.3			550
PR 1.2.1 recessed	70YZ 1.2.1		350	290
PR 1.2.2 recessed	70YZ 1.2.2			390
PR 1.2.3 recessed	70YZ 1.2.3			550
PR 2.1.1 recessed	70YZ 2.1.1	500	240	290
PR 2.1.2 recessed	70YZ 2.1.2			390
PR 2.1.3 recessed	70YZ 2.1.3			550
PR 2.2.1 recessed	70YZ 2.2.1		350	290
PR 2.2.2 recessed	70YZ 2.2.2			390
PR 2.2.3 recessed	70YZ 2.2.3			550
PR 3.1.1 recessed	70YZ 3.1.1	600	240	290
PR 3.1.2 recessed	70YZ 3.1.2			390
PR 3.1.3 recessed	70YZ 3.1.3			550
PR 3.2.1 recessed	70YZ 3.2.1		350	290
PR 3.2.2 recessed	70YZ 3.2.2			390
PR 3.2.3 recessed	70YZ 3.2.3			550
PR 4.1.1 recessed	70YZ 4.1.1	700	240	290
PR 4.1.2 recessed	70YZ 4.1.2			390
PR 4.1.3 recessed	70YZ 4.1.3			550
PR 4.2.1 recessed	70YZ 4.2.1		350	290
PR 4.2.2 recessed	70YZ 4.2.2			390
PR 4.2.3 recessed	70YZ 4.2.3			550
PR 5.1.1 recessed	70YZ 5.1.1	700	240	290
PR 5.1.2 recessed	70YZ 5.1.2			390
PR 5.1.3 recessed	70YZ 5.1.3			550
PR 5.2.1 recessed	70YZ 5.2.1		350	290
PR 5.2.2 recessed	70YZ 5.2.2			390
PR 5.2.3 recessed	70YZ 5.2.3			550

Note: Complete cabinets' dimensions on page 22.

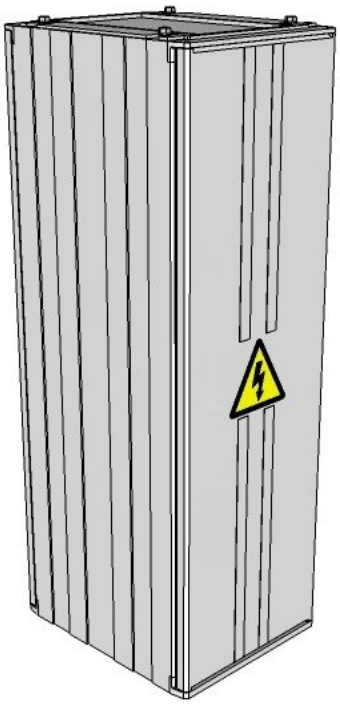
PR 5.1.3 recessed



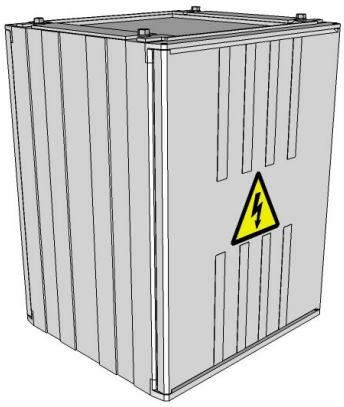
PR 5.1.1 recessed



PR 5.2.1 recessed



PR 2.2.2 recessed



■ Recessed cabinets IP54

Cabinets for using in masonry (in recesses or brick pillars), or loosely on pillars in case of cabinets stacked up (between „plinth cabinet“ and „plinth“).

It is necessary to fix IP 54 cabinets with three-point leverage lock system.

Type:	Catalogue no.	Height [mm]	Depth [mm]	Width [mm]
PR 1.1.1 recessed IP54	70YZ54 1.1.1	300	240	290
PR 1.1.2 recessed IP54	70YZ54 1.1.2			390
PR 1.1.3 recessed IP54	70YZ54 1.1.3			550
PR 1.2.1 recessed IP54	70YZ54 1.2.1		350	290
PR 1.2.2 recessed IP54	70YZ54 1.2.2			390
PR 1.2.3 recessed IP54	70YZ54 1.2.3			550
PR 2.1.1 recessed IP54	70YZ54 2.1.1	500	240	290
PR 2.1.2 recessed IP54	70YZ54 2.1.2			390
PR 2.1.3 recessed IP54	70YZ54 2.1.3			550
PR 2.2.1 recessed IP54	70YZ54 2.2.1		350	290
PR 2.2.2 recessed IP54	70YZ54 2.2.2			390
PR 2.2.3 recessed IP54	70YZ54 2.2.3			550
PR 3.1.1 recessed IP54	70YZ54 3.1.1	600	240	290
PR 3.1.2 recessed IP54	70YZ54 3.1.2			390
PR 3.1.3 recessed IP54	70YZ54 3.1.3			550
PR 3.2.1 recessed IP54	70YZ54 3.2.1		350	290
PR 3.2.2 recessed IP54	70YZ54 3.2.2			390
PR 3.2.3 recessed IP54	70YZ54 3.2.3			550
PR 4.1.1 recessed IP54	70YZ54 4.1.1	700	240	290
PR 4.1.2 recessed IP54	70YZ54 4.1.2			390
PR 4.1.3 recessed IP54	70YZ54 4.1.3			550
PR 4.2.1 recessed IP54	70YZ54 4.2.1		350	290
PR 4.2.2 recessed IP54	70YZ54 4.2.2			390
PR 4.2.3 recessed IP54	70YZ54 4.2.3			550
PR 5.1.1 recessed IP54	70YZ54 5.1.1	900	240	290
PR 5.1.2 recessed IP54	70YZ54 5.1.2			390
PR 5.1.3 recessed IP54	70YZ54 5.1.3			550
PR 5.2.1 recessed IP54	70YZ54 5.2.1		350	290
PR 5.2.2 recessed IP54	70YZ54 5.2.2			390
PR 5.2.3 recessed IP54	70YZ54 5.2.3			550

Note: Complete cabinets' dimensions on page 22.

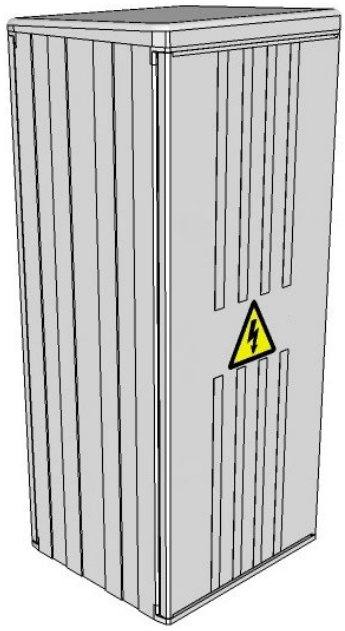
■ Pole mount cabinets IP44

Cabinets equipped with holder for pole mounting.

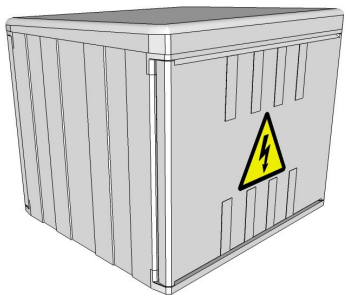
Type:	Catalogue no.	Height [mm]	Depth [mm]	Width [mm]
PR 1.1.1 pole mount	71YZ 1.1.1	300	240	290
PR 1.1.2 pole mount	71YZ 1.1.2			390
PR 1.1.3 pole mount	71YZ 1.1.3			550
PR 1.2.1 pole mount	71YZ 1.2.1		350	290
PR 1.2.2 pole mount	71YZ 1.2.2			390
PR 1.2.3 pole mount	71YZ 1.2.3			550
PR 2.1.1 pole mount	71YZ 2.1.1	500	240	290
PR 2.1.2 pole mount	71YZ 2.1.2			390
PR 2.1.3 pole mount	71YZ 2.1.3			550
PR 2.2.1 pole mount	71YZ 2.2.1		350	290
PR 2.2.2 pole mount	71YZ 2.2.2			390
PR 2.2.3 pole mount	71YZ 2.2.3			550
PR 3.1.1 pole mount	71YZ 3.1.1	600	240	290
PR 3.1.2 pole mount	71YZ 3.1.2			390
PR 3.1.3 pole mount	71YZ 3.1.3			550
PR 3.2.1 pole mount	71YZ 3.2.1		350	290
PR 3.2.2 pole mount	71YZ 3.2.2			390
PR 3.2.3 pole mount	71YZ 3.2.3			550
PR 4.1.1 pole mount	71YZ 4.1.1	700	240	290
PR 4.1.2 pole mount	71YZ 4.1.2			390
PR 4.1.3 pole mount	71YZ 4.1.3			550
PR 4.2.1 pole mount	71YZ 4.2.1		350	290
PR 4.2.2 pole mount	71YZ 4.2.2			390
PR 4.2.3 pole mount	71YZ 4.2.3			550
PR 5.1.1 pole mount	71YZ 5.1.1	900	240	290
PR 5.1.2 pole mount	71YZ 5.1.2			390
PR 5.1.3 pole mount	71YZ 5.1.3			550
PR 5.2.1 pole mount	71YZ 5.2.1		350	290
PR 5.2.2 pole mount	71YZ 5.2.2			390
PR 5.2.3 pole mount	71YZ 5.2.3			550

Note: Complete cabinets' dimensions on page 22.

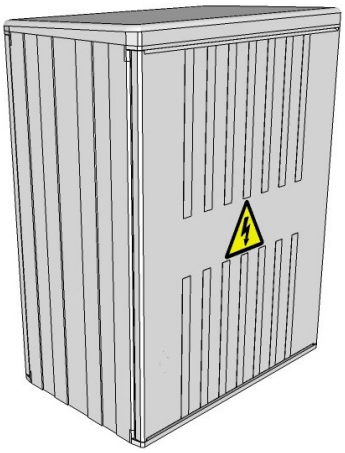
PR 5.2.2 pole mount



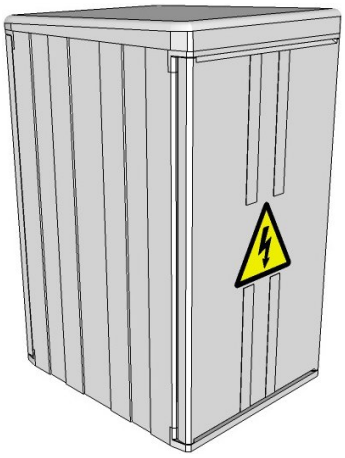
PR 1.2.2 pole mount



PR 4.2.3 pole mount



PR 2.2.1 pole mount



■ Pole mount cabinets IP54

Cabinets equipped with holder for pole mounting.

Three-point leverage lock system is required for cabinets IP54.

Type:	Catalogue no.	Height [mm]	Depth [mm]	Width [mm]
PR 1.1.1 pole mount IP54	71YZ54 1.1.1	300	240	290
PR 1.1.2 pole mount IP54	71YZ54 1.1.2			390
PR 1.1.3 pole mount IP54	71YZ54 1.1.3			550
PR 1.2.1 pole mount IP54	71YZ54 1.2.1		350	290
PR 1.2.2 pole mount IP54	71YZ54 1.2.2			390
PR 1.2.3 pole mount IP54	71YZ54 1.2.3			550
PR 2.1.1 pole mount IP54	71YZ54 2.1.1	500	240	290
PR 2.1.2 pole mount IP54	71YZ54 2.1.2			390
PR 2.1.3 pole mount IP54	71YZ54 2.1.3			550
PR 2.2.1 pole mount IP54	71YZ54 2.2.1		350	290
PR 2.2.2 pole mount IP54	71YZ54 2.2.2			390
PR 2.2.3 pole mount IP54	71YZ54 2.2.3			550
PR 3.1.1 pole mount IP54	71YZ54 3.1.1	600	240	290
PR 3.1.2 pole mount IP54	71YZ54 3.1.2			390
PR 3.1.3 pole mount IP54	71YZ54 3.1.3			550
PR 3.2.1 pole mount IP54	71YZ54 3.2.1		350	290
PR 3.2.2 pole mount IP54	71YZ54 3.2.2			390
PR 3.2.3 pole mount IP54	71YZ54 3.2.3			550
PR 4.1.1 pole mount IP54	71YZ54 4.1.1	700	240	290
PR 4.1.2 pole mount IP54	71YZ54 4.1.2			390
PR 4.1.3 pole mount IP54	71YZ54 4.1.3			550
PR 4.2.1 pole mount IP54	71YZ54 4.2.1		350	290
PR 4.2.2 pole mount IP54	71YZ54 4.2.2			390
PR 4.2.3 pole mount IP54	71YZ54 4.2.3			550
PR 5.1.1 pole mount IP54	71YZ54 5.1.1	900	240	290
PR 5.1.2 pole mount IP54	71YZ54 5.1.2			390
PR 5.1.3 pole mount IP54	71YZ54 5.1.3			550
PR 5.2.1 pole mount IP54	71YZ54 5.2.1		350	290
PR 5.2.2 pole mount IP54	71YZ54 5.2.2			390
PR 5.2.3 pole mount IP54	71YZ54 5.2.3			550

Note: Complete cabinets' dimensions on page 22.

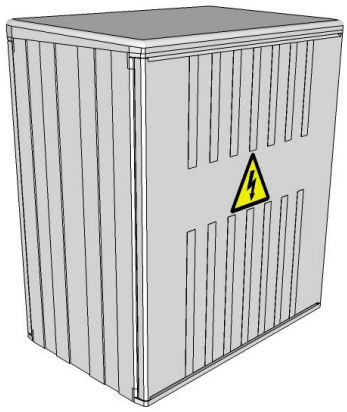
■ Wall-mounted cabinets IP44

Cabinets used for wall-mounting or construction-mounting. Roof rake angle is to the front, so that water does not flow down the facade.

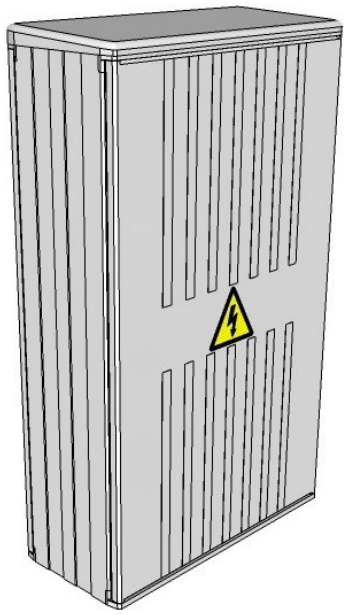
Type:	Catalogue no.	Height [mm]	Depth [mm]	Width [mm]
PR 1.1.1 wall-mounted	73YZ 1.1.1	300	240	290
PR 1.1.2 wall-mounted	73YZ 1.1.2			390
PR 1.1.3 wall-mounted	73YZ 1.1.3			550
PR 1.2.1 wall-mounted	73YZ 1.2.1		350	290
PR 1.2.2 wall-mounted	73YZ 1.2.2			390
PR 1.2.3 wall-mounted	73YZ 1.2.3			550
PR 2.1.1 wall-mounted	73YZ 2.1.1	500	240	290
PR 2.1.2 wall-mounted	73YZ 2.1.2			390
PR 2.1.3 wall-mounted	73YZ 2.1.3			550
PR 2.2.1 wall-mounted	73YZ 2.2.1		350	290
PR 2.2.2 wall-mounted	73YZ 2.2.2			390
PR 2.2.3 wall-mounted	73YZ 2.2.3			550
PR 3.1.1 wall-mounted	73YZ 3.1.1	600	240	290
PR 3.1.2 wall-mounted	73YZ 3.1.2			390
PR 3.1.3 wall-mounted	73YZ 3.1.3			550
PR 3.2.1 wall-mounted	73YZ 3.2.1		350	290
PR 3.2.2 wall-mounted	73YZ 3.2.2			390
PR 3.2.3 wall-mounted	73YZ 3.2.3			550
PR 4.1.1 wall-mounted	73YZ 4.1.1	700	240	290
PR 4.1.2 wall-mounted	73YZ 4.1.2			390
PR 4.1.3 wall-mounted	73YZ 4.1.3			550
PR 4.2.1 wall-mounted	73YZ 4.2.1		350	290
PR 4.2.2 wall-mounted	73YZ 4.2.2			390
PR 4.2.3 wall-mounted	73YZ 4.2.3			550
PR 5.1.1 wall-mounted	73YZ 5.1.1	900	240	290
PR 5.1.2 wall-mounted	73YZ 5.1.2			390
PR 5.1.3 wall-mounted	73YZ 5.1.3			550
PR 5.2.1 wall-mounted	73YZ 5.2.1		350	290
PR 5.2.2 wall-mounted	73YZ 5.2.2			390
PR 5.2.3 wall-mounted	73YZ 5.2.3			550

Note: Complete cabinets' dimensions on page 22.

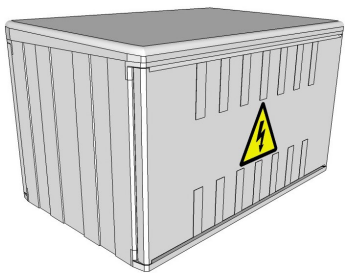
PR 3.2.3 wall-mounted



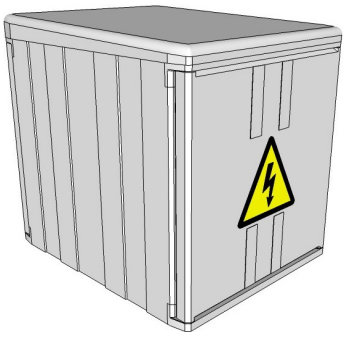
PR 5.1.3 wall-mounted



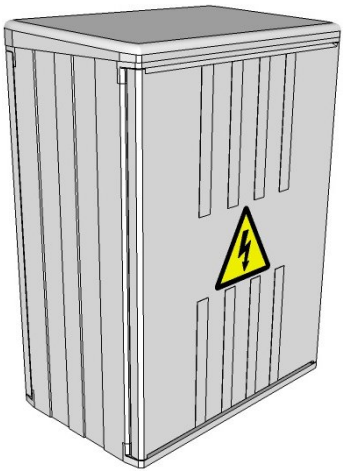
PR 1.2.3 wall-mounted



PR 1.2.1 wall-mounted



PR 2.1.2 wall-mounted



■ Wall-mounted cabinets IP54

Cabinets used for wall-mounting or construction-mounting. Roof rake angle is to the front, so that water does not flow down the facade.

Three-point leverage lock system is required for cabinets IP54.

Type:	Catalogue no.	Height [mm]	Depth [mm]	Width [mm]
PR 1.1.1 wall-mounted IP54	73YZ54 1.1.1	300	240	290
PR 1.1.2 wall-mounted IP54	73YZ54 1.1.2			390
PR 1.1.3 wall-mounted IP54	73YZ54 1.1.3			550
PR 1.2.1 wall-mounted IP54	73YZ54 1.2.1		350	290
PR 1.2.2 wall-mounted IP54	73YZ54 1.2.2			390
PR 1.2.3 wall-mounted IP54	73YZ54 1.2.3			550
PR 2.1.1 wall-mounted IP54	73YZ54 2.1.1	500	240	290
PR 2.1.2 wall-mounted IP54	73YZ54 2.1.2			390
PR 2.1.3 wall-mounted IP54	73YZ54 2.1.3			550
PR 2.2.1 wall-mounted IP54	73YZ54 2.2.1		350	290
PR 2.2.2 wall-mounted IP54	73YZ54 2.2.2			390
PR 2.2.3 wall-mounted IP54	73YZ54 2.2.3			550
PR 3.1.1 wall-mounted IP54	73YZ54 3.1.1	600	240	290
PR 3.1.2 wall-mounted IP54	73YZ54 3.1.2			390
PR 3.1.3 wall-mounted IP54	73YZ54 3.1.3			550
PR 3.2.1 wall-mounted IP54	73YZ54 3.2.1		350	290
PR 3.2.2 wall-mounted IP54	73YZ54 3.2.2			390
PR 3.2.3 wall-mounted IP54	73YZ54 3.2.3			550
PR 4.1.1 wall-mounted IP54	73YZ54 4.1.1	700	240	290
PR 4.1.2 wall-mounted IP54	73YZ54 4.1.2			390
PR 4.1.3 wall-mounted IP54	73YZ54 4.1.3			550
PR 4.2.1 wall-mounted IP54	73YZ54 4.2.1		350	290
PR 4.2.2 wall-mounted IP54	73YZ54 4.2.2			390
PR 4.2.3 wall-mounted IP54	73YZ54 4.2.3			550
PR 5.1.1 wall-mounted IP54	73YZ54 5.1.1	900	240	290
PR 5.1.2 wall-mounted IP54	73YZ54 5.1.2			390
PR 5.1.3 wall-mounted IP54	73YZ54 5.1.3			550
PR 5.2.1 wall-mounted IP54	73YZ54 5.2.1		350	290
PR 5.2.2 wall-mounted IP54	73YZ54 5.2.2			390
PR 5.2.3 wall-mounted IP54	73YZ54 5.2.3			550

Note: Complete cabinets' dimensions on page 22.

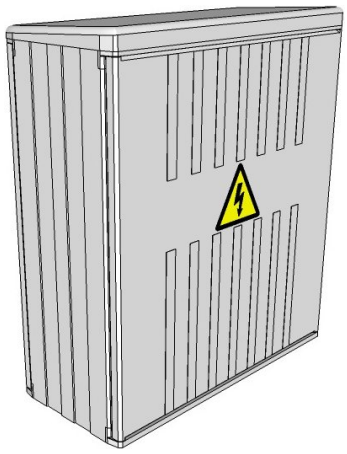
■ Plinth cabinets IP44

Cabinets used with plinth or built-in cabinets with plinth in case of more superimposed cabinets.

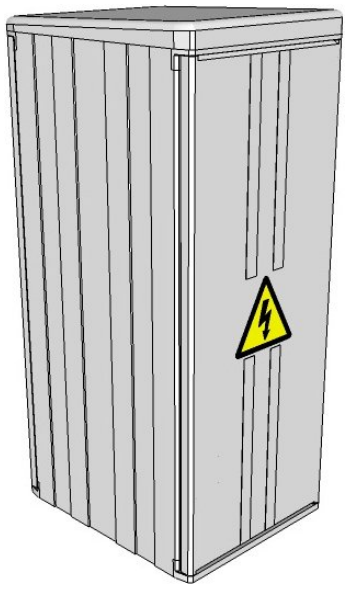
Type:	Catalogue no.	Height [mm]	Depth [mm]	Width [mm]
PR 1.1.1 plinth cabinet	74YZ 1.1.1	300	240	290
PR 1.1.2 plinth cabinet	74YZ 1.1.2			390
PR 1.1.3 plinth cabinet	74YZ 1.1.3			550
PR 1.2.1 plinth cabinet	74YZ 1.2.1		350	290
PR 1.2.2 plinth cabinet	74YZ 1.2.2			390
PR 1.2.3 plinth cabinet	74YZ 1.2.3			550
PR 2.1.1 plinth cabinet	74YZ 2.1.1	500	240	290
PR 2.1.2 plinth cabinet	74YZ 2.1.2			390
PR 2.1.3 plinth cabinet	74YZ 2.1.3			550
PR 2.2.1 plinth cabinet	74YZ 2.2.1		350	290
PR 2.2.2 plinth cabinet	74YZ 2.2.2			390
PR 2.2.3 plinth cabinet	74YZ 2.2.3			550
PR 3.1.1 plinth cabinet	74YZ 3.1.1	600	240	290
PR 3.1.2 plinth cabinet	74YZ 3.1.2			390
PR 3.1.3 plinth cabinet	74YZ 3.1.3			550
PR 3.2.1 plinth cabinet	74YZ 3.2.1		350	290
PR 3.2.2 plinth cabinet	74YZ 3.2.2			390
PR 3.2.3 plinth cabinet	74YZ 3.2.3			550
PR 4.1.1 plinth cabinet	74YZ 4.1.1	700	240	290
PR 4.1.2 plinth cabinet	74YZ 4.1.2			390
PR 4.1.3 plinth cabinet	74YZ 4.1.3			550
PR 4.2.1 plinth cabinet	74YZ 4.2.1		350	290
PR 4.2.2 plinth cabinet	74YZ 4.2.2			390
PR 4.2.3 plinth cabinet	74YZ 4.2.3			550
PR 5.1.1 plinth cabinet	74YZ 5.1.1	900	240	290
PR 5.1.2 plinth cabinet	74YZ 5.1.2			390
PR 5.1.3 plinth cabinet	74YZ 5.1.3			550
PR 5.2.1 plinth cabinet	74YZ 5.2.1		350	290
PR 5.2.2 plinth cabinet	74YZ 5.2.2			390
PR 5.2.3 plinth cabinet	74YZ 5.2.3			550

Note: Complete cabinets' dimensions on page 22. Plinth is not supplied with cabinet and must be ordered separately (see page 17).

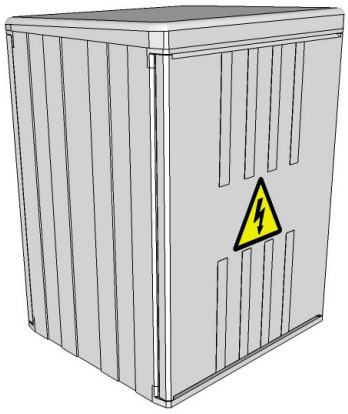
PR 3.1.3 plinth cabinet



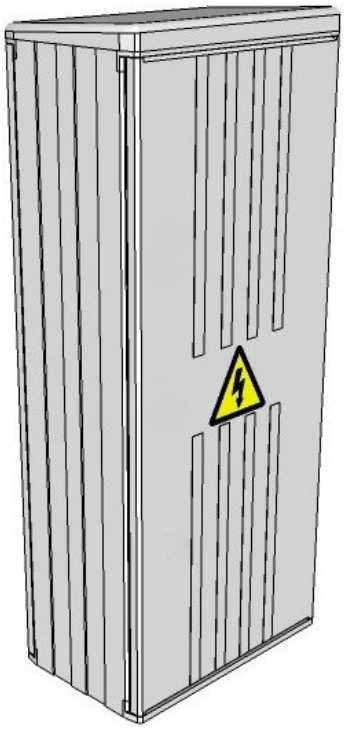
PR 4.2.1 plinth cabinet



PR 2.2.2 plinth cabinet



PR 5.1.1 plinth cabinet



■ Plinth cabinets IP54

Cabinets used with plinth or built-in cabinets with plinth in case of more superimposed cabinets.

Three-point leverage lock system is required for cabinets IP54.

Type:	Catalogue no.	Height [mm]	Depth [mm]	Width [mm]
PR 1.1.1 plinth cabinet IP54	74YZ54 1.1.1	300	240	290
PR 1.1.2 plinth cabinet IP54	74YZ54 1.1.2			390
PR 1.1.3 plinth cabinet IP54	74YZ54 1.1.3			550
PR 1.2.1 plinth cabinet IP54	74YZ54 1.2.1		350	290
PR 1.2.2 plinth cabinet IP54	74YZ54 1.2.2			390
PR 1.2.3 plinth cabinet IP54	74YZ54 1.2.3			550
PR 2.1.1 plinth cabinet IP54	74YZ54 2.1.1	500	240	290
PR 2.1.2 plinth cabinet IP54	74YZ54 2.1.2			390
PR 2.1.3 plinth cabinet IP54	74YZ54 2.1.3			550
PR 2.2.1 plinth cabinet IP54	74YZ54 2.2.1		350	290
PR 2.2.2 plinth cabinet IP54	74YZ54 2.2.2			390
PR 2.2.3 plinth cabinet IP54	74YZ54 2.2.3			550
PR 3.1.1 plinth cabinet IP54	74YZ54 3.1.1	600	240	290
PR 3.1.2 plinth cabinet IP54	74YZ54 3.1.2			390
PR 3.1.3 plinth cabinet IP54	74YZ54 3.1.3			550
PR 3.2.1 plinth cabinet IP54	74YZ54 3.2.1		350	290
PR 3.2.2 plinth cabinet IP54	74YZ54 3.2.2			390
PR 3.2.3 plinth cabinet IP54	74YZ54 3.2.3			550
PR 4.1.1 plinth cabinet IP54	74YZ54 4.1.1	700	240	290
PR 4.1.2 plinth cabinet IP54	74YZ54 4.1.2			390
PR 4.1.3 plinth cabinet IP54	74YZ54 4.1.3			550
PR 4.2.1 plinth cabinet IP54	74YZ54 4.2.1		350	290
PR 4.2.2 plinth cabinet IP54	74YZ54 4.2.2			390
PR 4.2.3 plinth cabinet IP54	74YZ54 4.2.3			550
PR 5.1.1 plinth cabinet IP54	74YZ54 5.1.1	900	240	290
PR 5.1.2 plinth cabinet IP54	74YZ54 5.1.2			390
PR 5.1.3 plinth cabinet IP54	74YZ54 5.1.3			550
PR 5.2.1 plinth cabinet IP54	74YZ54 5.2.1		350	290
PR 5.2.2 plinth cabinet IP54	74YZ54 5.2.2			390
PR 5.2.3 plinth cabinet IP54	74YZ54 5.2.3			550

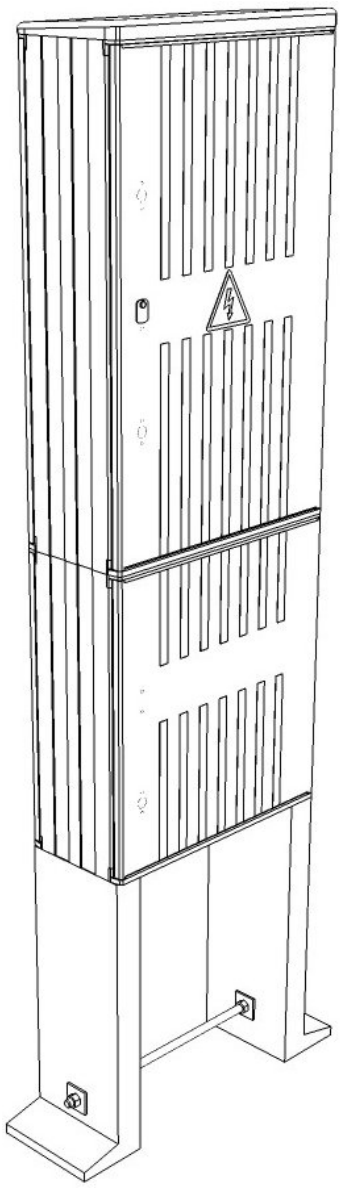
Note: Complete cabinets' dimensions on page 22. Plinth is not supplied with cabinet and must be ordered separately (see page 17).

■ Plinths for 3D cabinets

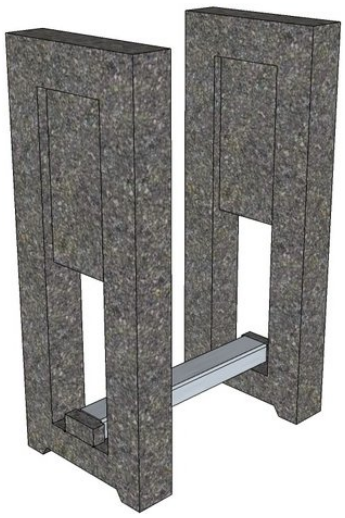
Plinths used with plinth cabinets or under built-in cabinets with plinth in case of more superimposed cabinets.

Type:	Catalogue no.	Height [mm]	Depth [mm]	Width [mm]
SO 1.1.1	8200 1.1.1	300	240	290
SO 1.1.2	8200 1.1.2			390
SO 1.1.3	8200 1.1.3			550
SO 1.2.1	8200 1.2.1		350	290
SO 1.2.2	8200 1.2.2			390
SO 1.2.3	8200 1.2.3			550
SO 2.1.1	8200 2.1.1	500	240	290
SO 2.1.2	8200 2.1.2			390
SO 2.1.3	8200 2.1.3			550
SO 2.2.1	8200 2.2.1		350	290
SO 2.2.2	8200 2.2.2			390
SO 2.2.3	8200 2.2.3			550
SO 3.1.1	8200 3.1.1	600	240	290
SO 3.1.2	8200 3.1.2			390
SO 3.1.3	8200 3.1.3			550
SO 3.2.1	8200 3.2.1		350	290
SO 3.2.2	8200 3.2.2			390
SO 3.2.3	8200 3.2.3			550
SO 4.1.1	8200 4.1.1	700	240	290
SO 4.1.2	8200 4.1.2			390
SO 4.1.3	8200 4.1.3			550
SO 4.2.1	8200 4.2.1		350	290
SO 4.2.2	8200 4.2.2			390
SO 4.2.3	8200 4.2.3			550
SO 5.1.1	8200 5.1.1	900	240	290
SO 5.1.2	8200 5.1.2			390
SO 5.1.3	8200 5.1.3			550
SO 5.2.1	8200 5.2.1		350	290
SO 5.2.2	8200 5.2.2			390
SO 5.2.3	8200 5.2.3			550

SO 3.1.3 in standalone pillar set



ZK 0.1.1



ZK 0.1.3

3D cabinets bases

Bases for cabinets used with plinth.

Type:	Catalogue no.	Height [mm]	Depth [mm]	Width [mm]
ZK 0.1.1	8080 0.1.1	600	240	290
ZK 0.1.2	8080 0.1.2			390
ZK 0.1.3	8080 0.1.3			550
ZK 0.2.1	8080 0.2.1		350	290
ZK 0.2.2	8080 0.2.2			390
ZK 0.2.3	8080 0.2.3			550

■ 3D cabinets locks

Several lock types can be ordered to 3D Cabinets - one-point lock system, two-point lock system or three-point lock system. FAB locks and cylindrical locks can be offered with system of unified key.

In case of IP54 cabinets with increased protection, only three-point leverage system with any lock cylinder must be ordered.

One-point lock systems and leverage closing.

Type:	Catalogue no.
One-point lock system with energetic cam lock	11
One-point lock system with not divided D lock	12
One-point lock system with square lock 6x6mm	13
One-point lock system FAB	14
One-point leverage closing system without lock cylinder *)	15

Two-point lock systems.

Type:	Catalogue no.
Two-point lock system with cam lock and not divided D lock	21
Two-point lock system with not divided D lock	22
Two-point lock system with square lock 6x6mm	23
Two-point lock system FAB	24

Three-point leverage lock system.

Type:	Catalogue no.
Three-point leverage lock system with energy cylinder	31
Three-point leverage lock system with D cylinder (not divided)	32
Three-point leverage lock system with square 6x6mm cylinder	33
Three-point leverage lock system with FAB cylinder	34
Three-point leverage lock system without cylinder *)	35

Cabinet **keys**.

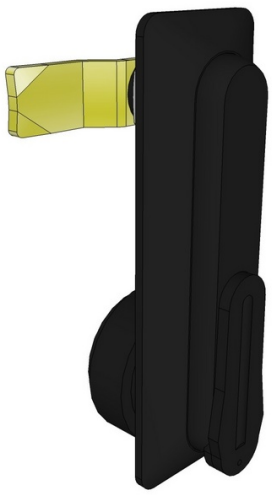
Type:	Catalogue no.
Square locking key 6 x 6 mm according to ČSN 35 9756	
Half-moon locking key according to ČSN 35 9754 annex 1	

**) Cylindrical insert can be ordered separately.*

Other types of locks (for example cam lock with padlock) or other variations of cylindrical insertions can be supplied.

One-point lock system

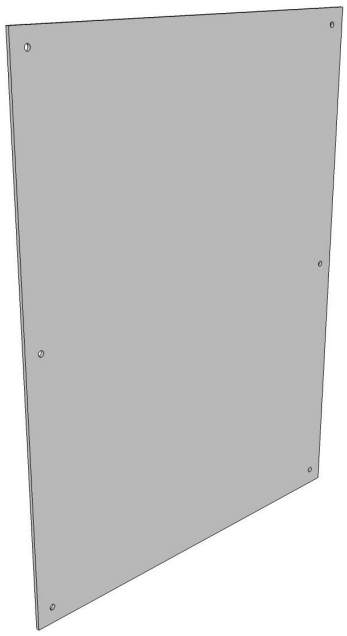
One-point cam lock system



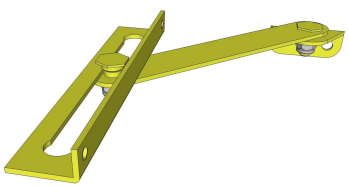
Three-point leverage lock system

Modular frame 5x24 modules 5.x.3

Mounting plate 5.x.3



Door catch



Door switch

■ 3D cabinets accessories

System of 3D cabinets utilization can be increased by properly chosen accessories.

Frames for devices with capacity from 12 to 120 modules.

Type:	Catalogue no.
Modular frame 1.x.1 1x12 modules	9100 1.x.1
Modular frame 1.x.2 1x17 modules	9100 1.x.2
Modular frame 1.x.3 1x24 modules	9100 1.x.3
Modular frame 2.x.1 2x12 modules	9100 2.x.1
Modular frame 2.x.2 2x17 modules	9100 2.x.2
Modular frame 2.x.3 2x24 modules	9100 2.x.3
Modular frame 3.x.1 3x12 modules	9100 3.x.1
Modular frame 3.x.2 3x17 modules	9100 3.x.2
Modular frame 3.x.3 3x24 modules	9100 3.x.3
Modular frame 4.x.1 4x12 modules	9100 4.x.1
Modular frame 4.x.2 4x17 modules	9100 4.x.2
Modular frame 4.x.3 4x24 modules	9100 4.x.3
Modular frame 5.x.1 5x12 modules	9100 5.x.1
Modular frame 5.x.2 5x17 modules	9100 5.x.2
Modular frame 5.x.3 5x24 modules	9100 5.x.3

Mounting plates 4mm for equipment attachment (thermoplastic).

Type:	Catalogue no.
Mounting plate 1.x.1	9110 1.x.1
Mounting plate 1.x.2	9110 1.x.2
Mounting plate 1.x.3	9110 1.x.3
Mounting plate 2.x.1	9110 2.x.1
Mounting plate 2.x.2	9110 2.x.2
Mounting plate 2.x.3	9110 2.x.3
Mounting plate 3.x.1	9110 3.x.1
Mounting plate 3.x.2	9110 3.x.2
Mounting plate 3.x.3	9110 3.x.3
Mounting plate 4.x.1	9110 4.x.1
Mounting plate 4.x.2	9110 4.x.2
Mounting plate 4.x.3	9110 4.x.3
Mounting plate 5.x.1	9110 5.x.1
Mounting plate 5.x.2	9110 5.x.2
Mounting plate 5.x.3	9110 5.x.3

Another 3D cabinets possible **accessories**.

Type:
Inside lighting 8W *(fluorescent)*
Document casing A5, A4
Tempering *(thermostat, heating unit)*
Reversible door *(access to devices from both sides)*
Ventilation *(forced or natural)*
Construction „C“ profiles 330, 445, 550 and 830 mm
Plastic peephole 110 x 110 mm
Top coating RAL 7035 - varnish shade
Resistant set of hinges *(set of door hinges)*
Door catch *(prevent spontaneous door closing)*
Door switch including assembly holder

3D system – sample sets

3D Modular cubicle system is intended for separate cabinets but also for cabinets' sets. Individual cabinets can be arbitrarily assembled side by side and superimposed in cabinets or pillars of various height and depth (total height sum must be the same).

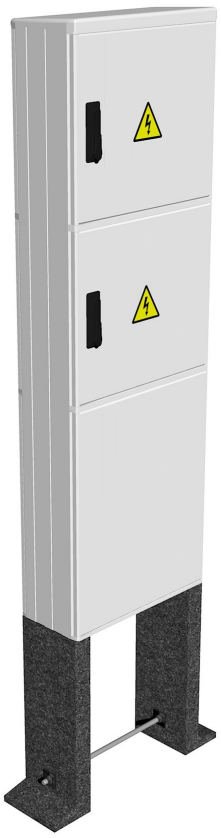
If there are more superimposed cabinets, numerical signs means single height from above - for example, 33.x.x means two superimposed cabinets of 600 mm height. Set x.x.123 means side by side cabinets with 290, 390 a 550 mm width - in this case numbering always from the left.

Only basic types of cabinets are stated in the catalogue. List of set is theoretically endless and can be completed according to examples. Our technical support can help you with modular cubicle system set preparation.

Sample set 1:

Standalone pillar cabinets composed of following items:

- **PR 2.1.3 plinth cabinet** *(catalogue no. 74YZ 2.1.3)*
- Three-point leverage lock system without cylinder *(catalogue no. 15)*
- **PR 2.1.3 recessed** *(catalogue no. 70YZ 2.1.3)*
- Three-point leverage lock system without cylinder *(catalogue no. 15)*
- **SO 4.1.3** *(catalogue no. 8200 4.1.3)*
- **ZK 0.1.3** *(catalogue no. 8080 0.1.3)*



If the set is composed of cabinets of different height, depth and width must be the same.

Marking of standalone pillar cabinets can be simplified.

- **PR 224.1.3 standalone pillar** *(catalogue no. 72YZ 224.1.3)*
- 2x Three-point leverage lock system without cylinder *(catalogue no. 15)*
- ***ZK 0.1.3*** *(catalogue no. 8080 0.1.3)*

Sample set 2:

It is standalone pillar cabinet composed of following items:

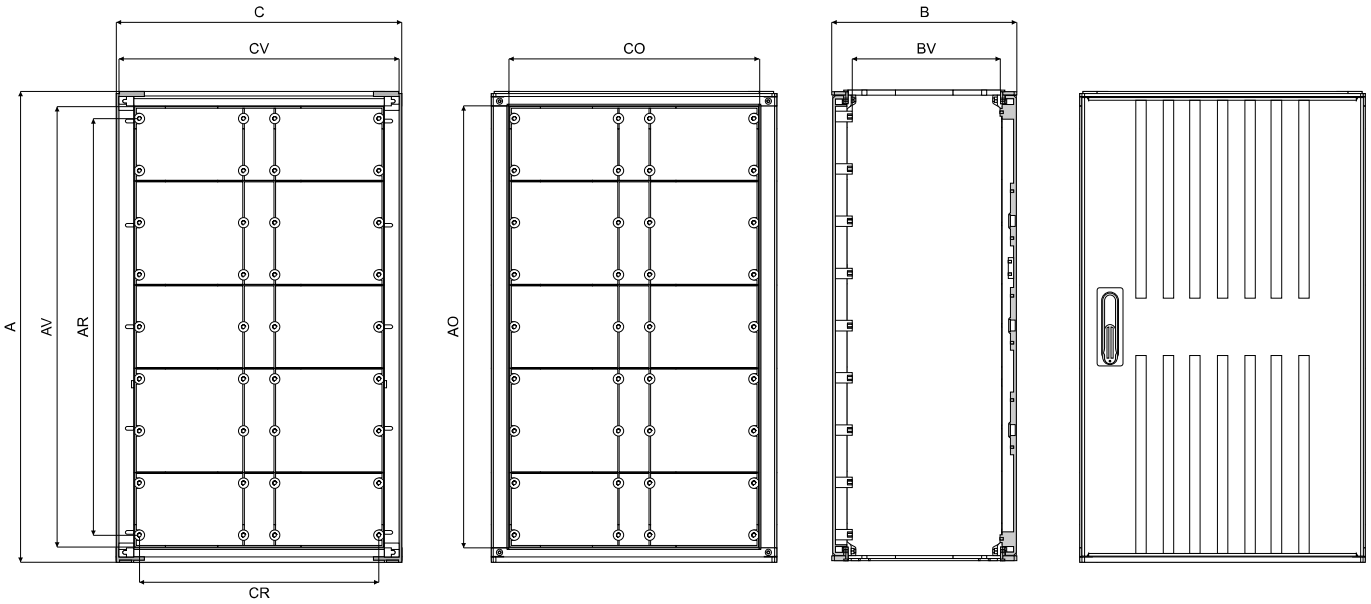
- **PR 3.1.2 plinth cabinet** *(catalogue no. 74YZ 3.1.2)*
- One-point lock system with square lock 6x6 mm *(catalogue no. 13)*
- **PR 3.1.3 plinth cabinet** *(catalogue no. 74YZ 3.1.3)*
- One-point lock system with energetic cam lock *(catalogue no. 11)*
- **SO 3.1.23** *(catalogue no. 8200 3.1.23)*
- **ZK 0.1.23** *(catalogue no. 8080 0.1.23)*

Set is composed of cabinets of different width, but depth and height must be the same.

Simplified marking:

- **PR 33.1.23 standalone pillar** *(catalogue no. 72YZ 33.1.23)*
- One-point lock system with square lock 6x6 mm *(catalogue no. 13)*
- One-point lock system with energetic cam lock *(catalogue no. 11)*
- ***ZK 0.1.23*** *(catalogue no. 8080 0.1.23)*

3D cabinets dimension table



Height [mm]	Depth [mm]	Width [mm]	Type	Inner dimension [mm]			Door hole [mm]		Fastening pitch [mm]	
A	B	C		AV	BV	CV	AO	CO	AR	CR
300	240	290	PR 1.1.1	282	200	279	248	221	2x100	200
		390	PR 1.1.2	282	200	379	248	321	2x100	300
		550	PR 1.1.3	282	200	539	248	481	2x100	200+60+200
	350	290	PR 1.2.1	282	310	279	248	221	2x100	200
		390	PR 1.2.2	282	310	379	248	321	2x100	300
		550	PR 1.2.3	282	310	539	248	481	2x100	200+60+200
500	240	290	PR 2.1.1	482	200	279	448	221	4x100	200
		390	PR 2.1.2	482	200	379	448	321	4x100	300
		550	PR 2.1.3	482	200	539	448	481	4x100	200+60+200
	350	290	PR 2.2.1	482	310	279	448	221	4x100	200
		390	PR 2.2.2	482	310	379	448	321	4x100	300
		550	PR 2.2.3	482	310	539	448	481	4x100	200+60+200
600	240	290	PR 3.1.1	582	200	279	548	221	5x100	200
		390	PR 3.1.2	582	200	379	548	321	5x100	300
		550	PR 3.1.3	582	200	539	548	481	5x100	200+60+200
	350	290	PR 3.2.1	582	310	279	548	221	5x100	200
		390	PR 3.2.2	582	310	379	548	321	5x100	300
		550	PR 3.2.3	582	310	539	548	481	5x100	200+60+200
700	240	290	PR 4.1.1	682	200	279	648	221	6x100	200
		390	PR 4.1.2	682	200	379	648	321	6x100	300
		550	PR 4.1.3	682	200	539	648	481	6x100	200+60+200
	350	290	PR 4.2.1	682	310	279	648	221	6x100	200
		390	PR 4.2.2	682	310	379	648	321	6x100	300
		550	PR 4.2.3	682	310	539	648	481	6x100	200+60+200
900	240	290	PR 5.1.1	882	200	279	848	221	8x100	200
		390	PR 5.1.2	882	200	379	848	321	8x100	300
		550	PR 5.1.3	882	200	539	848	481	8x100	200+60+200
	350	290	PR 5.2.1	882	310	279	848	221	8x100	200
		390	PR 5.2.2	882	310	379	848	321	8x100	300
		550	PR 5.2.3	882	310	539	848	481	8x100	200+60+200

3D cabinets warming calculation

Calculation of heat dissipation for particular cabinets.

Calculation is made according to **IEC/TR 60890 ed. 2.0** Standard „A method of temperature-rise verification of low-voltage switchgear and controlgear assemblies by calculation“

Height [mm]	Width [mm]	Depth [mm]	Type	Power dissipation* [W]		
				Standalone pillar	Wall-mounted	Recessed
300	290	240	**PR 1.1.1**	49	45	33
		350	**PR 1.2.1**	64	59	41
	390	240	**PR 1.1.2**	63	58	43
		350	**PR 1.2.2**	78	72	50
	550	240	**PR 1.1.3**	84	77	58
		350	**PR 1.2.3**	92	84	59
500	290	240	**PR 2.1.1**	68	64	44
		350	**PR 2.2.1**	92	80	56
	390	240	**PR 2.1.2**	83	76	58
		350	**PR 2.2.2**	102	93	68
	550	240	**PR 2.1.3**	111	98	77
		350	**PR 2.2.3**	126	121	89
600	290	240	**PR 3.1.1**	78	71	54
		350	**PR 3.2.1**	97	91	64
	390	240	**PR 3.1.2**	97	85	65
		350	**PR 3.2.2**	115	104	76
	550	240	**PR 3.1.3**	122	109	87
		350	**PR 3.2.3**	145	130	101
700	290	240	**PR 4.1.1**	89	80	60
		350	**PR 4.2.1**	106	98	72
	390	240	**PR 4.1.2**	103	96	73
		350	**PR 4.2.2**	125	116	84
	550	240	**PR 4.1.3**	138	121	94
		350	**PR 4.2.3**	153	138	108
900	290	240	**PR 5.1.1**	114	98	73
		350	**PR 5.2.1**	126	116	86
	390	240	**PR 5.1.2**	127	115	91
		350	**PR 5.2.2**	118	120	102
	550	240	**PR 5.1.3**	135	116	112
		350	**PR 5.2.3**	173	163	127

** Power loss dispersed by cabinet surface during air warming in the cabinet Δt = 35 K upper part of cabinets height.*

3D cabinets technical data

Basic technical data for empty cabinets (ČSN EN 62208 ed. 2:12 Empty enclosures for low-voltage switchgear and controlgear assemblies – General requirements):

Rated voltage U_i.....1 000 V
International Protection Marking (basic).....IP44
International Protection Marking (increased).....IP54
Mechanical impact resistance.....IK10

Notes

AHVO cabinets system

Cabinets are designed as a monoblock. That means that the individual cabinet is moulded at one time without any other components required for assembly. Cabinets have a basic height 585 mm, a depth 216 mm and a width of 420 mm. The cabinets are made of SMC thermosetting material, which meets the requirements for flammability V0 and HB40 with weatherproofing and are suitable properties for electrotechnics.

Individual components are designed to be simple to assemble and use to meet a wide range of industry-specific electrotechnical requirements. The AHVO® cabinets can be mounted on a pole, wall-mounted, recessed and placed as a standalone pillar.

Cabinets' doors are smooth on the surface, what does not interfere aesthetics of the cabinet. Material and door construction eliminate any buckling or bending. Door can be opened at an angle of 200 °. This prevent door against possible damage during work inside the cabinet. Door is sufficiently resistant to mechanical damage or destruction. Door locking is possible with a single lock or one leverage lock. Door removal is simple and can be done by opening the cabinet. It is possible to install the cabinet ventilation lath without damaging the IP44 coverage.

General processing of the cabinet assures the assembly of individual superimposed cabinets in the theoretically endless line.

Cabinets are designed with respect to the acquisition costs and all technical requirements. In case of cabinets and especially pillars, number of mouldings is reduced, what means lower price of AHVO® cabinets.

Rear wall of the cabinet, which is intended primarily for devices installation, is provided with a slat for auxiliary segments installation. The slat contains pressed-in M6 or M8 nuts.

Cabinets differentiation according to the installation method

Installation method:	Description:
Recessed and / or plinth cabinet	cabinet recessed in the masonry or for a plinth as a standalone pillar (this is an universal cabinet)
Standalone pillar cabinet	cabinet including AHVO plinth (cat. no. 82300) and base of the pillar AHVO (cat. no. 80380)
Pole mount cabinet	cabinet for a pole, equipped with a fastening strap for a mounting on the UP-370 (cat. no. 50347) or the "BANDIMEX" system
Wall-mounted cabinet	cabinet prepared for wall mounting

Assembly procedure for recessed cabinets

Cabinets are usually placed outside the buildings, or into the wall recesses or as a standalone pillar. There must be a space for operators in front of cabinet at least 800 mm depth. In case of installation near other distribution devices, safe distance must be kept. Fuse boxes and switchboards are installed according to distribution company requirements.

Door is set down before installation and the recesses dimension is checked.

Using wooden wedges, the cabinet is straightened in such a way that the cabinet protrudes from the masonry with a raised frame. After the recess has been moistened with water, cabinet is consolidated with cement mortar (or with mounting foam). It is necessary to assure the cabinet dimensions (e.g. wedge it) before the final fixing to avoid cabinet deformation. The cabinet is then cleaned from the cement mortar residues. During supply cables connecting it is recommended to dismount the closing slat (connecting cabinets only) by turning and pulling the locking pins.

The conductor ends and cables must be insulated, alternatively fitted with terminal crimps or "V" terminal clamps. Conductors are shaped and earthing is connected to clamp (marked with an earthing mark). The cable entry must be sealed to prevent water getting into cabinets. This is ensured by thin layer of cement mortar or possibly walling the entire cabling space up. The ventilation of an IP44 door labyrinth can be improved by air slat (see accessories section).

After the cables assembly, the closing bar is fitted and the wires are marked as necessary. Then the door is fitted and the door closing and locking is tested. Cabinet locks are made with a brass core and greased during production. Further greasing is no longer required.

Assembly procedure for pole mount cabinets

Pole mount cabinets are produced for pole mounting and are fully prepared for it. There must be a space for operators in front of cabinet at least 800 mm depth. In case of installation near other distribution devices, safe distance must be kept. Disconnect cabinets are located according to the requirements of distributors.

Stabilizers for pole mounting are attached to the rear wall of the cabinets. The "BANDIMEX" system is used to fasten the cabinet to the pole.

Grommets for conductor entry/exit must be cut with a sharp device in the pre-pressed groove (and chosen diameter (50, 63, 76 mm)) before installing the protective power plastic pipes. Power plastic pipes bracket base (supplied separately as an accessory) is attached by straps to the pole so that top is approximately 0.5 m below the upper end of the pipes, and the lower to the centre between the cabinet and the upper bracket. For poles over 9 m in length, it is recommended to use three pieces of pipe brackets. The plastic pipes are fixed with a lower end on the grommets of the cabinet and attached to the base of the bracket by a divided part.

Door is removed from the cabinet and the conductors are pulled into the fixed pipes. The conductors are insulated and alternatively fitted with terminal crimp or "V" or "P" terminal clamps. Then the conductors are marked as needed. Before connecting to the grid, outlet pipes are fitted with covering (supplied separately as accessory).

If earthing outlet is fitted into the cabinet, it must be also protected by a plastic pipe. This pipe is attached to the pole in the same way as the outlet pipes for the conductors outgoing to overhead power line. The brass terminal M8 on the rear outer side of the cabinet is optionally connected to the housing ground (in case that cabinet is equipped with it). Cabinet earthing is connected to the outer rear part on the M8 brass bolt.

The door is fitted and the door closing and locking is tested. Cabinet locks are made with a brass core and greased during production. Further

greasing is no longer required.

Assembly procedure for wall-mounted cabinets

Wall-mounted cabinets are only those where the cables entry can be secured. They are called as wall-mounted cabinets in the catalogue. There must be a space for operators in front of cabinet at least 800 mm depth. In case of installation near other distribution devices, safe distance must be kept. Cabinets are installed at least 0.6 m above the terrain.

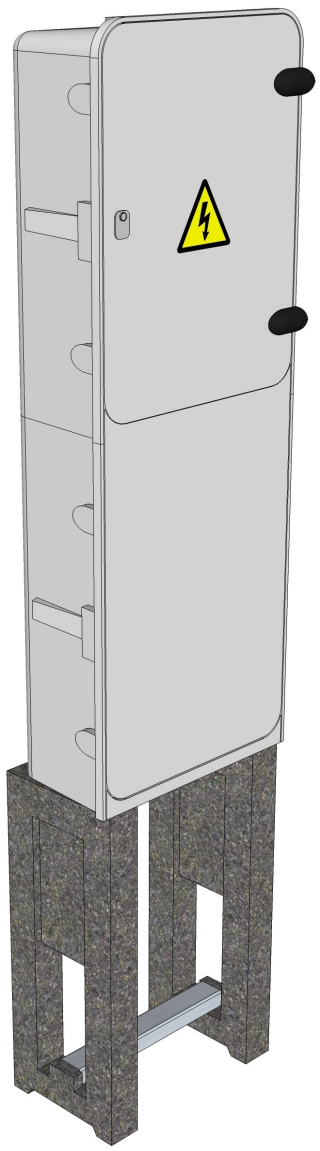
Door and internal devices are removed from the cabinet and the mounting holes are drilled into the rear wall of the cabinet. The layout and number of holes must be adapted to the interior facilities of the cabinet and to the state and character of the wall on which the cabinet is installed. For cabinet fastening common fasteners (plastic anchors, screws) are used. After fastening the cabinet to the wall, devices are mounted back.

Entry/exit conductors must be sufficiently protected from mechanical damage. When the conductors are plugged into the cabinet, they are insulated and alternatively fitted with terminal crimp or "V" or "P" terminal clamps. Then they are plugged in and the conductors are marked as needed.

All the coverings and cabinet door are mounted back and the door closing and locking is tested. Cabinet locks are made with a brass core and greased during production. Further greasing is no longer required.

Mounting procedure for standalone pillar cabinets

Standalone pillar cabinets are placed freely in the field or close to the buildings and fences. There must be a space for operators in front of cabinet at least 800 mm depth. In case of installation near other distribution devices, safe distance must be kept. The pillar consists of three basic parts: cabinet, plinth and base of the pillar. These parts can be ordered as separate items. The plinth and the base of the pillar can be installed first in the open space and after finishing all the terrain adjustments, cabinet is mounted and plugged in.



At first plastic or concrete base of the pillar is assembled. Two base pieces are precisely, according to plinth width, spread out with the aid of provided bar brace, so that the pre-drilled holes (countersunk-head bolt) fit tightly in the plinth base holes. Then the base is assembled with a plinth. Set of the plinth and base of the pillar are placed in the digged hole so that plinth base is approximately 5 cm below the final terrain level. The plinth is put straight and ground is added on the sides if needed. If necessary (bearing capacity of the soil is reduced) plinth can be concreted. Cabinet can be fastened to the plinth then.

Door is removed from the cabinet. Furthermore, the cabinet cover is removed from the cabinet by turning and pulling the locking pins and pulling the cover forward. Then the closure slat at the bottom of the base is removed by turning and pulling the locking pins. The cable compartment is equipped with "L" console for cable attachment and also to prevent cables from mechanical stress on the printed circuits. The conductor ends and cables must be insulated, alternatively fitted with terminal crimp or terminal clamps. Conductors are shaped and connected to the protective-conductor terminal and marked as earthing (if the clamp is provided with the cabinet). Grounding conductor is connected there too.

When the cable mounting is completed, we continue with pillar base covering. We cover the base step by step with inert material. After filling the entire base, the locking lath is fixed and conductors are marked as necessary. Then the cover of the cable space and cabinet door are placed and the door closing and locking is tested. Cabinet locks are made with a brass core and greased during production. Further greasing is no longer required. Finally, the last terrain adjustments are made.

Empty cabinets IP44

Type:	Catalogue no.:	Dimensions (height x depth x width) mm:
PR O recessed (closed)	70301	570 x 216 x 420
PR O pole mount (closed)	71301	570 x 216 x 420
PR A standalone pillar (opened)	72302	1.185 x 216 x 420
PR A recessed and / or plinth cabinet (opened)	75302	585 x 216 x 420

Empty cabinets IP54

Type:	Catalogue no.:	Dimensions (height x depth x width) mm:
PR O recessed IP54 (closed)	70301.54	570 x 216 x 420
PR O pole mount IP54 (closed)	71301.54	570 x 216 x 420
PR A standalone pillar IP54 (opened)	72302.54	1.185 x 216 x 420
PR A recessed and / or plinth cabinet IP54 (opened)	75302.54	585 x 216 x 420

AHVO cabinets plinths and bases

Type:	Catalogue no.:	Dimensions (height x depth x width) mm:
Plinth AHVO	82300	600 x 216 x 420
Plinth AHVO IP54	82300.54	600 x 216 x 420
Pillar base AHVO	80380	600 x 230 x 560

AHVO cabinets locks

Type:	Catalogue no.:
Energetic cam locks D (divided)	7007
Energetic cam locks D IP54 (not divided)	7007.54
Square lock 6x6 mm	7008
Square lock 6x6 mm IP54	7008.54
FAB lock	7009

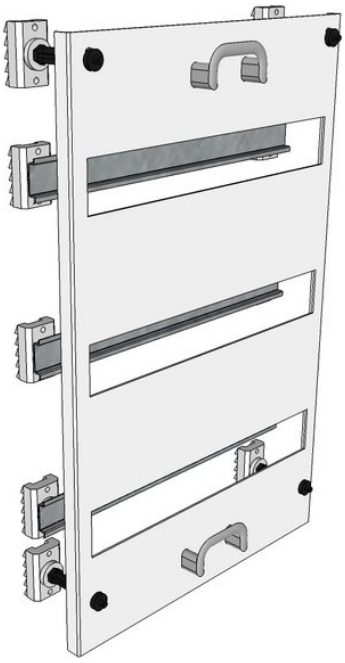
PR A recessed and / or plinth cabinet

PR O recessed

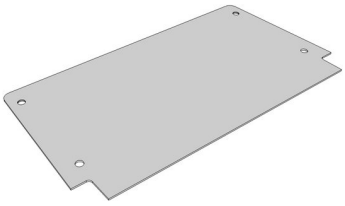
PR O pole mount IP54

AHVO pillar base

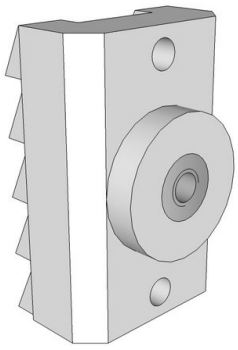
Modular frame 3x17 moduls



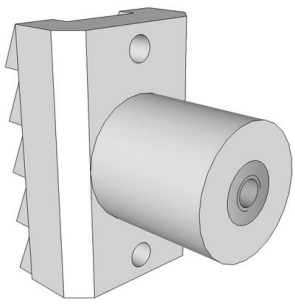
Bottom part AHVO



Plastic holder M6 5 mm



Plastic holder M6 25 mm



AHVO cabinets accessories

System of AHVO utilization can be increased by properly chosen accessories.

Modular frames for devices with capacity of 51 modules.

Type:	Catalogue no.:
Modular frame 3x17 modules with covering IP20 A	9103
Modular frame 3x17 modules with covering IP20 O	9104

Bottom part for closing bottom or upper part of opened cabinets.

Type:	Catalogue no.:
Bottom part AHVO	51216

Plastic holders for AHVO cabinets equipment fitting (cabinets do not contain pressed nuts).

Type:	Catalogue no.:
Adjustable plastic holder M8 25 mm	9044
Adjustable plastic holder M8 5 mm	9045
Adjustable plastic holder M6 25mm	9046
Adjustable plastic holder M6 5mm	9047

Accessories for AHVO cabinets.

Type:
Document casing A5, A4
Tempering *(heating unit, thermostat)*
Ventilation *(forced, natural))*
Construction „C“ profiles 330, 445, 550 mm
Plastic peephole 110 x 110 mm
Tipping door *(removable, hinge underneath)*
Horizontal cabinet version

AHVO cabinets – sample sets

The AHVO system is designed especially for individual cabinets and standalone pillars. Cabinets can also be assembled in limited extent (superimposed).

Only simple basic types of cabinets are listed in the catalogue. Here are some sample sets realized in the past. Our technicians are ready to help you with new set realization.

Sample set 1:

Standalone pillar cabinet consisting of following items:

- **PR A recessed and / or plinth cabinet** *(catalogue no. 75302)*
- **Bottom part AHVO** *(catalogue no. 51216)*
- Square lock 6x6mm *(catalogue no. 7008)*
- **PR H recessed** *(custom-made production)*
- **Bottom part AHVO** *(katalogové číslo 51216)*
- Square lock 6x6mm *(catalogue no. 7008)*
- **AHVO plinth** *(catalogue no. 82300)*
- **AHVO base** *(catalogue no.80380)*

Note: Inside equipment is illustrative only and is not part of the set.

Sample set 2:

Set for pole mount cabinets consisting of following items:

- **PR A recessed and / or plinth cabinet** *(catalogue no. 75302)*
- Energetic cam lock D *(catalogue no. 7007)*
- **PR V recessed** *(custom-made production)*
- Energetic cam lock D *(catalogue no. 7007)*

Note: Inside equipment is illustrative only and is not part of the set.

AHVO technical data

Basic technical data for empty cabinets (ČSN EN 62208 ed. 2:12 Empty enclosures for low-voltage switchgear and controlgear assemblies – General requirements):

Rated voltage U_i.....1 000 V
International Protection Marking (basic).....IP44
International Protection Marking (increased).....IP54
Mechanical impact resistance.....IK10

Notes

Poznámky

MODUL cabinets system

Cabinets are solved as a construction set consisting of individual module of 555 mm height, 200 mm depth and 270 mm width. Individual modules are made of plastic SMC material, meeting inflammability requirements V0 a HB40 and adjustment for weather condition and suitable properties for electrical engineering.

Modules can be assembled side by side with or without divider, up to a width of 5 modules what is 1,345 mm. Individual components are designed to be simple to assemble and use to meet a wide range of specific electrical engineering requirements. Modular switchboards can be mounted on a pole, recessed, wall-mounted and placed as a standalone pillar.

Cabinet doors are smooth on the surface, what does not interfere aesthetics of switchgear. Material and door construction eliminate any buckling or bending. Doors are sufficiently resistant to mechanical damage or destruction. Door locking is possible with one or two single locks or one leverage lock system. Door removal is simple and can be done by opening the cabinet. It is possible to install the cabinet ventilation lath without damaging the IP44 coverage.

Sides of the cabinets are lightly fitted with ribs on the outer surface. These ribs make difficult to pull the cabinet out from the masonry. The overall treatment of the sides and dividers secures individual cabinets side by side in an endless series.

Cabinet roof has an overlap across the ground plan of the cabinet. This solution prevents water leaking into the cabinet.

Rear side of the cabinet, which is intended for installation of devices primarily, is supplied with pressed-in M6 or M8.

Cabinets differentiation according to mounting

Mounting:	Description:
Recessed	Cabinets without roof designed to be mounted into masonry, as a standalone pillar (plastic or concrete) Type 1 to Type 5 (it is not possible to adjust cabinets for standalone pillar, it can be done only within production)
Pole mount	Cabinets for mounting on the pole. The cabinet is fitted with the UP-370 fastening strap for mounting (cat. no. 50347) or the "BANDIMEX" system
Standalone pillar	Cabinet assembly, pillar superstructures Type 1 to Type 5, and base (the pillar base does not need to be ordered separately)

Assembly procedure for recessed cabinets

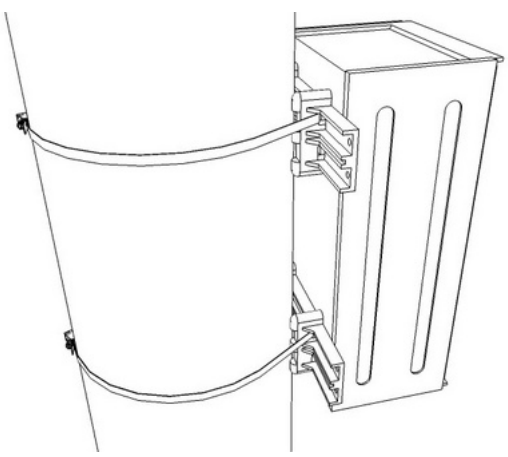
Before mounting, door is set down and the recesses dimensions are checked. Plastic cabinets used in masonry are provided with perforations to prevent cabinets to slip out of the wall.

Using the wooden wedges, cabinet is straightened in such a way that the cabinet protrudes from the masonry with a raised frame (upper and lower part). After the recess has been moistened with water, cabinet is consolidated with cement mortar (or with mounting foam). It is necessary to assure the cabinet dimensions (e.g. wedge it) before the final fixing to avoid cabinet deformation. Cabinet is then cleaned from the cement mortar residues. During supply cables connecting it is recommended to dismount the closing slat (disconnect and connecting cabinets only).

The conductor ends and cables must be insulated, alternatively fitted with terminal crimp or “V” terminal clamps. Conductors are shaped and earthing is connected to clamp (marked with an earthing mark). The cable entry must be sealed to prevent water getting into cabinets. This is ensured by thin layer of cement mortar or possibly walling the entire cabling space up. Ventilation of an IP44 door labyrinth can be improved by air lath (see accessories section).

After the cable assembly, the closing bar is fitted and conductors are marked as necessary. Then the door is fitted and the door closing and locking is tested. Cabinet locks are made with a brass core and greased during production. Further greasing is no longer required.

Assembly procedure for pole mount cabinets



Pole mount cabinets are produced for pole mounting and are fully prepared for it. There must be a space for operators in front of cabinet at least 800 mm depth. In case of installation near other distribution devices, safe distance must be kept. Disconnect cabinets are located according to the requirements of distributors.

Stabilizers for pole mounting are attached to the rear wall of the cabinets. The "BANDIMEX" system is used to fasten the cabinet to the pole.

Grommets for conductor entry/exit must be cut with a sharp device in the pre-pressed groove (and chosen diameter (50, 63, 76 mm)) before installing the protective power plastic pipes. Power plastic pipes bracket base (supplied separately as an accessory) is attached by the straps to the pole, so that the top is approximately 0.5 m below the upper end of the pipes, and the lower to the centre between the cabinet and the upper bracket. For poles over 9 m in length, it is recommended to use three pieces of pipe brackets. Plastic pipes are fixed with a lower end on the grommets of the cabinet and attached to the base of the bracket by a divided part.

Door is removed from the cabinet and the conductors are pulled into the fixed pipes. The conductors are insulated and alternatively fitted with terminal crimp or "V" or "P" terminal clamps. Then the conductors are marked as needed. Before connecting to the grid, outlet pipes are fitted with covering (supplied separately as an accessory).

If the earthing outlet is fitted into the cabinet It must be also protected by a plastic pipe. This pipe is attached to the pole in the same way as the outlet pipes for the conductors outgoing to overhead power line. The brass terminal M8 on the rear outer side of the cabinet is optionally connected to the housing ground (in case that cabinet is equipped with it). Cabinet earthing is connected to the outer rear part on the M8 brass bolt.

The door is fitted and the door closing and locking is tested. Cabinet locks are made with a brass core, and greased during production. Further

greasing is no longer required.

Assembly procedure for wall-mounted cabinets

Wall-mounted cabinets are only those where cable entry can be secured. There must be a space for operators in front of cabinet at least 800 mm depth. In case of installation near other distribution devices, safe distance must be kept. Cabinets are installed at least 0.6 m above the terrain.

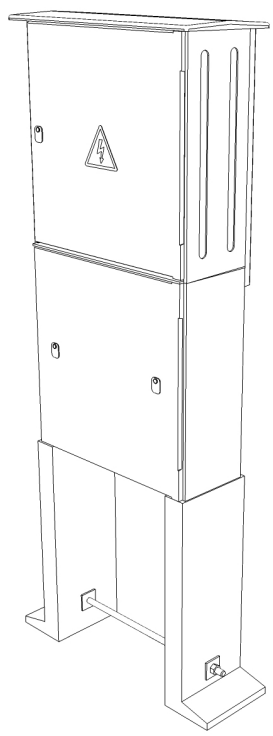
Door and internal devices are removed from the cabinet and the mounting holes are drilled into the rear wall of the cabinet. The layout and number of holes must be adapted to the interior facilities of the cabinet and to the state and character of wall on which the cabinet is installed. For cabinet fastening common fasteners (plastic anchors, screws) are used. After fastening the cabinet to the wall, all the devices are mounted back.

Entry/exit conductors must be sufficiently protected from mechanical damage. When the conductors are plugged into the cabinet, they must be insulated and alternatively fitted with terminal crimp or "V" or "P" terminal clamps. Then they are plugged in and the conductors are marked as needed.

All the coverings and cabinet doors are mounted back and the door closing and locking is tested. Cabinet locks are made with a brass core and greased during production. Further greasing is no longer required.

Mounting procedure for standalone pillar cabinets

Standalone pillar cabinets are placed with plinth and a pillar freely in the field or close to the buildings and fences. There must be a space for operators in front of cabinet at least 800 mm depth. In case of installation near other distribution devices, safe distance must be kept. The pillar consists of three basic parts: cabinet, plinth and pillar base. These parts can be ordered as separate items. Cabinet and pillar Type 1 to Type 5 can also be ordered as separate items, but must be prepared as a unit from production. Cabinet can not be rearranged to the pillar.



At first plastic or concrete base of the pillar is assembled. Two base pieces are precisely, according to plinth width spread out with the aid of provided bar brace, so that the pre-drilled holes (countersunk-head bolt) fit tightly in the plinth base holes. Then the base is assembled with a plinth. Set of the plinth and the base of the pillar are placed in the digged hole so that the plinth base is approximately 5 cm below the final terrain level. The plinth is put straight and ground is added on the sides if needed. If necessary (bearing capacity of the soil is reduced) plinth can be concreted.

Cabinet cover is removed from the plinth by moving two stops toward the plinths axis and opening the cover forwards. Door is removed from the cabinet. Then, locking laths are demounted at the bottom of the cabinet. The cable compartment is equipped with "L" console for cable attachment and also to prevent cables from mechanical stress on the printed circuits. Conductor ends and cables must be insulated, alternatively fitted with terminal crimp or terminal clamps. Conductors are shaped and connected to the clamp (if the clamp is provided with the cabinet). Then marked as earthing. Grounding conductor is connected there too.

When the cable mounting is completed, we continue with the pillar base covering. We cover the base step by step with inert material. After filling the entire base, locking laths are fixed and conductors are marked as necessary. Then the cover of cable space and cabinet door are placed and the door closing and locking is tested. Cabinet locks are made with a brass core and greased during production. Further greasing is no longer required. Finally, the last terrain adjustments are made.

Recessed cabinets IP44

Type:	Catalogue no.:	Dimension (H x D x W) mm:
PR 1M recessed (closed)	7010	555 x 220 x 280
PR 1S recessed (opened from below)	7011	555 x 220 x 280
PR 2M recessed (closed)	7020	555 x 220 x 540
PR 2S recessed (opened from below)	7021	555 x 220 x 540
PR 3M recessed (closed)	7030	555 x 220 x 810
PR 3S recessed (opened from below)	7031	555 x 220 x 810
PR 4M recessed (closed)	7040	555 x 220 x 1.070
PR 4S recessed (opened from below)	7041	555 x 220 x 1.070
PR 5M recessed (closed)	7050	555 x 220 x 1.350
PR 5S recessed (opened from below)	7051	555 x 220 x 1.350

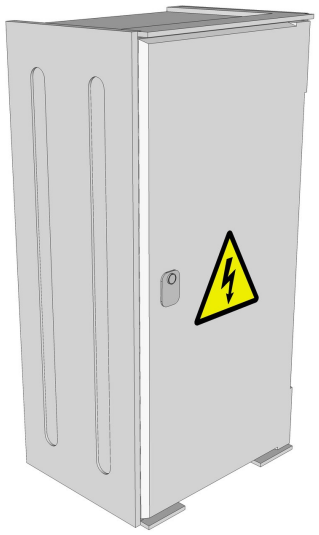
Pole mount cabinets IP44

Type:	Catalogue no.:	Dimension (H x D x W) mm:
PR 1M pole mount (closed)	7110	555 x 220 x 280
PR 1S pole mount (opened from below)	7111	555 x 220 x 280
PR 2M pole mount (closed)	7120	555 x 220 x 540
PR 2S pole mount (opened from below)	7121	555 x 220 x 540
PR 3M pole mount (closed)	7130	555 x 220 x 810
PR 3S pole mount (opened from below)	7131	555 x 220 x 810
PR 4M pole mount (closed)	7140	555 x 220 x 1.070
PR 4S pole mount (opened from below)	7141	555 x 220 x 1.070
PR 5M pole mount (closed)	7150	555 x 220 x 1.350
PR 5S pole mount (opened from below)	7151	555 x 220 x 1.350

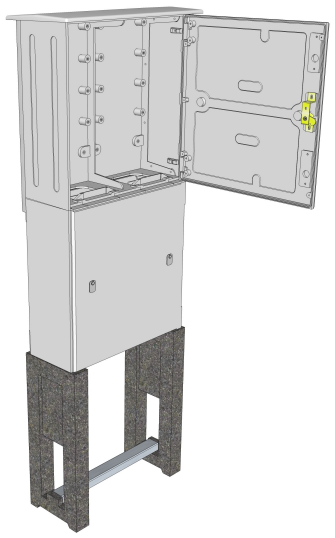
Standalone pillar cabinets IP44

Type:	Catalogue no.:	Dimension (H x D x W) mm:
PR 1M standalone pillar (closed)	7210	1.120 x 230 x 290
PR 1S standalone pillar (opened from below)	7211	1.120 x 230 x 290
PR 2M standalone pillar (closed)	7220	1.120 x 230 x 550
PR 2S standalone pillar (opened from below)	7221	1.120 x 230 x 550
PR 3M standalone pillar (closed)	7230	1.120 x 230 x 820
PR 3S standalone pillar (opened from below)	7231	1.120 x 230 x 820
PR 4M standalone pillar (closed)	7240	1.120 x 230 x 1.080
PR 4S standalone pillar (opened from below)	7241	1.120 x 230 x 1.080
PR 5M standalone pillar (closed)	7250	1.120 x 230 x 1.360
PR 5S standalone pillar (opened from below)	7251	1.120 x 230 x 1.360

PR 1M recessed



PR 2S standalone pillar



PR 3M standalone pillar

Energetic cam lock D (divided)

Square lock 6x6 mm

■ Pillar superstructure for MODUL cabinets

Using a pillar superstructure, standalone pillar cabinets can be assembled of the basic cabinets (recessed). The pillar superstructure is suitable for atypical pillar cabinet sets.

The pillar superstructure is suitable for M (closed) and S (opened from below) cabinets.

Type:	Catalogue no.:	Dimension (H x D x W) mm:
Pillar superstructure type 1	8100	1.120 x 230 x 290
Pillar superstructure type 2	8200	1.120 x 230 x 550
Pillar superstructure type 3	8300	1.120 x 230 x 820
Pillar superstructure type 4	8400	1.120 x 230 x 1.080
Pillar superstructure type 5	8500	1.120 x 230 x 1.360

■ MODUL cabinets bases

Type:	Catalogue no.:	Dimension (H x D x W) mm:
Base type 1	8081	600 x 230 x 280
Base type 2	8082	600 x 230 x 540
Base type 3	8083	600 x 230 x 810
Base type 4	8084	600 x 230 x 1.070
Base type 5	8085	600 x 230 x 1.350

■ MODUL cabinets locks

Type:	Catalogue no.:
Energetic cam lock D (divided)	7007
Square lock 6x6 mm	7008
FAB lock system	7009

■ MODUL cabinets accessories

The MODUL cabinets use can be increased using suitable accessories.

Modular frames for devices with capacity 36 to 72 modules.

Type:	Catalogue no.:
Modular frame 1M 3x12 modules with covering IP20	9101
Modular frame 2M 3x24 modules with covering IP20	9102

Assembly panels 4 mm for equipment fastening (thermoplastic).

Type:	Catalogue no.:
Mounting plate 1M	9111
Mounting plate 2M	9112

MODUL cabinets **other accessories**.

Type:
Document casing A5, A4
Tempering *(thermostat, heating unit)*
Ventilation *(forced or natural)*
Construction „C“ profile 330, 445, 550 a 830 mm
Plastic peephole 110 x 110 mm

MODUL cabinets – sample sets

The MODUL cabinets system is designed for individual cabinets, standalone pillar cabinets as well as for simple sets. These cabinets can be put together only side by side.

Only basic types of cabinets are listed in the catalogue. List of possible sets is limited and you can follow the examples below. Of course, you can contact our technical support with the request to select cabinets set.

Catalogue sets:

Catalogue sets are produced according to the following key:

PR 1M (1S) pillar = one module cabinet as a standalone pillar

PR 2M (2S) pillar = two modules cabinet as a standalone pillar

PR 3M (3S) pillar = one module + two modules cabinet as a standalone pillar

PR 4M (4S) pillar = two modules + two modules cabinet as a standalone pillar

PR 5M (5S) pillar = two modules + one module + two modules cabinet as a standalone pillar

For cabinets of different arrangement, follow the examples below.

Sample set 1:

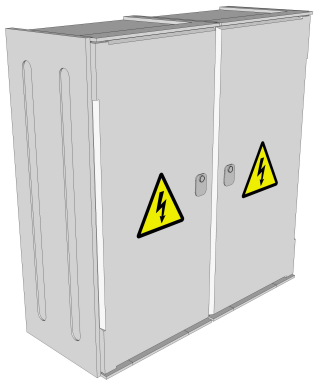
Standalone pillar cabinet composed of the following items:

- **PR 1M recessed** *(catalogue number 7010)*
- Square lock 6x6 mm *(catalogue number 7008)*
- **PR 1S recessed** *(catalogue number 7011)*
- Square lock 6x6 mm *(catalogue number 7008)*
- **PR 1M recessed** *(catalogue number 7010)*
- Square lock 6x6 mm *(catalogue number 7008)*
- **Pillar superstructure type 3** *(catalogue number 8300)*
- **Base type 3** *(catalogue number 8083)*

Sample set 2:

Set of recessed cabinets composed of the following items:

- **PR 1M recessed** *(catalogue number 7010)*
- Square lock 6x6 mm *(catalogue number 7008)*
- **PR 1S recessed** *(catalogue number 7011)*
- Square lock 6x6 mm *(catalogue number 7008)*



MODUL cabinents technical data

Basic technical data for empty cabinets (ČSN EN 62208 ed. 2:12 Empty enclosures for low-voltage switchgear and controlgear assemblies – General requirements):

Rated voltage Ui.....1 000 V
International Protection Marking.....IP44
Mechanical impact resistance.....IK10

Notes

Notes

PS1 and PS2 cabinets system

These cabinets are made as a monoblock; it is moulded at once without any other components required for assembly. Cabinets have a basic height of 272 mm (PS1) and 372 mm (PS2), a depth of 113 mm and a width of 303 mm. Individual parts are made of SMC thermosetting material, meeting inflammability requirements V0 a HB40 and adjustment for weather conditions and suitable properties for electrical engineering.

Individual components are designed to be simple to assemble and use to meet a wide range of industry-specific electrotechnical requirements. These cabinets are produced in two basic heights. Cabinets can be mounted on a pole, wall-mounted and used the in the masonry. Pole mounted cabinets are pressed with stabilizer to be mounted (stainless fastening strap or "BANDIMEX" system is used to fasten the cabinet to the pole).

Cabinet door is fitted with ribs on the outer surface. Aesthetic is not disturbed and poster sticking is difficult. Material and door construction eliminate distortion and material to bend. The door can be opened at an angle of 180 °. This is prevention before accidental damage when working inside the cabinet. Doors are sufficiently resistant to mechanical damage or destruction. Door locking is possible with locks or M5 bolt with a possibility putting the seal. Door removal is simple and can be done by pulling the door pin and taking it off after opening the switchgear.

The rear wall of the cabinet, which is primarily intended for devices installation is provided with holes for special self-tapping screws in plastic.

Cabinets differentiation according to mounting

Mounting:	Description:
Recessed	Cabinet to be mounted into masonry or as a standalone pillar
Pole mount	Cabinet for mounting on the pole. The cabinet is fitted with the UP-370 fastening strap stabilizer for mounting (cat. no. 50347) or the "BANDIMEX" system
Wall-mounted	

Assembly procedure for recessed cabinets

Cabinets are usually placed outside the building in recesses or loosely on pillars. There must be a space for operators in front of cabinet at least 800 mm depth. In case of installation near other distribution devices, safe distance must be kept. Fuse cabinets are located according to the requirements of distributors.

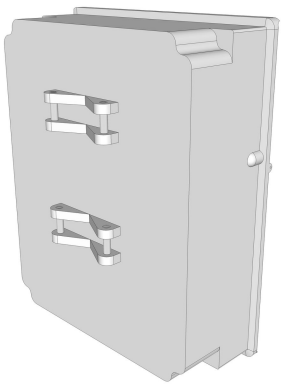
Cabinet door is dismantled and the dimensions of the recess are checked before mounting.

Using the wooden wedges, the cabinet is arranged to fit with the masonry surface. Raised parts should slightly protrude from the masonry. After recesses moistening, cabinet is fastened into it using cement mortar (or mounting foam). It is necessary to ensure size of cabinet before final masonry fixing, to avoid deformation (for example wooden spacer). Cabinet is then cleaned from the rest of cement mortar.

The conductor ends and cables must be insulated, alternatively fitted with terminal crimp or terminal clamps. Conductors are shaped and earthing is connected to the clamp (marked with an earthing mark). The cable entry must be sealed to prevent water getting into cabinet. This is ensured by thin layer of cement mortar.

Then the door is fitted and the door closing and locking is tested. Cabinet locks are made with a brass core and greased during production. Further greasing is no longer required.

Assembly procedure for pole mount cabinets



Pole mount cabinets are supplied with mounting stabilizers. There must be a space for operators in front of cabinet at least 800 mm depth. In case of installation near other distribution devices, safe distance must be kept. Connecting cabinets are located according to the requirements of distributors.

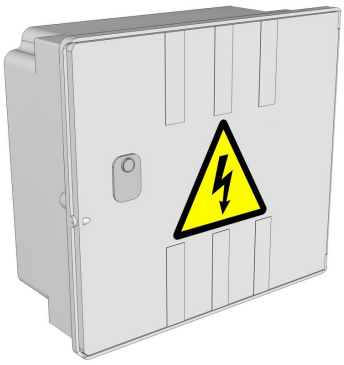
Stabilizers for pole mounting are attached to the rear wall of the cabinets. The UP-370 stainless fastening strap or "BANDIMEX" system is used to fasten the cabinet to the pole.

The door is removed from the cabinet and the conductors are pulled into the cabinet. The conductors are insulated and alternatively fitted with terminal crimp or "V" or "P" terminal clamps. Then conductors are marked as needed.

If the earthing outlet is fitted into the cabinet, it also must be protected by a plastic pipe to prevent mechanical damage.

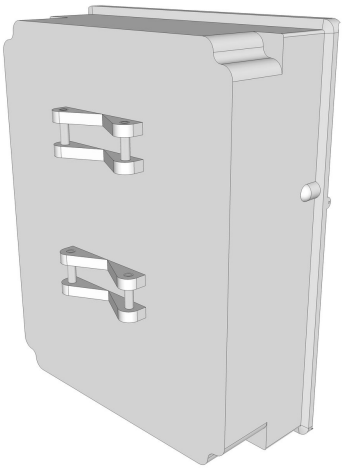
The door is fitted and the door closing and locking is tested. Cabinet locks are made with a brass core and greased during production. Further greasing is no longer required.

PSP1 recessed



PSP2 wall-mounted

PSP2 pole mount IP54



Square lock 6x6 mm

Empty cabinets IP44

Type:	Catalogue no.:	Dimension (H x D x W) mm:
PSP1 recessed	70100	272 mm × 113 mm × 303 mm
PSP2 recessed	70200	372 mm × 113 mm × 303 mm
PSP1 pole mount	71100	272 mm × 113 mm × 303 mm
PSP2 pole mount	71200	372 mm × 113 mm × 303 mm
PSP1 wall mounted	73100	272 mm × 113 mm × 303 mm
PSP2 wall mounted	73200	372 mm × 113 mm × 303 mm

Empty cabinets IP54

Type:	Catalogue no.:	Dimension (H x D x W) mm:
PSP1 recessed IP54	70100.54	272 mm × 113 mm × 303 mm
PSP2 recessed IP54	70200.54	372 mm × 113 mm × 303 mm
PSP1 pole mount IP54	71100.54	272 mm × 113 mm × 303 mm
PSP2 pole mount IP54	71200.54	372 mm × 113 mm × 303 mm
PSP1 wall mounted IP54	73100.54	272 mm × 113 mm × 303 mm
PSP2 wall mounted IP54	73200.54	372 mm × 113 mm × 303 mm

Locks for cabinets PS1 a PS2

If a lock type is not specified, the enclosure is locked with M5 bolt. If not locking cabinet (also without M5 bolt) is demanded, it is necessary to stress this requirement in the order.

Type:	Catalogue no.:
M5 bolt	-
Energetic cam lock D (divided)	7007
Energetic cam lock D IP 54 (not divided)	7007.54
Square lock 6x6 mm	7008
Square lock 6x6 mm IP54	7008.54
FAB lock	7009

PS1 and PS2 cabinets technical data

Basic technical data for empty cabinets (ČSN EN 62208 ed. 2:12 Empty enclosures for low-voltage switchgear and controlgear assemblies – General requirements):

Rated voltage Ui.....500 V
International Protection Marking (basic).....IP44
International Protection Marking (increased).....IP54
Mechanical impact resistance.....IK10

Notes