



POWER ENGINEERING SOLUTIONS

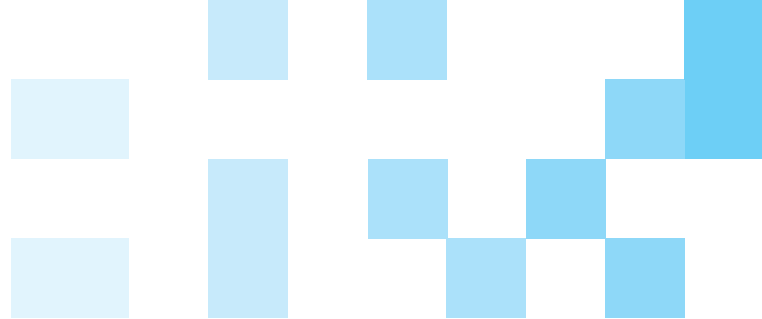


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About the company

HOKE S.C. started its activity in 2010 as a partnership with 100% Polish capital. From the very beginning of its operation, it has been associated with the power engineering and automation industries, acting as a supplier of low voltage switchboards for energy, industrial and public utility facilities.

HOKE S.C. specialises in the production of metal enclosures and prefabrication of cabinets. Our solutions and product offer contain various types of distribution boards and power distribution cabinets, for automation, control and measuring equipment in many fields. The company's offer is addressed to producers and distributors of electricity as well as subcontracting firms, carrying out investment projects, modernisation and repair tasks. We cooperate with design offices and wholesalers throughout the country; supplying our products to, amongst others, the contractors providing services to the Polish Energy Grids (PSE), Energy Companies, Polish National Railways (PKP) as well as for general industry.

HOKE's mission is to provide all customers with the highest quality products and services. The company achieves the set goals through continuous improvement of employees' competencies and workflow organisation, as well as with guaranteed timely deliveries, following the needs and expectations of our customers.

Since the beginning of 2015, our company has been operating from its new headquarters, located in Malinie near Mielec, on the route from Mielec to Tarnobrzeg.



Relying on its production capabilities, HOKE manufactures metal enclosures of mainly non-aluminium, steel and stainless-steel metals, intended for both indoor and outdoor applications. Our comprehensive offer includes a range of accessories as well as mechanical and electrical equipment for the prefabrication processes of enclosures and cabinets.

HOKE S.C. supplies a wide range of standard products included in the company's regular offer, as well as custom-built products for the specific needs of our customers. The company realises each of these customs implementations basing on detailed arrangements of the company's technical department with the clients.



As a manufacturer, we issue declarations of conformity for all the enclosures offered, confirming compliance with the PN-EN standards. Additionally, in case of cabinets for outdoors applications, we have the CE Certificate of Conformity, issued by BBJ SEP based in Warsaw.

Production of metal enclosures



"HOW" TYPE ALUMINIUM CABINETS



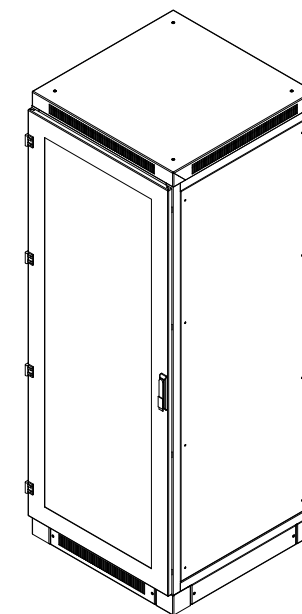
PRODUCT DESIGNATION

Indoor aluminium cabinets of the "HOW" type are universal power engineering enclosures, designed for indoor use, manufactured in 36 different dimensions, as shown in the table.

These products are used in the control rooms of transformer/switching stations and electricity substations, they are also being used as auxiliary cabinets for the security installations, MV and LV switchboards, automation systems, technological process control systems, DCS systems, PLC controllers-based steering systems in the power engineering, ICT, various branches of industry and within building and construction.

Series of types of cabinets

No.	Cabinet model	Height (mm)	Width (mm)	Depth (mm)
1	HOW-180604-0000	1800	600	400
2	HOW-180606-0000			600
3	HOW-180608-0000			800
4	HOW-180804-0000		800	400
5	HOW-180806-0000			600
6	HOW-180808-0000			800
7	HOW-181004-0000		1000	400
8	HOW-181006-0000			600
9	HOW-181008-0000			800
10	HOW-181204-0000		1200	400
11	HOW-181206-0000			600
12	HOW-181208-0000			800
13	HOW-200604-0000	2000	600	400
14	HOW-200606-0000			600
15	HOW-200608-0000			800
16	HOW-200804-0000		800	400
17	HOW-200806-0000			600
18	HOW-200808-0000			800
19	HOW-201004-0000		1000	400
20	HOW-201006-0000			600
21	HOW-201008-0000			800
22	HOW-201204-0000		1200	400
23	HOW-201206-0000			600
24	HOW-201208-0000			800
25	HOW-220604-0000	2200	600	400
26	HOW-220606-0000			600
27	HOW-220608-0000			800
28	HOW-220804-0000		800	400
29	HOW-220806-0000			600
30	HOW-220808-0000			800
31	HOW-221004-0000		1000	400
32	HOW-221006-0000			600
33	HOW-221008-0000			800
34	HOW-221204-0000		1200	400
35	HOW-221206-0000			600
36	HOW-221208-0000			800



MATERIAL

aluminium profiles and aluminium sheet

SURFACE FINISH

- standard cabinet frame, doors, covers, roof panel and plinth, painted with epoxy-polyester powder paint of a thick structure in RAL 7035*,
- mounting plate, supporting beams and elements of the bottom plate made of galvanised steel sheet.

CABINET WEIGHT 125 kg

(applies to a cabinet of the following configuration: dimensions 2000 x 800 x 800, front door glazed and back door solid, solid side covers, plinth 100 mm, perforated roof panel, three-section floor with brush opening, mounting plate).

PERMISSIBLE CABINET LOAD 1200 kg

PROTECTION DEGREE IP 44

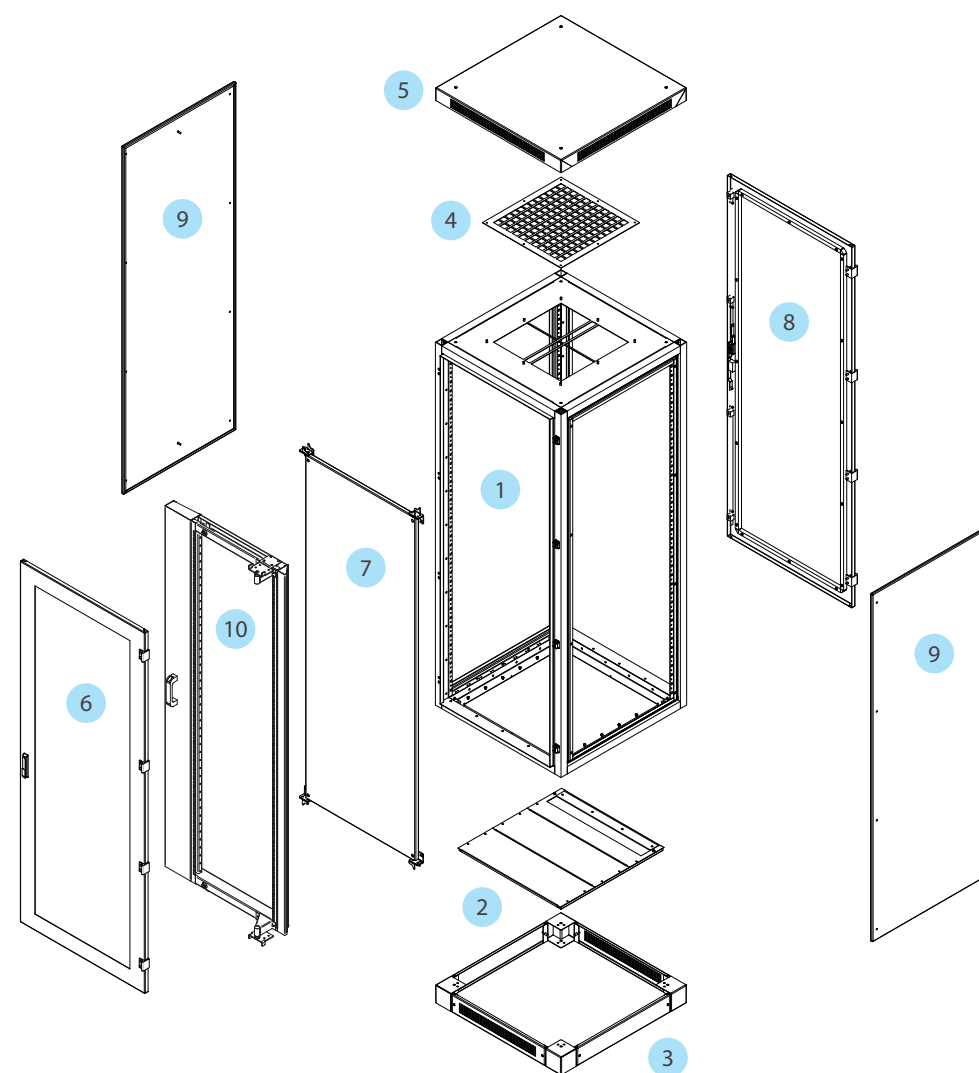
(IP 55 when using a solid roof panel without perforation)

→ SCOPE OF DELIVERY

A standard cabinet (cat. no. HOW-.....-0000) includes the following elements: cabinet frame, solid top plate, a three-part bottom plate with a brush opening. Front door, rear door/cover, side covers, mounting frame, swing frame, canopy, plinth and other accessories need to be ordered separately.

- We have capabilities to provide custom-built cabinets of non-standard dimensions as well as to paint the cabinets in different RAL palette colours, after a prior arrangement of details with the technical department.

PRODUCTS NUMBERING SYSTEM



Cabinet build

No.	Description
1	Aluminium frame, riveted and welded
2	Three-section bottom plate with brush opening
3	Plinth
4	Dust filter
5	Roof panel
6	Glazed front door
7	Mounting plate
8	Solid back door
9	Sidewalls, screwed on
10	Swing frame

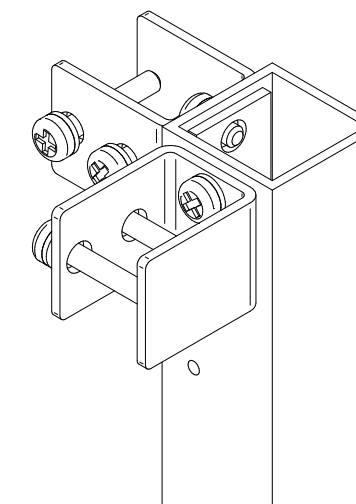
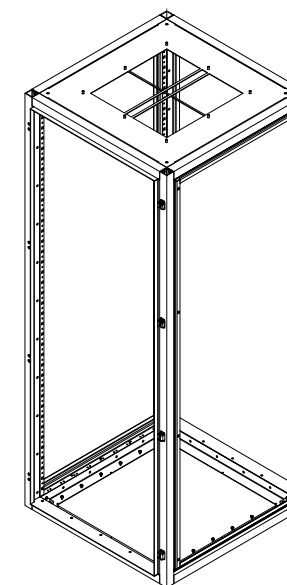
Cabinet height	Cabinet width	Cabinet depth
18 - 1 800 mm	06 - 600 mm	04 - 400 mm
20 - 2 000 mm	08 - 800 mm	06 - 600 mm
22 - 2 200 mm	10 - 1 000 mm	08 - 800 mm
	12 - 1 200 mm	

HOW-000000-0000

Front of the cabinet	Rear of the cabinet	Left side of the cabinet	Right side of the cabinet
0 - no door	0 - no door	0 - no door	0 - no door
1 - glazed door	1 - glazed door	1 - full cover	1 - full cover
2 - solid door	2 - solid door	2 - partition	2 - partition
	3 - full cover		

CONSTRUCTION DESCRIPTION / CABINET FRAME

The cabinet's frame is made of a 3 mm thick, 40 x 40 mm aluminium profile, and the structure is riveted and welded. The side frame of the structure is perforated, which allows for the assembly of elements, i.e. the brackets, mounting rails. Openings in the side elements of the frame in the lower and upper parts allow for mounting the assembly plate and the swing frame. There are four threaded holes for the transport eye bolts in the upper part of the frame. The removable part of the top plate allows for cable insertions, fan assembly and the use of a raised roof. The lower part of the frame also has a space for cable insertion, normally closed off with a multi-part plate.



→ Riveted and welded cabinet frame - bottom



→ Riveted and welded cabinet frame - top

Top plate with filter cloth



→ A standard top plate is delivered as a solid panel. As an option, there is a possibility of using several different solutions, including filter fabric with gravitational ventilation of the cabinet, as shown in the photo.

Bottom plate



→ As standard, the bottom plate is made of galvanised steel sheet, triple-sectioned with a brush opening. It enables various ways of inserting cables, depending on the customer's needs. Optionally, it is possible to change the plate elements, using a metal sheet with rubber grommets instead.

Methods of mounting devices in a cabinet

- mounting plate - quick and straightforward fixing, with the possibility of easy positioning, placed in the light of the cabinet,
- swinging frame - symmetrical or asymmetrical, used with cabinets 600 and 800 mm wide, allows for the installation of devices in the 19" standard, with an easily changeable direction of frame opening,
- mounting rails - enable any horizontal and vertical configuration of the rack inside the cabinet, depending on the customer's needs.

ACCESSORIES FOR “HOW” CABINETS

CABINET DOORS

The design allows for door installation in the front and the rear; it is also possible on the sides of the cabinets. The door elements include a four-point locking system with a handle allowing for the installation of a cylinder lock. It also features a frame for additional stiffness, with holes for fixing cable ducts, wire harnesses and other elements. The doors are available as solid (full), glazed or perforated. Easy change of the left / right door opening direction (turning the door along with the locking elements and the handle). 1000 and 1200 mm wide cabinets feature double-leaf doors, cabinets 600 and 800 mm wide include a single-leaf door. Doors opening angle is 180°.

SIDE COVERS

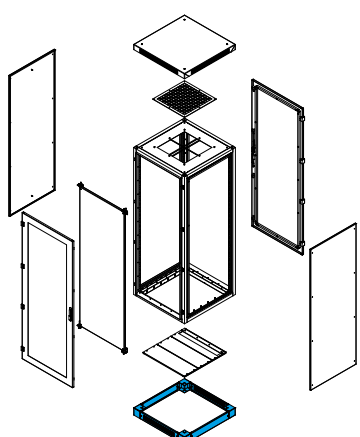
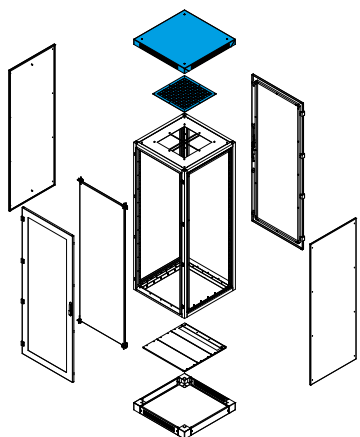
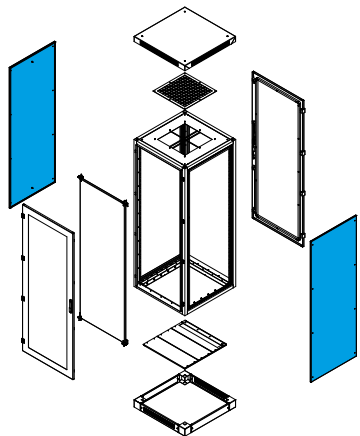
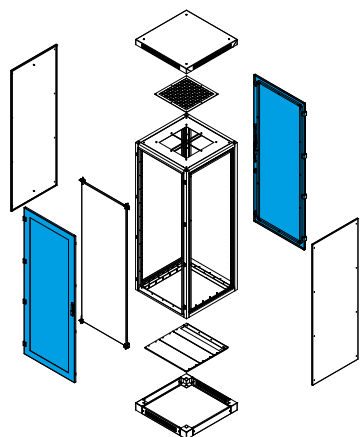
The universal construction design allows using the side/ rear covers instead of the door. The standard doors are solid (full), optional solutions such as door panels with perforation or a ventilation grille cut-out are available upon customer's request. In the case of joining rack cabinets, it is possible to use a side partition panel.

ROOF PANEL

An element of additional equipment, fixed to the frame of the cabinet with distance sleeves. The 70 mm high perforated roof panel enables the installation of fans underneath it to obtain proper air exchange in the rack cabinet.

THE BASE

It is recommended to install the cabinets on a 100 or 200 mm high plinth. Various configurations of plinths enable easy adaptation to the needs of the facility and the client. The rack cabinets can also be installed without a plinth, directly on a prepared cable duct or on levelling feet.



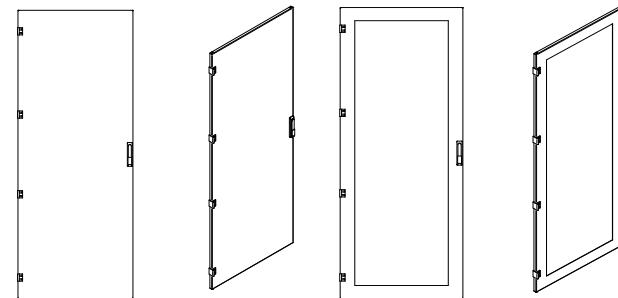
DOORS

The doors are fitted on the front side or at the rear of the cabinet. Aluminium doors powder-coated in RAL 7035, featuring steel stiffening profiles and 4 mm thick tempered glass.

→ Scope of delivery: door leaf complete with hinges and fixing elements, equipped with a door handle and a standard double-bit insert.

Single-leaf door

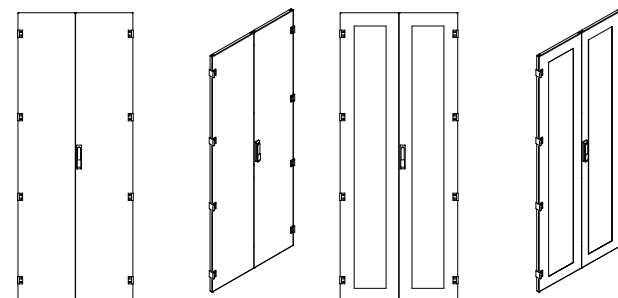
No.	For the cabinets:		Glazed doors	Solid doors
	Height (mm)	Width (mm)		
1	1800	600	HA-180600-1000	HA-180600-2000
2	1800	800	HA-180800-1000	HA-180800-2000
3	2000	600	HA-200600-1000	HA-200600-2000
4	2000	800	HA-200800-1000	HA-200800-2000
5	2200	600	HA-220600-1000	HA-220600-2000
6	2200	800	HA-220800-1000	HA-220800-2000



■ Please note: a complete double-leaf door order requires separate orders of the left and right door leaves!

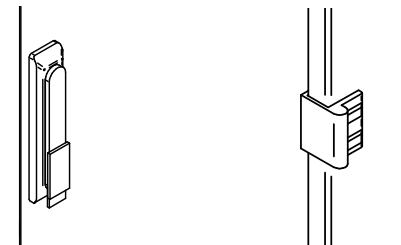
Double-leaf doors

No.	For the cabinets:		Solid door	
	Height (mm)	Width (mm)	Right leaf	Left leaf
1	1800	1000	HA-181000-2P00	HA-181000-2L00
2	1800	1200	HA-181200-2P00	HA-181200-2L00
3	2000	1000	HA-201000-2P00	HA-201000-2L00
4	2000	1200	HA-201200-2P00	HA-201200-2L00
5	2200	1000	HA-221000-2P00	HA-221000-2L00
6	2200	1200	HA-221200-2P00	HA-221200-2L00



Double-leaf doors

No.	For the cabinets:		Glazed door	
	Height (mm)	Width (mm)	Right leaf	Left leaf
1	1800	1000	HA-181000-1P00	HA-181000-1L00
2	1800	1200	HA-181200-1P00	HA-181200-1L00
3	2000	1000	HA-201000-1P00	HA-201000-1L00
4	2000	1200	HA-201200-1P00	HA-201200-1L00
5	2200	1000	HA-221000-1P00	HA-221000-1L00
6	2200	1200	HA-221200-1P00	HA-221200-1L00



→ A door handle with a key



→ Door hinges



→ Door sealing and reinforcing profile



→ Door closing mechanism

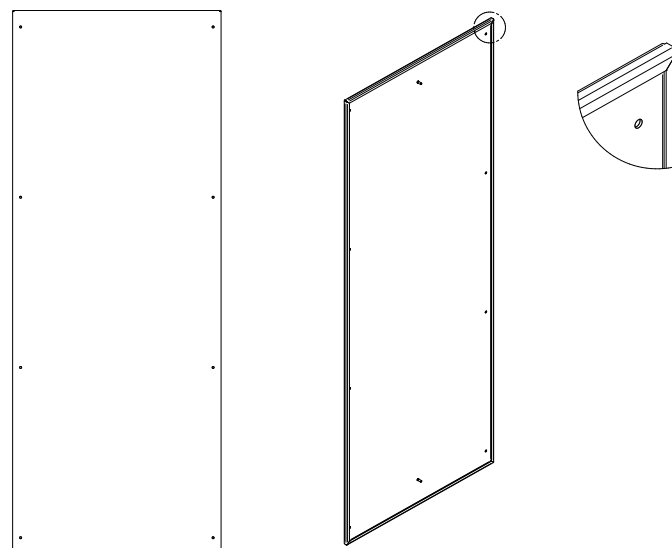
REAR COVER

The covers are used instead of the door at the back of the cabinet; they are made of aluminium powder-coated in RAL 7035.

→ Scope of delivery: One rear cover with fixing accessories.

Rear cover

No.	For the cabinets:		Solid cover
	Height (mm)	Width (mm)	
1	1800	600	HA-180600-0400
2	1800	800	HA-180800-0400
3	1800	1000	HA-181000-0400
4	1800	1200	HA-181200-0400
5	2000	600	HA-200600-0400
6	2000	800	HA-200800-0400
7	2000	1000	HA-201000-0400
8	2000	1200	HA-201200-0400
9	2200	600	HA-220600-0400
10	2200	800	HA-220800-0400
11	2200	1000	HA-221000-0400
12	2200	1200	HA-221200-0400



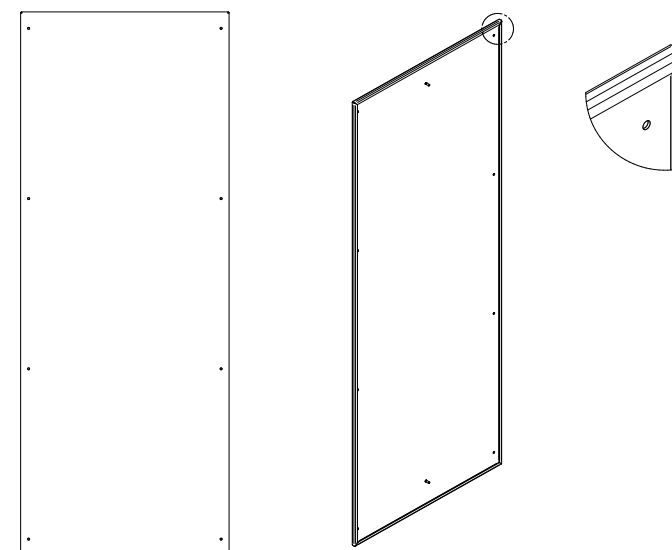
SIDE PANEL COVERS

Side panels are aluminium and powder-coated in RAL 7035. In case of a need to join cabinets together, a partition can be used instead of a cover.

→ Scope of delivery: two side panel covers or a partition with fixing accessories.

Side panel cover

No.	For the cabinets:		Solid cover	Partition
	Height (mm)	Depth (mm)		
1	1800	400	HA-180004-0011	HA-180004-0030
2	1800	600	HA-180006-0011	HA-180006-0030
3	1800	800	HA-180008-0011	HA-180008-0030
4	2000	400	HA-200004-0011	HA-200004-0030
5	2000	600	HA-200006-0011	HA-200006-0030
6	2000	800	HA-200008-0011	HA-200008-0030
7	2200	400	HA-220004-0011	HA-220004-0030
8	2200	600	HA-220006-0011	HA-220006-0030
9	2200	800	HA-220008-0011	HA-220008-0030



→ Side covers and partitions are identical and can be mounted on any given side of the cabinet.



→ Mounting with 8 fixing screws



→ Sidewall sealing

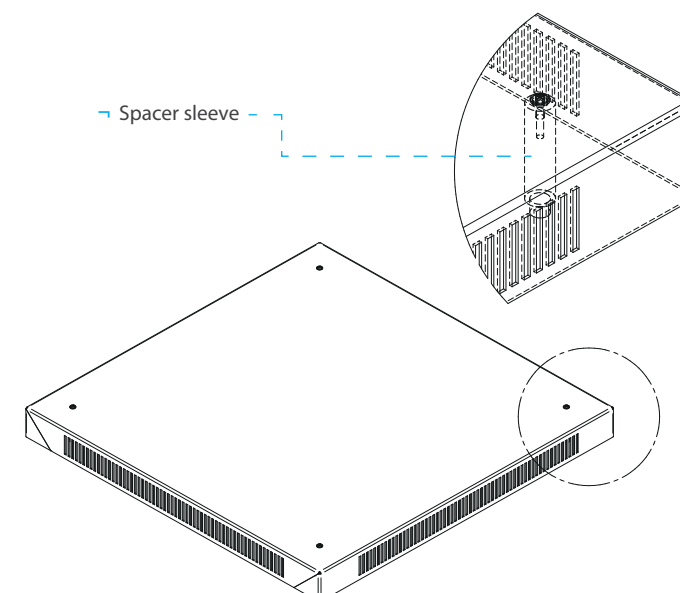
ROOF - TOP PANEL

The top panel is used when fans are installed in a rack cabinet, it is perforated and powder-coated in RAL 7035.

→ Scope of delivery: roof panel with four spacers and fixing accessories.

Roof panel

No.	For the cabinets:		Roof panel
	Width (mm)	Depth (mm)	
1	600	400	HA-000604-5000
2	600	600	HA-000606-5000
3	600	800	HA-000608-5000
4	800	400	HA-000804-5000
5	800	600	HA-000806-5000
6	800	800	HA-000808-5000
7	1000	400	HA-001004-5000
8	1000	600	HA-001006-5000
9	1000	800	HA-001008-5000
10	1200	400	HA-001204-5000
11	1200	600	HA-001206-5000
12	1200	800	HA-001208-5000



→ Perforated roof panel



→ Roof panel corner

BOTTOM PLATE

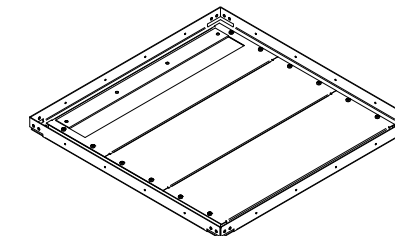
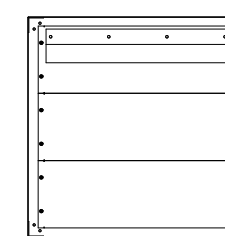
In standard version it is tripartite (three exchangeable sheets, including one with a brush opening) made of galvanised steel sheet.

Replaceable plate with rubber grommets (24 grommets), used as an optional element for the bottom plate.

→ Scope of delivery: One exchangeable metal plate with rubber grommets.

Bottom plate, tripartite

No.	For the cabinets:		Sheet metal with rubber grommets
	Width (mm)		
1	600		HA-000600-2000
2	800		HA-000800-2000
3	1000		HA-001000-2000
4	1200		HA-001200-2000



→ Tripartite floor



→ Brush grommet and support brace for cable clamps (optional accessories)

■ PLINTH

Used as the base of a 100 or 200 mm high cabinet, made of aluminium sheet, powder-coated in RAL 7035.

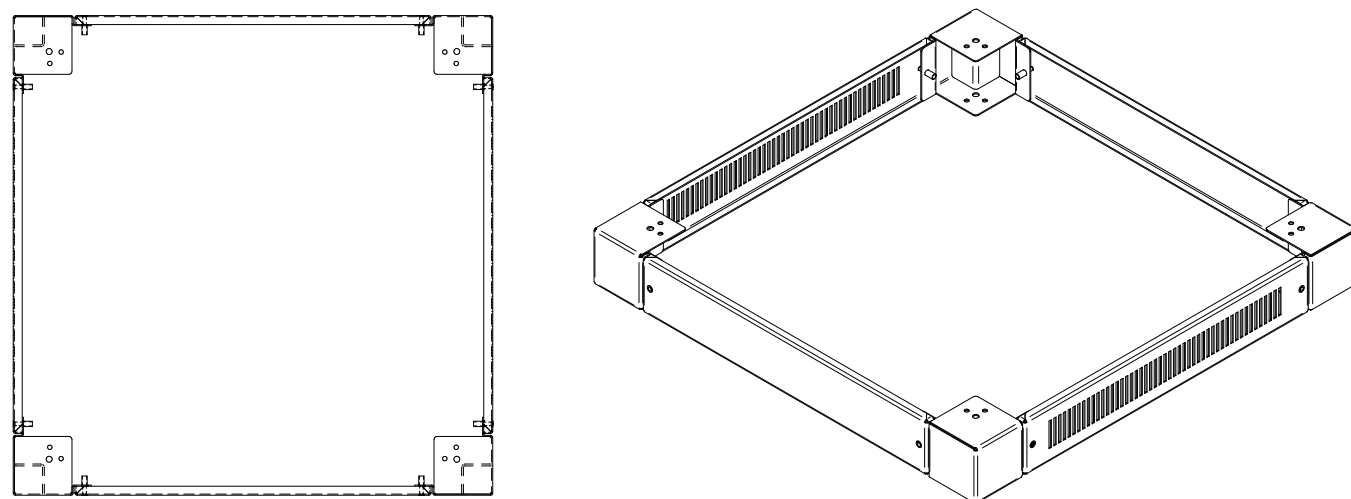
Depending on the customer's needs, the plinth can have a perforated, brush or solid grommets.

Please note: A complete plinth order requires ordering: the front and rear plinth elements, i.e. 4 corners and 2 connectors for a plinth 100 mm high or 4 corners and 4 connectors for a plinth 200 mm high, as well as the plinth sides, i.e. 2 connectors for a 100 mm high plinth mm and 4 for a plinth 200 mm high.

→ Scope of delivery: 4 corners and 2 connectors (front and back) for a 100 mm high plinth or 4 corners and 4 connectors (front and back) for a 200 mm high plinth with fixing accessories.

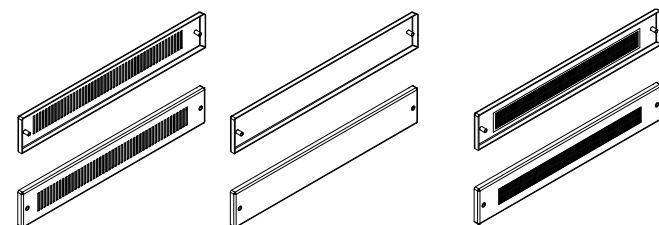
The front and rear plinth elements

No.	For the cabinets: Width (mm)	The front and rear plinth element, 100 mm high, solid	Front and rear plinth element, 100 mm high, with perforation	Front and rear plinth element, 100 mm high, with brush opening	The front and rear plinth element, 200 mm high, solid	Front and rear plinth element, 200 mm high, with perforation	Front and rear plinth element, 200 mm high, with brush opening
1	600	HA-000600-6100	HA-000600-7100	HA-000600-8100	HA-000600-6200	HA-000600-7200	HA-000600-8200
2	800	HA-000800-6100	HA-000800-7100	HA-000800-8100	HA-000800-6200	HA-000800-7200	HA-000800-8200
3	1000	HA-001000-6100	HA-001000-7100	HA-001000-8100	HA-001000-6200	HA-001000-7200	HA-001000-8200
4	1200	HA-001200-6100	HA-001200-7100	HA-001200-8100	HA-001200-6200	HA-001200-7200	HA-001200-8200

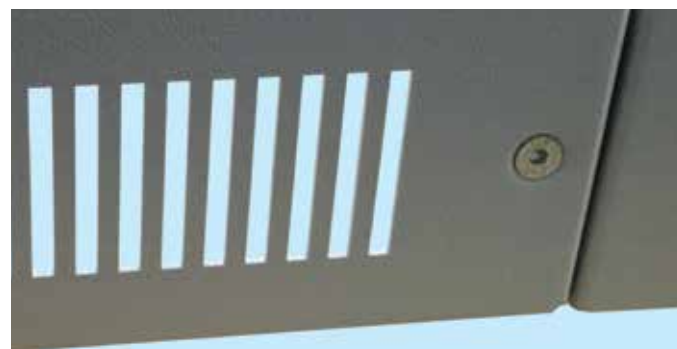


The sides of the plinth

No.	For the cabinets: Depth (mm)	Solid sides	Perforated sides	Brush openings
1	400	HA-000004-6100	HA-000004-7100	HA-000004-8100
2	600	HA-000006-6100	HA-000006-7100	HA-000006-8100
3	800	HA-000008-6100	HA-000008-7100	HA-000008-8100



→ Scope of delivery: 2 connectors (sides) with fixing elements. In the case of a plinth of a 200 mm height, 2 sets of the plinth sides, i.e. 4 connectors (sides) need to be ordered.



→ Perforated plinth front



→ Plinth corner

■ MOUNTING PLATE

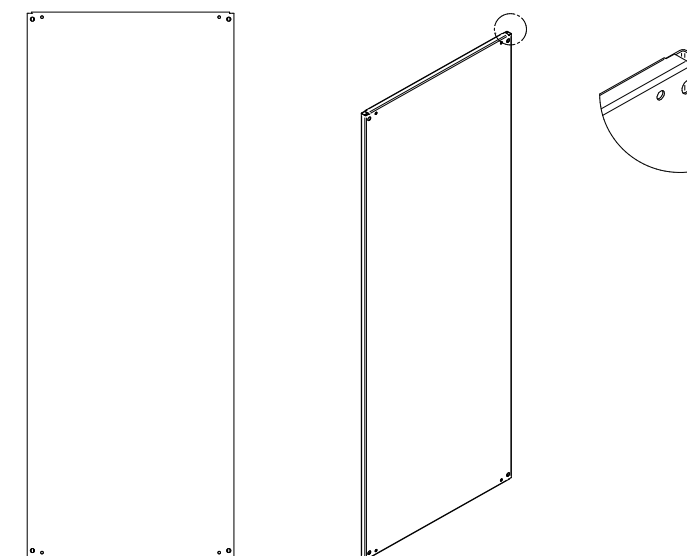
The plate is suitable for installation with modular equipment; it is made of galvanised steel sheet, mounted as standard on the entire height of the cabinet.

→ Scope of delivery: mounting plate with fixing elements.

Mounting plate

No.	For the cabinets: Height (mm)	Width (mm)	Mounting plate
1	1800	600	HA-180600-0100
2	1800	800	HA-180800-0100
3	1800	1000	HA-181000-0100
4	1800	1200	HA-181200-0100
5	2000	600	HA-200600-0100
6	2000	800	HA-200800-0100
7	2000	1000	HA-201000-0100
8	2000	1200	HA-201200-0100
9	2200	600	HA-220600-0100
10	2200	800	HA-220800-0100
11	2200	1000	HA-221000-0100
12	2200	1200	HA-221200-0100

■ It is possible to order a mounting plate of a custom height, after prior agreement of the project dimensions with the technical department of HOKE S.C.



→ Mounting plate fixing elements – posterior view



→ Mounting plate fixing elements

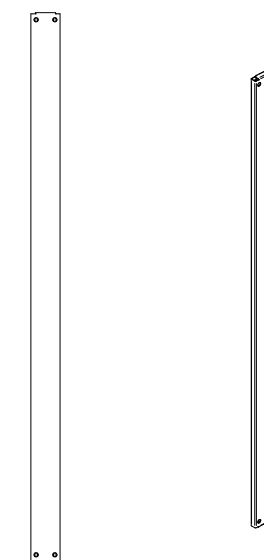
MOUNTING PLATES CONNECTOR

Used to fill the space between the mounting plates and to connect them in case of the rack cabinets serial setup, connector material is galvanised steel sheet.

→ Scope of delivery: connector with fixing accessories.

Mounting plates connector

No.	For the cabinets: Height (mm)	Connector for mounting plates
1	1800	HA-180000-0100
2	2000	HA-200000-0100
3	2200	HA-220000-0100



RACK CABINETS CONNECTING KIT

The connecting kit allows for joining cabinets in rows.

→ Scope of delivery: 8 pcs of M6 screws with washers.

Cabinet connector

No.	Quantity	Cabinet connector
1	1 set	HA-000000-3000

SWING FRAME

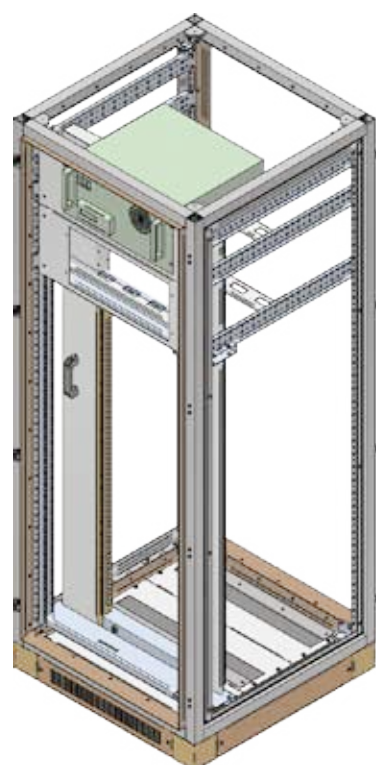
A frame for mounting equipment in the 19" standard, made of galvanised steel sheet, frame side covers made of aluminium sheet. The frame is powder-coated in RAL 7035, mounted as standard on the entire height of the cabinet. It can be installed in 600 and 800 mm wide cabinets, closed with two double-bit insert locks. Load capacity: 250 kg. Manufactured as an asymmetrical frame as standard.

→ Scope of delivery: swing frame with mounting elements.

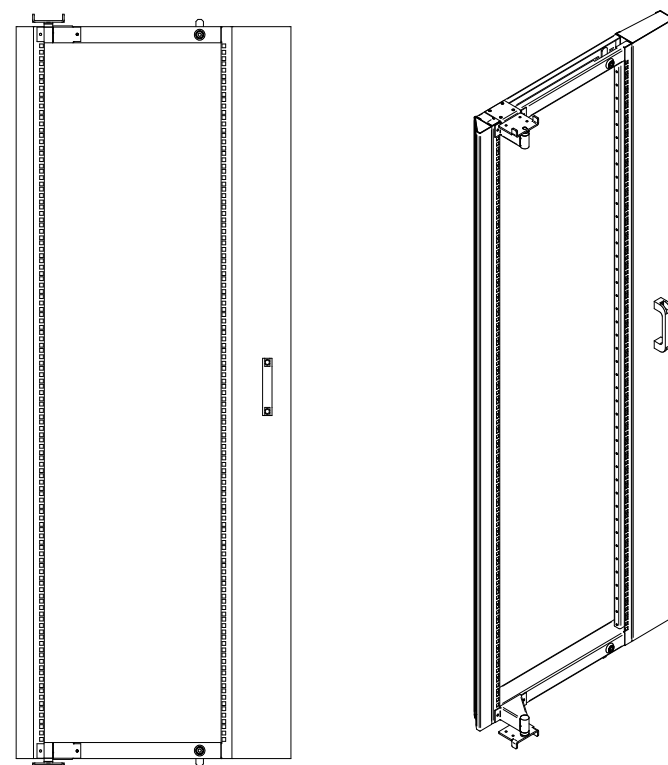
A swing frame or a symmetrical frame of a non-standard height can also be ordered after prior agreement of the dimensions with the technical department of HOKE S.C.

Swing frame

No.	For the cabinets:		Swing frame
	Height (mm)	Width (mm)	
1	1800	600	HA-180600-0200
2	1800	800	HA-180800-0200
3	2000	600	HA-200600-0200
4	2000	800	HA-200800-0200
5	2200	600	HA-220600-0200
6	2200	800	HA-220800-0200



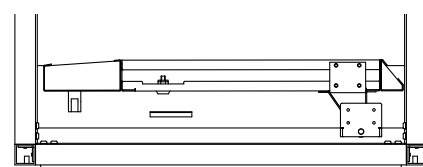
→ An example of a non-standard swing frame



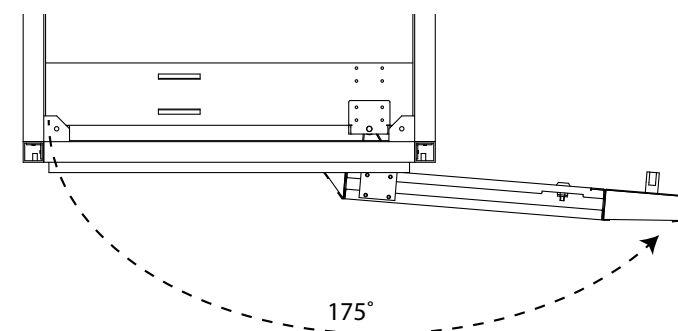
→ Earthing of the swing frame



→ Masking panels - open frame view



→ Tilt frame inclination 175°



BEAMS AND VERTICAL RAILS

The galvanised sheet metal tilting frames allow for any vertical and horizontal installation of the rack cabinet devices and equipment in accordance with the expectations and needs of the customer.

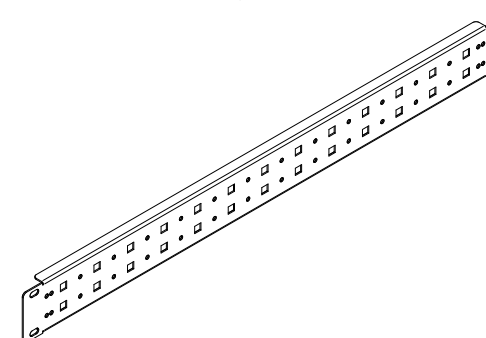
→ Scope of delivery: mounting beam with fixing accessories.

Recessed rail

No.	For the cabinets:		Recessed rail
	Depth (mm)		
1	400		HA-000004-6000
2	600		HA-000006-6000
3	800		HA-000008-6000

Vertical rack rail

No.	For the cabinets:		Vertical rack rail
	Depth (mm)		
1	1800		HA-180000-6000
2	2000		HA-200000-6000
3	2200		HA-220000-6000



→ Recessed rail (crossbeam)



→ Vertical assembly rail with a recessed rail

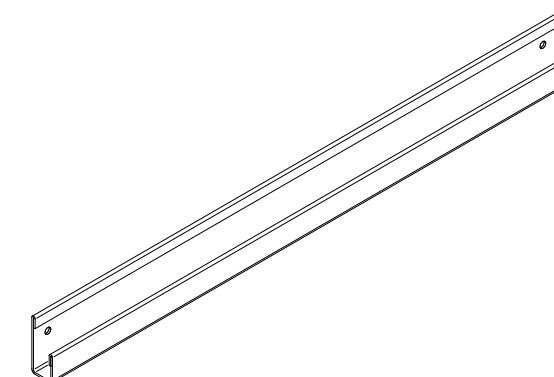
SUPPORT BRACKETS WITH CABLE HOLDERS

Installed when a mounting plate is used; the brackets are made of galvanised steel sheet, allowing for a proper organisation of cables in the cabinet.

→ Scope of delivery: bracket with cable holders (10 pieces) and fixing accessories.

Support brackets for cable holders

No.	For the cabinets:		Bracket for cable holders
	Width (mm)		
1	600		HA-000600-0600
2	800		HA-000800-0600
3	1000		HA-001000-0600
4	1200		HA-001200-0600



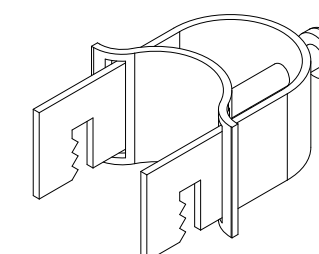
CABLE HOLDER

The galvanised steel cable holder clips are used to organise the connecting cables plugged into the equipment fitted on the rack cabinet mounting plates.

→ Scope of delivery: a set consisting of 10 pieces.

Cable holder

No.	Quantity	Cable holder
1	1 set	HA-000000-2000



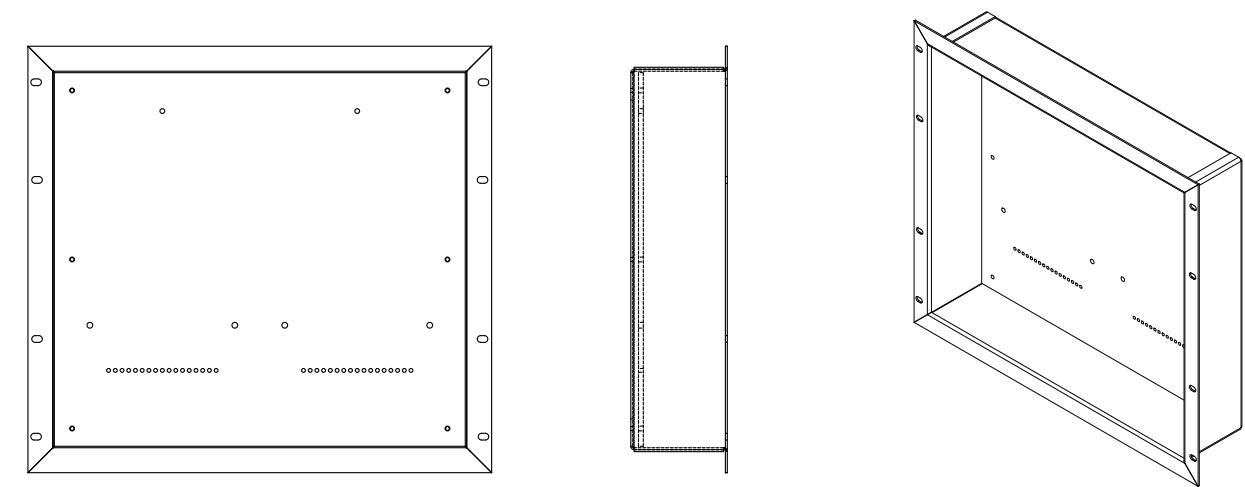
METER BOX

Made in compliance with the 19" standard, it enables the space for fitting two measuring meters. It is made of aluminium sheet, powder-coated in RAL 7035, the rear dielectric mounting plate made of PVC can be changed to a painted aluminium plate.

Meter boxes of 4U, 6U and 8U heights are designated to fit smaller metering devices or rail-mount terminals.

→ Scope of delivery: meter box with fixing accessories.

■ A custom meter box of other dimensions can be ordered, in case more measuring devices need to be housed after a prior arrangement of details with the technical department of HOKE S.C.



METER PLATE

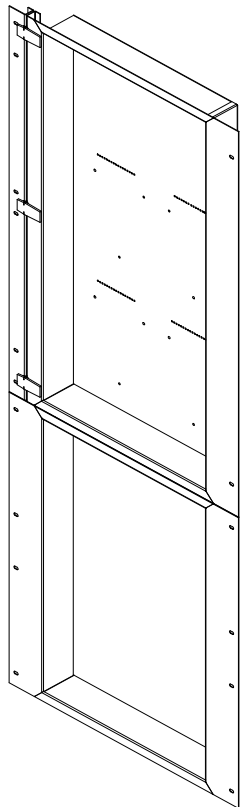
Meter plate for cabinets with a minimum width of 800 mm consists of a tilting part for the installation of six meters, and a fixed part for rail-mount terminal blocks and modular equipment, mounted on the entire height of the cabinet using vertical rails. The swinging and fixed parts are made of aluminium sheet, powder-coated in RAL 7035, and the back is made of PVC (dielectric plate).

→ Scope of delivery: meter plate consisting of tilting and fixed parts, 2 vertical rails and 6 recessed rails with fixing elements.

Meter plate

No.	For the cabinets: Height (mm)	Meter plate
1	1800	HA-180000-0020
2	2000	HA-200000-0020
3	2200	HA-220000-0020

■ A meter plate of other dimensions or a plate made to fit other manufacturers' cabinets can be made in accordance with the customer's specification after a prior arrangement of the details with the technical department of HOKE S.C.



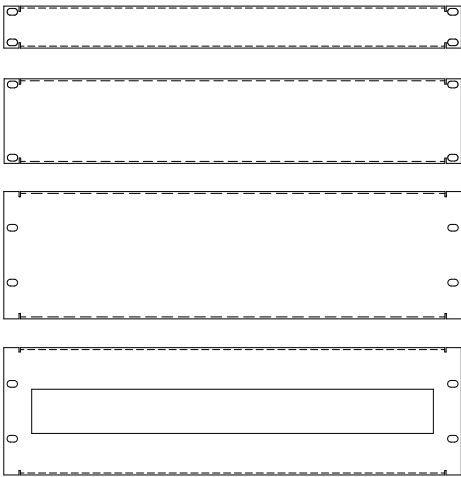
19" meter box

No.	No of meters, height (U)	19" meter box	
		with a dielectric plate	with an aluminium plate
1	4U	HA-000000-0017	HA-000000-0117
2	6U	HA-000000-0018	HA-000000-0118
3	8U	HA-000000-0019	HA-000000-0119
4	2 meters, 9U	HA-000000-0020	HA-000000-0120
5	2 meters, 10U	HA-000000-0021	HA-000000-0121

19" ALUMINIUM MASKING PANELS

19" masking panels are designed for mounting on a tilting frame, they are used for attaching devices and/or to fill the unused space of the framework, the panels are made of aluminium sheet and powder coated in RAL 7035.

→ Scope of delivery: 19" masking panel with fixing accessories.



WIDE ALUMINIUM MASKING PANELS

Wide masking panels are designed to be mounted on the entire width of 800 mm cabinets directly to the vertical rails; they are used to install devices and fill the unused space of cabinets and made of aluminium sheet, powder-coated in RAL 7035.

→ Scope of delivery: a wide cover panel with fixing accessories.



19" masking panels

No.	Height (U)	19" masking panels
1	1U	HA-000000-0001
2	2U	HA-000000-0002
3	3U	HA-000000-0003
4	4U	HA-000000-0004
5	5U	HA-000000-0005
6	6U	HA-000000-0006
7	7U	HA-000000-0007
8	8U	HA-000000-0008
9	9U	HA-000000-0009
10	10U	HA-000000-0010
11	12U	HA-000000-0012
12	14U	HA-000000-0014

■ Perforation of panels according to the customer's design can be provided after a prior arrangement of details with the technical department of HOKE S.C.

Wide masking panels

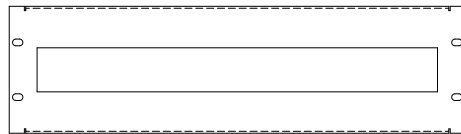
No.	Height (U)	Wide masking panel
1	1U	HA-000800-0001
2	2U	HA-000800-0002
3	3U	HA-000800-0003
4	4U	HA-000800-0004
5	5U	HA-000800-0005
6	6U	HA-000800-0006
7	7U	HA-000800-0007
8	8U	HA-000800-0008
9	9U	HA-000800-0009
10	10U	HA-000800-0010
11	12U	HA-000800-0012
12	14U	HA-000800-0014

■ Perforation of panels according to the customer's design can be provided after a prior arrangement of details with the technical department of HOKE S.C.

19" ALUMINIUM PANELS FOR MODULAR EQUIPMENT

19" panels for modular equipment are used for fitting and securing the modular equipment mounted on the tilting frame of the cabinet. Made of aluminium sheet in 19" standard, powder-coated in RAL 7035.

→ Scope of delivery: 19" panel for modular devices with fixing elements.



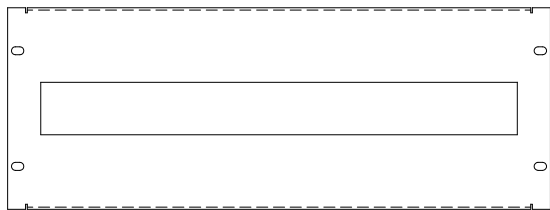
19" panels for modular equipment

No.	Height (U)	19" panel for modular equipment
1	3U	HA-000000-0103
2	4U	HA-000000-0104

■ WIDE ALUMINIUM PANEL FOR MODULAR EQUIPMENT

Wide panels for modular equipment are used for fitting and securing the modular devices mounted directly to the vertical rails in 800 mm wide cabinets and made of aluminium sheet, powder-coated in RAL 7035.

→ Scope of delivery: wide panel for modular devices with fixing elements.

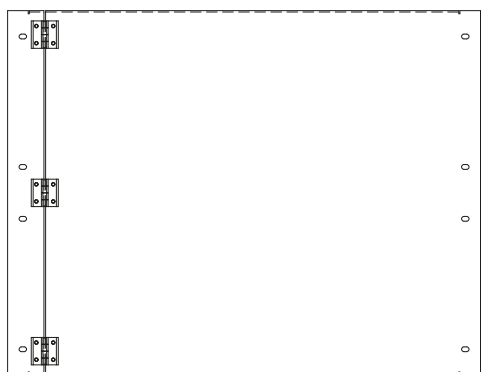


Wide panel for modular equipment

No.	Height (U)	Wide panel for modular equipment
1	3U	HA-000800-0103
2	4U	HA-000800-0104

■ 19" ALUMINIUM TILTING PANELS

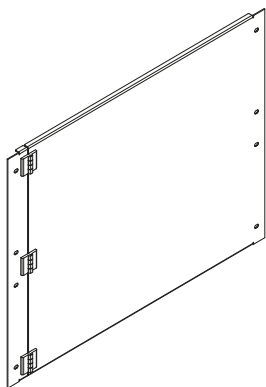
19" tilting panels dedicated for mounting onto a 19" fixed frame are used for mounting electrical devices, such as buttons, switches, lamps, etc., in case an access to their posterior elements is required - made of aluminium sheet in 19" standard, powder-coated in RAL 7035.



19" tilting aluminium panel

No.	Height (U)	19" tilt panel
1	2U	HA-000000-U002
2	3U	HA-000000-U003
3	4U	HA-000000-U004
4	5U	HA-000000-U005
5	6U	HA-000000-U006
6	7U	HA-000000-U007
7	8U	HA-000000-U008
8	9U	HA-000000-U009
9	10U	HA-000000-U010
10	12U	HA-000000-U012
11	14U	HA-000000-U014

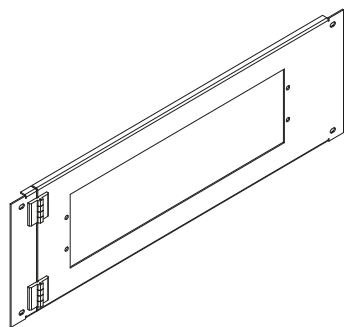
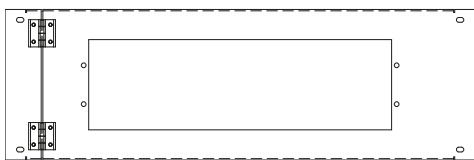
■ Perforation of panels according to the customer's design can be provided after a prior arrangement of details with the technical department of HOKE S.C.



■ TILTING ALUMINIUM PANELS FOR ATSE

Swing-out panels for ATSE enable the installation of switch panel mounted Automatic Transfer Switching Equipment supplied by various manufacturers. The panels are made in 19" standard or supplied as a wide panel to fit the entire width of the 800mm cabinet, and they are made of aluminium sheet and powder coated in RAL 7035. The height of the panel should be agreed each time with HOKE's technical department.

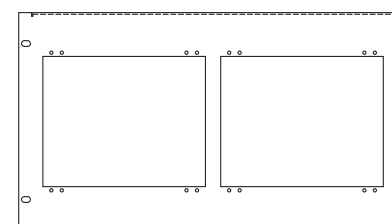
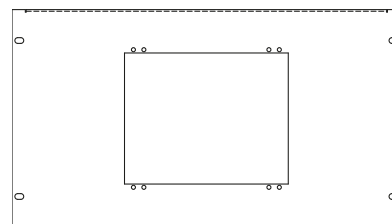
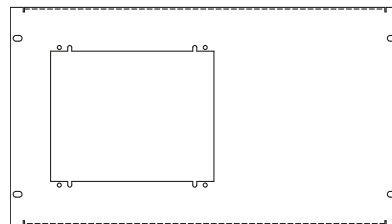
→ Scope of delivery: Swing-out panel for ATSE with fixing elements.



■ 19" ALUMINIUM PANELS

19" purpose-built panels are used for fitting electrical equipment such as security devices, adjusters, controllers, etc. onto the swing frame of the cabinet. The holes in the panel allow for mounting a given type of a switch panel-mounted device. They are made of aluminium sheet, powder-coated in RAL 7035.

→ Scope of delivery: purpose-built 19" panel with fixing elements.

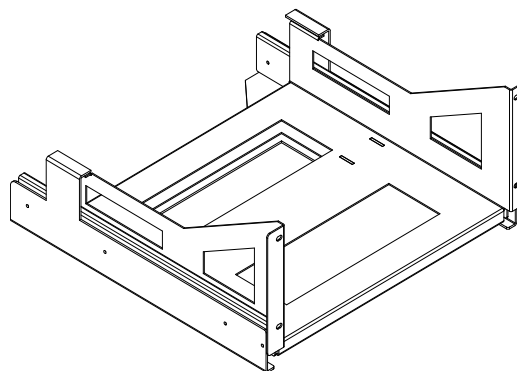


■ Holes in the panels can be made according to the customer's specification after a prior arrangement of details with the technical department of HOKE S.C.

■ SLIDE-OUT BRACKET FOR 19" APPLIANCES

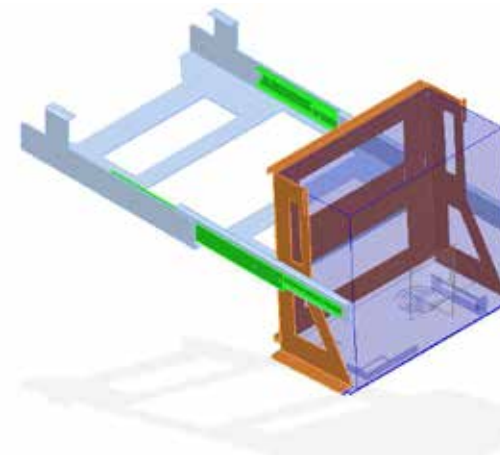
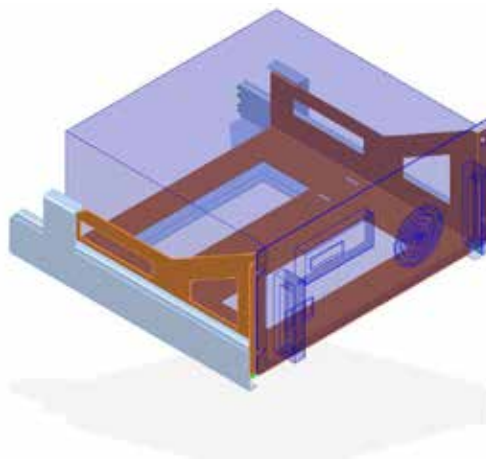
Designed for installation of equipment such as power supplies, inverters, etc. provided by various manufactures like MEDCOM, APS and others. 19" standard size slide-out bracket made of steel sheet and powder coated in RAL 7035. The load capacity of up to 55 kg.

→ Scope of delivery: slide-out bracket with fixing accessories.



Slide-out bracket for 19" equipment

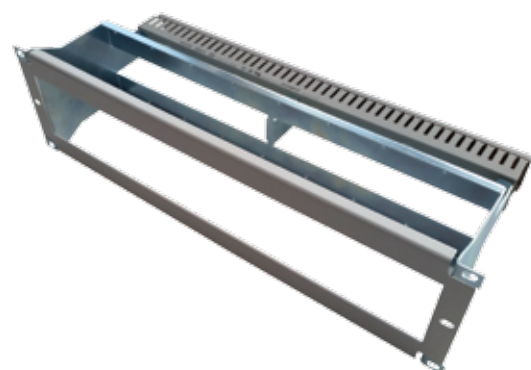
No.	Quantity	Slide out bracket
1	1 set	HA-000000-0030



■ BRACKETS FOR RELAY WITH GZ14Z SOCKETS

This relay rail bracket is a universal solution for modular installation, allowing for up to six relays from different manufacturers to be fitted in GZ14Z sockets. The bracket is of a 19" standard and 3U height, its cover is made of aluminium sheet, powder-coated in RAL 7035 colour, and the bracket is made of galvanised sheet metal.

→ Scope of delivery: cover, relay bracket with a fitted cable tray and fixing elements.



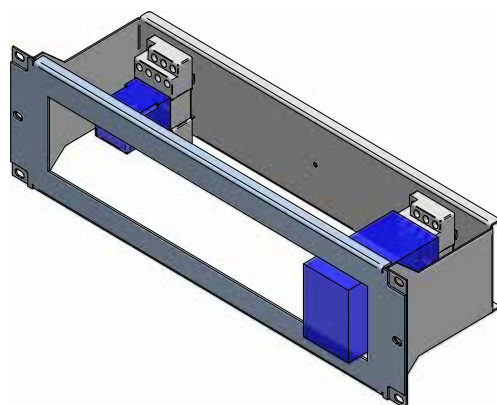
Relay rack brackets with GZ14Z sockets

No.	Quantity	GZ14Z bracket
1	1 set	HA-000000-Z040

■ RELAY RAIL BRACKETS WITH GZ14U SOCKETS

The relay bracket is a universal solution for modular installation; it allows for up to six relays from different manufacturers to be mounted in GZ14U sockets. The bracket is of a 19" standard and 3U height, its cover is made of aluminium sheet, powder-coated in RAL 7035 colour, and the bracket is made of galvanised sheet metal.

→ Scope of delivery: cover, relay bracket and fixing accessories.



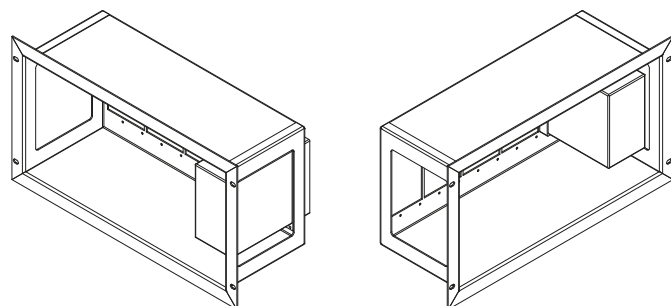
Relay rack brackets with GZ14U sockets

No.	Quantity	GZ14U bracket
1	1 set	HA-000000-U040

■ COMBIFLEX RELAYS BRACKETS

Designed for installation of up to five Combiflex type relays. 19" standard, height 6U, made of aluminium sheet, powder-coated in RAL 7035.

→ Scope of delivery: masking cover, relay bracket and fixing accessories.



Combiflex relays brackets

No.	Quantity	Combiflex bracket
1	1 set	HA-000000-C040

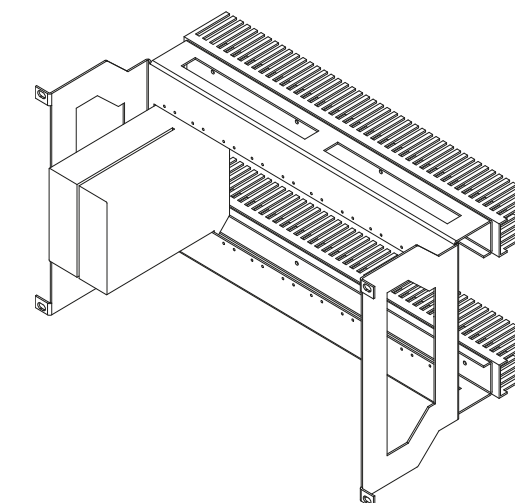
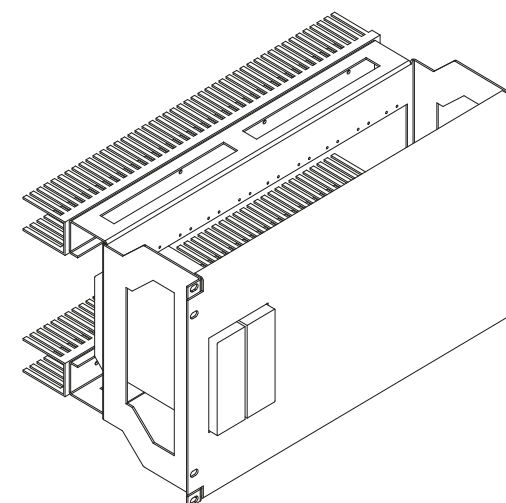
■ RELAY BRACKETS RTXP24

Its design allows for fitting up to ten relays of the RTXP24 type. The bracket is of a 19" standard and 6U height, its cover is made of aluminium sheet, powder-coated in RAL 7035 colour, and the bracket is made of galvanised sheet metal.

→ Scope of delivery: cover, relay bracket and fixing accessories.

Rail brackets for RTXP24 switches

No.	Quantity	RTXP24 bracket
1	1 set	HA-000000-R040



■ A custom-built masking cover for a specific number of installed relays can be supplied after a prior arrangement of details with the technical department of HOKE S.C.

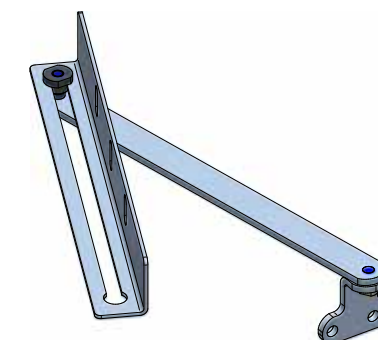
■ DOORSTOP

The doorstop ensures stable support of the door in a set position, preventing uncontrolled opening beyond the set angle. It is made of galvanised steel sheet.

→ Scope of delivery: one doorstop with fixing accessories.

Doorstop

No.	Quantity	Doorstop
1	1 set	HA-000000-4000



BATTERY SHELVES

The battery shelf is designed for mounting directly to the cabinet frame or to recessed rails, it allows for the installation of batteries of a weight up to 100 kg. The battery shelves are made of galvanised steel sheet.

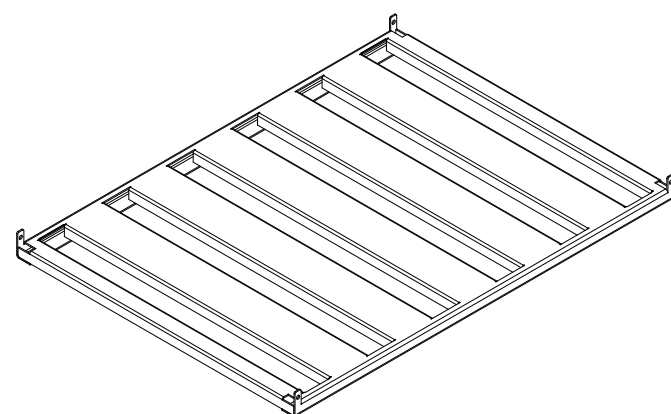
→ Scope of delivery: battery shelf with fixing accessories.

Battery shelf

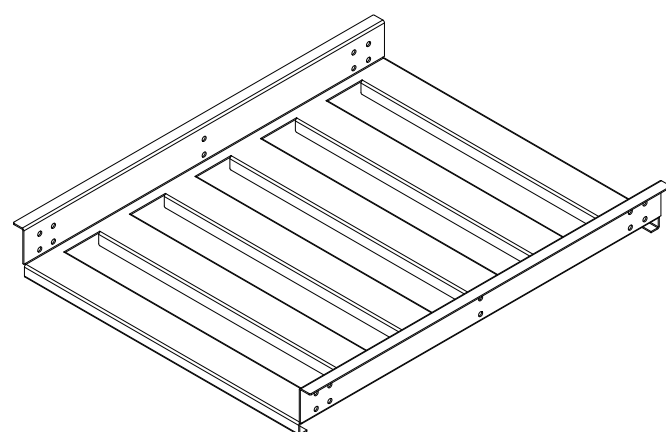
No.	For the cabinets:		Type I battery shelf	Type II battery shelf
	Width (mm)	Depth (mm)		
1	600	600	HA-000606-1000	HA-000606-1001
2	600	800	HA-000608-1000	HA-000608-1001
3	800	600	HA-000806-1000	HA-000806-1001
4	800	800	HA-000808-1000	HA-000808-1001



→ Type II battery shelf mounted in the cabinet



→ Type I battery shelf - designed to be mounted directly to the cabinet frame.



→ Type II battery shelf - reinforced, suitable for mounting to recessed rails fixed to the cabinet frame.

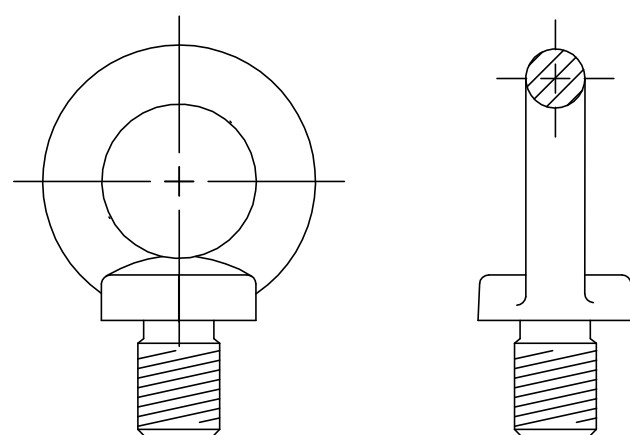
TRANSPORT EYE BOLTS

To be screwed into the upper part of the frame, the eye bolt fittings made as a galvanised steel forging for M12 thread are used in cabinets with a flat top.

→ Scope of delivery: a set consisting of 4 pieces.

Transport eye bolts

No.	Name	Transport eye bolt
1	Transport eye bolt	HA-000000-1000



PEN RAIL

Enables the attachment of earthing cables to ensure the required equipotential bonding in the cabinet, made of 30x5 mm copper tape.

→ Scope of delivery: rail with mounting elements.

PEN rail

No.	For the cabinets: Width (mm)	PEN rail
1	600	HA-000600-9000
2	800	HA-000800-9000
3	1000	HA-001000-9000
4	1200	HA-001200-9000



→ PEN rail

POWER STRIP

The power strip equipped with a power switch is used to distribute electricity. Universal strip with standard 5 sockets with DIN49411 plug is designed for 19" system 1U height. The maximum current load of the power strip is 16A.

→ Scope of delivery: power strip with fixing accessories.

Power Strip

No.	Quantity	Power strip
1	1 set	HA-000000-5000



It is possible to order a power strip with a larger number of sockets or with a different type of plugs, after prior arrangement with the technical department of HOKE S.C.

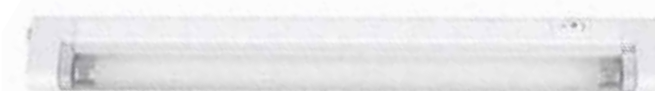
LIGHTING PANEL

The lighting panel mounted in the upper part of the cabinet allows for proper illumination of the inside of the cabinet. The lighting panel is controlled directly from the panel switch or with the use of a limit switch. Power supply 220/230 V, lighting power 8W.

→ Scope of delivery: lighting panel with fixing accessories.

Lighting panel

No.	Quantity	Lighting panel
1	1 set	HA-000000-6000



LIMIT SWITCH

The limit switch installed in the cabinet door enables easy control of switching the lighting on and off in the cabinet.

→ Scope of delivery: limit switch with fixing accessories.

Limit switch

No.	Quantity	Limit switch
1	1 set	HA-000000-6001



■ HEATERS

The heaters installed within the cabinets ensure the required temperature and prevent the formation of condensate, enabling the correct operation of the equipment housed inside. Heating power is selected depending on the specific needs of a given cabinet and controlled by thermostats.

→ Scope of delivery: heater with fixing accessories.

Heaters

No.	Power (Watts)	Heater
1	100 W	HA-000000-7001
2	150 W	HA-000000-7002
3	200 W	HA-000000-7003
4	200 W with a fan	HA-000000-7004



■ KTO THERMOSTAT

KTO thermostats are used to control the cabinet heating system, switching the heating on when the temperature drops below the set threshold. Setting range: 0-60° C

→ Scope of delivery: thermostat with fixing accessories.

KTO thermostat

No.	Quantity	KTO thermostat
1	1 set	HA-000000-7100



■ HYGRO THERMOMETER

Electronic ETF hygro-thermometer controls the temperature and relative humidity in the cabinets. When the set values are reached, it switches on the heating or ventilation. This prevents condensate from forming inside the cabinet. Setting ranges: temperature: 0-60° C, humidity: 50-90% RH.

→ Scope of delivery: hygro-thermometer with fixing elements.

ETF Hygro-thermometer

No.	Quantity	Hygro-thermometer
1	1 set	HA-000000-7300



■ FANS

Fans mounted inside the cabinet (in the roof panel) force proper air circulation inside it, under control by thermostats. The number of fans installed in the cabinet depends on the dimensions of the cabinet and the requirements of the devices installed.

→ Scope of delivery: fan with fixing accessories.

Fan

No.	Quantity	Fan
1	1 set	HA-000000-8000



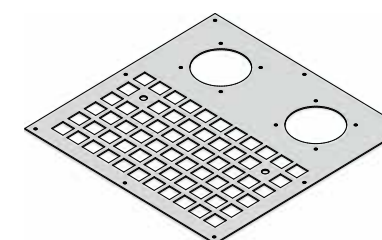
■ ROOF PLATES FOR FANS ASSEMBLY

Roof panels enable installation of up to 4 fans in the cabinet roof. The plates are made of aluminium sheet and powder coated in RAL7035.

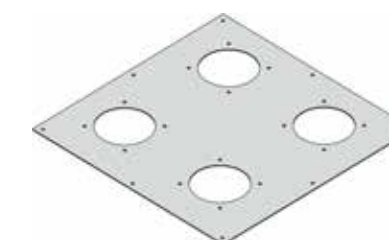
→ Scope of delivery: roof plate with fan safeguards and fixing elements.

Roof panels for fans

No.	Roof plate for 2 fans	Roof plate for 4 fans
1	HA-000000-8002	HA-000000-8004



→ Roof plate for 2 fans



→ Roof plate for 4 fans

■ KTS THERMOSTAT

KTS thermostats are used to control the cabinet ventilation, they switch on the heating when the temperature rises above the set threshold.

Setting range: 0-60° C

→ Scope of delivery: thermostat with fixing accessories.

KTS thermostat

No.	Quantity	KTS thermostat
1	1 set	HA-000000-7200



■ MOUNTING ELEMENTS

The mounting elements are used for fixing all kinds of elements to the frames, beams, vertical rails, panels, brackets, etc. inside the cabinet.

→ Scope of delivery: cage nut, washer and M6 screw - 10 pieces.

Mounting elements

No.	Type	Mounting elements
1	with a plastic washer	HA-000000-1111
2	with a metal washer	HA-000000-2222



FS "TYPE Z1" CABLE CABINETS

PURPOSE

The following circuitry elements are located in the FS "Z1" type cable cabinets: secondary circuits of current and voltage transformers of HV switchgear bays, output circuit breakers and disconnecting switches as well as automation and security devices.

CABINET SPECIFICATIONS

- Suitable for use in outdoor conditions,
- It is used for the installation of power equipment in the HV switching stations bays of power stations,
- In order to avoid condensation of water vapour inside the cabinets and to provide thermal insulation, protection in the form of a double wall filled with thermal insulation material is used. Additionally, the inside of the cabinets is ventilated through ventilation holes in the ceiling, secured with a filter cloth and covered with a mesh,
- Adjustable depth of vertical profiles allows for attaching various types of equipment, depending on the user's requirements,
- The doors open at the front and rear of the cabinet, making it easy to access electrical devices installed inside it. Equipped with a lock-insert, three-point locking with a blockade to prevent opening,
- The cabinet can be additionally equipped with a fireproof partition, a concrete foundation, a hinged tilt-plate and electrical equipment according to the customer's request.

MATERIAL

- Cabinet's frame bearer, walls, doors, base, roof panel - aluminium sheet # 2 mm,
- Fireproof partition - aluminium sheet # 3 mm,
- Bearing angles, crossbeams - steel sheet # 2 mm (galvanised),
- Mounting plates - aluminium sheet # 2 mm (painted in RAL 7035).

CONSTRUCTION

sheath, welded, riveted.

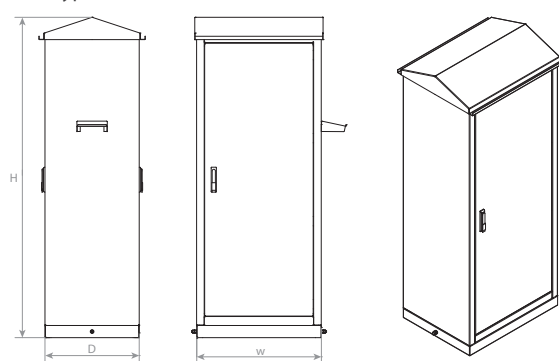
SURFACE FINISH

- all aluminium parts - RAL 7035 colour,
- steel elements - RAL 7035 colour.

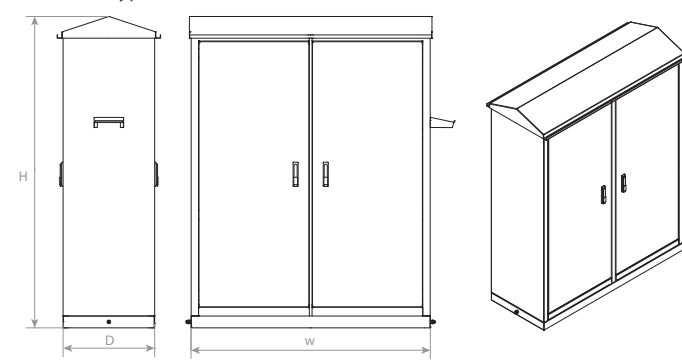
PROTECTION DEGREE

IP 55, IK 10

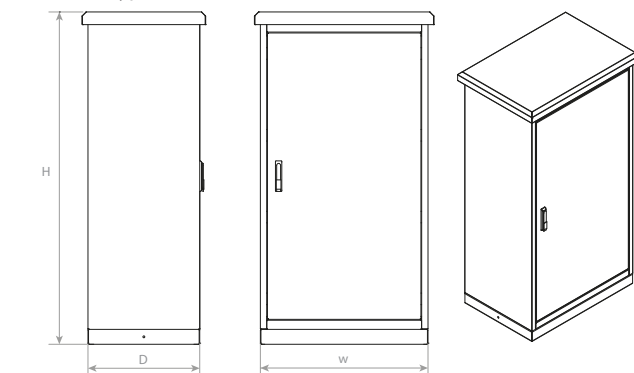
- Series of types of cabinets: FS-1, FS-1-1 and FS-1-5



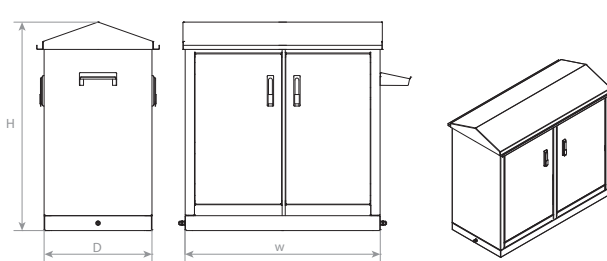
- Series of types of cabinets: FS-2 and FS-2-2



- Series of types of cabinets: FS-1-3 and FS-1-4



- Series of types of cabinets: FS-2-1, FS-2-4 and FS-2-5



COMPLETE CABLE CABINET WITH A RACK AND FIREPROOF PARTITION

Series of cabinets

No.	Cabinet model	Height (mm)	Width (mm)	Depth (mm)
1	FS-1	2 100	820	620
2	FS-1-1	1 700	820	620
3	FS-1-3*	1 780	900	600
4	FS-1-4	2 000	985	780
5	FS-1-5	2 000	1 000	600
6	FS-2	2 100	1 620	620
7	FS-2-2	1 850	1 620	620
8	FS-2-1	1 120	1 050	580
9	FS-2-4	1 400	1 050	580
10	FS-2-5	1 500	1 050	580

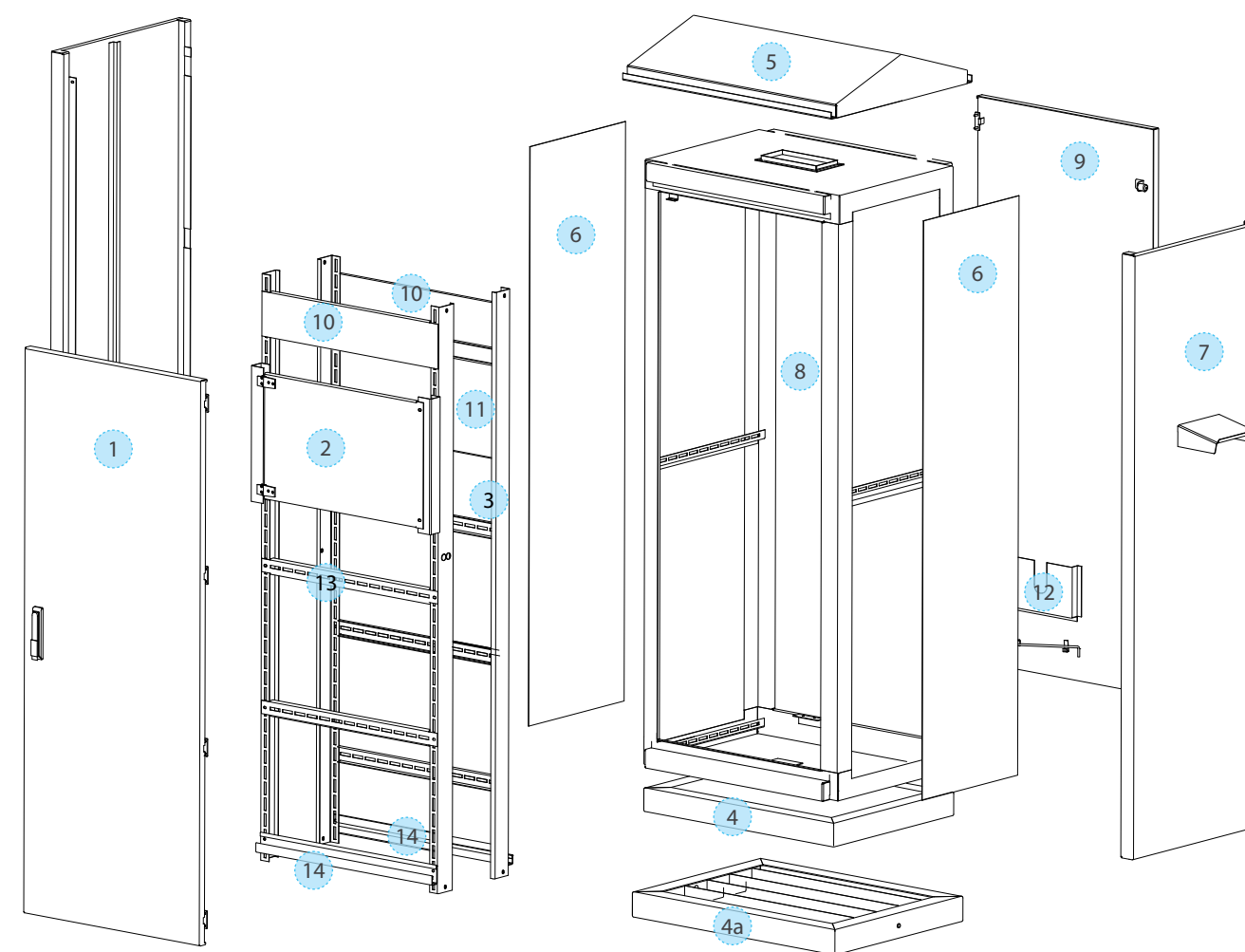
→ * The cabinet is designed to be mounted on the primary station equipment's supporting structures of a one-way access.

■ Cabinets of different heights and of a one-sided access, i.e. a back wall, can be supplied in accordance with the customer's requirements.

Cabinet construction

No.	Description
1	Solid aluminium door, handle with a patent lock (outer shell)
2	Swinging plate for visual display unit, 400mm (optional)
3	Rack for mounting plates and devices
4	Cabinet's plinth
4a	Fireproof partition (optional)
5	Canopy
6	Inner wall **
7	Side wall with a canopy for an external socket
8	Welded framework
9	Inner shell-door **
10	Mounting plate height 150mm - 2 pcs.
11	Mounting plate height 250mm - 1 pcs.
12	Document holder
13	Mounting crossbars - 5 pcs.
14	Bracket for cable holders with clips

→ ** in the case of a single wall cabinet, the element is not present.



OPTIONAL EQUIPMENT:

- fixed mounting plates,
- swinging mounting plates,
- vertical rails,
- fireproof partitions,
- mounting crossbars,
- concrete foundations, electrical prefabrication of cabinets (according to the provided documentation).

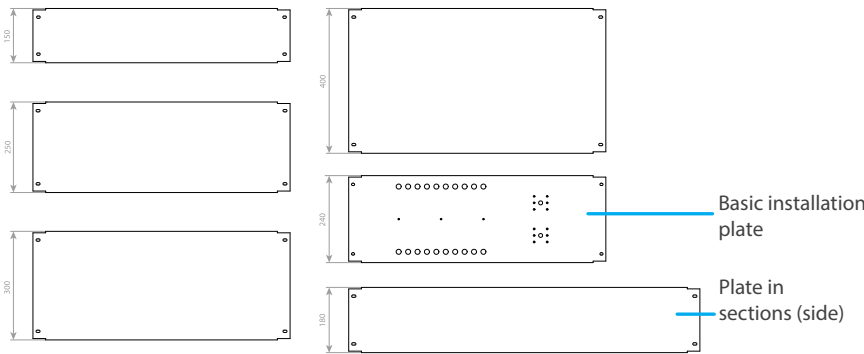
ADDITIONAL ACCESSORIES FOR CABLE RACK CABINETS

FIXED MOUNTING PLATES

Designed for fitting electrical equipment within cable cabinets, made of aluminium and powder coated in RAL 7035.

→ Scope of delivery: plate with assembly elements.

No.	Height (mm)	Width (mm)
1	150	710
2	250	
3	300	
4	400	
5	240	970
6	180	

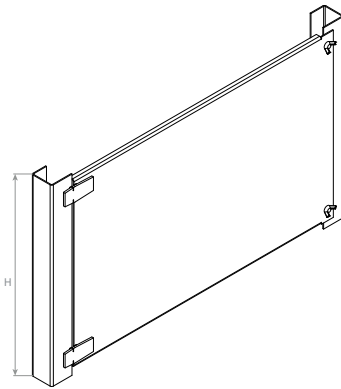


SWINGING MOUNTING PLATES

The plates are used for fitting the electrical equipment, i.e. buttons, switches with the applied HV visual display panel, made of aluminium and powder coated in RAL 7035.

→ Scope of delivery: plate with assembly elements.

No.	Height (mm)	Width (mm)
1	400	710
2	500	
3	510	
4	560	
5	600	
6	700	
7	800	

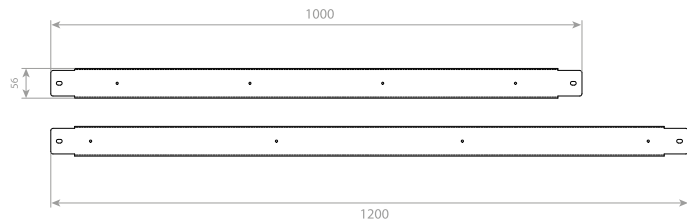


VERTICAL ASSEMBLY RAILS

Made of galvanised steel sheet, they allow for any vertical arrangement of the mounting plates, terminal strips and cable trays within the cabinets.

→ Scope of delivery: vertical assembly rail with fixing elements.

No.	Height (mm)	Width (mm)
1	1 000	56
2	1 200	

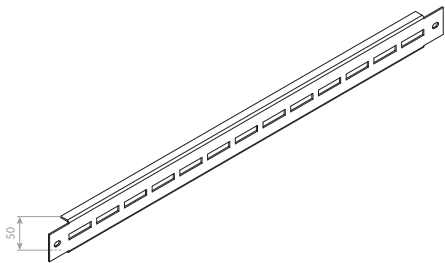


MOUNTING RAILS

Cross rails mounted horizontally in the cabinet are used for attaching terminal blocks rails, cable trays and other electrical devices inside the cable cabinets and made of galvanised steel sheet.

→ Scope of delivery: a cross rail with assembly elements.

No.	Height (mm)	Width (mm)
1	50	710
2		970

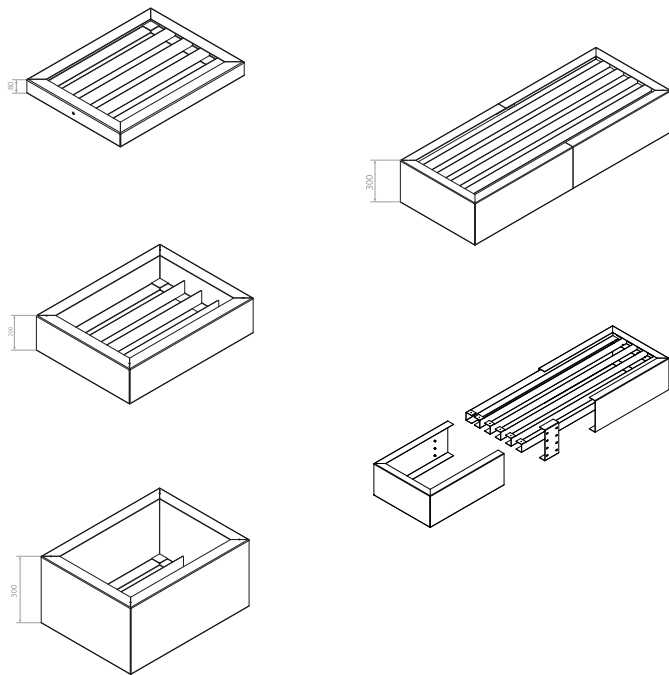


FIREPROOF PARTITIONS

Designed to separate the inside of the cabinet from the cable duct, made of aluminium and powder coated in the colour of the cabinet.

→ Scope of delivery: fireproof partition with assembly elements.

No.	Cabinet model	Height (mm)	Width (mm)	Depth (mm)
1	FS-1 FS-1-1	80	820	620
2		200		
3		300		
4	FS-1-3*	300 (extendable)*	900	600
5		80		
6		200		
7		300		
8	FS-1-4	300 (extendable)*	985	780
9		80		
10		200		
11		300		
12	FS-1-5	300 (extendable)*	1 000	600
13		80		
14		200		
15		300		
16	FS-2 FS-2-2	300 (extendable)*	1 620	620
17		80		
18		200		
19		300		
20	FS-2-1 FS-2-4 FS-2-5	300 (extendable)*	1 050	580
21		80		
22		200		
23		300		
24		300 (extendable)*		



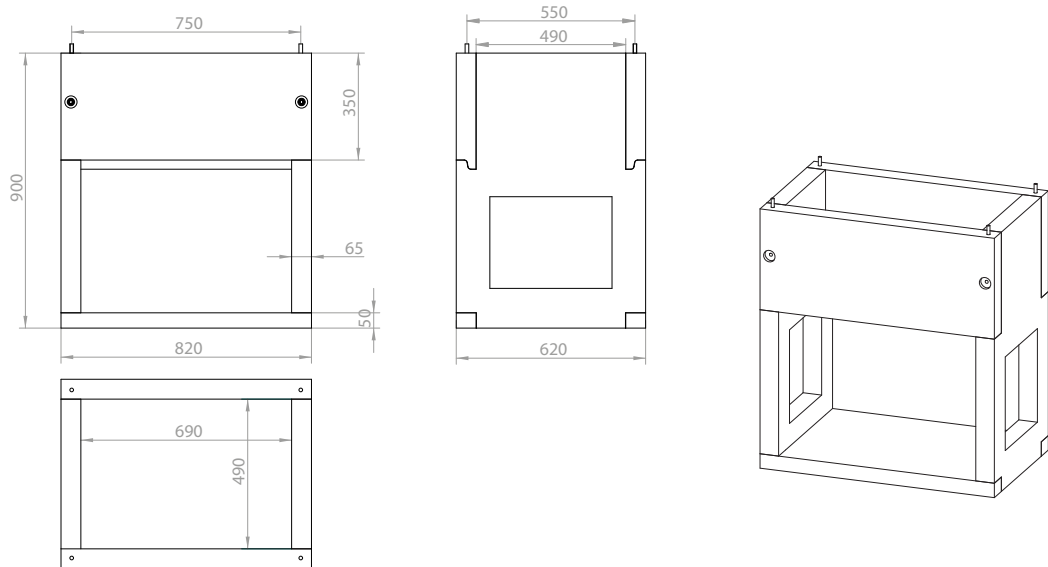
CONCRETE FOUNDATIONS

The prefabricated concrete foundation for FS cable cabinets consists of five elements interconnected with bolts, allowing for an easy insertion of cables into the cabinet directly from the cable ducts. There are bolts (pins) for attaching the cabinet to the foundation in the upper part of the foundation.

→ Scope of delivery: foundation with assembly elements.

No.	Cabinet model	Height (mm)	Width (mm)	Depth (mm)
1	FS-1, FS-1-1	900	820	620
2	FS-1-4		985	780
3	FS-1-5		1 000	600
4	FS-2, FS-2-2		1 620	620
5	FS-2-1, FS-2-4, FS-2-5		1 050	580

→ Foundation for the FS-1 type cable cabinet



FSU CABINET FOR VOLTAGE CIRCUITS

PURPOSE OF THE CABINET

It is a hanging cabinet, designed for outdoor use. It is used to house power energy devices, controls and automation equipment, etc.

CHARACTERISTICS OF THE CABINET

- Aluminium housing, single or double wall with insulation, ventilated,
- Equipped with a mounting plate,
- Fixtures for hanging the cabinet are located on its posterior wall.
- Electrical equipment provided as per the request of the customer.

MATERIAL

- Housing - aluminium sheet # 2 mm,
- Bearing angles, crossbeams - steel sheet # 3 mm (galvanised),
- Mounting plate - steel sheet # 2 mm (galvanised).

CONSTRUCTION

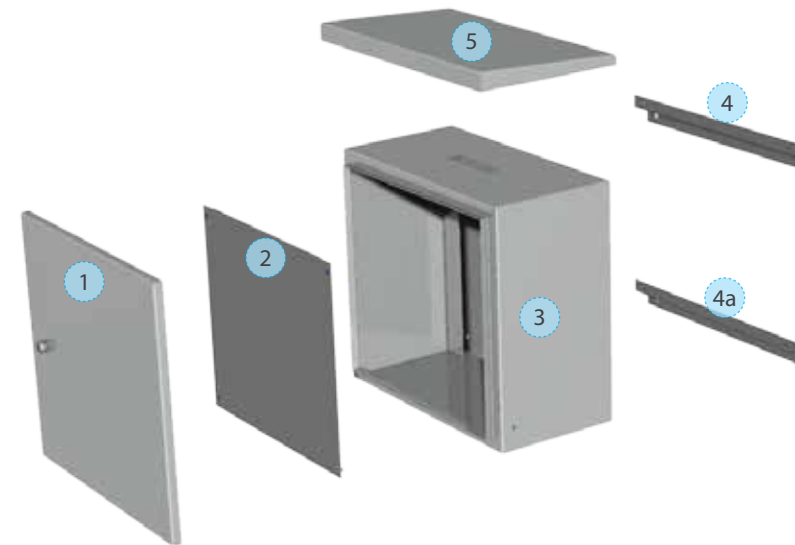
sheath, welded, riveted.

SURFACE FINISH

- all aluminium parts - RAL 7035 colour,
- steel parts galvanised.

PROTECTION DEGREE

IP 55, IK10



CONSTRUCTION

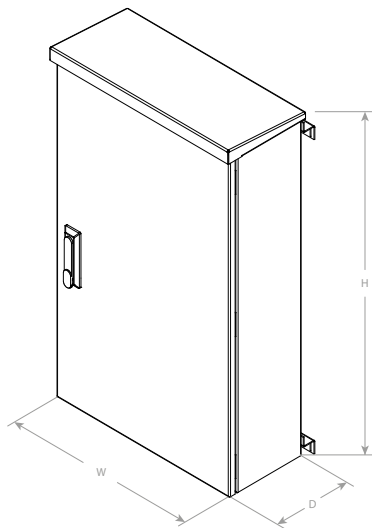
No.	Description
1	Solid aluminium door, door handle with a patent lock
2	Mounting plate
3	Housing
4	Wall or pole mount bracket
4a	Wall or pole mount bracket
5	Canopy

Optional, adjustable brackets can be used in order to mount the cabinets onto a round pole (50-300mm diameter) or a rectangular shape pole (50-250mm diameter).

SERIES OF TYPES

FSU cabinets with a single wall

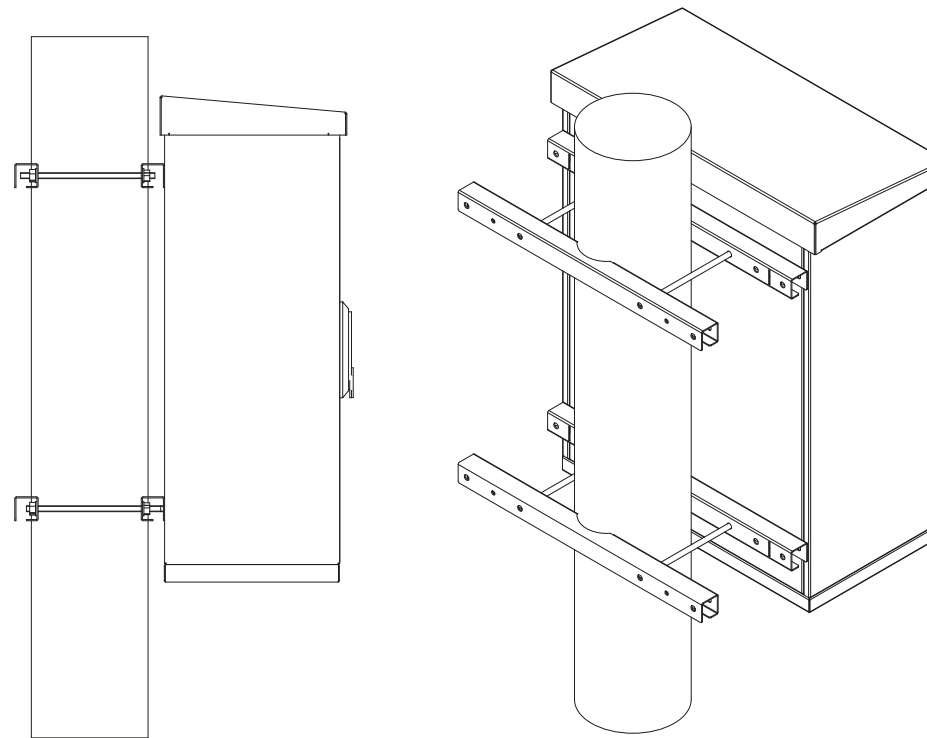
No.	Cabinet model	Height (mm)	Width (mm)	Depth (mm)
1	FSU-1	1 000	800	250
2	FSU-2	1 200	800	300
3	FSU-3	900	600	250
4	FSU-4	800	600	
5	FSU-5	600	400	
6	FSU-6	1 200	600	250
7	FSU-7	600	600	
8	FSU-8	1 000	600	
9	FSU-9	1 000	800	300
10	FSU-10 (double door)	1 200	1 200	600
11	FSU-11	800	600	300
12	FSU-12 (double door)	600	1 600	350
13	FSU-15	1 200	1 000	300
14	FSU-16	1 400		
15	FSU-17	600		
16	FSU-18	500	800	250
17	FSU-19	400	400	
18	FSU-20	500	600	
19	FSU-21	800*	800	250



FSU cabinets with double walls, insulated

No.	Cabinet model	Height (mm)	Width (mm)	Depth (mm)
1	FSU-1P	930	600	300
2	FSU-2P	850		400
3	FSU-3P	1 230	800	300
4	FSU-4P	750	910	400
5	FSU-5P	1 260	810	300
6	FSU-6P	1 030	600	
7	FSU-7P	830	800	
8	FSU-8P		800	
9	FSU-9P	630	400	

→ the height of the cabinet with an added canopy



→ FSU cabinet mounted on a round pole, with the use of adjustable brackets

→ the height of the cabinet without the canopy. If a canopy is to be attached at the top, 40mm should be added to the height of the cabinet.

Custom cabinets of any size and dimensions can be supplied.

FZ TYPE OUTDOOR ALUMINIUM CABINET

PURPOSE
 The cabinet is designed for use in outdoor conditions. It is suitable for use with power energy devices, telecommunications appliances and automation equipment etc.

CABINET CHARACTERISTICS

- Aluminium enclosure, double-wall, insulated and ventilated,
- Using a mounting plate, a 19" or a 21" rack is possible.
- The cabinet can be additionally equipped with a fireproof partition, a concrete foundation, a hinged tilting plate and electrical equipment according to the customer's request.

MATERIAL

- Cabinet's frame bearer, walls, doors, base, canopy - aluminium sheet # 2 mm,
- Fireproof partition - aluminium sheet # 3 mm,
- Bearing angles, crossbeams - steel sheet # 2 mm (galvanised),
- Mounting plates - steel sheet # 2 mm (galvanised).

CONSTRUCTION
 sheath, welded, riveted.

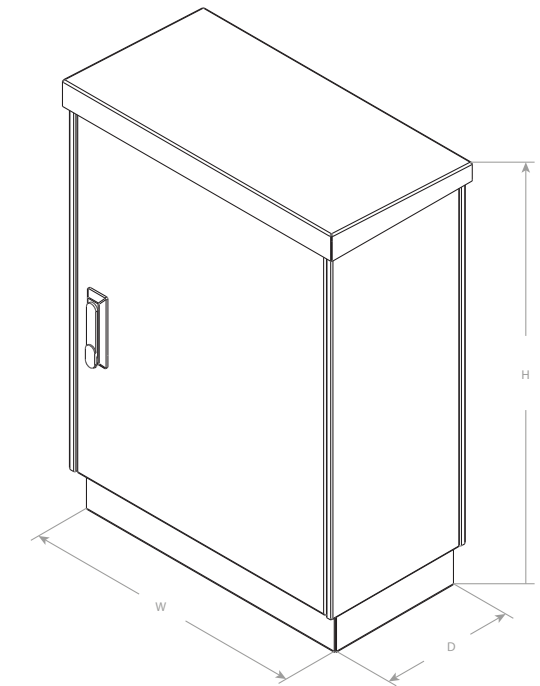
SURFACE FINISH

- all aluminium parts - RAL 7035 colour,
- steel parts - RAL 7035 colour.

PROTECTION DEGREE
 IP 55

SERIES OF TYPES

No.	Cabinet model	Height (mm)	Width (mm)	Depth (mm)
1	FZ-1	1 200	800	500
2	FZ-2	1 200		600
3	FZ-3	1 400		600
4	FZ-4	1 600		600

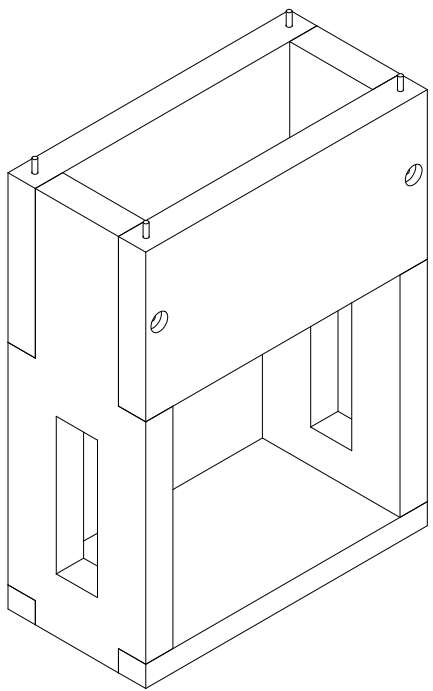
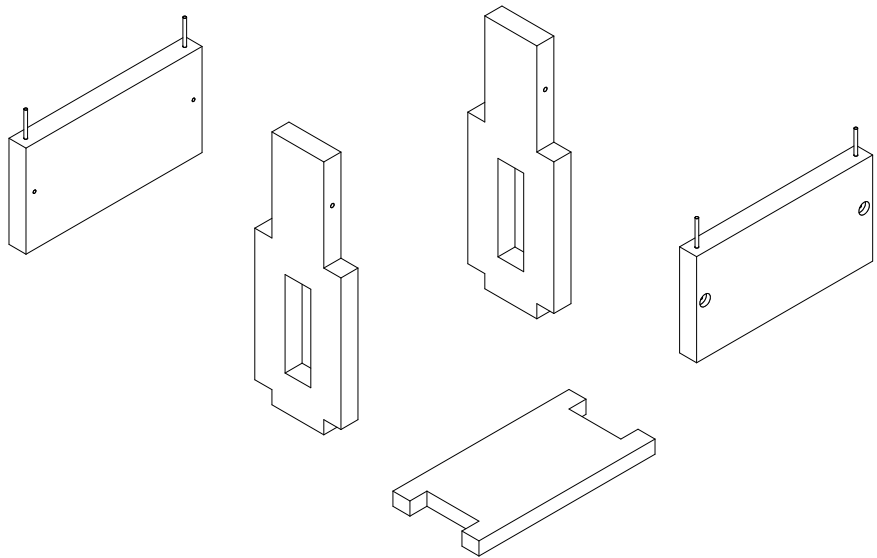


FOUNDATION

The prefabricated concrete foundation designed for FZ cabinets consists of five elements, bolted together using two interconnecting screws. The housing is screwed to the foundation with 4 bolts (pins).

Concrete foundations of the FZ cabinet

No.	Cabinet model	Height (mm)	Width (mm)	Depth (mm)
1	FZ-1	900	800	500
2	FZ-2			600
3	FZ-3			
4	FZ-4			





CUSTOM BUILT ENCLOSURES FOR SPECIFIC REQUIREMENTS OF THE CLIENT

Based on our production capabilities, we provide all kinds of metal housings and components made of materials such as steel, stainless steel and aluminium. Our services and offer include both the production based on the existing base of realised enclosures, as well as new products made in accordance with the documentation and client’s specific requirements. With each of the projects, their specific details are elaborated by our engineers in cooperation with the client, in order to achieve their satisfaction with the fulfilment of the project.

SAMPLE IMPLEMENTATIONS



FSU cabinet with glass doors



FS cable cabinet in a custom painting



External aluminium cabinet for housing power supply and control systems of the pumping station



OTHER

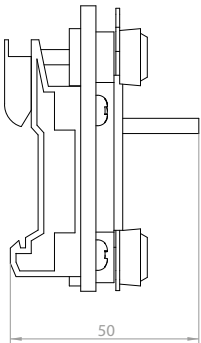
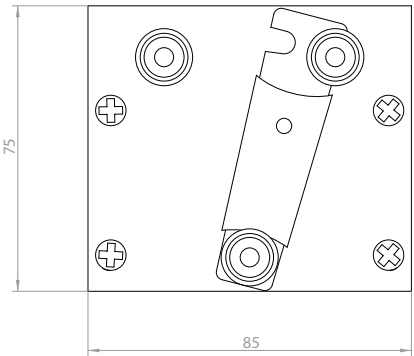
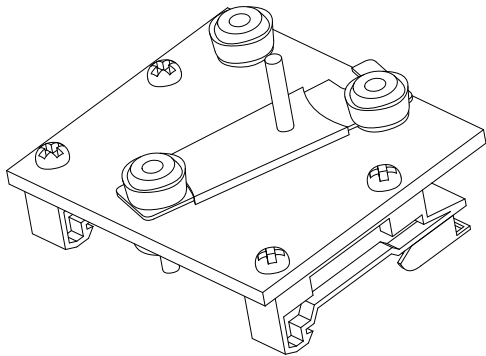
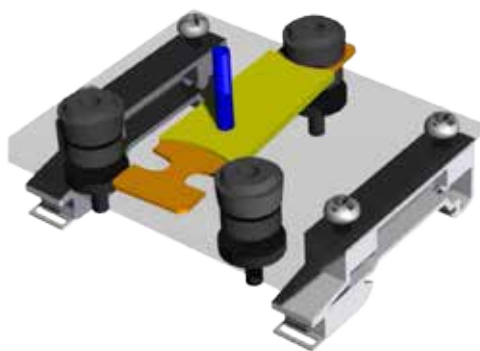
TWO-POSITION NP2P OVERLAY

PURPOSE

The NP2P two-position overlay is mounted on a standard TS rail. The base of the overlay is made of transparent material to which the measuring terminals are attached.

SERIES OF TYPES

No.	Height (mm)	Width (mm)	Depth (mm)
1	70	85	50



OPGW SLACK CABLE STORAGE RACK

PURPOSE OF THE RACK

The slack cable storage system is designed to organise excess OPGW cable length on power poles.

RACK CHARACTERISTIC

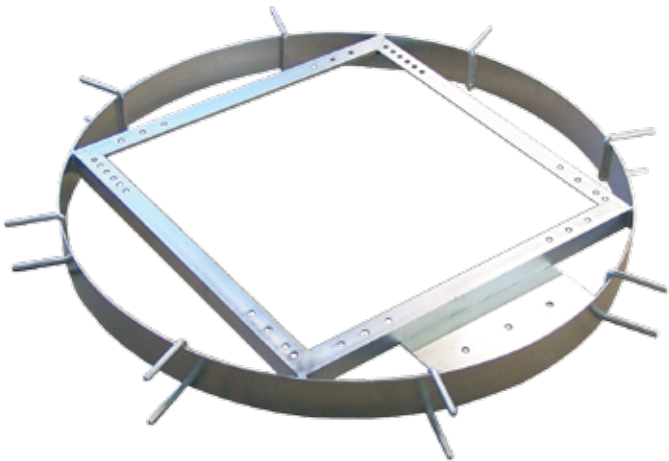
- rack diameter 1100mm, usable width 90mm,
- fastening to steel poles with 4 brackets,
- maximum capacity: up to 30m of cable,
- protective feature to prevent the cable sliding off the rim to the sides.

MATERIAL

- rim - steel sheet # 3 mm, galvanised.

SURFACE FINISH

- steel parts galvanised.





Based on many years of experience and own production capabilities, HOKE S.C. carries out comprehensive prefabrication of switchgears, rack cabinets, box enclosures, etc. for a variety of implementations within power engineering, automation and other branches of industry. Prefabrication of enclosures is carried out on the basis of the approved technical documentation provided by the customer, adhering strictly to all the technical requirements and quality standards

We use various appliance system solutions available on the market, cooperating with manufacturers and suppliers of dedicated equipment and devices. The prefabrication is realised relying both on our own enclosures, as well as on the basis of casings and housing elements from other manufacturers, such as Rittal, ZPAS, ZPrAE, etc.

For the ready-made prefabricated products, we issue and provide all the necessary documents confirming the fulfilment of quality and technical standards as required by Polish law.

Prefabrication of cabinets and switchgears



CABLE STATION CABINETS

Station cabinets used in power engineering applications for electro energetic stations' HV bays. The secondary circuits of current and voltage transformers can be fitted inside the cabinets, as well as breakers and disconnectors output circuits and other automation and security devices.

We prefabricate on our own, double-walled aluminium FS cable cabinets chassis (optionally with a single wall without insulation) or using cabinets of other manufacturers, as indicated by the clients.

We offer prefabrication of station cabinets for:

- line fields,
- transformer fields,
- clutch fields,
- voltage measurement fields,
- AACE (with FeClAr resistor).

The prefabrication of cable station cabinets is carried out in accordance with the approved blueprints and technical documentation provided by the client, in conjunction with our engineering department, in order to guarantee the necessary functionalities and the highest quality level of the product.



■ 110kV bay cable cabinet with a measuring system



→ Installation of the AACE resistor in the FS-1-1 cable cabinet



→ Tilt-plates for the control system and the circuit breaker controller, mounted in the FS-1 cabinet

CONTROL AND RELAY CABINETS

Control and relay cabinets are dedicated for HV power stations control rooms, MV network switching stations, traction substations and for housing the steering appliances, automation and security systems in power engineering, ICT and industrial sector as a whole.

We carry out prefabrication based on the indoors aluminium "HOW" cabinets of our own production or using the cabinets of different manufacturers, as indicated by the customer. During the production and assembly processes, we utilise protective measures, regulators, relays, controllers, etc., supplied by the leading domestic and foreign producers available on the Polish market.

We offer the prefabrication of control and relay cabinets:

- line fields,
- transformer fields,
- clutch fields,
- generators,
- synchronisation systems;
- control systems.

Each time, the prefabrication of control and relay cabinets is carried out in compliance with the specification provided by the customer as well as using the know-how of our experienced engineers and technicians, in order to guarantee the necessary functionality and a proper technical level of the product.



■ Transformer bay control cabinet



→ Installation of relays on the cabinet mounting plate



→ 110kV bay protection mounted on a swing frame

AUXILLIARIES SWITCHGEARS

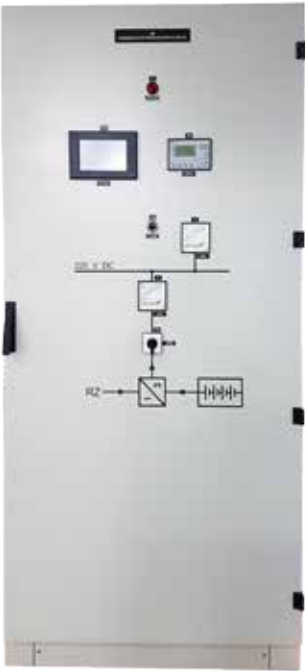
Auxiliaries switchgears are designed for applications within the HV power stations control rooms, MV network switching stations, traction substations and other electro energetic and industrial facilities. Our products ensure and guarantee the necessary power supply for all devices and field installations in full voltage ranges.

We carry out prefabrication based on our own, indoors aluminium “HOW” cabinets or using other manufacturers’ cabinets according to customer’s requirements. During the assembly process, we use devices such as inverters, rectifiers, ATS systems and other equipment procured from the Polish market’s leading manufacturers.

We offer prefabrication of the following types of auxiliaries switchgears:

- 400/230V AC,
- 220V DC (110V DC),
- 230V AC,
- 48V DC (24V DC).

The prefabrication process of each auxiliaries switchgear build is carried out on the basis of the client’s technical specification as well as using our technical department’s know-how and experience, which allows us to guarantee the required functionalities, without compromising the product’s manufacturing quality.



■ PW 220V DC Auxiliaries Switchgear for Traction Substation



→ The controller and the earth fault control system for the PW 220V DC cabinet



→ Inverter / PSU mounting and custom height swing frame

MEASURING

Measuring cabinets for various applications, such as inside the HV power stations control rooms, MV network switching stations, traction substations or other power-related and industrial facilities. Our solutions ensure uninterrupted electricity usage measurements through billing and measurement equipment as well as the data transmission and monitoring systems.

We carry out prefabrication based on our own, indoors aluminium “HOW” cabinets, or, when required, using other manufacturers’ cabinets according to customer’s specifications. Various measurement systems, data transmission devices, etc., supplied by the leading domestic and foreign producers available on the Polish market are used in the assembly process.

In case of the metering equipment supplied by the customer to be fitted in the cabinets, we can provide additional, optional services, such as device calibration and legalisation, which are carried out by certified and authorised Polish-based research facilities.

We offer prefabrication of the following metering cabinets:

- line fields,
- transformer bays,
- PCB fields (parallel capacitor batteries).

The prefabrication of our metering cabinets is always conducted in strict adherence to the documentation provided by the customer. Thanks to the involvement and the production supervision of our engineering department, we can supply products of the highest quality made to the most complex specifications.



■ Metering cabinet with a mounted meter plate (swinging and fixed)



→ Mounting on a solid dielectric plate



→ Metering devices fitted into the meter box

TELEMECHANICS AND SIGNALLING

Telemechanic and signalling systems cabinets are designated for installation inside HV stations control rooms, MV network switching stations, traction substations and other power and industrial facilities. These solutions allow for the implementation of remote control and monitoring of station devices, implemented with the use of drivers and signalling systems from leading manufacturers on the Polish market.

We carry out prefabrication based on our own, aluminium "HOW" type cabinets, or, when required, using other manufacturers' cabinets according to customer's specifications.

The prefabrication of telemechanic and signalling systems cabinets is carried out on in accordance with the documentation and through arrangements and cooperation of our engineering team with the client; which guarantees the necessary functionalities and a flawless build of the product.



■ Central signalling station cabinet



→ Signalling system with an acoustic circuit fitted inside the cabinet



→ Station's central signalling system mounted within the local control cabinet

ENCLOSURES FOR VOLTAGE CIRCUITS, MEASUREMENT, INTERMEDIARY AND CONTROL

Cabinets for voltage circuits, measurement, intermediary and control circuits, suitable for installation at various power facilities, hydrological, construction, public and industrial premises. These cabinets complement the electrical, measuring and control installations in power supply systems, technological processes steering, etc.

The prefabrication process relies on own aluminium, steel or stainless-steel enclosures, or using other manufacturers' enclosure systems assigned by the client.

The entire manufacturing process of voltage, measurement, intermediary and control circuit cabinets is performed in accordance with the customer's documentation, our technical department ensures the correct execution of prefabrication, allowing to maintain the consistent, highest product quality.



■ 220/110kV station voltage circuit cabinet



→ Equipment of the measuring circuits cabinet



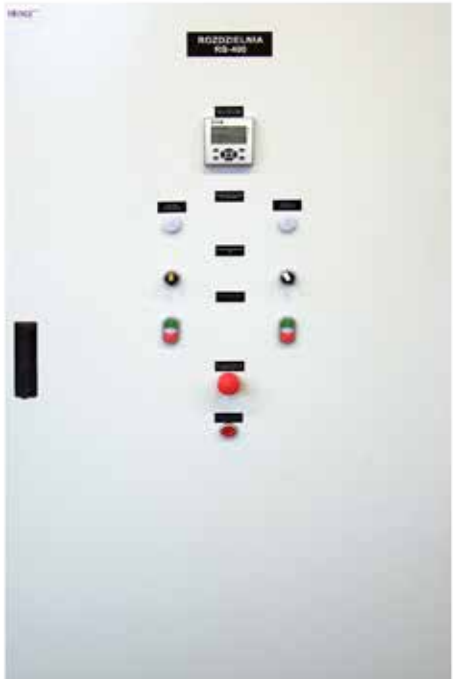
→ Equipment of an intermediary cabinet

LV DISTRIBUTION

LV switchgears designed for installation in electro energetic, hydrological, industrial, public and other facilities. The switchgears provide power for the devices and LV installations equipment located at the above-mentioned objects.

The prefabrication processes use the aluminium, steel or stainless-steel elements of our in-house production, enclosure components sourced from other manufacturers are used when ordered by the client.

Prefabrication process of LV switchgears is performed on the basis of the blueprints and documentation provided by the client, in cooperation with our technical department, to guarantee the required functions and the best possible product quality.



■ LV switching station with ATS



→ Equipment for the facilities switching station



→ Digital protection equipment mounted on a switchgear mounting plate

OTHER

Based on the individual arrangements with our clients, we carry out switchgears prefabrication, as well as manufacturing of cabinets and enclosures for all kinds of renovation, modernisation and investment tasks which may be carried out on-site at power, industrial, hydrological, public utility and construction facilities.

Each of these projects is being realised with taking into account the object-specific requirements, the reviewed and approved client's product documentation, all the applicable regulations and quality standards, guaranteeing the product's build quality and correct functions in various environments.



■ Telecommunication engineering cabinet at a 110kV station



→ Active elements of the SUT cabinet equipment



→ 15kV switchgear cell plate

REFERENCE LETTERS



A decorative element consisting of three small squares: a grey one, a blue one, and a black one.

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