

# Data communication and industrial enclosures

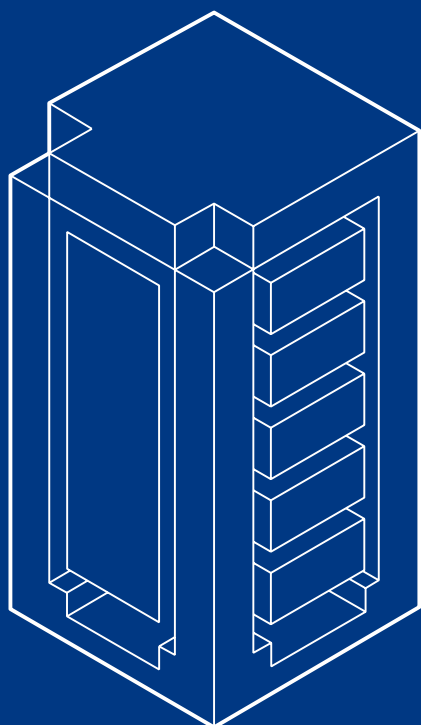


**ZPAS**

for your connections

# ZPAS

## G R O U P



### ZPAS Group

The ZPAS Group, pursuing shared goals and business philosophy, integrates the product offer of ZPAS S.A. and ZPAS-NET sp. z o.o. The idea is reflected in our motto “solutions for connections”, which refers to advantages of our products, benefits of using them, a superb system of communication with our customers, partnership, technical consulting and high level of customer service, from the moment of first contact until order fulfilment. The motto thus reflects our attitude to clients whose requirements we wish to satisfy, offering them top-quality services.

We have achieved a strong status in the industry over 35 years of our business activity. As a manufacturer, we operate in accordance with our well-established reputation as a reliable business partner providing customers with topquality products, short lead times and very reasonable prices.

Electronic communication products (elements of IT, telecommunications and power systems) must demonstrate parameters and features capable of meeting rigorous high-tech requirements. Our primary goal is to supply such products.

Our capital is not limited to modern machines. We also boast of highly qualified staff. Our employees are young, creative and innovation-minded. They also make the best use of vast industry experience acquired over more than 30 years by specialists who have worked for our company ever since its beginnings. Advanced technologies and wellplanned organisation of all manufacturing processes are supported by INFOR ERP LN, our IT system.

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Supplementary accessories

INDUSTRIAL ENCLOSURES

Wall-mounted cabinets

CONTROL DESKS

MULTIMEDIA KIOSKS



## ABOUT THE COMPANY



General view of the upper section of the manufacturing plant in Przygórze

### ZPAS S.A.

Since the very beginning of its business activity in 1973, ZPAS has produced a variety of industrial cabinets and enclosures. Initially, the Company operated as the Experimental Department of the Power System Automation Institute (IASI) in Wrocław, to become a part of the Research and Manufacturing Centre for Power System Automation (CNPAE). After 1989, the management of the Company undertook actions aimed at privatisation, which resulted in the establishment of a private joint-stock company at the end of 1991. In 2004, a part of the ZPAS S.A. business was spun off into ZPAS-NET, a daughter company which took over a section of the Company's production.

In June 2007, ZPAS S.A. put into operation a new manufacturing plant occupying an area of 10,000 m<sup>2</sup>, located on the premises of the Nowa Ruda Industrial Park in Nowa Ruda-Słupiec. The plant, equipped with an automatic Salvagnini cutting and bending line for metal sheet processing and an automatic powder paint facility, focuses on large lot production. It also accommodates a finished goods warehouse.

Products manufactured by the ZPAS Group are mainly used as protection devices in advanced telecom, IT and electric power systems. Thanks to new technologies and design solutions, the Company has succeeded in developing a uniform and comprehensive product portfolio. ZPAS and ZPAS-NET products make it possible to join the previously separated groups of products in the IT, telecommunications and power industries.

Currently, the ZPAS Group markets a very broad range of equipment (mainly enclosures) designed for important functions in a variety of industries using electronic communication. Detailed information is available at [www.zpas.pl](http://www.zpas.pl).



Bird's eye view of the manufacturing plant in Przygórze

### Quality and the environment

The ZPAS Group holds the ISO 9001:2000 Quality Assurance System Certificate and the ISO 14001:2004 Environmental Management System certificate.





## ABOUT THE COMPANY



ZPAS manufacturing plant in Przygórze



Seat of the Company's Management Board

### Sales agencies

The Company has around a dozen sales agencies all over Poland. A detailed list is available on the Company's website.

ZPAS products are also sold abroad through a distribution network in: Austria, Belarus, Belgium, Bosnia and Herzegovina, Cyprus, Denmark, France, Germany, Great Britain, Greece, Hungary, Iceland, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Malta, Morocco, the Netherlands, Norway, Portugal, Russia, Slovenia, Spain, Sweden, Switzerland and the Ukraine. Detailed information is available on request from the ZPAS Group Marketing Department.

### ZPAS offers:

- 19" and 21" data communication enclosures (including server cabinets, telecommunications cabinets, EMC enclosures and others -- both in free-standing and wallmounted versions)
- empty power cabinets (without electrical devices)
- customised cabinets
- universal control desks
- products made of stainless acid-resistant steel

### ZPAS-NET offers:

- structural cabling systems
- fibre optic distribution frames and accessories
- telecommunications accessories
- ZPAS Control Oversee telecom and IT systems
- DataCenter integration of equipment and systems
- aluminium outdoor telecom cabinets
- dispatch and control desks
- mimic boards
- prefabrication of power supply, protection, control and automatics cabinets

## ABOUT THE COMPANY



Automatic sheet metal shearing machine

### Production

At present, ZPAS S.A. has two manufacturing plants located in Przygórze and Nowa Ruda-Słupiec. The newer plant, located on the premises of the Nowa Ruda Industrial Park in Nowa Ruda-Słupiec, specialises in large lot production of standard items, while the plant in Przygórze focuses on manufacturing customised products, piece production and short-run production. Przygórze is also the main headquarters of ZPAS S.A. and the seat of the management of the ZPAS Group.



Laser shearing machine



Hall housing bending brakes



## ABOUT THE COMPANY



ZPAS manufacturing plant in Nowa Ruda - Stupiec



Automatic cutting and bending line for metal sheet processing



Gasket casting machine



Assembly of data communication cabinets



## REFERENCES



Collocation racks DSR installed in the internet server room by OVH in Paris France)



Installation of servers in SZB cabinets in OVH's internet server room in Paris



SZB SE cabinets in the server room of the Wrocław University of Technology



Server room equipped with SZB SE cabinets. Installation was performed by MCP Ltd. from Kraków, Poland (<http://www.mcp.pl>)

## REFERENCES



Main distribution room in the Stock Exchange Warsaw building. The whole system is designed and manufactured on the basis of SZB cabinets. Installation performed by ALMA S.A. from Poznań (Poland) - <http://www.alma.biz.pl>



SZB and SZB SE cabinets  
Installed in server rooms  
of TV Cyfrowy Polsat in Warsaw  
([www.cyfrowypolsat.pl](http://www.cyfrowypolsat.pl))



Stub-end station in the branch of Telefonía Polska - Zachód Sp. z o.o. in Stargard Szczeciński. Installation designed and manufactured using SZB cabinets, performed by VECTOR Sp. z o.o. from Gdynia (Poland) - <http://www.vector.com.pl>



SZB cabinets installed in the headquarters of BPT "TELBANK" S.A. in Warsaw (Poland)

In many places in Poland, it is possible to see enclosures produced by ZPAS S.A. with installed equipment and elements of structural cabling which are parts of data communication systems. There are placed in:

- Bank Spółdzielczy,
- Bank Zachodni,
- Stock Exchange in Warsaw,
- Lukas Bank,
- NASK Warsaw and Wrocław
- Politechnika Wrocławska (Technical University in Wrocław),
- Polish Olympic Committee in Warsaw,
- PKP (Polish Railways),
- Airport in Wrocław,
- PKO bank,
- PKN Orlen petrol stations,
- TVP (Polish TV),
- Cable TV,
- TV Polsat in Warsaw,
- TVN24 in Warsaw,
- ZUS (Polish social insurance company).



## REFERENCES



Motorway toll gates delivered under a cooperation agreement to Ascom MultiToll Solutions SAS, France. The scope of delivery included the provision of enclosures together with electric system installation. The toll gates were put up at the motorway entry in the south of France.

## GUARANTEE



ZPAS offers 5 years guarantee for its elements. Post-guarantee service is provided without a time limit.



## FLOOR-STANDING CABINETS



SZB, OTS1



SZB PC



SZE2 PC



SZB SE



SZB SEI



DSR



SZU



SJB

## SZB 19" CABINET

### Standard universal data communication cabinet

- Designed for indoor applications.
- Offered in 40 size variations (see the chart on page 15), of which 11 variations are in constant sale from our warehouse.
- Individual configuration:
  - multiple door, panel, roof options for maximum flexibility,
  - possibility to join cabinets in a row,
  - levelling feet, castor or plinth options,
  - multiple alternative cable entry options (brush, foam),
  - 21" mounting profiles also possible (in 800 mm wide cabinets),
  - individual configuration using simple coding.
- Wide range of supplementary accessories: shelves, drawers, fan units, power strips, blanking plates etc.
- Flexibility in manufacturing tailor-made cabinets.

### Scope of delivery

Cabinet in basic configuration\*  
(cat. no. WZ-SZB-xxx-17AA-11-0000-011):

- frame,
- safety glass front door,
- two side panels,
- steel rear door shortened with 3 U module panel with brush strip, lockable,
- standard roof, raised, with perforated sides,
- 2 pairs of 19" mounting profiles,
- earthing bar and cables,
- cabinet placed on levelling feet.

\*) Other configurations - see page 15.

### Technical data

#### Material:

Frame	- 2.0 mm thick sheet steel
Side panels	- 0.8 mm thick sheet steel
Steel doors:	
- solid door	- 1.0 mm thick sheet steel
- steel door with Plexiglas	- 1.5 mm thick sheet steel, 4.0 mm thick Plexiglas
Glass door	- 6.0 mm thick safety glass
Glass door with metal sides	- 2.0 mm thick sheet steel, 6.0 mm thick safety glass
Mounting profiles	- 2.0 mm thick sheet steel

#### Protection degree:

IP 20 in accordance with EN 60529 / IEC 529 (does not apply to brush cable entries).

On request, IP 41 can be achieved.

#### Surface finishing:

Frame, roof, panels, doors, plinth - textured powder paint, light grey (RAL 7035). All other colour options on request.

Mounting profiles - Al-Zn coated.

Outriggers for 800 mm wide cabinets - galvanised.

**Maximum load capacity:** see chart on page 15

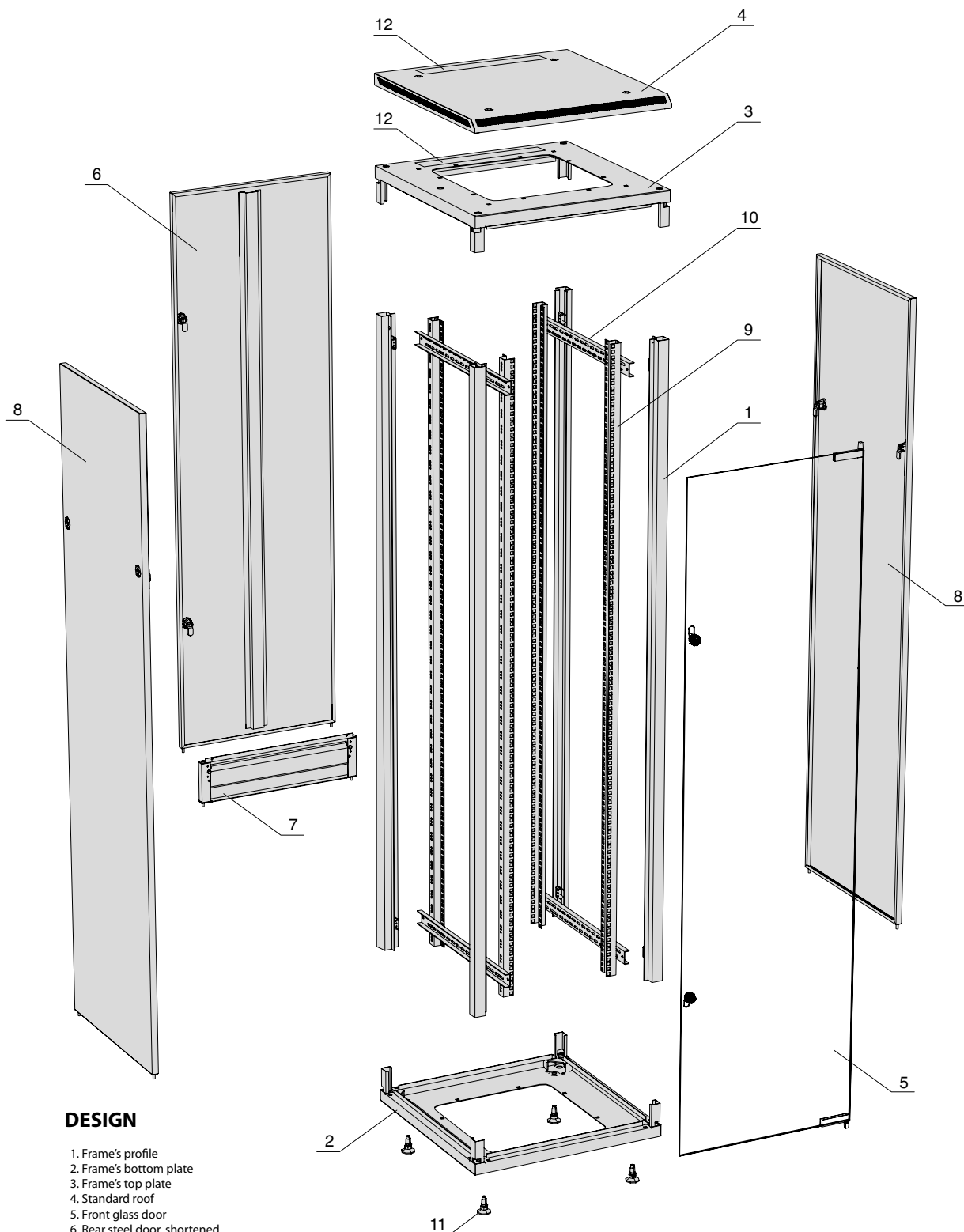


SZB cabinets in the basic configuration, 600 and 800 mm wide

## SZB 19" CABINET

SZB cabinet 42 U, 600x600 mm in basic configuration

Other available configurations are presented on pages 15-18.

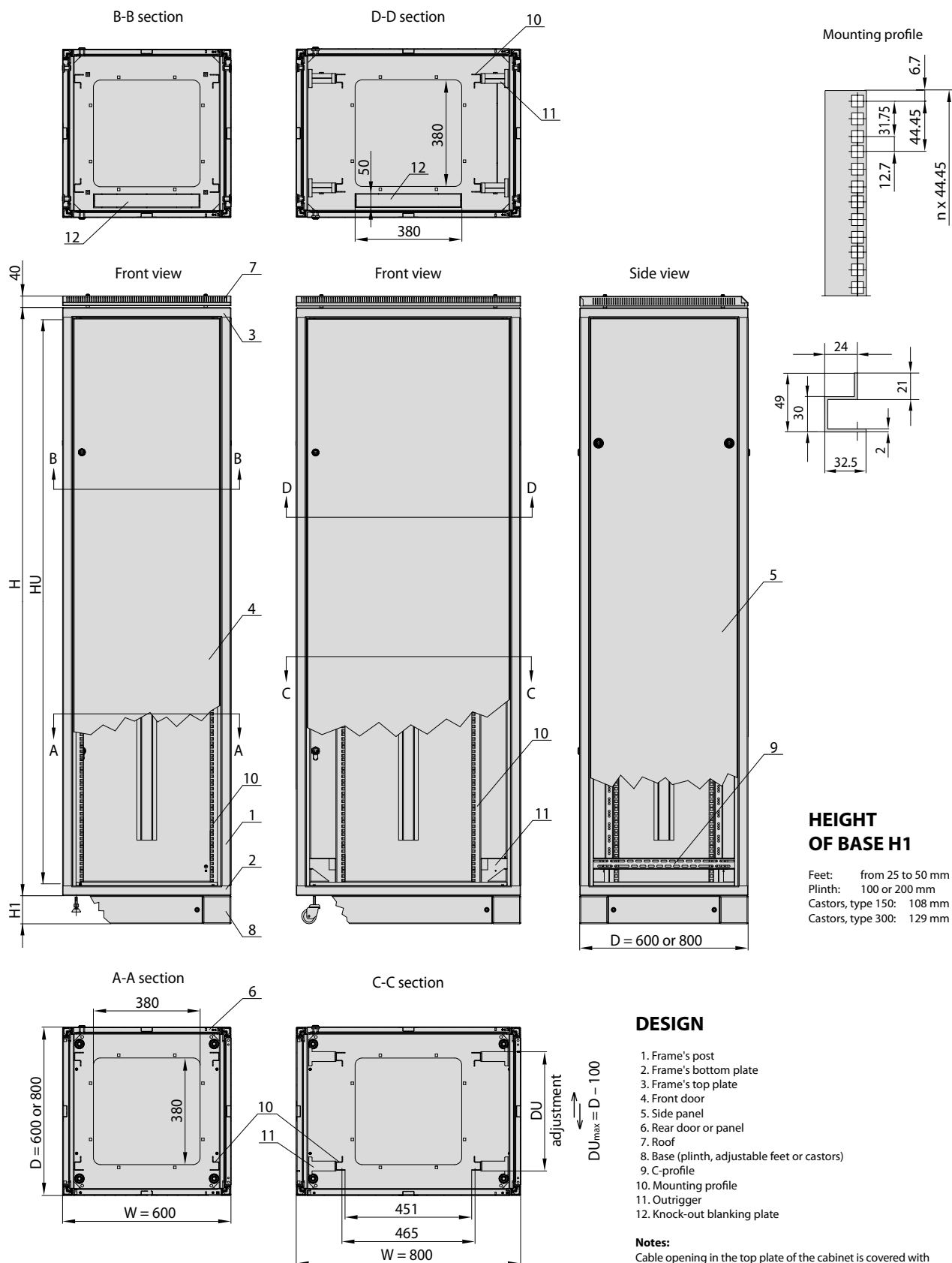


### DESIGN

1. Frame's profile
2. Frame's bottom plate
3. Frame's top plate
4. Standard roof
5. Front glass door
6. Rear steel door, shortened
7. 3 U module panel with brush strip
8. Steel side panel
9. Mounting profile
10. C-profile
11. Adjustable feet
12. Knock-out blanking plate



## SZB 19" CABINET



Maximum door opening angle: 110°

## SZB 19" CABINET

## Reference chart

Total width W [mm]	Total depth D [mm]	Reference number									
800	800	5	17	145	53	149	153	157	89	101	113
	600	6	18	146	54	150	154	158	90	102	114
600	800	9	21	147	57	151	155	159	93	105	117
	600	10	22	148	58	152	156	160	94	106	118
Usable height HU [U = 44.45 mm]		45 U	42 U	39 U	36 U	33 U	30 U	27 U	24 U	18 U	15 U
Frame height H [mm]		2096	1963	1830	1696	1563	1430	1296	1163	896	763

## Note:

- Cabinet options in the red shaded fields are available in constant supply from ZPAS S.A.'s warehouse (this refers to cabinets with the following configuration: frame, four adjustable mounting profiles, two side panels, front glass door, lockable steel rear door shortened with 3 U module panel with brush strip, standard roof with perforation, four levelling feet, earthing bar and earthing cables for the doors and side panels - cat. no. WZ-SZB-xxx-17AA-11-0000-011).
- Lead time of other cabinets to be agreed upon with ZPAS Sales Department.

## Catalogue number of SZB cabinet

## Reference number

specifies the cabinet's overall dimensions (see reference chart). Zeros should be added before single-digit or double-digit numbers.  
(Note: Cabinets with expanded side panels are only manufactured in the following ref. numbers 9, 21 and 147.)

## Roof type:

- 1 - standard roof
- 2 - roof with extra perforation
- 3 - tight roof IP 41
- 4 - roof with opening for blanking/cable entry plate

For a detailed description of roof types, go to pages 18 and 78.

**WZ-SZB - XXX - XXXX - XX - XXXX - 011**

## FRONT

## REAR

## LEFT SIDE

## RIGHT SIDE

## Door or panel type:

- 0 - without any doors or panels
- 1 - glass door
- 2 - steel door
- 3 - steel door with perforation in the bottom part
- 4 - steel door with Plexiglas
- 5 - steel door with Plexiglas and perforation
- 7 - steel door, shortened + 1 pc. of 3 U module panel with brush strip
- 9 - steel door, shortened + 2 pcs. of 3 U module panels with brush strip
- Z - glass door with metal sides and rod-latch lock (specially designed as front or rear door for cabinets higher than 18 U)
- A - steel panel
- C - steel side panel, shortened + 1 pc. of 3 U module panel with brush strip
- E - steel side panel, shortened + 2 pcs. of 3 U module panels with brush strip
- F - expanded steel side panel (only for cabinets with ref. numbers 9, 21 and 147)

## Base type:

- 0 - without any base (cabinet set directly on bottom plate)
- 1 - levelling feet
- 2 - castors - type 150 (see page 76)
- 3 - castors - type 300 (see page 76)
- 4 - plinth 100 mm
- 5 - plinth 100 mm with levelling option
- 6 - plinth 200 mm
- 7 - plinth 200 mm with levelling option
- 8 - plinth 200 mm, widened (specially designed for SZB cabinets with expanded side panels).

## FRONT

## REAR

## LEFT SIDE

## RIGHT SIDE

## Configuration of plinth's sides:

Four digits which specify plinth side type.  
Four zeros (0000) should be entered for cabinet without any plinth.

Each side can be:

- 1 - solid
- 2 - with perforation
- 3 - with double perforation\*
- 4 - with a brush opening
- 5 - with two brush openings
- 6 - with a brush opening and perforation\*

\*) Only for plinths 200 mm in height.

For a detailed descriptions of plinths, see pages 74-75.

## NOTE:

The delivery of a standard SZB cabinet (except for elements listed in cat. no.) includes the following: four mounting profiles, earthing bar and earthing cables for doors and panels.

## Example:

The cat. no. WZ-SZB-018-1AAA-14-2422-011 means SZB cabinet, usable height 42 U, width 800 mm, depth 600 mm. The cabinet is equipped with front glass door, two removable side panels and removable rear panel. The top is covered with the standard roof. Cabinet is situated on 100 mm plinth. Rear side of the plinth with brush opening for cable entry, all other sides are perforated. Doors, panels and roof are earthed. Cabinet interior is equipped with four mounting profiles installed to the frame by means of 8 outriggers.

## Ordering instruction

- When ordering the SZB cabinet, please provide the appropriate **catalogue number according to the above information**, which specifies the overall dimensions, type of doors, panels, roof and base.
- The next step is to specify **catalogue numbers of supplementary accessories** (such as: shelves, blanking plates, power strips, fan units etc. - see pages 73-108). Supplementary accessories are delivered in separate packaging including fixing hardware. On request it is also possible to mount supplementary accessories in the cabinet.

## Maximum load capacity for SZB cabinets

Base type	Maximum weight of equipment mounted in cabinet
levelling feet	600 kg
castors - type 150	150 kg
castors - type 300	500 kg
plinth	600 kg

## EXAMPLES OF SZB CABINETS



SZB cabinet 600 mm wide, front glass door [1]



SZB 600 mm wide cabinet with front glass door with metal sides and rod-lath lock [Z]



SZB cabinet 600 mm wide, front steel door [2]



SZB cabinet 600 mm wide, front steel door with Plexiglass [4]



SZB cabinet 800 mm wide, front steel door with Plexiglass and perforation [5]



SZB cabinet 800 mm wide, front steel door with perforation in the bottom part [3]

### Note:

Symbols given in square parentheses [ ] refer to diagrams on page 15 – Door and panel types



## EXAMPLES OF SZB CABINETS



**SZB cabinet 800 mm wide equipped with blanking plate, fan unit and shelves**



**SZB cabinet with expanded side panels [F]**  
The design of this cabinet is based on the SZB 600x800 mm frame, while the expanded panels widen the cabinet to 800 mm.



**SZB cabinet 600 mm wide with front glass door [1].** Right section of the cabinet is made of shortened steel door and 3 U module panel with brush strip [7].



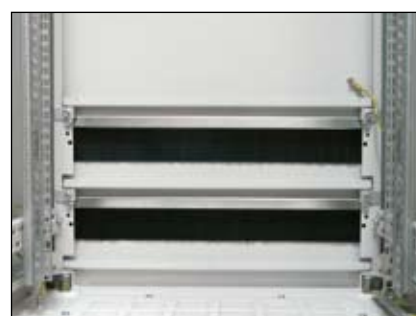
**Steel door shortened and 3 U module panel with brush strip [7], mounted in the rear of the cabinet**



**Steel panel shortened with 2 pcs. of 3 U module panels [E], mounted in the rear of the cabinet**



**3 U module panel mounted in 600 mm wide cabinet**



**2 pcs. of 3 U module panels mounted in the 600 mm wide cabinet**

### Note:

Symbols given in square parentheses [ ] refer to diagrams on page 15 – Door and panel types.

## ROOF TYPES FOR SZB CABINETS



[1] Standard roof. After removal of the knock-out blanking plate from the roof, the cable opening can be completed with brush strip - see pages 78-79.



[2] Roof with extra perforation (top)



[3] Tight roof with IP 41 protection



[4] Roof with opening 380x210 mm for blanking/cable entry plate 420x250 mm (blanking/cable entry plate should be ordered separately – see pages 78-79)

### Note:

Numbers given in square parentheses [ ] refer to diagrams on page 15 – Roof types.

## EXAMPLES OF NON-STANDARD SZB CABINETS



SZB cabinet with easy adjustment of 19" mounting profiles



SZB cabinet 42 U height, 800 mm wide with 10 U swing frame. Non-standard version (detailed description of swing frames SZB cabinet with easy adjustment of 19" mounting profiles - see page 88).

## EXAMPLES OF NON-STANDARD SZB CABINETS



SZB cabinet 1000 mm wide, double-sectioned. Left section equipped with 19" mounting profiles. Right section with mounting angles in 300 mm spacing. Tailor made.



SZB cabinet 600 mm wide with double-wing door - tailor made



# OTS1 19" CABINET

## Data communication cabinet for self-assembly

- Offered in 8 options immediately available from the ZPAS warehouse.
- Full compliance with SZB cabinets in terms of design and technical specifications (pages 12-19).
- Finished in RAL 7035 colour.
- Delivered disassembled, along with assembly manual.

### Scope of delivery

- screwed frame (bottom plate, top plate, 4 posts, 4 C-profiles),
- glass front door,
- 2 side panels,
- steel rear door, shortened,
- 3 U module panel with a brush strip, for assembly under or above the shortened rear door,
- standard roof (with cable opening in the rear section, covered with a knock-out blanking plate),
- 2 pairs of mounting profiles, spaced at 19",
- 8 outriggers for fixing mounting profiles (only in 800 mm cabinets),
- earthing bar and earthing cables for the rear door, side panels and roof,
- 4 levelling feet,
- assembly manual,
- cardboard packaging.



Cabinet OTS1 42 U, 800 x 800 mm

### Reference chart

Height [U = 44.45 mm]	Width [mm]	Depth [mm]	Catalogue number
42 U	800	1000	WZ-OTS1-007-17AA-11-0000-011
		800	WZ-OTS1-008-17AA-11-0000-011
		600	WZ-OTS1-009-17AA-11-0000-011
	600	1000	WZ-OTS1-010-17AA-11-0000-011
		800	WZ-OTS1-011-17AA-11-0000-011
		600	WZ-OTS1-012-17AA-11-0000-011
24 U	600	800	WZ-OTS1-035-17AA-11-0000-011
		600	WZ-OTS1-036-17AA-11-0000-011

**OTS1 19" CABINET****Cabinet OTS1 42 U, 600 x 600 mm**

## SZB PC 19" COMPUTER CABINET

### Designed for computer equipment protection

- Designed for indoor applications.
- The design enables selective admission of access to each section of the cabinet through the use of locks with different cylinders.
- Wide range of supplementary accessories: keyboards, shelves, drawers, fan units, power strips, blanking plates etc.
- Optional cable entries.
- Easy coding system enables quick configuration (see page 24).
- Non-standard versions on customer's request.

### Scope of delivery

Standard configuration\*

(cat.no. WZ-SZBPC-xxx-17AA-11-0000-4-011):

- frame with fixed universal keyboard drawer,
- two side panels,
- double front door: lower - solid, upper - with Plexiglas,
- steel rear door, shortened with 3 U module panel with brush strip,
- standard roof,
- 2 pairs of 19" mounting profiles,
- earthing bar and cables,
- set on levelling feet.

\*) For other configurations see chart on page 24.



SZB PC cabinet 600 mm wide

### Technical data

#### Material:

Frame	- 2.0 mm thick sheet steel
Side panels,	
roof and solid doors	- 1.0 mm thick sheet steel
Steel door with glass	- 1.5 mm thick sheet steel,
	4.0 mm thick safety glass
Mounting profiles	- 2.0 mm thick sheet steel

#### Protection degree:

IP 20 in accordance with EN 60529 / IEC 529  
(does not apply to brush cable entries).

#### Surface finishing:

Frame, roof, panels, doors, plinth  
- textured powder paint, light grey (RAL 7035).  
All other colour options on request.

Mounting profiles - Al-Zn coated.

Outriggers - galvanised.

#### Maximum load capacity:

As given for SZB cabinets – see chart on page 15.



**SZB PC 19" COMPUTER CABINET**

SZB PC cabinet 800 mm wide with vertical masking panels, mounted on a plinth

## SZB PC 19" COMPUTER CABINET

### Reference chart

Total width W [mm]	Frame depth D [mm]	Reference number			
800	800	1	5	9	13
	600	2	6	10	14
600	800	3	7	11	15
	600	4	8	12	16
Usable height HU [U = 44.45 mm]		45 U	42 U	39 U	36 U
Frame height H [mm]		2096	1963	1830	1696

### Catalogue number of SZB PC cabinet

**Reference number**  
specifies the cabinet's overall dimensions  
(see reference chart). Zeros should be added  
before single-digit or double-digit numbers.

**front doors:**  
1 - upper: with glass window,  
lower: solid  
2 - upper and lower with glass  
window

**Roof type:**  
1 - standard roof  
2 - roof with extra perforation  
3 - tight roof IP 41  
4 - roof with opening for blanking/cable entry plate  
For a detailed description of roof types,  
go to pages 18 and 78.

**WZ-SZBPC - XXX - XXXX - XX - XXXX - X - 011**

REAR

LEFT SIDE

RIGHT SIDE

#### Door or panel type:

- 0 - without any doors or panels
- 1 - glass door
- 2 - steel door
- 3 - steel door with perforation
- 4 - steel door with Plexiglas
- 5 - steel door with Plexiglas and perforation
- 7 - steel door, shortened + 1 pc. of 3 U module panel with brush strip
- 9 - steel door, shortened + 2 pcs. of 3 U module panels with brush strip
- A - steel panel
- C - steel side panel, shortened + 1 pc. of 3 U module panel with brush strip
- E - steel side panel, shortened + 2 pcs. of 3 U module panels with brush strip

#### Base type:

- 0 - without any base (cabinet set directly on bottom plate)
- 1 - levelling feet
- 2 - castors - type 150 (see page 76)
- 3 - castors - type 300 (see page 76)
- 4 - plinth 100 mm
- 5 - plinth 100 mm with levelling option
- 6 - plinth 200 mm
- 7 - plinth 200 mm with levelling option

FRONT

REAR

LEFT SIDE

RIGHT SIDE

#### Configuration of plinth's sides:

Four digits which specify plinth's side type.  
Four zeros (0000) should be entered for cabinet without a plinth.

Each side can be:

- 1 - solid
- 2 - with perforation
- 3 - with double perforation\*
- 4 - with a brush opening
- 5 - with two brush openings
- 6 - with a brush opening and perforation\*

\*) Only for plinths 200 mm.

For a detailed descriptions of plinths, see pages 74-75.

#### Type of drawer and keyboard:

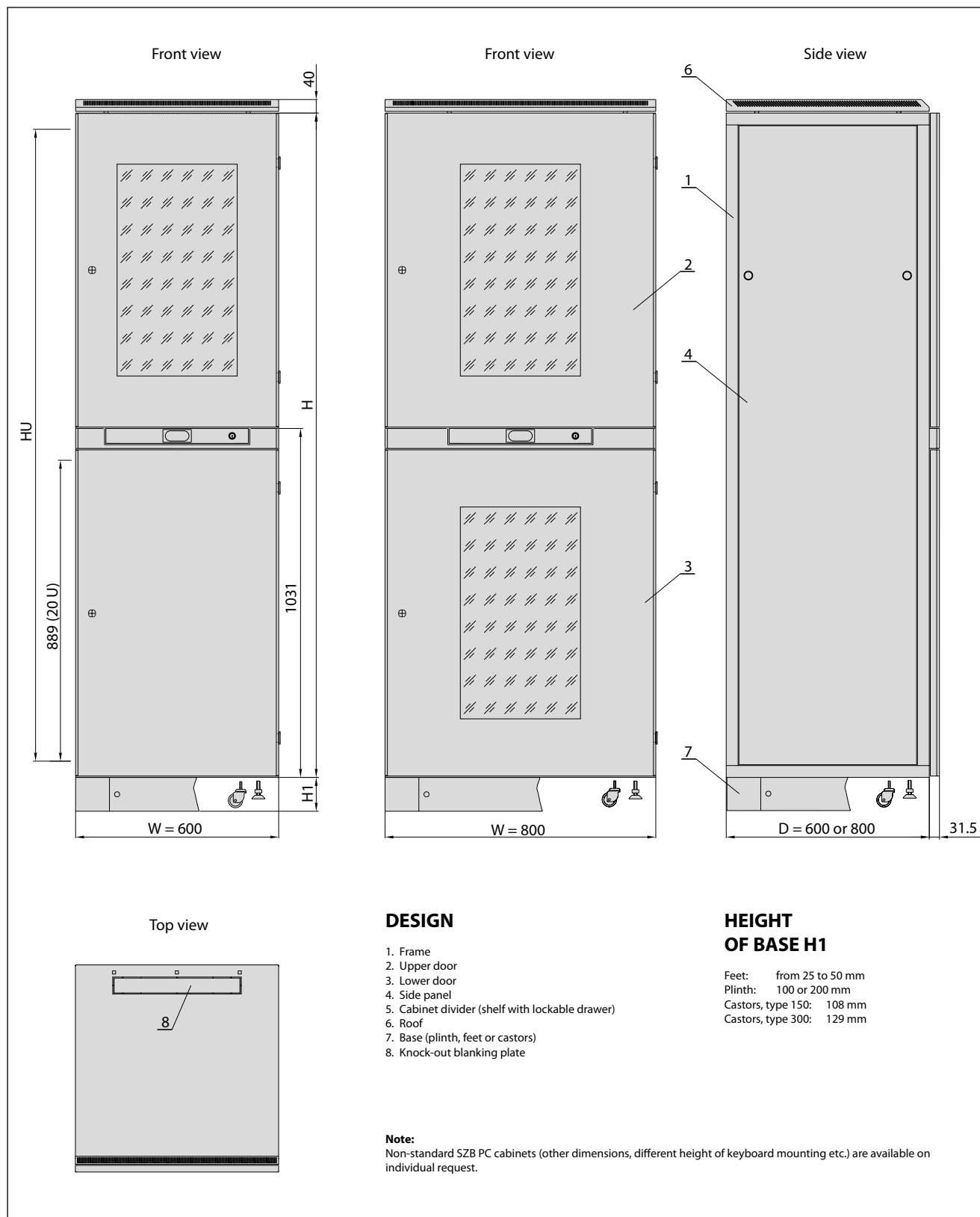
- 1 - drawer with touchpad keyboard
- 2 - drawer with trackball keyboard
- 3 - drawer with keyboard without pointing device
- 4 - universal drawer without keyboard

For detailed description of drawers and keyboards, see page 82.

#### Note:

- The delivery of a standard SZB PC cabinet (except for elements listed in cat. no.) includes the following: four mounting profiles, earthing bar and earthing cables for doors and panels.
- Monitor housing and other equipment shall be ordered separately.

## SZB PC 19" COMPUTER CABINET



### Ordering instruction

1. When ordering the SZB PC cabinet, please provide the appropriate **catalogue number according to the above information**, which specifies the overall dimensions, type of doors, panels, roof, base and the type of keyboard drawer.
2. The next step is to specify **catalogue numbers of supplementary accessories** (such as: shelves, blanking plates, power strips, fan units etc. - see pages 73-108). Supplementary accessories are delivered in separate packaging including fixing hardware. On request it is also possible to mount supplementary accessories in the cabinet.



## SZE2 PC 19" COMPUTER CABINET - IP 64

### Designed for computer equipment requiring antidust protection

- Designed for protection of computer equipment used in industrial areas.
- The design enables selective admission of access to each section of the cabinet through use of locks with different cylinders.
- Design based on modified frame of the SZE2 cabinet.
- Easy baying in rows with SZE2 and SZE2 PC cabinets
- Possibility of using supplementary accessories designed for SZE2 (page 158-176) and equipment for 19" installations.
- Possibility to manufacture cabinet frame, door, panels, supplementary roof and plinth of stainless sheet steel (on individual request).
- Non-standard versions on customer's request.

#### Scope of delivery

- frame set on 100 mm plinth,
- 2 pairs of 19" mounting profiles,
- 2 flushed side panels,
- double front door with 3-point (rod-lath) lock and patent cylinder (upper door with glass, lower door solid),
- door for keyboard part with one-point lock,
- rear panel,
- universal drawer for keyboard,
- solid blanking plate for top including sealing gasket,
- sliding gland plates for adjustable cable entry.

#### Technical data

##### Material:

Frame's top and bottom plate	- 2.0 mm thick sheet steel
Frame's posts	- 2.5 mm thick sheet steel
Door	- 2.0 mm thick sheet steel, 4.0 mm thick safety glass
Side panels	- 1.5 mm thick sheet steel
Plinth - corners	- 2.5 mm thick sheet steel
- covers	- 1.25 mm thick sheet steel
Mounting profile	- 2.0 mm thick sheet steel

##### Protection degree:

IP 64 in accordance with EN 60 529 / IEC 529.

##### Surface finishing:

Frame, door, panels, plinth  
- textured powder paint with thick structure, light grey (RAL 7035). All other colour options on request.

Mounting profiles – Al-Zn coated

##### Maximum load capacity:

The maximum weight of equipment mounted in SZE2 PC cabinets is 600 kg.



Roof - supplementary accssesories (see page 160)

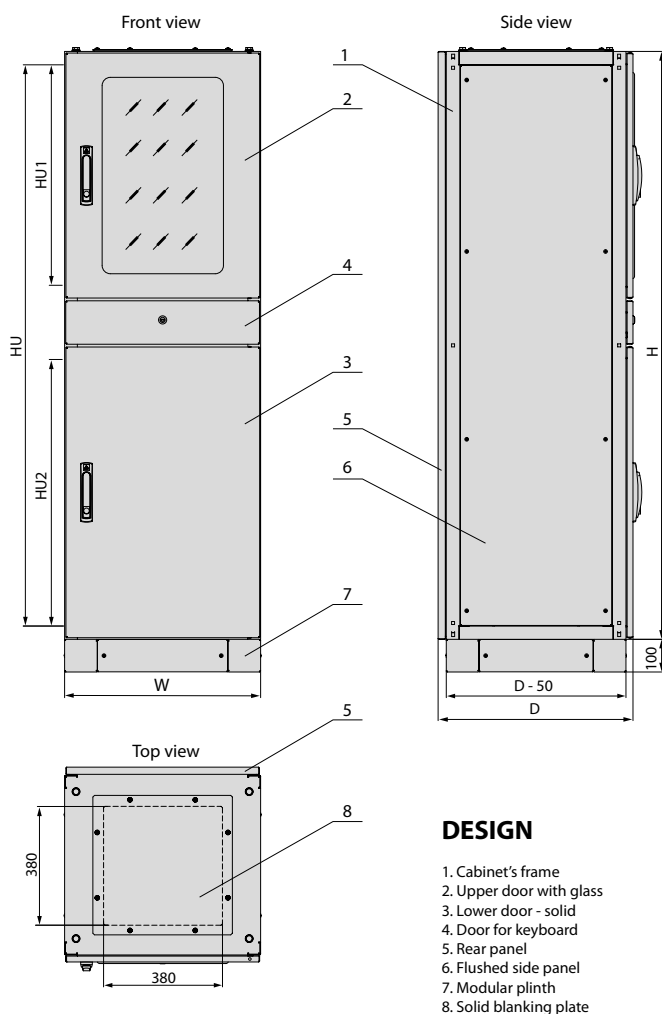
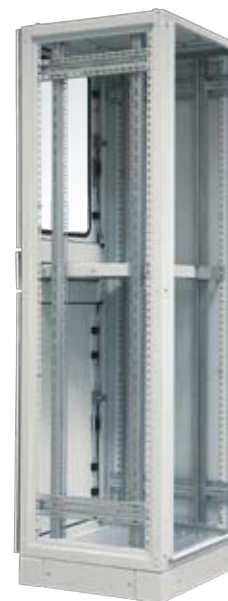


#### Reference chart

Width W [mm]	Depth D [mm]	Catalogue number		
		WZ-3004-00-06-011	WZ-3004-00-04-011	WZ-3004-00-02-011
600	600	WZ-3004-00-05-011	WZ-3004-00-03-011	WZ-3004-00-01-011
	800			
Usable height of cabinet HU [U = 44,45 mm]	complete cabinet HU	33 U	38 U	42 U
	upper part HU1	10 U	15 U	19 U
	lower part HU2	18 U	18 U	18 U
Total height of cabinet without plinth H [mm]		1600	1800	2000

## SZE2 PC 19" COMPUTER CABINET - IP 64

SZE2 PC cabinet equipped with keyboard housing. The housing insures IP 64 of the cabinet at open door of the keyboard part.

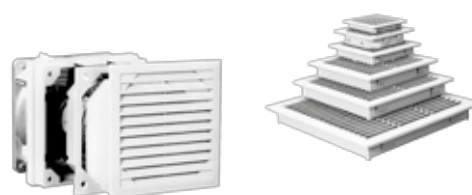


### DESIGN

1. Cabinet's frame
2. Upper door with glass
3. Lower door - solid
4. Door for keyboard
5. Rear panel
6. Flushed side panel
7. Modular plinth
8. Solid blanking plate



Keyboard housing (see page 83)



Filter fan and exhaust filter for cabinet panels or door (see page 173)



Interchangeable sliding gland plates (see page 169)

### Note:

The opening in the bottom plate of the SZE2 PC cabinet is identical as in the SZE2 cabinet (see page 152).

## SZB SE 19" SERVER CABINET

### Offers protection of installed equipment in server rooms

- Offered in 28 different overall dimensions, including 6 types immediately available from the ZPAS S.A. warehouse (see page 29).
- Expanded configuration system:
  - multiple door, panel, roof options for maximum flexibility,
  - possibility to join cabinets in a row,
  - possibility of optional cable entry,
  - easy coding system enables quick configuration of the cabinet.
- Possibility of controlling ventilating air flow by application of proper type of doors, side panels and fan units.
- Wide range of supplementary accessories: shelves, drawers, fan units, power strips, blanking plates etc.
- Non-standard cabinets are available on individual customer's request.

### Scope of delivery

The cabinets immediately available from the manufacturer's warehouse – see page 29.  
For other cabinet versions, see page 31.

### Technical data

#### Material:

Frame	- 2.0 mm thick sheet steel
Side panels	- 1.0 mm thick sheet steel
Steel doors	- 1.0 mm thick sheet steel
Glass door	- 6.0 mm thick safety glass
Glass door with metal perforated sides	- 2.0 mm thick sheet steel, 6.0 mm thick safety glass
Mounting profiles	- 2.0 mm thick sheet steel

#### Protection degree:

IP 20 in accordance with EN 60529 / IEC 529 (does not apply to brush cable entries).

#### Surface finishing:

Frame, roof, panels, doors, plinth  
- powder paint, light grey (RAL 7035) or black (RAL 9005).  
All other colour options on request.  
Mounting profiles - Al-Zn coated.  
Outriggers - galvanised.

#### Maximum load capacity:

See chart on page 31.



Cabinet SZB SE 42 U, 600x1000 mm, colour: RAL 9005, door with perforation type C - cat. no. WZ-SZBSE-006-5711-13-7111-1-161



SZB SE 19" SERVER CABINET

Cabinets immediately available from the manufacturer’s warehouse



Cabinet SZB SE 42 U, 800x1000 mm, colour: RAL 9005, door with perforation type C  
cat. no. WZ-SZBSE-005-5711-13-7111-1-161

Reference chart

Height [U = 44.45 mm]	Width [mm]	Depth [mm]	Catalogue number	
			Cabinet finished in RAL 7035	Cabinet finished in RAL 9005
47 U	800	1000	WZ-SZBSE-001-5711-13-7111-1-011	WZ-SZBSE-001-5711-13-7111-1-161
	600	1000	WZ-SZBSE-002-5711-13-7111-1-011	WZ-SZBSE-002-5711-13-7111-1-161
45 U	800	1000	WZ-SZBSE-003-5711-13-7111-1-011	WZ-SZBSE-003-5711-13-7111-1-161
	600	1000	WZ-SZBSE-004-5711-13-7111-1-011	WZ-SZBSE-004-5711-13-7111-1-161
42 U	800	1000	WZ-SZBSE-005-5711-13-7111-1-011	WZ-SZBSE-005-5711-13-7111-1-161
	600	1000	WZ-SZBSE-006-5711-13-7111-1-011	WZ-SZBSE-006-5711-13-7111-1-161

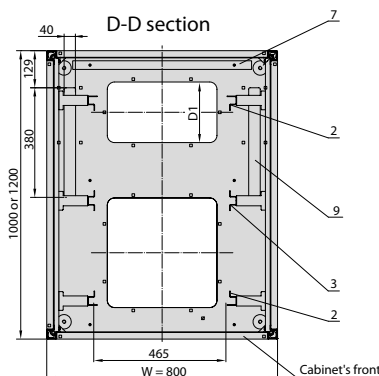
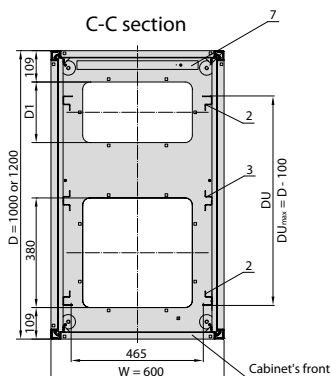
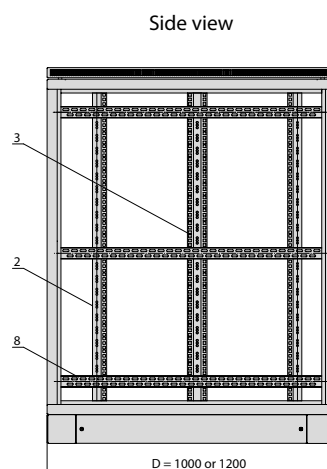
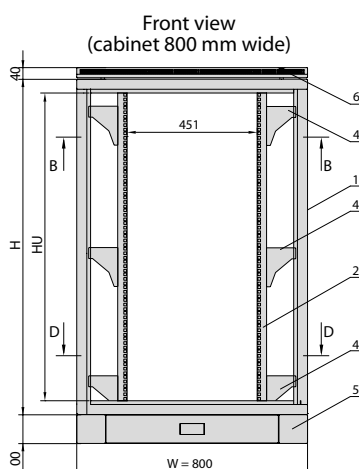
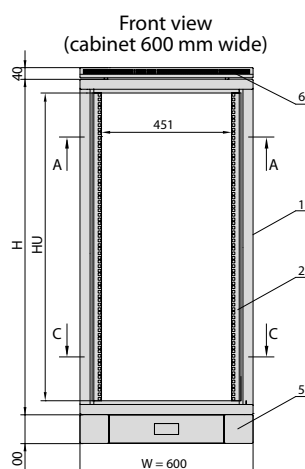
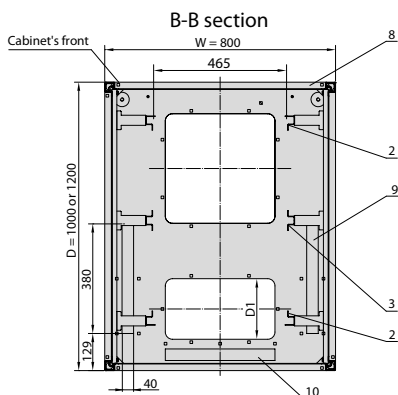
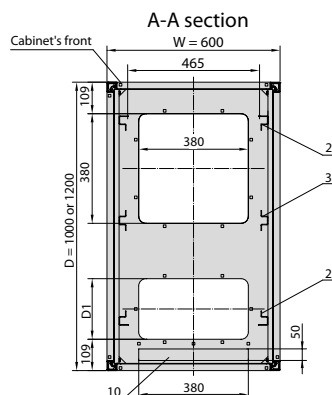
Scope of delivery

- cabinet frame on a stabilising mounting plinth
- front and rear steel doors with perforation type C (see page 30), equipped with rod-lath lock and swing handle
- two side panels made of unperforated steel sheets
- standard roof (with 1 or 3 cable openings covered with knock-out blanking plates): 600 mm cabinets – 1 opening, 800 mm cabinets – 3 openings; for details, go to page 78)
- three pairs of mounting profiles, spaced at 19"
- earthing strip and cables

Note

The table above lists selected cabinet versions only, which are immediately available from the warehouse. When ordering cabinets with different overall dimensions or a different configuration of components (items available on demand), please use the coding system provided on page 31.

## SZB SE 19" SERVER CABINET

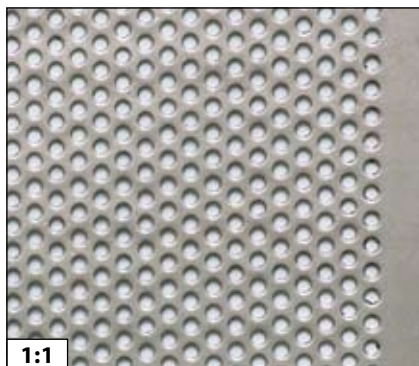


Dimensions [mm]	
D	D1
1000	210
1200	380

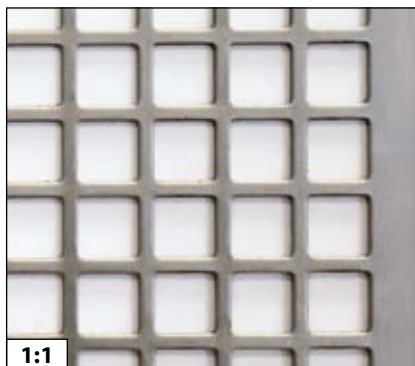
### Notes:

- The cabinet in the drawing is shown without any panels or doors.
- A wide range of blanking and cable entry plates can be matched with openings in the top and bottom plates and – optionally – in the roof of a cabinet (see pages 78-79). The 380x40 and 380x50 mm openings are blinded with knock-out blanking plates as a standard.

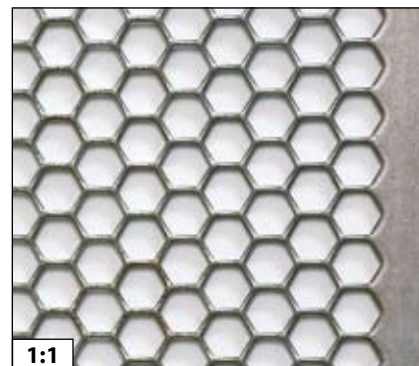
### Perforation types for doors and panels



**Perforation type A**  
clearance 30%



**Perforation type B**  
clearance 69%



**Perforation type C**  
clearance 80%

## SZB SE 19" SERVER CABINET

### Reference chart

Width W [mm]	Depth D [mm]	Reference number						
800	1000	1	3	5	7	9	11	13
	1200	21	23	25	27	29	31	33
600	1000	2	4	6	8	10	12	14
	1200	22	24	26	28	30	32	34
Usable height HU [U = 44.45 mm]		47 U	45 U	42 U	39 U	36 U	33 U	24 U
Frame height H [mm]		2186	2096	1963	1830	1696	1563	1163

**Note:** Cabinet versions marked in red are immediately available from the manufacturer's warehouse – see page 29.

### Catalogue number of SZB SE cabinet

**Reference number**  
specifies the cabinet's overall dimensions (see reference chart). Zeros shall be added before single-digit or double-digit numbers.

**LEFT SIDE**      **RIGHT SIDE**

**Side panel types:**  
0 - without any panel  
1 - solid steel panel  
2 - perforated steel panel (fine perforation)

**Roof types:**  
1 - standard roof  
2 - roof with openings for blanking or cable entry plates  
For a detailed description of roofs, see page 78.

**Cabinet's colours:**  
011 - RAL 7035  
161 - RAL 9005

**WZ-SZBSE - XXX - XXXX - XX - XXXX - X - XXX**















**Front door types:**  
0 - without any door  
1 - solid steel door  
2 - steel door with perforation type A  
3 - glass door  
4 - glass door with perforated metal sides, rod-lath lock and swing handle  
5 - steel door with perforation type C, equipped with rod-lath lock and swing handle (the door is available only for the following cabinets: 42, 45 and 47 U)  
6 - steel door with perforation type B, equipped with rod-lath lock and swing handle

**Base types:**  
0 - without any base  
1 - levelling feet  
2 - castors - type 300 (see page 76)  
3 - plinth, 100 mm high  
4 - plinth, 200 mm high

**FRONT**      **REAR**      **LEFT SIDE**      **RIGHT SIDE**

**Configuration of plinth sides**  
Four digits which specify plinth side type.  
Four zeros (0000) should be entered for cabinets without a plinth.

Each side can be:

1 - solid		
2 - with perforation		
3 - with double perforation*		
4 - with a brush opening		
5 - with two brush openings*		
6 - with a brush opening and perforation*		
7 - with a stabilising frame**		

\*) Only for plinths 200 mm in height  
\*\*) Only as a front side for 100 mm plinths  
For a detailed description of plinths, see pages 74-75.

**Rear door or panel types:**  
0 - without any doors or panels  
1 - solid steel door  
2 - solid steel door, shortened, with one 3 U module panel\*  
3 - solid steel door, shortened, with two 3 U module panels\*  
4 - steel door with perforation type A  
5 - steel door with perforation type A, shortened, with one 3 U module panel\*  
6 - steel door with perforation type A, shortened, with two 3 U module panels\*  
7 - steel door with perforation type C, equipped with rod-lath lock and swing handle (the door is available only for the following cabinets: 42, 45 and 47 U)  
8 - steel door with perforation type C, shortened, with one 3 U module panel, equipped with rod-lath lock and swing handle (the door is available only for 45 U cabinets)  
I - steel door with perforation type B, equipped with rod-lath lock and swing handle  
A - solid steel panel  
B - solid steel panel, shortened, with one 3 U module panel\*  
C - solid steel panel, shortened, with two 3 U module panels\*  
D - steel panel with perforation type A  
E - steel panel with perforation type A, shortened, with one 3 U module panel\*  
F - steel panel with perforation type A, shortened, with two 3 U module panels\*  
G - steel panel with perforation type C (the door is available only for the following cabinets: 42, 45 and 47 U)  
H - steel panel with perforation type C, shortened, with one 3 U module panel\* (the panel is available only for 45 U cabinets)  
J - steel panel with perforation type B

\*) 3 U module panel with a brush strip

**Layout of mounting profiles or mounting angles inside the cabinet:**  
1 - two pairs of 19" mounting profiles and one pair of middle mounting profiles  
2 - two pairs of 19" mounting profiles  
3 - two pairs of 19" mounting angles

#### NOTES:

- The delivery of standard SZB SE cabinets (except for elements listed in the catalogue no.) includes an earthing strip and earthing cables for doors and side panels.
- Blanking and cable entry plates for the top plate, bottom plate and roof, as well as other elements of supplementary accessories, must be ordered separately.

### Instructions for ordering SZB SE 19" cabinets

- When ordering a SZB SE cabinet, please provide the appropriate **catalogue number according to the above system** which specifies overall dimensions of the cabinet, types of doors, panels, roof and base, the layout of mounting profiles or angles, and the colour.
- The next step is to specify **catalogue numbers of supplementary accessories** (such as shelves, blanking plates, power strips, fan units etc. – see pages 73-108). Supplementary accessories are delivered in separate packaging together with fixing hardware.

### Maximum load capacity for SZB SE cabinets

Base type	Maximum weight of equipment mounted in cabinet
levelling feet	600 kg
castors - type 300	500 kg
plinth	800 kg

## EXAMPLES OF SZB SE CABINETS



Cabinets with door and panels with perforation type A



## EXAMPLES OF SZB SE CABINETS



**Rear view of the cabinet**

Beneath the rear door there is a 3 U module panel with a brush strip.



**Cabinet with glass door**



**Cabinet with glass front door with perforated metal sides, rod-lath lock and swing handle**



**Server cabinets with tailor made doors**

## SZB SEI 19" CABINET

### Server cabinet for self-assembly

- Offered in 4 options immediately available from the manufacturer's warehouse.
- Full compliance with SZB SE cabinets in terms of design and technical specifications (pages 28-33).
- Finished in RAL 7035 or RAL 9005 colour.
- Delivered disassembled, complete with assembly manual.

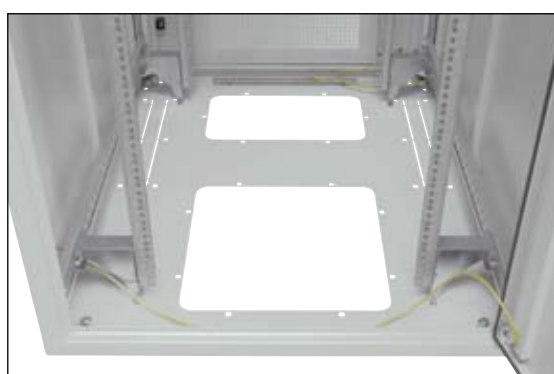
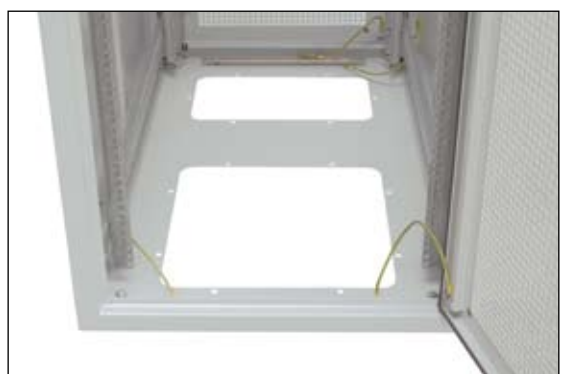
### Scope of delivery

- screwed frame (bottom plate, top plate, 4 posts, 6 C-profiles,
- front and rear steel door with perforation type B (page 30), equipped with rod-lath lock and swing handle,
- 2 solid steel side panels,
- standard roof (with 1 or 3 cable openings covered with knock-out blanking plates): 600 mm cabinets – 1 opening, 800 mm cabinets – 3 openings; for details, go to page 78),
- 2 pairs of mounting profiles, spaced at 19",
- 12 outriggers for fixing mounting profiles (only for 800 mm cabinets),
- earthing bar and earthing cables for doors, panels and roof,
- 4 levelling feet,
- assembly manual,
- cardboard packaging



### Reference chart

Height [U = 44.45 mm]	Width [mm]	Depth [mm]	Catalogue number	
			Cabinet finished in RAL 7035	Cabinet finished in RAL 9005
42 U	800	1000	WZ-SZBSEI-005-6I11-11-0000-2-011	WZ-SZBSEI-005-6I11-11-0000-2-161
	600	1000	WZ-SZBSEI-006-6I11-11-0000-2-011	WZ-SZBSEI-006-6I11-11-0000-2-161
24 U	800	1000	WZ-SZBSEI-013-6I11-11-0000-2-011	WZ-SZBSEI-013-6I11-11-0000-2-161
	600	1000	WZ-SZBSEI-014-6I11-11-0000-2-011	WZ-SZBSEI-014-6I11-11-0000-2-161

**SZB SEI 19" CABINET**

## DSR 19" COLOCATION CABINET

### Allows for placing multiple independent servers in one cabinet

Colocation cabinets are typically used for indoor applications. They are specially designed to protect equipment installed inside and provide it with appropriate ventilation. There is one standard overall dimension with 6 different combination options for the colocation cabinets.

When designing DSR cabinets, ZPAS applied unique design principles normally found in tailor made cabinets with ventilation systems.

#### Main features:

- Front and rear door made of perforated sheet steel, offered in 3 standard heights of 47 U, 23 U, 11 U. The rear of the cabinet can be also fitted with perforated sheet.
- Colocation cabinets come with steel perforated side panels, these side panels can double up as cabinet dividers when cabinets are bayed together.
- Doors and panels are fitted with standard single point locks; multiple point locks can be applied on request.
- Individual compartments are separated with horizontal dividers that are fixed directly to the frame. Each compartment has its own set of 19" mounting profiles and split cable ducts. These ducts are on both sides of the cabinet. Cable entry points are possible from either the top or bottom of the cabinet.
- Both top and bottom plate have 380x210 mm opening that might be used either for a fan unit or cable entry. These access points can be covered using various blanking plates. Additionally there are 2 slim, side cable openings. For top cable leading it is necessary to use roof with cable openings instead of the solid roof.

#### Technical data

##### Material:

Frame	- 2.0 mm thick sheet steel
Side panels	- 1.0 mm thick sheet steel
Door	- 1.0 mm thick sheet steel
Roof	- 1.0 mm thick sheet steel
Mounting profiles	- 2.0 mm thick sheet steel

##### Protection degree:

IP 20 in accordance with EN 60529 / IEC 529.

##### Surface finishing:

Frame, roof, panels, doors, plinth  
- textured powder paint, light grey (RAL 7035).  
All other colour options on request.

Mounting profiles and cable ducts - Al-Zn coated.

##### Maximum load capacity:

The maximum weight of equipment mounted in DSR cabinets is 600 kg.



DSR cabinets bayed together

#### Scope of delivery

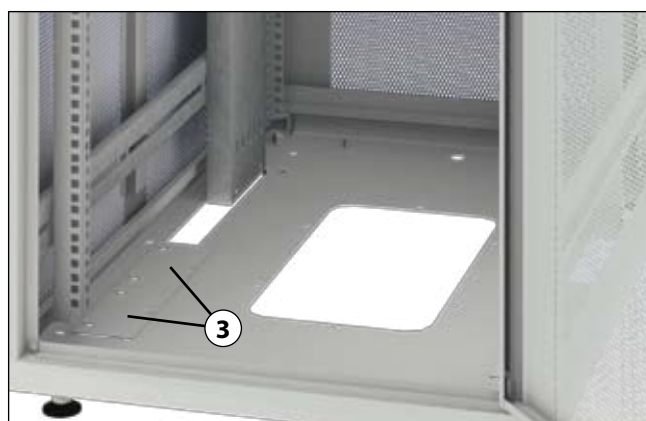
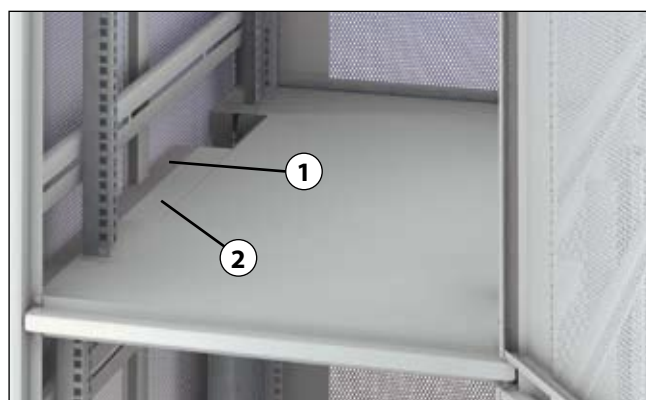
Cabinet in standard configuration\*  
(cat. no. WZ-DSR-00<-x600-1-011):

- frame,
- horizontal dividers (quantity dependent on number of compartments within the cabinet),
- individual front door for each compartment,
- rear single panel for the full height of the cabinet,
- 2 pairs of 19" mounting profiles for each compartment,
- cable ducts (does not refer to cabinet without any compartments),
- solid roof,
- earthing cables.

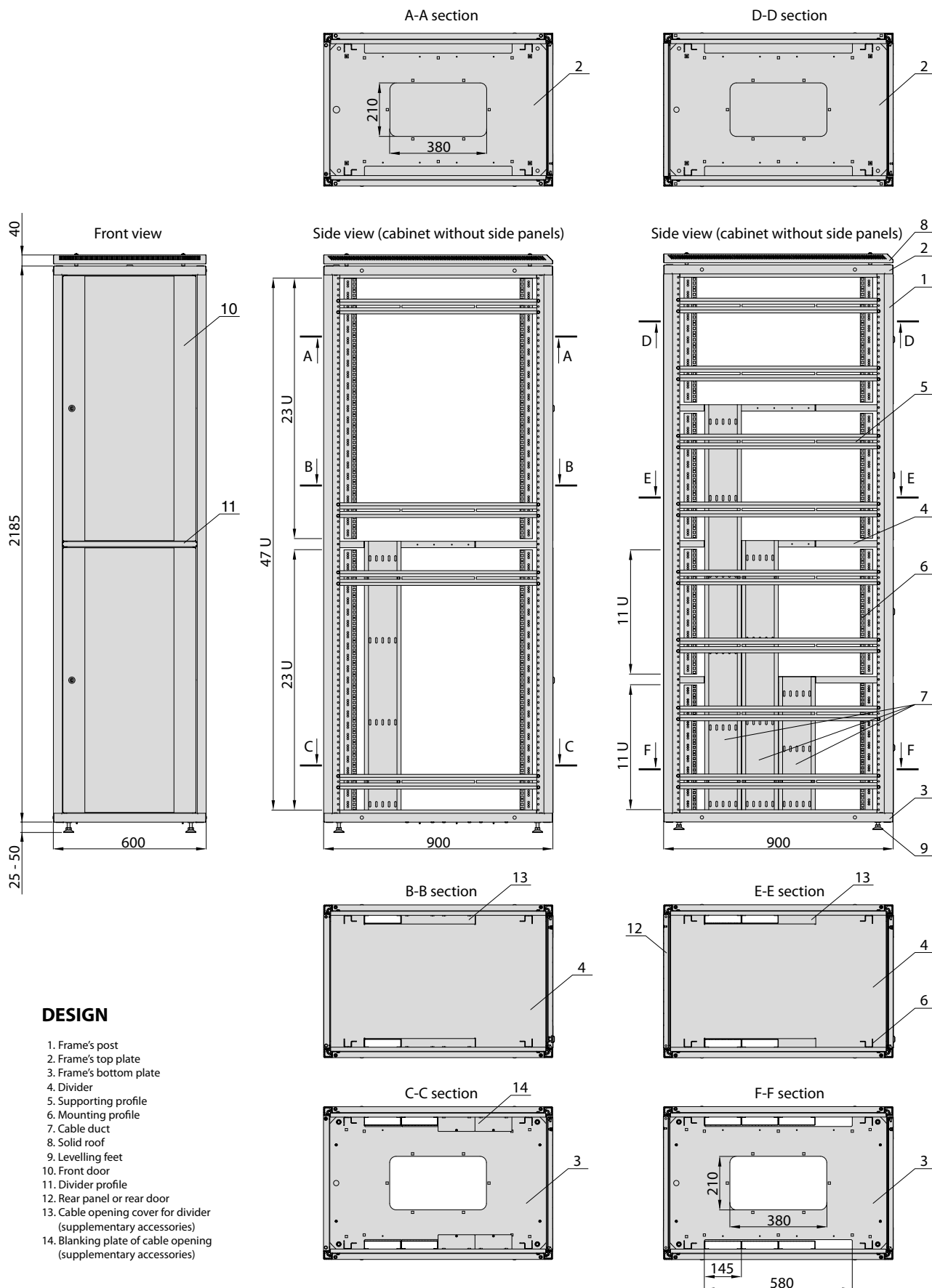
\*) Other configurations -- see instructions on page 39.



## DSR 19" COLOCATION CABINET



## DSR 19" COLOCATION CABINET



DSR 19" COLOCATION CABINET

Catalogue number of DSR cabinet

**Split of cabinet's interior:**

**NOTES:**  
Height of horizontal dividers is 1 U.  
Each compartment has individual 19" mounting profiles.

**Type of side panel:**

LEFT SIDE    RIGHT SIDE

**Type of roof:**

1 solid roof    2 roof with cable openings

**WZ-DSR - 00X - XXXX - XX - 011**

**Split of front and rear door/panel:**

FRONT    REAR

**Perforated door**

**Perforated side panel**

**NOTES:**  
Split of front and rear door/panel does not have to match with interior split of the cabinet.  
Normally doors are fitted with single point locks without handle.  
On request it is possible to use handle locking system.  
As a standard, doors and panels have perforation with 30% clearance (perforation type A).  
Perforation with larger clearance is available on request (types B or C – see page 30).

**Type of base:**

- 1 - levelling feet
- 2 - 100 mm plinth
- 3 - 100 mm plinth with levelling option
- 4 - 200 mm plinth
- 5 - 200 mm plinth with levelling option

**NOTES:**  
For a detailed description of plinths, see pages 74-75.

Ordering instruction

- When ordering the DSR cabinet, please provide the appropriate **catalogue number according to the above information**, which specifies the interior split of the cabinet, as well as type of doors, panels, roof and base.
- The next step is to specify **catalogue numbers of supplementary accessories** (such as: blanking plates, power strips, fan units etc. - see pages 73-108). Supplementary accessories are delivered in separate packaging including fixing hardware.

**Supplementary accessories:**

Cable opening cover for DSR divider - page 93

Self-adhesive insert of DSR divider - page 93

Blanking plate of cable opening - page 93

Earthing bar - page 92  
Set of fixing/spacer bolt - page 92

## SZU 19"/21" TELECOMMUNICATION CABINET

### Universal telecommunication cabinet

- Designed according to the ETS 300 119-2 and IEC 917-2-1 standards.
- Depending on mounting profiles used, it makes it possible to install equipment in 19" or 21" spacing.
- Application of 21"-19" adapters allows installation of both 19" and 21" appliances in one cabinet.
- Possibility to set the cabinet on adjustable feet hidden in the bottom plate of the frame. Adjustment range 15 mm.
- Insertion of cables into the cabinet from the top and from the bottom through maximally enlarged openings in the top and bottom plate.
- Side panels additionally protected from the inside against disassembly from the outside.

### Scope of delivery

- cabinet's frame
- mounting profiles in 19" or 21" spacing. In cabinets 800 and 600 mm deep there are two pairs of mounting profiles; with just one pair in cabinets 300 mm deep.
- two side panels
- front door
- rear door or rear panel
- eight cable bars
- earthing bar
- two perforated blanking plates (in the top and the bottom plate)
- ESD antistatic earthing band

### Technical data

#### Material:

Cabinet's frame	- 2.0 mm thick sheet steel
Side panels	- 1.5 mm thick sheet steel
Glass door	- 6.0 mm thick hardened glass
Metal door	- 1.5 mm thick sheet steel
Mounting profiles	- 2.0 mm thick sheet steel

#### Surface finishing:

Frame, panels, metal door - powder painted in RAL 7035.  
Application of other colours on request.  
Mounting profiles and blanking plates in the top and bottom plate - Al-Zn coated

#### Maximum load capacity:

The maximum weight of equipment mounted in SZU cabinet is 250 kg



SZU 21" cabinet with metal perforated door

### Available types of front and rear door:

- glass door with two single locks
- metal perforated door with three point lock
- rear door can be changed for rear panel

### Supplementary accessories ordered separately (see pages 94-95):

- adapters for fixing 19" appliances on 21" mounting profiles
- lifting eyes
- roof mounted cable supports
- brackets for fixing cabinet to the wall
- elements for anchoring cabinet to the groundwork

### Catalogue number of SZU cabinet

**Reference number**  
defining dimensions of the cabinet  
(see reference chart)

**Types of mounting profiles:**  
1 - 19" mounting profiles  
2 - 21" mounting profiles

**WZ-SZU - 00X - XXAA - X0 - 011**

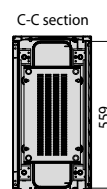
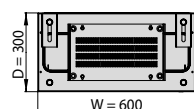
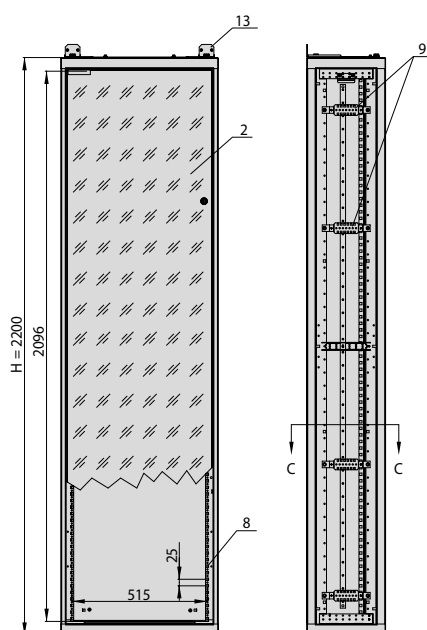
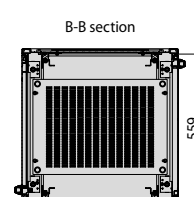
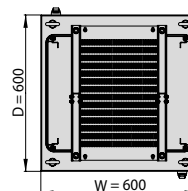
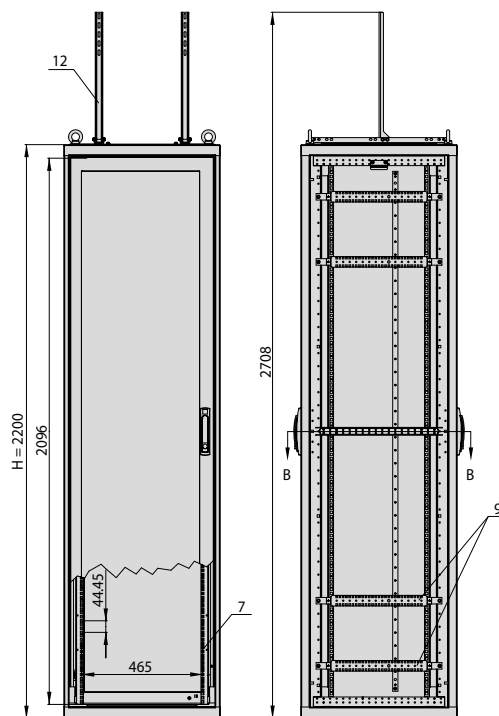
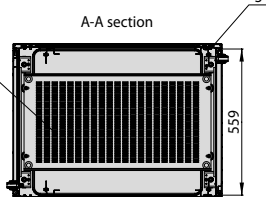
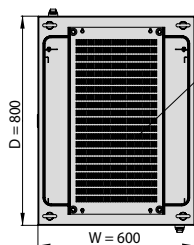
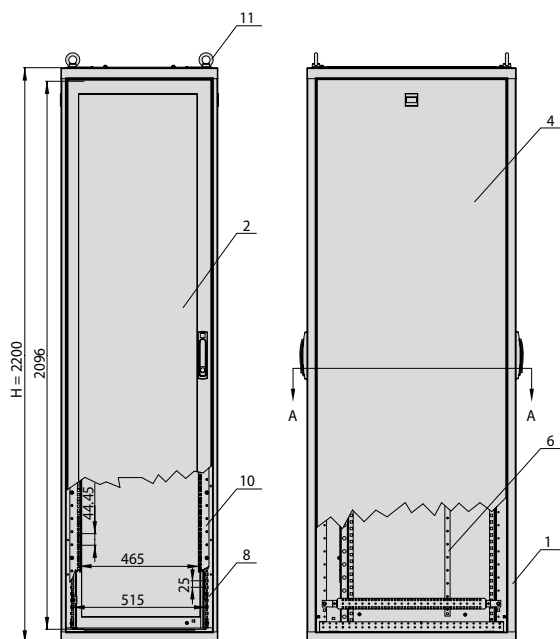
**Type of front door:**  
1 - glass door with two single locks  
2 - metal perforated\* door with rod-lath lock

**Type of rear door or rear panel:**  
1 - glass door with two single locks  
2 - metal perforated\* door with rod-lath lock  
A - solid metal panel

\*) Perforation type C - see page 30



# SZU 19"/21" TELECOMMUNICATION CABINET



## DESIGN

1. Cabinet's frame
2. Front door
3. Rear door
4. Side panel
5. Blanking plate of bottom or top plate
6. Earthing bar
7. 19" mounting profile
8. 21" mounting profile
9. Cross profile for cable fixing

Supplementary accessories ordered separately (pages 94-95):

10. 21"-19" adapter
11. Lifting eye
12. Roof mounted cable support
13. Bracket for fixing the cabinet to the wall

### Note:

Drawings represent sample configurations.

## Reference chart

Usable height		Dimensions [mm]			Reference number
19" version [1 U = 44.45 mm]	21" version [1 SU = 25 mm]	H	W	D	
47 U	83 SU	2200	600	800	1
				600	2
				300	3

## SJB 19" CABINET

### Data communication cabinet for office applications

- SJB cabinets are perfect solution for small network systems installed in offices.
- The design of the cabinet is based on a self-supporting body with no frame.
- Desktop made of furniture board gives the cabinet a sophisticated look and allows it to blend in with the existing interior decor.

#### Technical data

##### Materials:

Body	- 1.25 mm thick sheet steel
Rear panel	- 0.8 mm thick sheet steel
Door	- 4.0 mm thick safety glass
Mounting angles	- 1.5 mm thick sheet steel
Desktop	- MDF board, 18 mm

##### Protection degree:

IP 20 in accordance with EN 60 529 / IEC 529.

##### Surface finishing:

Body and rear panel – powder paint, RAL 7035 or RAL 9005.  
Other colour options available on request.

Mounting angles – Al-Zn coated.

##### Desktop colour:

As a standard option, cabinets are supplied with desktops made of Calvados-laminated MDF board. Other desktop colours or materials are available on request.

##### Scope of delivery:

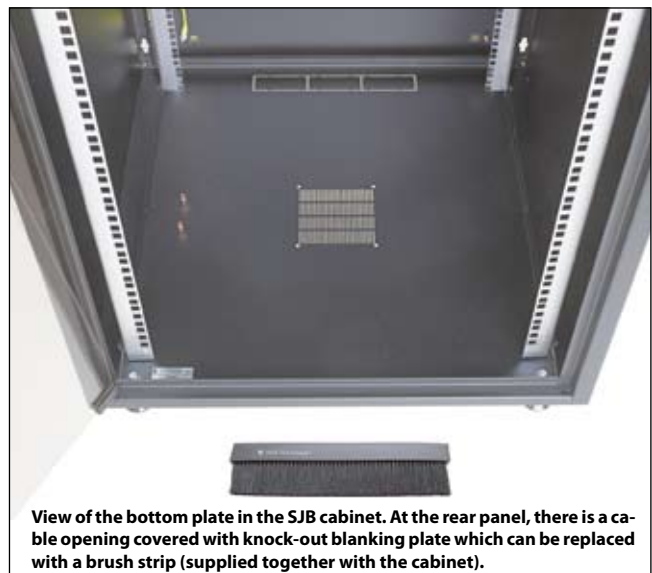
- cabinet body with safety glass door and removable rear panel,
- desktop made of furniture board,
- 2 pairs of mounting angles spaced at 19",
- brush strip for the cable opening (instead of knock-out blanking plate).

##### Supplementary accessories (ordered separately):

- earthing elements (page 65),
- shelves, drawers, power strips etc. (pages 73-108),
- desktop elevation kit.



SJB 15 U cabinet finished in RAL 9005



View of the bottom plate in the SJB cabinet. At the rear panel, there is a cable opening covered with knock-out blanking plate which can be replaced with a brush strip (supplied together with the cabinet).

### Desktop elevation kit for SJB cabinet

The kit makes it possible to elevate the desktop by 19 mm over the top plate, thus increasing air flow through the cabinet, and enables fan mounting to the top plate.

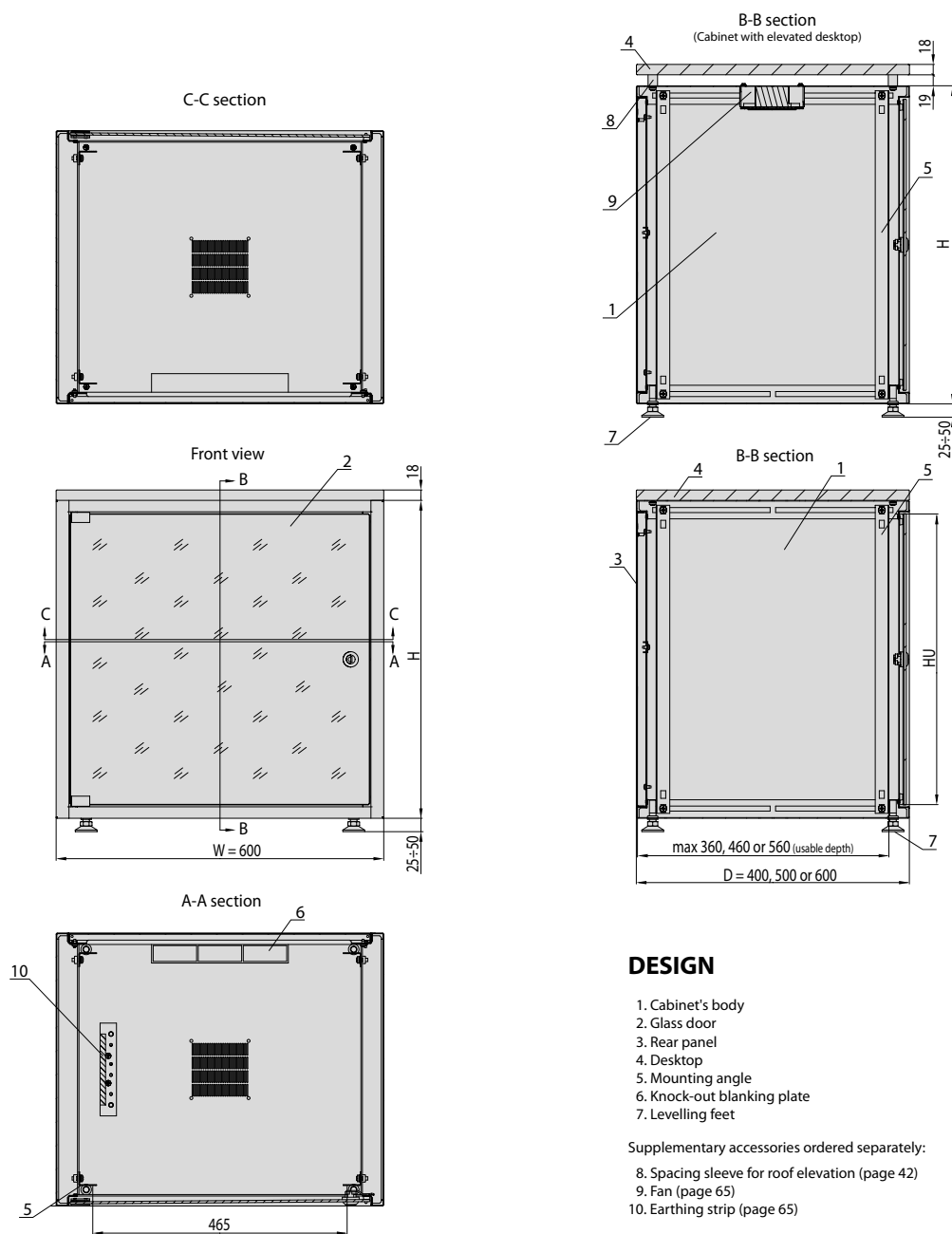
##### Scope of delivery:

Set: 4 screws M6x30, 4 washers, 4 spacing sleeves.

Package	Catalogue number
1 set	WZ-3987-90-00-000



## SJB 19" CABINET



### Reference chart

Total width W [mm]	Total depth D [mm]	Body height H [mm]	Usable height HU [U = 44.45 mm]	Maximum load capacity [kg]	Catalogue number	
					Cabinet finished in RAL 7035	Cabinet finished in RAL 9005
600	600	871	18 U	45	WZ-3987-01-04-011	WZ-3987-01-04-161
		737	15 U	38	WZ-3987-01-03-011	WZ-3987-01-03-161
		604	12 U	30	WZ-3987-01-02-011	WZ-3987-01-02-161
		515	10 U	30	WZ-3987-01-01-011	WZ-3987-01-01-161
600	500	871	18 U	45	WZ-4317-01-04-011	WZ-4317-01-04-161
		737	15 U	38	WZ-4317-01-03-011	WZ-4317-01-03-161
		604	12 U	30	WZ-4317-01-02-011	WZ-4317-01-02-161
		515	10 U	30	WZ-4317-01-01-011	WZ-4317-01-01-161
600	400	871	18 U	45	WZ-4318-01-04-011	WZ-4318-01-04-161
		737	15 U	38	WZ-4318-01-03-011	WZ-4318-01-03-161
		604	12 U	30	WZ-4318-01-02-011	WZ-4318-01-02-161
		515	10 U	30	WZ-4318-01-01-011	WZ-4318-01-01-161

## EXAMPLES OF CUSTOMISED CABINETS



Cabinet 19" conforming to EMC requirements, designed for the installation of devices emitting electromagnetic waves



## EXAMPLES OF CUSTOMISED CABINETS



Certificate of electromagnetic protection

Cabinet 19" conforming to EMC requirements, designed for the installation of devices emitting electromagnetic waves

## EXAMPLES OF CUSTOMISED CABINETS



Enclosure for a gas treatment station delivered to CS CLEAN SYSTEMS AG.  
Design protected by copyright.



19" cabinet without a door, equipped with voltage supply unit and a fan unit

Cabinets can be equipped with telecommunication or electric devices in accordance with customer's project or designed by ZPAS.

## WALL-MOUNTED CABINETS AND FRAMES

SD2



SJ2



SU



SW



SWJ



SKI2



SJK



RNO



RN



## SU 19" CABINET

### Wall-mounted single-section cabinet with removable side panels

- Designed for indoor applications.
- Available in 6 usable heights and 3 depths (see reference chart).
- The design of the cabinet is based on dismantlable frame with safety glass or steel front door and removable rear and side panels.
- Standard version is equipped with two adjustable 19" mounting angles, a knock-out blanking plate and a brush opening (potential cable entry point).
- The rear and side panels, as well as steel door, are provided with earthing connections.
- Cabinets can be fastened directly to the wall without using any brackets - convenient internal access to wallfixing screws.
- Easy change of door opening direction and cable opening layout by rotating by 180°.
- Wide range of supplementary accessories: shelves, drawers, fan kit, power strips etc.
- Cabinet can be equipped with additional rear adjustable 19" mounting angles or mounting profiles.

#### Technical data

##### Material:

Frame	- 1.5 mm thick sheet steel
Rear and side panels	- 0.8 mm thick sheet steel
Mounting angles	- 1.5 mm thick sheet steel
Glass door	- 4.0 mm thick safety glass
Steel door	- 0.8 mm thick sheet steel

##### Surface finishing:

Frame and mounting angles – Al-Zn coated. Steel door, side panels and rear panel – textured powder paint, light grey (RAL 7035). All other colour options on request.

##### Protection degree:

IP 20 in accordance with EN 60 529 / IEC 529 (does not apply to brush cable entries).

#### Scope of delivery

Cabinets are packed in cardboard boxes. In the packing there is a template for drilling holes in the wall.



SU cabinet 12 U high with safety glass door

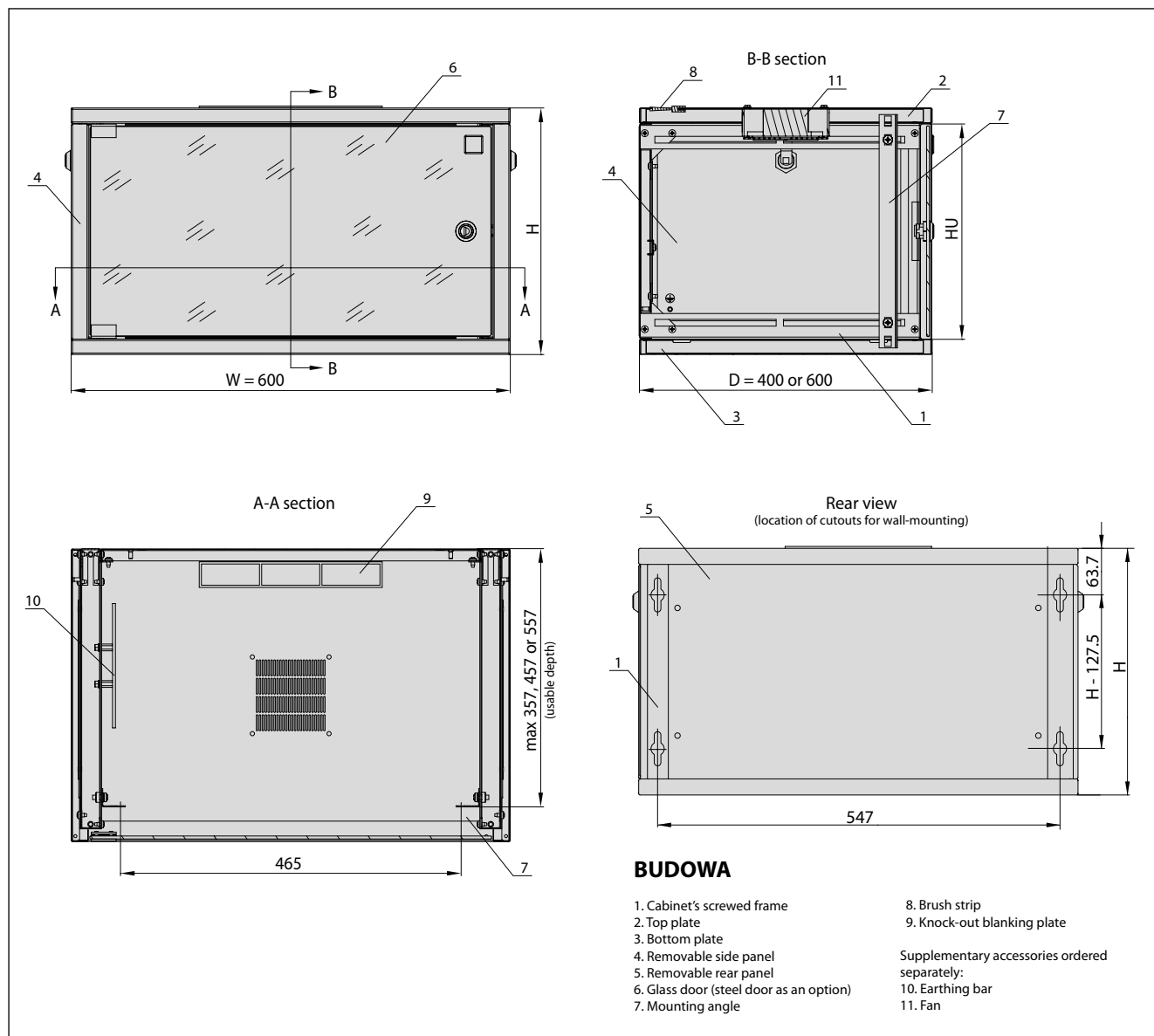


SU cabinet 6 U high - rear view



SU cabinet 6 U high with safety glass door

## SU 19" CABINET



## Reference chart

Total width W [mm]	Total depth D [mm]	Total height H [mm]	Usable height HU [U = 44.45 mm]	Maximum load capacity [kg]	Catalogue number	
					Cabinet with glass door	Cabinet with steel door
600	600	871	18 U	30	WZ-3286-01-S6-011	WZ-3286-01-M6-011
		737	15 U	25	WZ-3286-01-S5-011	WZ-3286-01-M5-011
		604	12 U	20	WZ-3286-01-S4-011	WZ-3286-01-M4-011
		515	10 U	16	WZ-3286-01-S3-011	WZ-3286-01-M3-011
		337	6 U	10	WZ-3286-01-S2-011	WZ-3286-01-M2-011
		248	4 U	7	WZ-3286-01-S1-011	WZ-3286-01-M1-011
600	500	871	18 U	35	WZ-3615-01-S6-011	WZ-3615-01-M6-011
		737	15 U	30	WZ-3615-01-S5-011	WZ-3615-01-M5-011
		604	12 U	25	WZ-3615-01-S4-011	WZ-3615-01-M4-011
		515	10 U	20	WZ-3615-01-S3-011	WZ-3615-01-M3-011
		337	6 U	15	WZ-3615-01-S2-011	WZ-3615-01-M2-011
		248	4 U	10	WZ-3615-01-S1-011	WZ-3615-01-M1-011
600	400	871	18 U	45	WZ-2733-01-S6-011	WZ-2733-01-M6-011
		737	15 U	37	WZ-2733-01-S5-011	WZ-2733-01-M5-011
		604	12 U	30	WZ-2733-01-S4-011	WZ-2733-01-M4-011
		515	10 U	25	WZ-2733-01-S3-011	WZ-2733-01-M3-011
		337	6 U	15	WZ-2733-01-S2-011	WZ-2733-01-M2-011
		248	4 U	10	WZ-2733-01-S1-011	WZ-2733-01-M1-011



## SD2 19" CABINET

### Double-section wall-mounted cabinet

- Designed for indoor applications.
- Available in 5 usable heights (see reference chart).
- Consists of two basic parts:
  - 19" part with safety glass or steel door,
  - wall-mounted part with removable rear panel.
- A standard cabinet is equipped with two easily adjustable mounting angles spaced at 19",
- The steel door and rear panel are provided with earthing cables.
- The wall part of the cabinet has two cable openings. One cable opening is completed with a brush strip, the other is covered with knock-out blanking plate.
- The door opening direction and cable opening layout can be easily changed by rotating the cabinet by 180°.
- Wide range of supplementary accessories: shelves, drawers, fan kit, power strips, blanking plates, earthing bar etc.
- Cabinet can be equipped with additional rear adjustable 19" mounting angles or mounting profiles.

### Technical data

#### Material:

Body	- 1.25 mm thick sheet steel
Rear panel	- 0.8 mm thick sheet steel
Mounting angles	- 1.5 mm thick sheet steel
Glass door	- 4.0 mm thick safety glass
Steel door	- 0.8 mm thick sheet steel

#### Surface finishing:

Textured powder paint, light grey (RAL 7035).  
All other colour options on request.  
Mounting angles - Al-Zn coated.

#### Protection degree:

IP 20 in accordance with EN 60529 / IEC 529  
(does not apply to brush cable entries).

### Scope of delivery

Cabinets are packed in cardboard boxes. In the packing there is a template for drilling holes in the wall.



SD2 wall-mounted cabinet 12 U - front view



SD2 cabinet - rear view

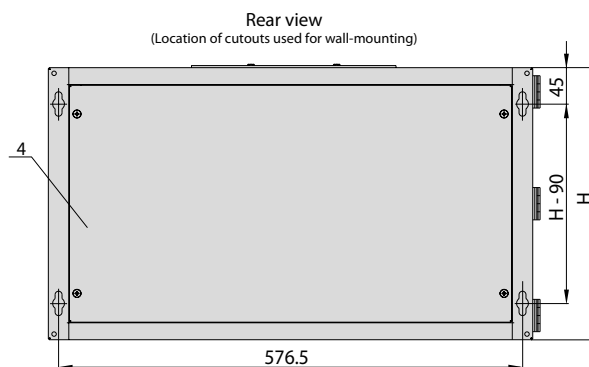
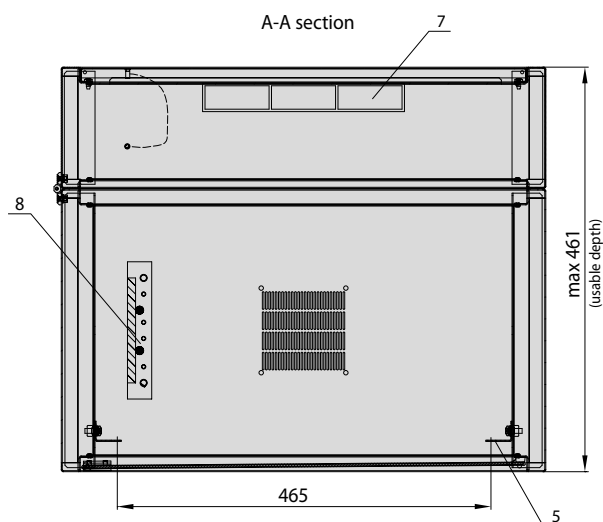
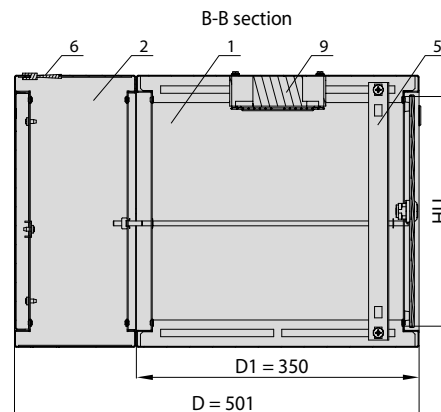
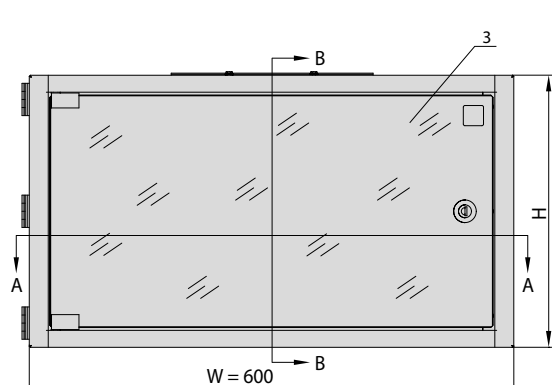


Bottom plate of SD2



Top plate of SD2

## SD2 19" CABINET



## DESIGN

1. Body of 19" part
2. Body of wall part
3. Glass door (steel door as an option)
4. Rear panel
5. Mounting angle
6. Cable entry
7. Knock-out blanking plate

Supplementary accessories ordered separately:  
8. Earthing bar  
9. Fan

## Reference chart

Total width W [mm]	Total depth D [mm]	Depth of 19" part D1 [mm]	Total height H [mm]	Usable height HU [U = 44.45 mm]	Maximum load capacity [kg]	Catalogue number	
						Cabinet with glass door	Cabinet with steel door
600	501	350	871	18 U	30	WZ-3505-01-05-011	WZ-3505-01-M5-011
			737	15 U	30	WZ-3505-01-04-011	WZ-3505-01-M4-011
			604	12 U	30	WZ-3505-01-03-011	WZ-3505-01-M3-011
			515	10 U	20	WZ-3505-01-02-011	WZ-3505-01-M2-011
			337	6 U	20	WZ-3505-01-01-011	WZ-3505-01-M1-011

## SJ2 19" CABINET

### Single-section wall-mounted cabinet

- Designed for indoor applications.
- Available in 3 depths and 6 usable heights (see reference chart).
- The design of the cabinet is based on a metal body with safety glass door and removable rear panel.
- A standard cabinet is equipped with two easily adjustable mounting angles spaced at 19",
- The steel door and rear panel are provided with earthing cables.
- The body of the cabinet has two cable openings. One cable opening is completed with brush strip, the other with knock-out blanking plate.
- The door opening direction and cable opening layout can be easily changed by rotating the cabinet by 180°.
- Wide range of supplementary accessories: shelves, drawers, fan kit, power strips etc.
- Cabinet can be equipped with additional rear adjustable 19" mounting angles or mounting profiles.

### Technical data

#### Material:

Body	- 1.25 mm thick sheet steel
Rear panel	- 0.8 mm thick sheet steel
Mounting angles	- 1.5 mm thick sheet steel
Glass door	- 4.0 mm thick safety glass
Steel door	- 0.8 mm thick sheet steel

#### Surface finishing:

Textured powder paint, light grey (RAL 7035).  
All other colour options on request.  
Mounting angles - Al-Zn coated.

#### Protection degree:

IP 20 in accordance with EN 60529 / IEC 529  
(does not apply to brush cable entries).

### Scope of delivery

Cabinets are packed in cardboard boxes. In the packing there is a template for drilling holes in the wall.



SJ2 cabinet 12 U with safety glass door



SJ2 cabinet 18 U with safety glass door

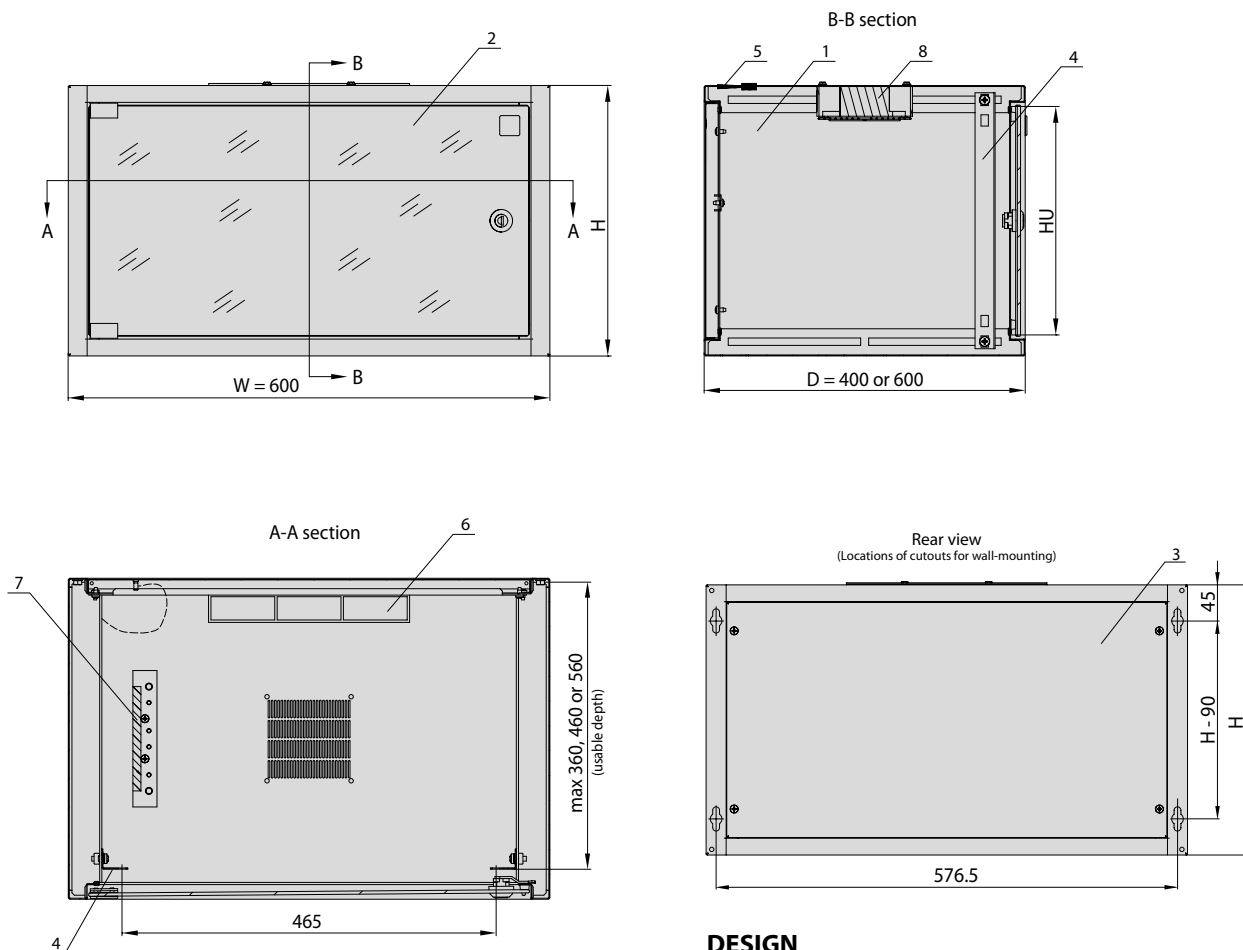


Bottom plate of SJ2



Top plate of SJ2

## SJ2 19" CABINET



### DESIGN

1. Cabinet's body
2. Glass door (steel door as an option)
3. Rear panel
4. Mounting angle
5. Brush strip
6. Knock-out blanking plate

Supplementary accessories ordered separately:  
7. Earthing bar  
8. Fan

### Reference chart

Total width W [mm]	Total depth D [mm]	Total height H [mm]	Usable height HU [U = 44.45 mm]	Maximum load capacity [kg]	Catalogue number	
					Cabinet with glass door	Cabinet with steel door
600	600	871	18 U	30	WZ-3715-01-05-011	WZ-3715-01-10-011
		737	15 U	25	WZ-3715-01-04-011	WZ-3715-01-09-011
		604	12 U	25	WZ-3715-01-03-011	WZ-3715-01-08-011
		515	10 U	20	WZ-3715-01-02-011	WZ-3715-01-07-011
		337	6 U	20	WZ-3715-01-01-011	WZ-3715-01-06-011
600	500	871	18 U	35	WZ-3984-01-05-011	WZ-3984-01-M5-011
		737	15 U	30	WZ-3984-01-04-011	WZ-3984-01-M4-011
		604	12 U	30	WZ-3984-01-03-011	WZ-3984-01-M3-011
		515	10 U	25	WZ-3984-01-02-011	WZ-3984-01-M2-011
		337	6 U	20	WZ-3984-01-01-011	WZ-3984-01-M1-011
600	400	871	18 U	40	WZ-3504-01-05-011	WZ-3504-01-M5-011
		737	15 U	35	WZ-3504-01-04-011	WZ-3504-01-M4-011
		604	12 U	30	WZ-3504-01-03-011	WZ-3504-01-M3-011
		515	10 U	30	WZ-3504-01-02-011	WZ-3504-01-M2-011
		337	6 U	25	WZ-3504-01-01-011	WZ-3504-01-M1-011
		248	4 U	20	WZ-3839-01-01-011	WZ-3839-01-M1-011

## SW 19" CABINET

### Double-section wall-mounted cabinet

- Designed for indoor applications.
- Manufactured in 5 usable heights (see reference chart).
- The cabinet consists of two basic sections joined by hinges:
  - 19" section with steel door with a glass window or without a glass window,
  - the wall section with removable rear panel.
- A standard cabinet has two regulated 19" mounting profiles, two frames with a metal grid (grids protect perforated surfaces of the cabinet from the inside), one blanking plate for cable entry, one cable entry plate, one earthing bar, five earthing cables and four wall-fastening brackets.
- Wide range of supplementary accessories: shelves, drawers, fan units etc.
- Cabinet can be equipped with additional rear adjustable 19" mounting angles or mounting profiles.

### Technical data

#### Material:

Body	- 1.5 mm thick sheet steel
Rear panel	- 1.0 mm thick sheet steel
Door	- 4.0 mm thick safety glass, 1.0 mm thick sheet steel

#### Surface finishing:

Body, door, rear panel, blanking plates, frame with grid  
 - powder painted in RAL 7035.  
 Application of other colours on request.  
 Mounting profiles - Al-Zn coated

#### Protection degree:

IP 40 in accordance with EN 60 529 / IEC 529

### Scope of delivery

Cabinets are packed in cardboard boxes. In the packing there is a template for drilling holes in the wall.



SW cabinet 15 U high with steel door with a glass window



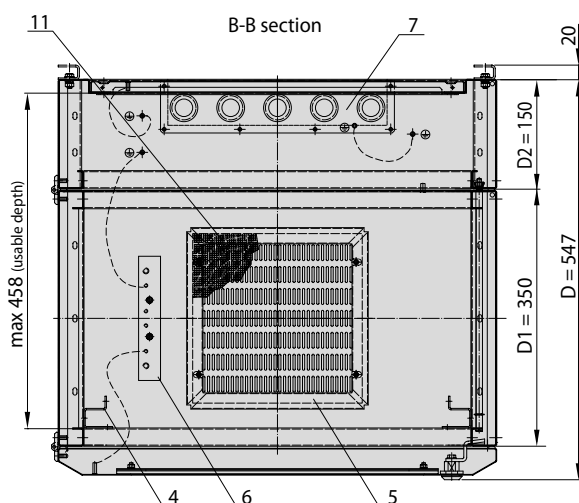
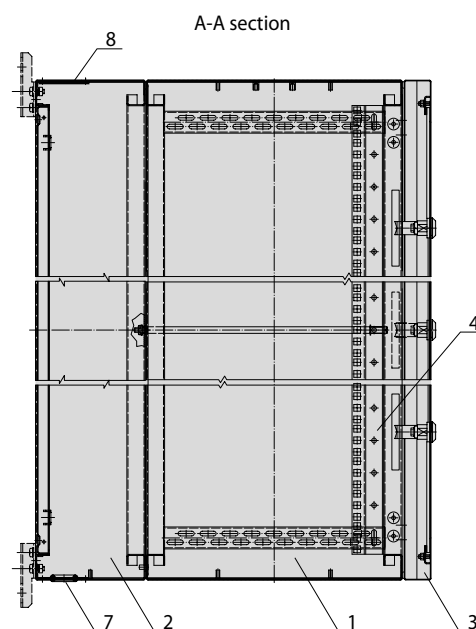
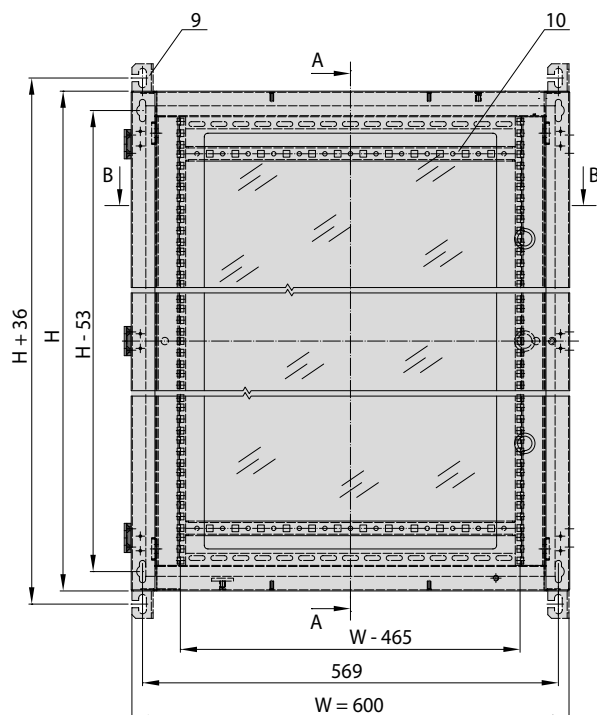
SW cabinet 10 U high with steel solid door



SW cabinet 6 U high with steel door with a glass window



## SW 19" CABINET



### DESIGN

1. Body of 19" section
2. Body of wall section
3. Door
4. Mounting profile
5. Frame with a metal grid
6. Earthing bar
7. Cable entry plate
8. Solid blanking plate
9. Wall-fastening bracket

Supplementary accessories ordered separately:

10. Cross bar
11. Filtering insert

Number of locks in the door  
 - cabinets up to height of 12 U - one lock  
 - cabinets above 12 U - two locks

### Reference chart

Total width W [mm]	Total depth D [mm]	Depth of the 19" body D1 [mm]	Depth of the wall body D2 [mm]	Total height H [mm]	Usable height HU [U = 44.45 mm]	Maximum load capacity [kg]	Catalogue number	
							Cabinet with steel solid door	Cabinet with steel door with a glass window
600	547	350	150	871	18 U	30	WZ-0405-M1-05-011	WZ-0405-S1-05-011
				737	15 U	30	WZ-0405-M1-04-011	WZ-0405-S1-04-011
				604	12 U	25	WZ-0405-M1-03-011	WZ-0405-S1-03-011
				515	10 U	25	WZ-0405-M1-02-011	WZ-0405-S1-02-011
				337	6 U	20	WZ-0405-M1-01-011	WZ-0405-S1-01-011

## SWJ 19" CABINET

### Single-section wall-mounted cabinet

- Designed for indoor applications.
- Manufactured in 2 depths and 6 usable heights (see reference chart).
- The cabinet is based on welded body with steel door and removable rear panel. The steel door can be with a glass window or without.
- Standard cabinet has two regulated 19" mounting profiles, one blanking plate for cable entry, one cable entry plate, one earthing bar, four earthing cables and four wall-fastening brackets.
- Wide range of supplementary accessories: shelves, drawers, fan units etc.
- Cabinet can be equipped with additional rear adjustable 19" mounting angles or mounting profiles.

### Technical data

#### Material:

Body	- 1.5 mm thick sheet steel
Rear panel	- 1.0 mm thick sheet steel
Door	- 4.0 mm thick safety glass, 1.0 mm thick sheet steel

#### Surface finishing:

Body, door, rear panel, blanking plates - powder painted in RAL 7035. Application of other colours on request.

Mounting profiles - Al-Zn coated

#### Protection degree:

IP 40 in accordance EN 60 529 / IEC 529

### Scope of delivery

Cabinets are packed in cardboard boxes. In the packing there is a template for drilling holes in the wall.



SWJ cabinet 10 U high with steel door with a glass window



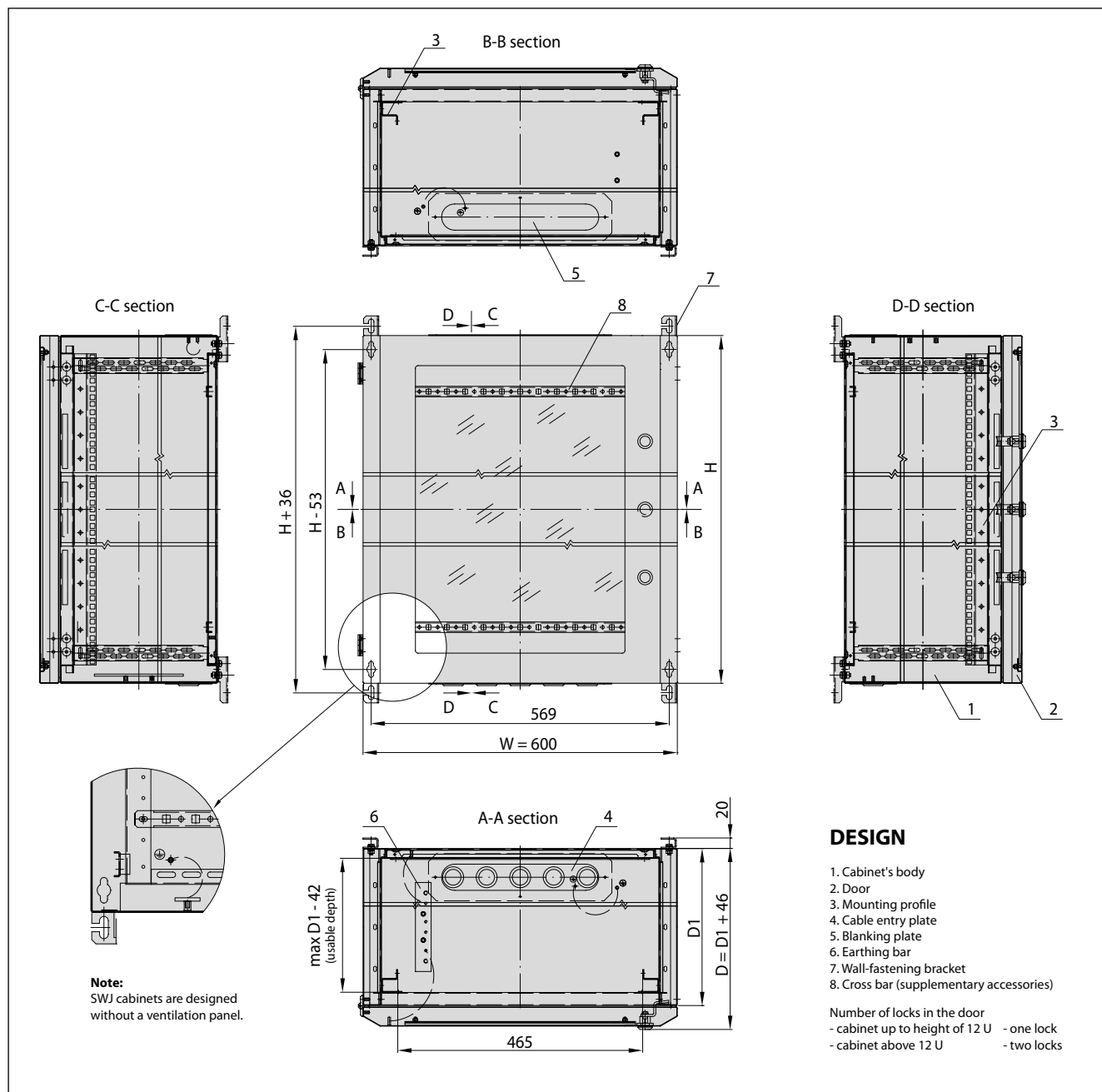
SWJ cabinet 15 U high with steel door with a glass window



SWJ cabinet 18 U high with steel solid door



## SWJ 19" CABINET



## Reference chart

Total width W (mm)	Total depth D (mm)	Depth of cabinets body D1 (mm)	Total height H (mm)	Usable height HU [U = 44.45 mm]	Maximum load capacity [kg]	Catalogue number	
						Cabinet with steel solid door	Cabinet with steel door with a glass window
600	446	400	871	18 U	40	WZ-0750-M1-02-011	WZ-0750-S1-02-011
			737	15 U	35	WZ-0750-M1-04-011	WZ-0750-S1-04-011
			604	12 U	30	WZ-0750-M1-06-011	WZ-0750-S1-06-011
			515	10 U	30	WZ-0750-M1-08-011	WZ-0750-S1-08-011
			337	6 U	25	WZ-0750-M1-10-011	WZ-0750-S1-10-011
			248	4 U	20	WZ-0750-M1-12-011	WZ-0750-S1-12-011
600	346	300	871	18 U	45	WZ-0750-M1-01-011	WZ-0750-S1-01-011
			737	15 U	40	WZ-0750-M1-03-011	WZ-0750-S1-03-011
			604	12 U	35	WZ-0750-M1-05-011	WZ-0750-S1-05-011
			515	10 U	30	WZ-0750-M1-07-011	WZ-0750-S1-07-011
			337	6 U	25	WZ-0750-M1-09-011	WZ-0750-S1-09-011
			248	4 U	25	WZ-0750-M1-11-011	WZ-0750-S1-11-011

## SJK 19" CABINET

### Wall-mounted cabinet for light equipment

- Designed for small indoor networks.
- Available in 3 size variations (see reference chart). Other dimensions on request.
- The cabinet is based on metal body with metal solid door. It includes two 19" mounting angles fixed to the walls of the body.
- Openings in the top and bottom plate are covered with knockout blanking plates.
- The cabinet does not have a rear panel.

#### Technical data

##### Material:

Body, door, mounting angles - 0.8 mm thick sheet steel

##### Surface finishing:

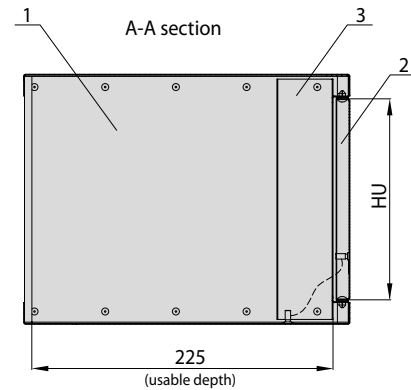
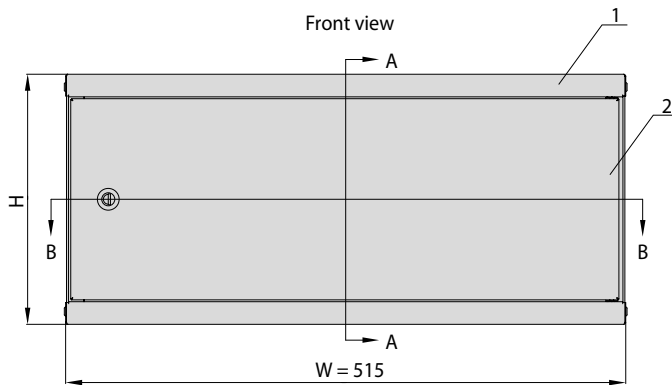
Powder painted in RAL 7035. Application of other colours on request.

##### Protection degree:

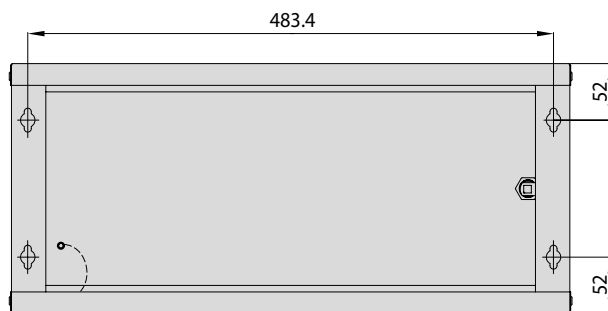
IP 20 (for cabinet mounted to the wall) in accordance with EN 60 529 / IEC 529



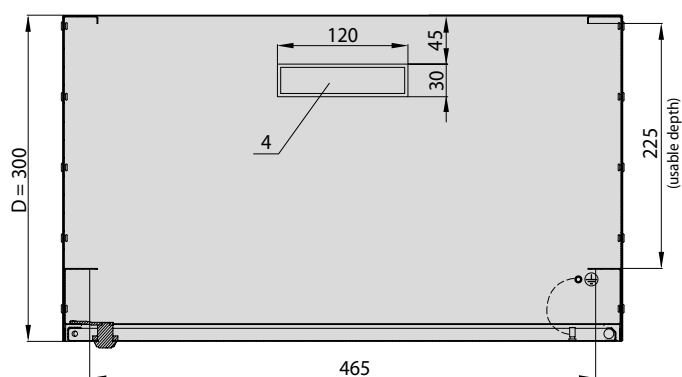
## SJK 19" CABINET



Rear view



B-B section



### DESIGN

1. Body
2. Door
3. Mounting angle
4. Knock-out blanking plate

### Reference chart

Total width W [mm]	Total depth D [mm]	Total height H [mm]	Usable height HU [U = 44.45 mm]	Maximum load capacity [kg]	Catalogue number
515	300	497	10 U	10	WZ-3684-01-02-011
		320	6 U	6	WZ-3684-01-01-011
		230	4 U	4	WZ-3684-01-00-011



## SKI2 10" CABINET

### Wall-mounted cabinet for small networks

- Designed for indoor applications.
- Usable height of the cabinet is 7 U.
- The cabinet is based on body with steel or glass door. The cabinet includes two mounting angles for installation of 10" appliances. The mounting angles are fixed to the walls of the body.
- Openings in the cabinet's top and bottom plate are covered with knock-out blanking plates.
- Following removal of the knock-out plate, a brush strip supplied together with the cabinet can be placed in one of the cable openings. The other brush strip can be ordered as a supplementary accessory (see page 64).
- The cabinet does not have a rear panel.

#### Technical data

##### Material:

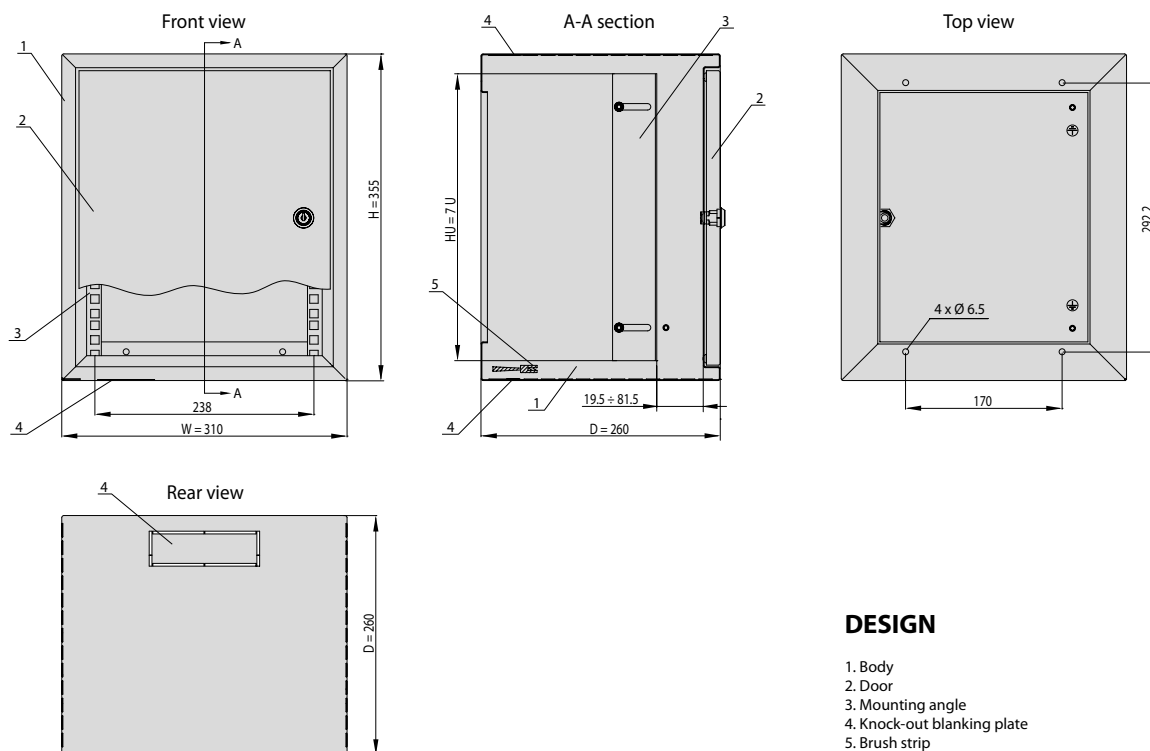
Body, door, mounting angles - 1.0 mm thick sheet steel

##### Surface finishing:

Powder painted in RAL 7035. Application of other colours on request.



## SKI2 10" CABINET

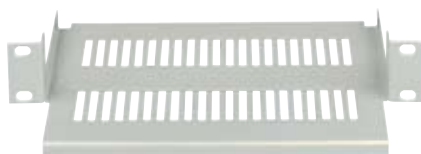


## Reference chart

Total width W [mm]	Total depth D [mm]	Total height H [mm]	Usable height HU [U = 44.45 mm]	Catalogue number	
				Cabinet with steel door	Cabinet with glass door
310	260	355	7 U	WZ-3661-01-01-011	WZ-3661-01-02-011

Supplementary accessories in the 10" standard	Package	Catalogue number
Universal patch panel 10" x 1 U, 4 ports 25 x 50 mm	1 pc.	WNK-891-319
Terminal block panel 10" x 1 U, 10 pairs	1 pc.	WNK-891-315
Patch panel 10" x 1 U for keystones, 8 ports	1 pc.	WNK-891-312
Patch panel 10" x 1 U, cat. 5e, 8 ports RJ45	1 pc.	WNK-891-316
Shelf 10" x 1 U	1 pc.	WNK-891-311
Power strip 10" x 1 U, 4 sockets type E (CEE 7/5)	1 pc.	T-SO-891-317

**Shelf 10" x 1 U**  
- cat. no. WNK-891-311



**Universal patch panel 10" x 1 U, 4 ports 25 x 50 mm**  
- cat. no. WNK-891-319



**Patch panel 10" x 1 U, for keystones, 8 ports**  
- cat. no. WNK-891-312



**Terminal block panel 10" x 1 U, 10 pairs**  
- cat. no. WNK-891-315



**Power strip 10" x 1 U, 4 sockets type E (CEE 7/5), voltage rating 230 V AC, maximum current 10 A, cable 1.8 m with universal plug, body made of anodized aluminium**  
- cat. no. T-SO-891-317



**Patch panel 10" x 1 U, cat. 5e, 8 ports RJ45**  
- cat. no. WNK-891-316



## RN 19" WALL FRAME

### Intended for light equipment which does not require full enclosure

- Simple and cheap solution for wall-mounted installation of 19" equipment.
- Available in 3 usable height options.

#### Material:

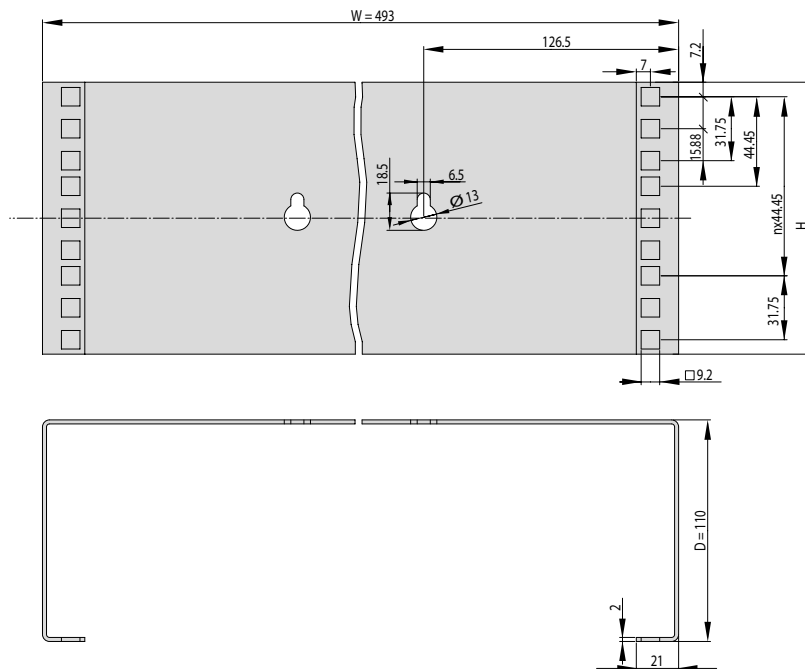
2.0 mm thick sheet steel

#### Surface finishing:

Powder paint, light grey (RAL 7035).  
Application of other colours on request.

#### Scope of delivery:

Wall frame (1 pc.) without fixing accessories.



### Reference chart

Total width W [mm]	Total depth D [mm]	Total height H [mm]	Usable height [U = 44.45 mm]	Catalogue number
493	110	134	3 U	WZ-2522-02-03-011
		90	2 U	WZ-2522-02-02-011
		45	1 U	WZ-2522-02-01-011

RNO 19" WALL FRAME

Intended for light equipment which does not require full enclosure

- Simple and cheap solution for wall-mounted installation of 19" equipment.
- Left side with hinges to offer access to equipment from the rear.
- Available in 2 options of varying depth.

Material:

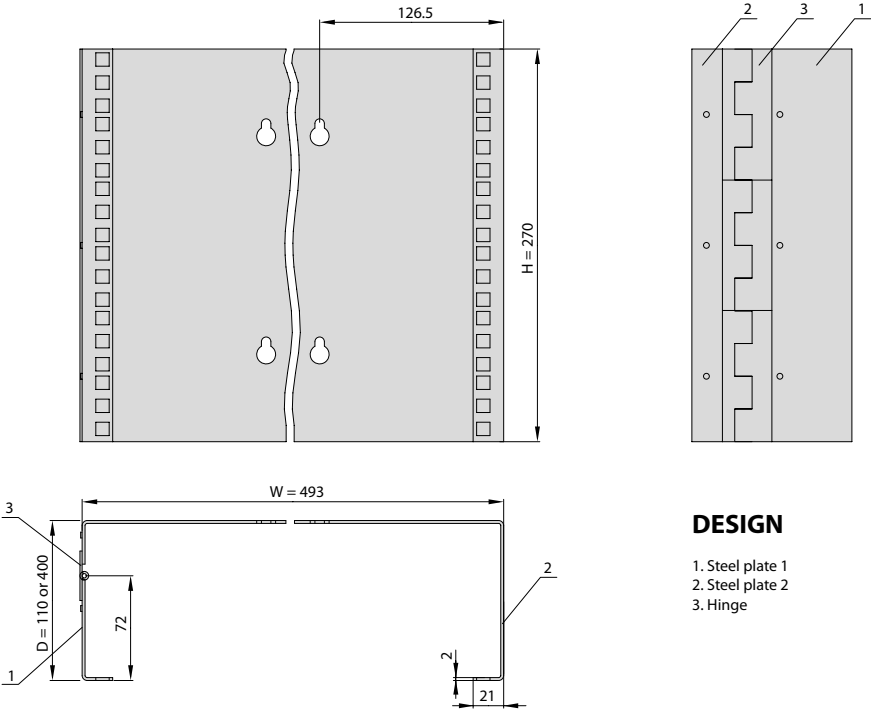
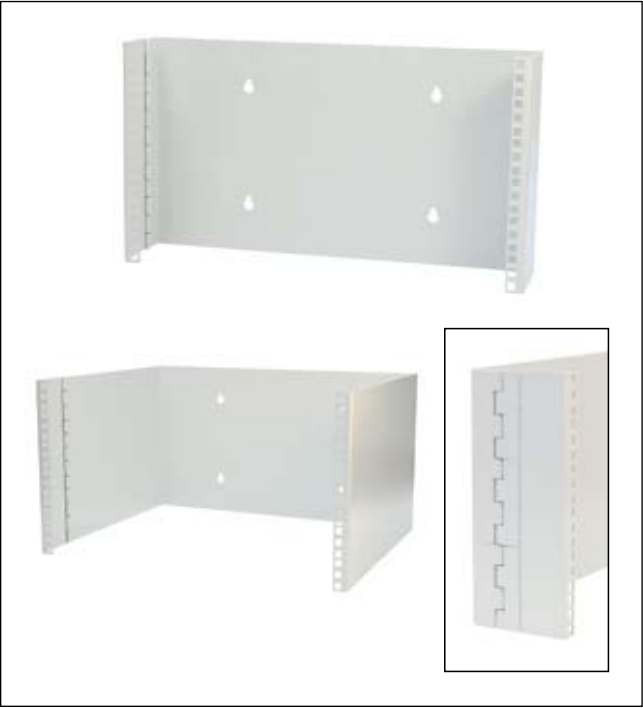
2.0 mm thick sheet steel

Surface finishing:

Powder paint, light grey (RAL 7035).  
Application of other colours on request.

Scope of delivery

Wall frame (1 pc.) without fixing accessories.



Reference chart

Total width W [mm]	Total depth D [mm]	Total height H [mm]	Usable height [U = 44.45 mm]	Catalogue number
493	400	270	6 U	WZ-2522-01-02-011
	110			WZ-2522-01-01-011

## SUPPLEMENTARY ACCESSORIES FOR WALL-MOUNTED CABINETS

### Mounting profiles, mounting angles

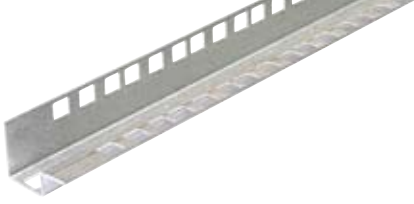



Mounting profiles are applied in wall-mounted cabinets when a shelf requiring four fixing points is to be installed (see page 80). In the standard configuration, SU, SD2 and SJ2 cabinets are offered with two mounting angles, whereas SW and SWJ cabinets are offered with two mounting profiles.

**Material:**

Sheet steel, Al-Zn coated, 1.5 mm thick (SU, SD2, SJ2)  
or 2.0 mm (SW, SWJ)

**Scope of delivery:**

One set consisting of two mounting angles/profiles  
with fixing accessories.

Type of set	Length [U = 44.45 mm]	Catalogue number	Picture of mounting profile or mounting angle
Set of mounting profiles for SU, SD2, SJ2 cabinets	4 U	WZ-3839-15-01-000	
	6 U	WZ-3504-15-01-000	
	10 U	WZ-3504-15-02-000	
	12 U	WZ-3504-15-03-000	
	15 U	WZ-3504-15-04-000	
	18 U	WZ-3504-15-05-000	
Set of mounting angles for SU, SD2, SJ2 cabinets	4 U	WZ-3839-14-01-000	
	6 U	WZ-3504-14-01-000	
	10 U	WZ-3504-14-02-000	
	12 U	WZ-3504-14-03-000	
	15 U	WZ-3504-14-04-000	
	18 U	WZ-3504-14-05-000	
Set of mounting profiles for SW, SWJ cabinets	4 U	WZ-0750-09-01-000	
	6 U	WZ-0750-09-02-000	
	10 U	WZ-0750-09-03-000	
	12 U	WZ-0750-09-04-000	
	15 U	WZ-0750-09-05-000	
	18 U	WZ-0750-09-06-000	
Set of mounting angles for SW, SWJ cabinets	4 U	WZ-0750-24-01-000	
	6 U	WZ-0750-24-02-000	
	10 U	WZ-0750-24-03-000	
	12 U	WZ-0750-24-04-000	
	15 U	WZ-0750-24-05-000	
	18 U	WZ-0750-24-06-000	

**Package:** 1 set = 2 pcs.

### Brush strip for cable opening

For blinding cable openings in SU, SD2, SJ2, SJK, SKI2 cabinets following the removal of blanking plates.

**Material:**

Plastic

**Scope of delivery:**

Brush strip, 250 mm long. Before fixing in SJK or SKI2 cabinets, the brush strip must be shortened..

Package	Catalogue number
1 pc.	WZ-3504-22-00-000





## SUPPLEMENTARY ACCESSORIES FOR WALL-MOUNTED CABINETS

### Mounting plate

Fixed on mounting angles or mounting profiles in 19" spacing.

**Material:**

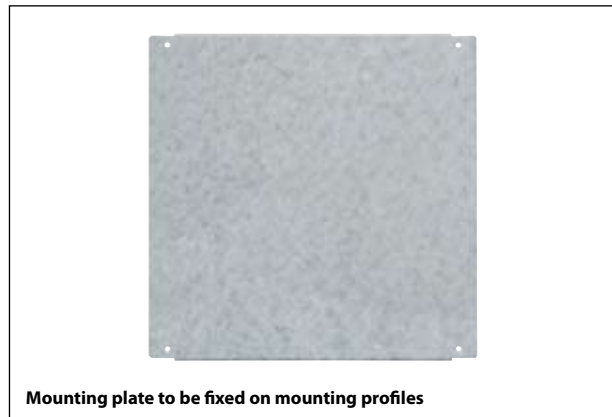
2.0 mm thick Al-Zn coated sheet steel

**Scope of delivery:**

Mounting plate with fixing accessories.

Height [U = 44.45 mm]	Catalogue number
4 U	WZ-0750-10-01-000
6 U	WZ-0750-10-02-000
10 U	WZ-0750-10-03-000
12 U	WZ-0750-10-04-000
15 U	WZ-0750-10-05-000
18 U	WZ-0750-10-06-000

Package: 1 pc.



### Earthing elements for SU, SD2, SJ2, SJB cabinets

**Earthing strip**

- Fixed to the bottom plate of the cabinet by means of screws.
- With threaded M5 openings for fixing ducts.
- Material: zinc coated steel bar 30 x 4 x 170 mm

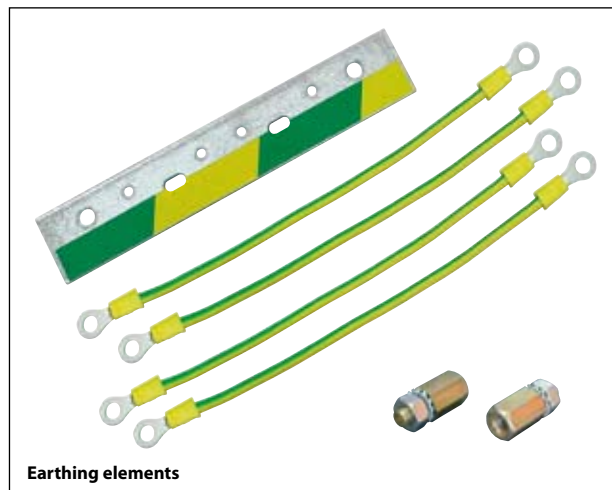
**Earthing cables:**

- Insulated copper cables with contact eyes for M5 screws.
- Material: copper wires, 6 mm<sup>2</sup> in diameter

**Scope of delivery:**

Earthing elements are supplied with fixing accessories for installation inside the cabinet.

Product name	Package	Catalogue number
Earthing strip for SD2, SJ2, SJB cabinets	1 pc.	WZ-3504-16-00-000
Earthing set for SU cabinet: - earthing strip with a set of fixing spacer bolts - 1pc. - earthing cable, 200 mm long - 4 pcs.	1 set	WZ-2733-13-00-000



### Fan kit for SU, SD2, SJ2 cabinets

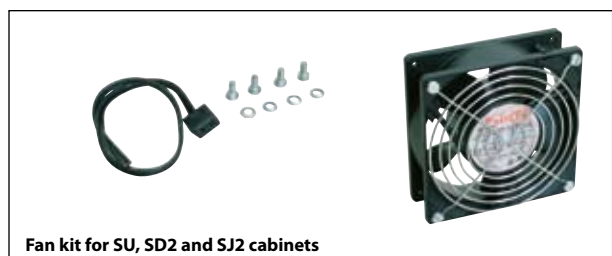
Mounted in the top or bottom plate of SU, SD2 and SJ2 cabinets.

Power supply: 230 V, 50 Hz; power: 22 W; capacity: 162 m<sup>3</sup>/h.

**Scope of delivery:**

Set: 1 fan with protection grid, power lead 1.0 m long, fixing accessories.

Package	Catalogue number
1 set	WN-0200-04-00-000



### Fan unit for SW cabinet

The fan unit is fixed to top or bottom plate of SW cabinet.

Power supply: 230 V, 50 Hz; power: 22 W; capacity: 162 m<sup>3</sup>/h

**Scope of delivery:**

Fan unit with power supply cable 1,5 m

Package	Catalogue number
1 pc.	WZ-0405-50-00-011



## SUPPLEMENTARY ACCESSORIES FOR WALL-MOUNTED CABINETS

### Cross profile

Intended for fixing cables in SU, SD2, SJ2, SW, SWJ wall mounted cabinets.

Horizontally mounted to the rear wall of the cabinet.

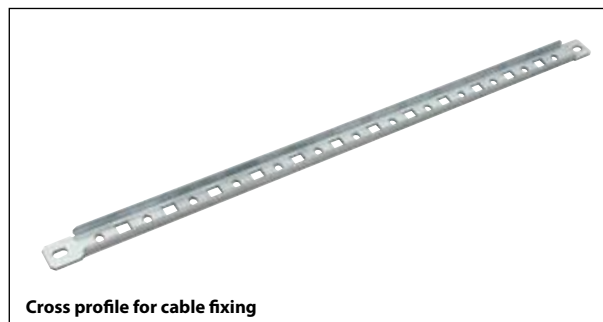
**Material:**

1.5 mm thick Al-Zn coated sheet steel

**Scope of delivery:**

Cross profile with fixing accessories.

Package	Catalogue number
1 pc.	WZ-2048-24-01-000



Cross profile for cable fixing

### Wall-fastening brackets

Fixed to openings in the rear wall of SU, SD2, SJ2, SW, SWJ wall mounted cabinets. For one cabinet it is necessary to use 4 brackets of the same depth. Cabinets can also be fastened directly to the wall without using brackets.

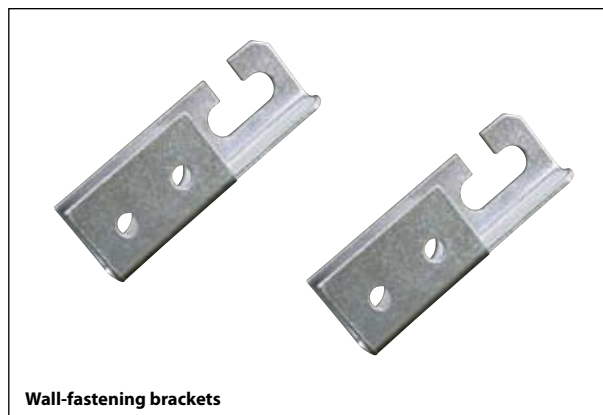
**Material:**

2.5 mm thick zinc-coated sheet steel

**Scope of delivery:**

Set of 4 brackets with screws, washers and nuts for fixing the cabinet to the wall.

Type of brackets	Package	Catalogue number
Brackets 20 mm deep	1 set = 4 pc.	WZ-2048-50-01-000
Brackets 40 mm deep	1 set = 4 pc.	WZ-2048-50-02-000



Wall-fastening brackets

### Perforated blanking plate and filtering insert for SWJ cabinet

Dimensions: 350 x 90 mm

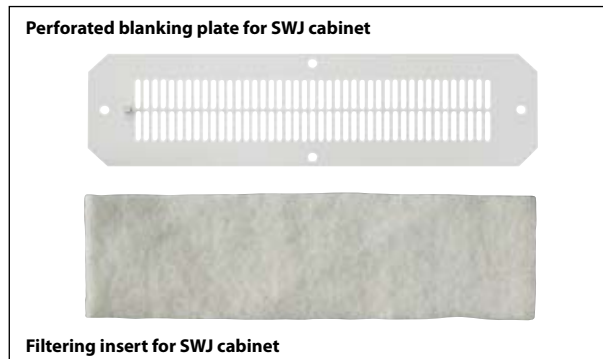
**Material:**

Sheet steel 1.5 mm thick, filtering fibre

**Scope of delivery:**

Blanking plate and filtering insert should be ordered separately.

Type of element	Package	Catalogue number
Perforated blanking plate	1 pc.	WZ-0429-06-00-011
Filtering insert	1 pc.	WZ-0429-06-01-000



Filtering insert for SWJ cabinet

### Filtering insert for SW cabinet

To be installed under the frame with a grid in SW cabinet.

Dimensions: 270 x 270 mm

**Scope of delivery:**

Filtering insert

Package	Catalogue number
1 pc.	WZ-0405-11-00-000



Filtering insert for SW cabinet

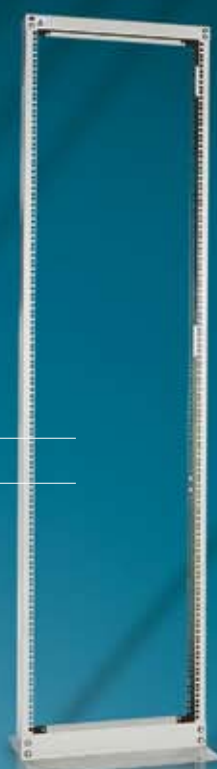
## OPEN RACKS



SRD



SRS



SRC



SRK



SRX

## SRS, SRD 19" OPEN RACKS

### Intended for installations which do not require full housing

- SRS rack has one 19" frame, while SRD rack has double 19" frame.
- In both types of racks it is possible to have optional adjustment of 19" frame position.
- Modular design based on horizontal aluminium profiles and vertical steel posts.
- Open racks are set on levelling feet.
- Various supplementary accessories are available as for data telecom cabinets - castors, shelves, drawers, power strips etc.

### Technical data

#### Material:

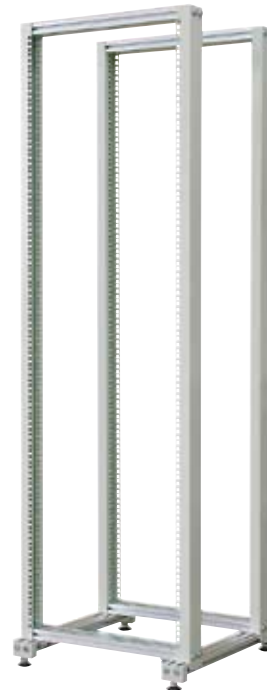
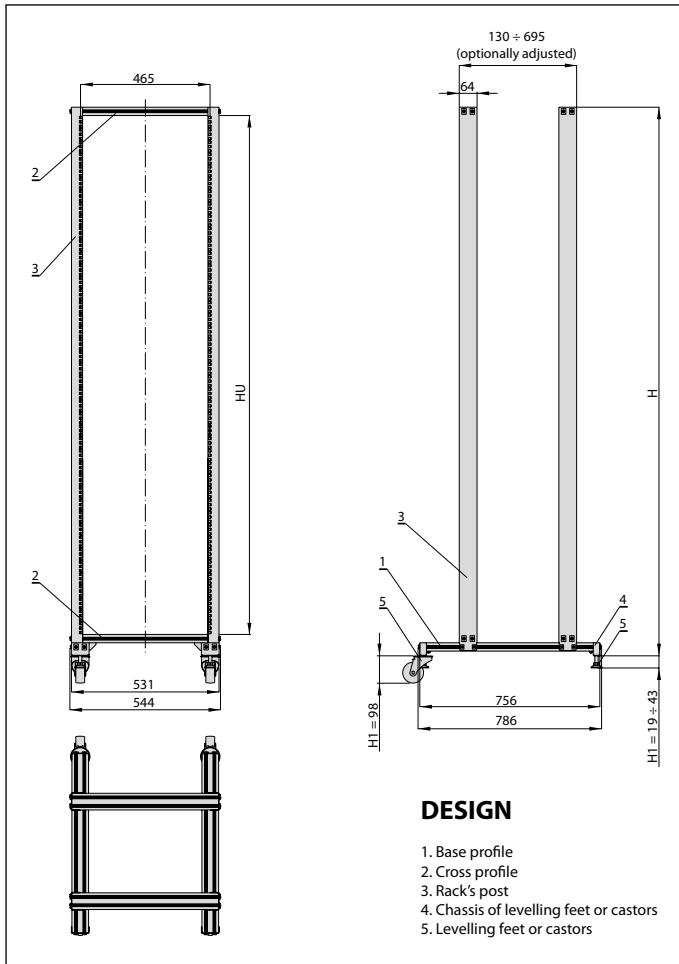
1.5 mm thick sheet steel,  
aluminium profile 60 x 30 mm

#### Surface finish:

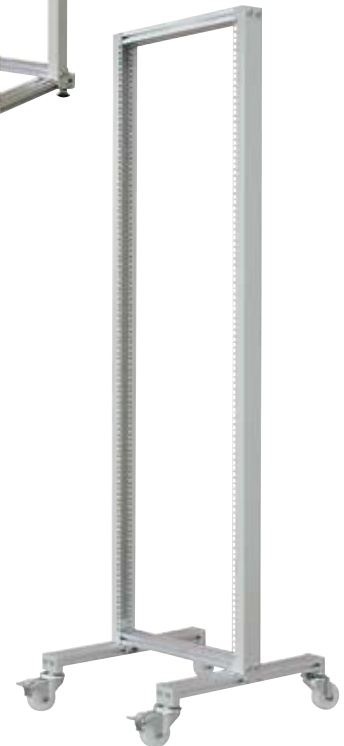
Textured powder paint, light grey (RAL 7035).  
All other colour options on request.

### Reference chart

HU [U = 44.45 mm]	H [mm]	Number of 19" frames	Maximum load capacity [kg]	Catalogue number
24 U	1177	1	100	WZ-1969-01-01-011
36 U	1709	1	100	WZ-1969-01-02-011
42 U	1975	1	100	WZ-1969-01-03-011
45 U	2109	1	100	WZ-1969-01-04-011
24 U	1177	2	150	WZ-1969-01-05-011
36 U	1709	2	150	WZ-1969-01-06-011
42 U	1975	2	150	WZ-1969-01-07-011
45 U	2109	2	150	WZ-1969-01-08-011



SRD rack  
set on levelling feet



SRS rack set on castors which should  
be ordered separately  
- see page 76

## SRX 19" OPEN RACK

### Intended for installations which do not require full housing

- Made of two 19" welded frames that are fastened to the double-part chassis with screws.
- Positioning of the frames is based on a 50 mm pitch pattern.
- Standard rack is placed on levelling feet.
- Possibility for using some elements of supplementary equipment for data telecom cabinets – castors, shelves, drawers, power strips etc.

### Technical data

#### Material:

2.0 mm thick sheet steel

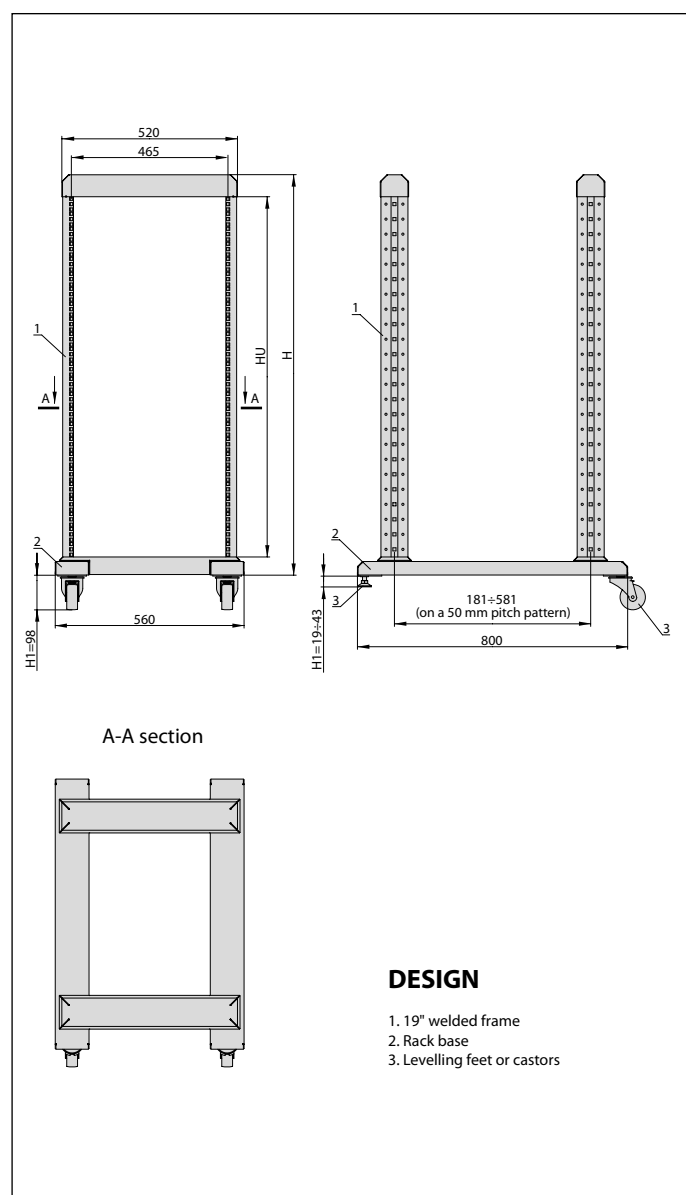
#### Surface finishing:

Textured powder paint, light grey (RAL 7035).

All other colour options on request.

### Reference chart

HU [U = 44.45 mm]	H [mm]	Maximum load capacity [kg]	Catalogue number
24 U	1185	250	WZ-2493-01-01-011
36 U	1719	250	WZ-2493-01-02-011
42 U	1985	250	WZ-2493-01-04-011
45 U	2119	250	WZ-2493-01-05-011



SRX rack equipped with 2 shelves type I – see page 80



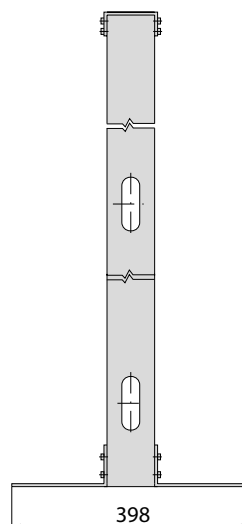
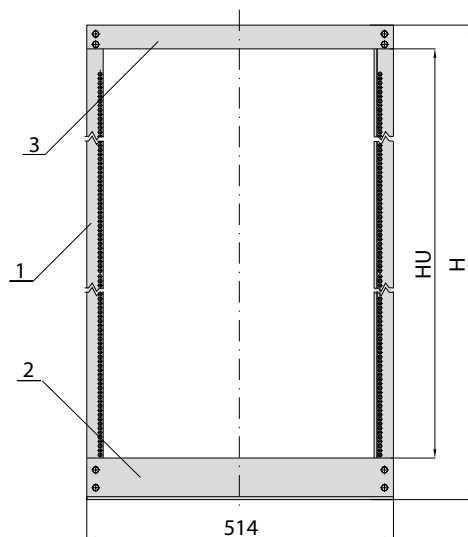
## SRC 19" OPEN RACK

### Intended for installations which do not require full housing

- The design is based on a single assembled 19" frame fixed by screws to two steel mounting angles forming the base.
- Chassis has openings to brace the rack to the floor.
- Optionally the rack can be equipped with wall-fastening brackets.
- Possibility to use some supplementary accessories as for data telecom cabinets: shelves, drawers, power strips etc.

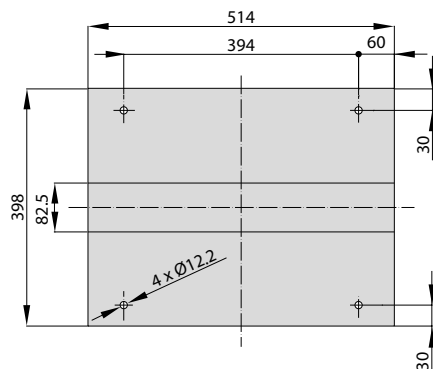
### Reference chart

HU [U = 44.45 mm]	H [mm]	Maximum load capacity [kg]	Catalogue number
31 U	1496	100	WZ-0008-01-01-011
41 U	1941	100	WZ-0008-01-02-011
45 U	2119	100	WZ-0008-01-03-011
54 U	2519	100	WZ-0008-01-04-011



### DESIGN

1. Vertical post
2. Chassis
3. Cross profile



### Technical data

#### Material:

2.0 mm thick sheet steel

#### Surface finish:

Textured powder paint, light grey (RAL 7035).  
All other colour options on request.

SRK 19" OPEN RACK

Intended for installations which do not require full housing

- The design consists of two screwed 19" frames which are fixed to two strengthened mounting angles forming the base.
- The distance of the frames can be changed by positioning at 50 mm steps.
- In the standard version the open rack is set on four adjustable feet.
- Roof and connectors for joining upper parts of both 19" frames can be ordered as supplementary accessories.
- Possibility to use some supplementary accessories as for data telecom cabinets: castors, shelves, drawers, power strips etc.

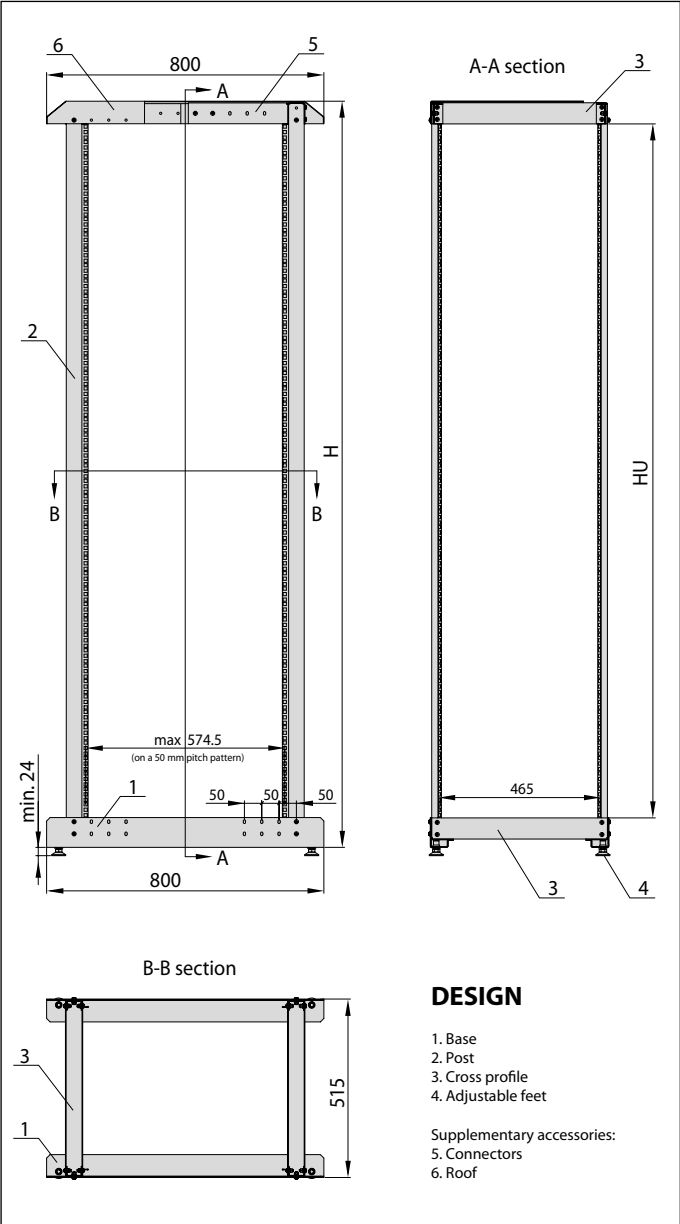
Technical data

**Material:**  
2.0 mm thick sheet steel

**Surface finishing:**  
Textured powder paint, light grey (RAL 7035).  
Application of other colours on request.

Reference chart

HU [U = 44.45 mm]	H [mm]	Maximum load capacity [kg]	Catalogue number
24 U	1190	110	WZ-2378-01-24-011
36 U	1724	110	WZ-2378-01-36-011
42 U	1990	110	WZ-2378-01-42-011
45 U	2124	110	WZ-2378-01-45-011



## SUPPLEMENTARY ACCESORIES FOR SRK 19" OPEN RACK

### Universal set of connectors for SRK open rack

For connecting upper 19" frames of SRK open rack in order to stiffen the rack.

Depending on the distance between the frames, 287 mm and 383 mm or 287 mm and 283 mm long connectors are used.

**Material:**

2,0 mm thick sheet steel powder painted in RAL 7035.

**Scope of delivery:**

Set of 3 pairs of connectors with fixing accessories. The connectors are 283, 287 or 383 mm long.

Package	Catalogue number
1 set	WZ-2378-19-00-011

Universal set of connectors



Way of connecting frames of SRK open rack



### Roof for SRK open rack

For protection of equipment installed in open racks and to strengthen the structure.

**Material:**

1.5 mm thick sheet steel powder painted in RAL 7035.

**Scope of delivery:**

Roof with fixing accessories.

Package	Catalogue number
1 pc.	WZ-2378-07-00-011



Roof for SRK open rack

## SUPPLEMENTARY ACCESSORIES

DRAWER WITH COMPACT KEYBOARD



PW FAN UNIT



PWD FAN UNIT



POWER STRIP



MICROPROCESSOR PANEL  
FOR FAN CONTROL



PULL-OUT SHELF II



## LEVELLING FEET

Levelling feet for cabinets and racks.

Thread: M12x38

Ways of adjustment:

- with 19 mm open ended spanner,
- with 5 mm wrench spanner (imbus).

**Material:**

Adjustable screw – zinc-coated steel.

Base - plastic.

**Scope of delivery:**

Adjustable feet - 1 pc.

Package	Catalogue number
1 pc.	M1F-05-0003



Levelling feet for cabinets and racks

## PLINTHS WITH SOLID COVERS

**Simple plinth**

- Possibility of fixing into the room's floor.
- Possibility of adding rubber vibro-shock absorbers.
- Scope of delivery:
  - Plinth 100 mm high: 4 corners 100 mm high, 4 solid covers, set of fixing accessories.
  - Plinth 200 mm high: 4 corners 200 mm high, 8 solid covers, set of fixing accessories.

**Plinth with levelling option:**

- Levelling by means of feet.
- Scope of delivery:
  - Plinth 100 mm high: 4 corners 100 mm high with levelling option (with feet), 4 solid covers, set of fixing accessories.
  - Plinth 200 mm high: 4 corners 200 mm high with levelling option (with feet), 8 solid covers, set of fixing accessories.

The design of the plinth makes it possible to remove and replace covers even when the cabinet is heavy-loaded with equipment.

Standard colour of plinths: light grey (RAL 7035).

Dimensions [mm]			Catalogue number	
Height	Width	Depth	Simple plinth	Plinth with levelling option
100	800	800	WZ-001C-80-80-011	WZ-01CP-80-80-011
		600	WZ-001C-80-60-011	WZ-01CP-80-60-011
	600	900	WZ-001C-60-90-011	WZ-01CP-60-90-011
		800	WZ-001C-80-60-011	WZ-01CP-80-60-011
		600	WZ-001C-60-60-011	WZ-01CP-60-60-011
200	800	800	WZ-002C-80-80-011	WZ-02CP-80-80-011
		600	WZ-002C-80-60-011	WZ-02CP-80-60-011
	600	900	WZ-002C-60-90-011	WZ-02CP-60-90-011
		800	WZ-002C-80-60-011	WZ-02CP-80-60-011
		600	WZ-002C-60-60-011	WZ-02CP-60-60-011

Package: 1 pc.



Simple plinth 200 mm high with solid cover



Plinth with levelling option, 100 mm high, with solid cover



## PLINTHS' ELEMENTS

### Covers

There are three types of covers available - see the picture. Each type has the standard height of 99 mm. Covers can be removed even when the cabinet is loaded with equipment.

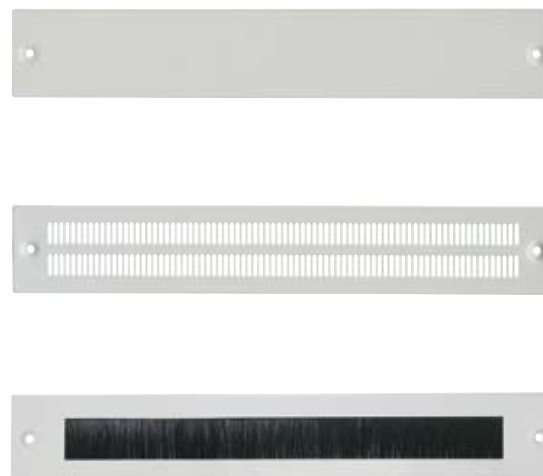
**Material:**

1.25 mm thick sheet steel, powder painted in light grey (RAL 7035) or black (RAL 9005).

**Scope of delivery:**

Cover with fixing accessories.

Type of cover	Length of cover [mm]	Length of plinth's side [mm]	Catalogue number	
			RAL 7035	RAL 9005
Solid cover	800	1000	WZ-1982-03-08-011	—
	600	800	WZ-1982-03-07-011	—
	400	600	WZ-1982-03-05-011	—
Cover with perforation	800	1000	WZ-1982-05-08-011	WZ-1982-05-08-161
	600	800	WZ-1982-05-07-011	WZ-1982-05-07-161
	400	600	WZ-1982-05-05-011	WZ-1982-05-05-161
Cover with brush opening	800	1000	WZ-1982-04-08-011	WZ-1982-04-08-161
	600	800	WZ-1982-04-07-011	WZ-1982-04-07-161
	400	600	WZ-1982-04-05-011	WZ-1982-04-05-161



Solid cover  
Cover with perforation  
Cover with brush opening

### Corners

They are available in two types:

- Simple corners – they can be fixed to the room's floor and provided with rubber vibro shock absorbers.
- Corners with levelling option – with feet.

**Material:**

Corners: 2.5 mm thick sheet steel powder painted in light grey (RAL 7035).

Levelling feet: see page 74.

**Scope of delivery:**

Set of 4 corners include fixing accessories for plinth covers and assembling a plinth to the cabinet. Corners with levelling option are delivered with adjustable feet.

Type of element	Height [mm]	Package	Catalogue number
Set of 4 simple corners	200	1 set	WZ-2174-05-02-011
	100	1 set	WZ-1982-08-02-011
Set of 4 corners with levelling option	200	1 set	WZ-2402-05-02-011
	100	1 set	WZ-2401-05-02-011



Simple corners

Corners with levelling option

### Vibro-shock absorbers

The simple plinths can be optionally equipped with vibroshock absorbers. Plinth with vibro-shock absorbers should be fixed into the room's floor. Four vibro-shock absorbers are needed for one plinth.

**Material:**

10 mm thick rubber.

**Scope of delivery:**

Vibro-shock absorber (1 pc.) without fixing accessories.

Package	Catalogue number
1 pc.	M1Z-00-0048



Vibro-shock absorber



Corner with vibro-shock absorber

## CASTORS

### Castors 150

For cabinets SZB, OTS1, SZB PC and SZT-2 as well as for open racks SRS, SRD, SRK and SRX.

One cabinet or open rack requires 2 locking and 2 nonlocking castors. Maximum load capacity of 4 castors: 400 kg\*

#### Scope of delivery:

Single castor with screws and washers for fixing into the cabinet or rack.

Type of element	Package	Catalogue number
Locking castor 150	1 pc.	WZ-SB72-00-01-000
Non-locking castor 150	1 pc.	WZ-SB72-00-02-000



Locking castor 150



Non-locking castor 150

### Castors 300

For cabinets SZB, OTS1, SZB PC, SZB SE, SZB SEI.

One cabinet requires 2 locking, 2 non-locking castors and 2 strengthening bars. One bar with locking castors is fixed at the cabinet's front, and the other bar with non-locking castors at the rear.

Maximum load capacity of 4 castors: 600 kg\*

#### Surface finish:

Strengthening bar for castors - textured powder painted light grey (RAL 7035).

#### Scope of delivery:

These are available as individual elements:

- castors with screws and washers for fixing into the strengthening bar,
- supporting bar for castors with screws and washers for fixing into the bottom plate of the cabinet.

Type of element	Package	Catalogue number
Locking castor 300 steering type	1 pc.	WZ-SB73-00-01-000
Non-locking castor 300 fixed type	1 pc.	WZ-SB73-00-02-000
Strengthening bar for cabinet's width 600 mm	1 pc.	WZ-SB74-00-01-011
Strengthening bar for cabinet's width 800 mm	1 pc.	WZ-SB74-00-02-011

Locking castor 300 steering type

Non-locking castor 300 fixed type



Strengthening bar for castors 300

### Castors set for SZE2 PC cabinet

Assembling castors to the cabinet by means of two strengthening bars as in castors 300.

Loading capacity: 600 kg\*

#### Surface finishing:

Strengthening bar for castors -- textured powder paint light grey (RAL 7035).

#### Scope of delivery:

2 strengthening bars, 2 locking castors, 2 non-locking castors, mounting elements.

Product name	Package	Catalogue number
Castors set for SZE2 PC cabinet	1 set.	WZ-3004-11-00-011



Castors set for SZE2 PC cabinet

\* Applicable to castors only. Loading capacity of the cabinet (or open rack) is specified in the description.

## MODULE PANEL FOR CABLE ENTRY

3 U module panel intended for assembly under shortened door or panel in cabinets SZB, OTS1, SZB PC and SZB SE.

The module panel is equipped with an opening used for cable entries. The opening is equipped with a brush preventing from dust penetration into the cabinet. The brush can be replaced with solid or perforated blanking plates.

Assembly guidelines are given on page 17.

### Material:

2.0 mm thick sheet steel textured powder painted in light grey (RAL 7035).

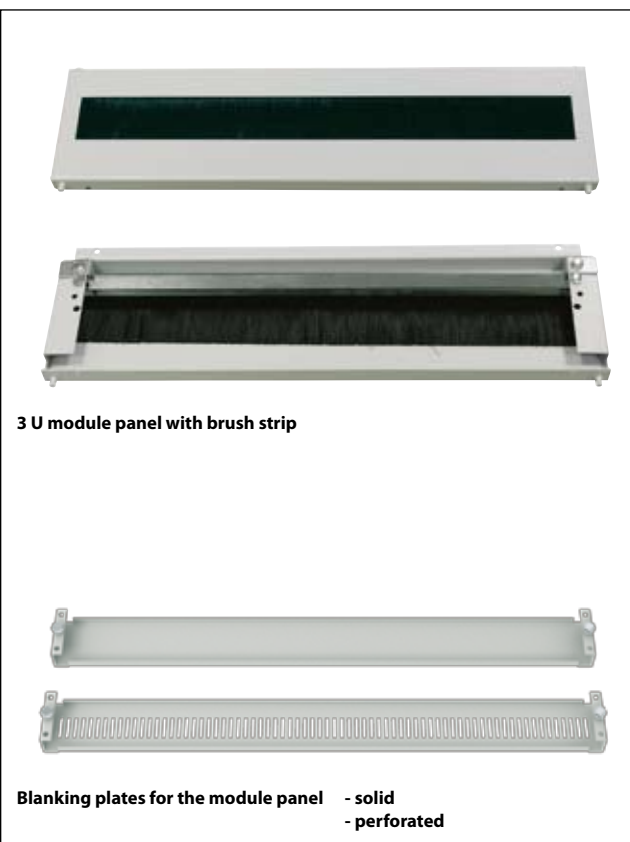
### Scope of delivery:

3 U module panel with brush strip.

Blanking plates for the module panel are to be ordered separately.

Product name	For cabinet width [mm]	Reference number
3 U module panel with brush strip	800	WZ-SB50-00-02-011
	600	WZ-SB50-00-04-011
Solid blanking plate for the module panel	800	WZ-SB09-01-01-011
	600	WZ-SB09-01-02-011
Perforated blanking plate for the module panel	800	WZ-SB09-02-01-011
	600	WZ-SB09-02-02-011

**Package:** 1 pc.



## FRAME WITH MESH

It is intended for covering the perforation in panels and doors of SZB cabinet from the inside.

### Material:

Frame - sheet steel, mesh - steel; all element textured powder painted in light grey (RAL 7035).

### Scope of delivery:

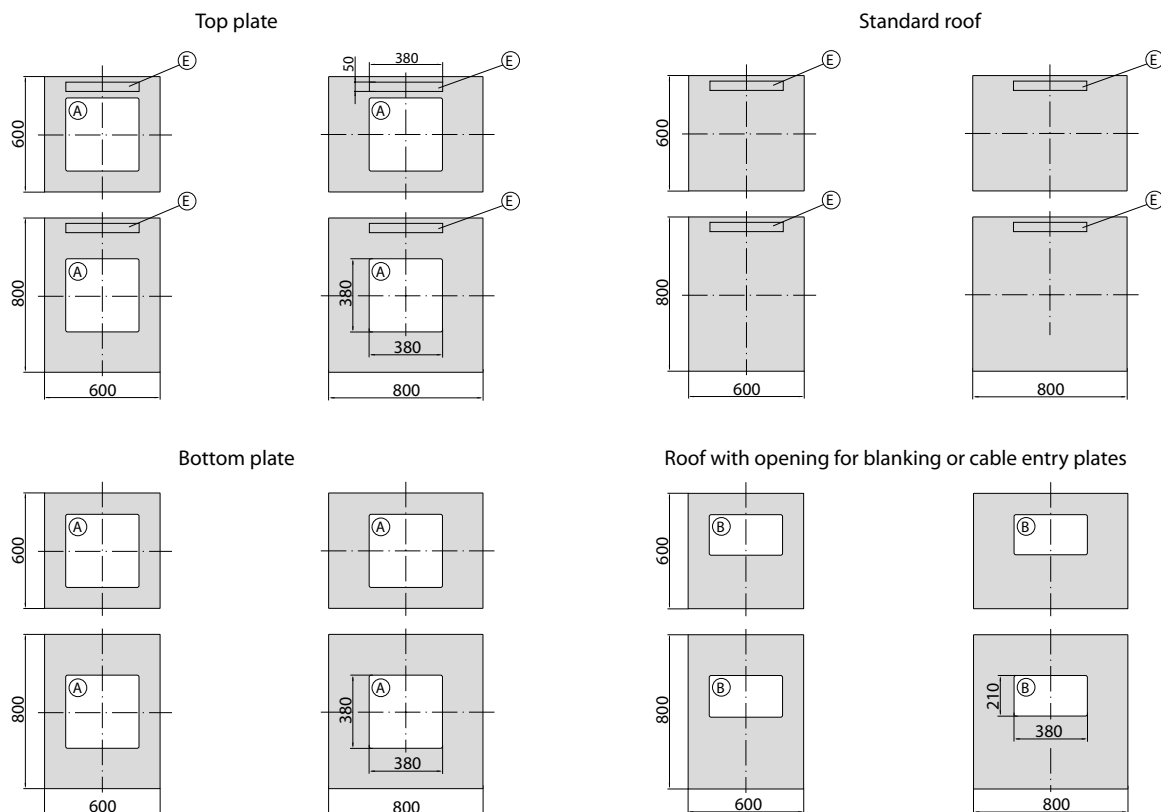
Frame with mesh and fixing accessories.

Dimensions [mm]	Package	Catalogue number
459 x 245	1 pc.	WZ-SB39-00-01-011
356 x 350	1 pc.	WZ-SB39-00-02-011
228 x 222	1 pc.	WZ-SB39-00-03-011

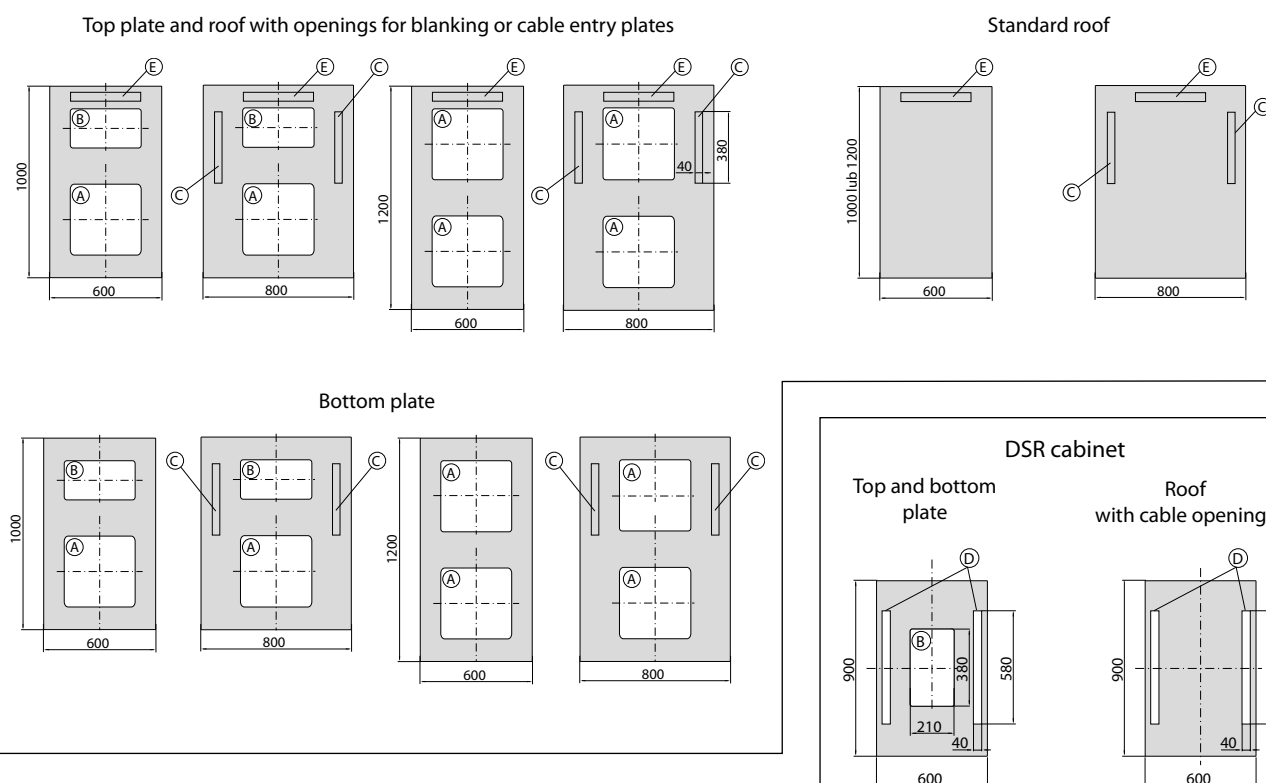


# BLANKING AND CABLE ENTRY PLATES AND STRIPS FOR BOTTOM PLATE, TOP PLATE AND ROOF

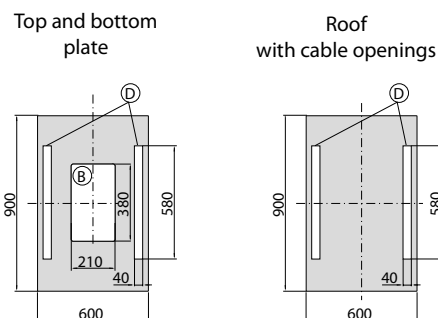
SZB, OTS1 and SZB PC cabinets



SZB SE and SZB SEI cabinets



DSR cabinet



**Note:**  
Openings "C" and "E" are covered with knock-out blanking plates.

## BLANKING AND CABLE ENTRY PLATES AND STRIPS FOR BOTTOM PLATE, TOP PLATE AND ROOF

Appliances in accordance with drawings on page 78.

### Material:

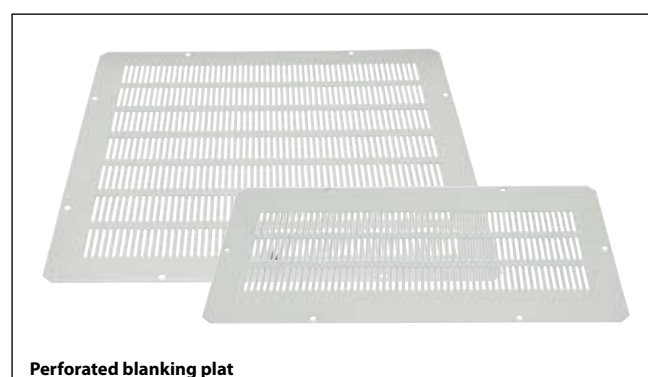
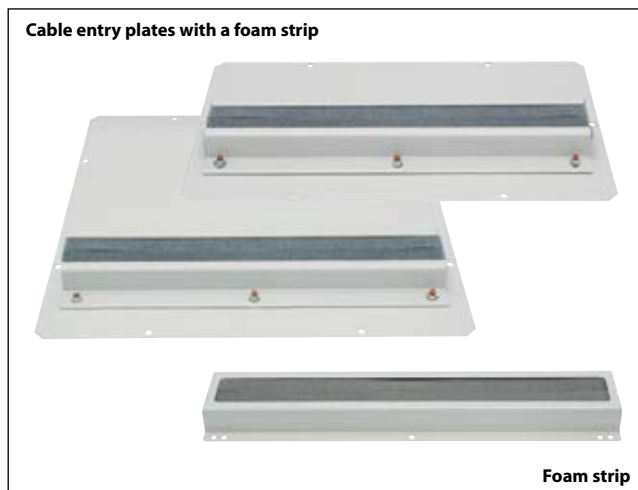
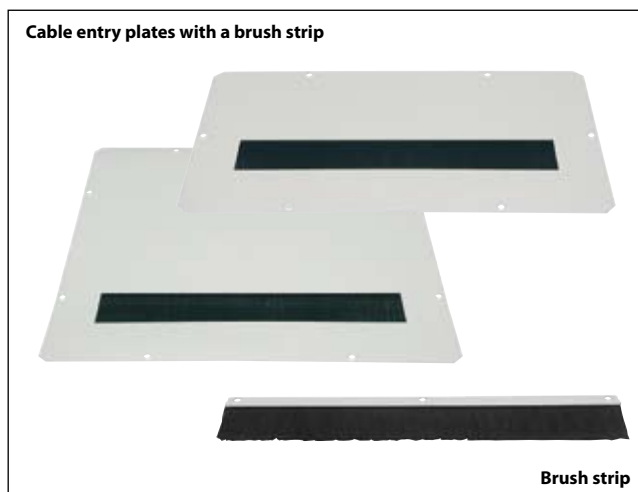
1.5 mm thick sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

### Scope of delivery:

Blanking /cable entry plate or strip with fixing accessories.

Type of element	For opening	Catalogue number	
		RAL 7035	RAL 9005
Solid blanking plate	A	WZ-1718-38-01-011	WZ-1718-38-01-161
	B	WZ-1718-38-02-011	WZ-1718-38-02-161
	C	WZ-1718-09-02-011	—
	D	WZ-1718-09-01-011	—
Perforated blanking plate	A	WZ-1718-39-01-011	WZ-1718-39-01-161
	B	WZ-1718-39-02-011	WZ-1718-39-02-161
Blanking plate with a fabric filter	A	WZ-1718-42-01-011	WZ-1718-42-01-161
	B	WZ-1718-42-02-011	WZ-1718-42-02-161
Cable entry plate with a brush strip	A	WZ-1718-37-01-011	WZ-1718-37-01-161
	B	WZ-1718-37-02-011	WZ-1718-37-02-161
Brush strip	C, E	WZ-1718-08-02-000	—
	D	WZ-1718-08-01-000	—
Cable entry plate with a foam strip	A	WZ-1718-40-01-011	—
	B	WZ-1718-40-02-011	—
Foam strip	C	WZ-1718-07-02-011	—
	D	WZ-1718-07-01-011	—
Cable entry plate with a fabric filter and a brush strip	A	WZ-SB76-00-00-011	WZ-SB76-00-00-161

Package: 1 pc.





## SHELVES

### Shelves fixed on two 19" mounting profiles

Available in fixed and pull-out version.

19" assembly, 2 U height.

Maximum static load capacity:

- Fixed shelf: 25 kg (superficial weight)
- Pull out shelf: 20 kg (superficial weight)

**Material:**

1.5 mm thick sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

**Scope of delivery:**

Fixed or pull out shelf with fixing accessories for assembling into the mounting profiles.



Fixed shelf II (19" x 2 U)



Pull out shelf II (19" x 2 U)

Type of shelf	Dimensions [mm]		Catalogue number	
	Usable width	Total depth	RAL 7035	RAL 9005
Fixed shelf II	446	650	WZ-SB00-49-01-011	WZ-SB00-49-01-161
		550	WZ-SB00-49-02-011	WZ-SB00-49-02-161
		450	WZ-SB00-49-03-011	WZ-SB00-49-03-161
		350	WZ-SB00-49-04-011	WZ-SB00-49-04-161
		250	WZ-SB00-49-05-011	WZ-SB00-49-05-161
Pull out shelf II	450	555	WZ-SB28-00-01-011	WZ-SB28-00-01-161
		455	WZ-SB28-00-02-011	WZ-SB28-00-02-161
		405	WZ-SB28-00-03-011	WZ-SB28-00-03-161
		355	WZ-SB28-00-04-011	WZ-SB28-00-04-161

Package: 1 pc.

### Shelves fixed on four 19" mounting profiles

Available in fixed and pull-out version.

Fixing on two pairs of 19" mounting profiles (to the side openings).

Usable height employed in the cabinet: 1 U

Maximum static load capacity:

- Fixed shelf: 100 kg (superficial weight)
- Pull out shelf: 25 kg (superficial weight)

**Material:**

1.5 mm thick sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

**Scope of delivery:**

Fixed or pull out shelf with fixing accessories for assembling into the mounting profiles.



Fixed shelf I



Pull out shelf I

Type of shelf	Dimensions [mm]		Catalogue number	
	Usable width	Total depth	RAL 7035	RAL 9005
Fixed shelf I	465	650	WZ-SB00-48-01-011	WZ-SB00-48-01-161
		550	WZ-SB00-48-02-011	WZ-SB00-48-02-161
		450	WZ-SB00-48-03-011	WZ-SB00-48-03-161
		350	WZ-SB00-48-04-011	WZ-SB00-48-04-161
		250	WZ-SB00-48-05-011	WZ-SB00-48-05-161
Pull out shelf I	450	555	WZ-SB27-00-01-011	WZ-SB27-00-01-161
		455	WZ-SB27-00-02-011	WZ-SB27-00-02-161
		405	WZ-SB27-00-03-011	WZ-SB27-00-03-161
		355	WZ-SB27-00-04-011	WZ-SB27-00-04-161

Package: 1 pc.

## SHELVES

### Shelves fixed on six 19" mounting profiles

For SZB SE and SZB SEI server cabinets.

Available in fixed and telescopic versions.

Fixing on three pairs of 19" mounting profiles.

Usable height employed in a cabinet: 1 U for fixed shelf and 2 U for telescopic shelf

Maximum static load capacity:

- Fixed shelf: 200 kg (superficial weight)
- Telescopic shelf: 140 kg (superficial weight)

**Material:**

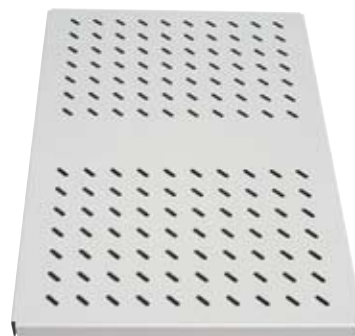
1.5 mm thick sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

**Scope of delivery:**

Fixed or telescopic shelf with fixing accessories for assembling into the mounting profiles.

Type of shelf	Dimensions [mm]		Catalogue number	
	Usable width	Total depth	RAL 7035	RAL 9005
Fixed shelf	465	700	WZ-1718-51-00-011	WZ-1718-51-00-161
Telescopic shelf	392	700	WZ-1718-31-00-011	WZ-1718-31-00-161

**Package:** 1 pc.



Fixed shelf for fixing on six 19" mounting profiles



Telescopic shelf for fixing on six 19" mounting profiles

### Shelf with adjustable depth

On two pairs of 19" mounting profiles, usable height 1 U.

Maximum static load: 150 kg (surface load)

**Material:**

1.5 mm thick sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

**Scope of delivery:**

Shelf with fixing accessories for assembling into the mounting profiles.

Type of shelf	Dimensions [mm]		Catalogue number	
	Usable width	Total depth	RAL 7035	RAL 9005
Shelf with adjustable depth	440	500 - 900	WZ-3074-83-00-011	WZ-3074-83-00-161
	440	350 - 600	WZ-3393-20-00-011	—

**Package:** 1 pc.



Shelf with adjustable depth

## KEYBOARD DRAWERS

### Drawer with touchpad keyboard

Drawer 19" x 1 U x 400 mm with compact touchpad keyboard. Drawer equipped with lock with cylindric insert.

**Material of drawer:**

Sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

**Scope of delivery:**

Drawer with keyboard set, fixing accessories for assembling into the cabinet.

Package	Colour	Catalogue number
1 pc.	RAL 7035	WZ-SB78-00-01-011
	RAL 9005	WZ-SB78-00-01-161



Drawer 19" x 1 U with touchpad keyboard

### Drawer with trackball keyboard

Drawer 19" x 1 U x 400 mm with compact trackball keyboard. Drawer equipped with lock with cylindric insert.

**Material of drawer:**

Sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

**Scope of delivery:**

Drawer with keyboard set, fixing accessories for assembling into the cabinet.

Package	Colour	Catalogue number
1 pc.	RAL 7035	WZ-SB78-00-02-011
	RAL 9005	WZ-SB78-00-02-161



Drawer 19" x 1 U with trackball keyboard

### Drawer with keyboard without pointing device

Drawer 19" x 1 U x 400 mm with compact keyboard without pointing device. Drawer equipped with lock with cylindric insert.

**Material of drawer:**

Sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

**Scope of delivery:**

Drawer with keyboard set, fixing accessories for assembling into the cabinet.

Package	Colour	Catalogue number
1 pc.	RAL 7035	WZ-SB78-00-03-011
	RAL 9005	WZ-SB78-00-03-161



Drawer 19" x 1 U with keyboard without pointing device

### Universal drawer without keyboard

Drawer 19" x 1 U x 400 mm without keyboard. Internal dimensions: 378 x 262 x 36 mm. Drawer equipped with lock with cylindric insert.

**Material of drawer:**

Sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

**Scope of delivery:**

Drawer with fixing accessories for assembling into the cabinet.

Package	Colour	Catalogue number
1 pc.	RAL 7035	WZ-SB78-00-04-011
	RAL 9005	WZ-SB78-00-04-161



Universal drawer 19" x 1 U without keyboard

## KEYBOARD HOUSING FOR SIZE2 PC CABINET

The housing makes it possible to maintain IP 64 of the cabinet at open door of the keyboard part.

**Material:**

1.5 mm tight sheet steel powder painted in light grey (RAL 7035) or black (RAL 9005).

**Scope of delivery:**

Keyboard housing with fixing accessories.

Package	Colour	Catalogue number
1 pc.	RAL 7035	WZ-3259-08-00-011
	RAL 9005	WZ-3259-08-00-161



## DOCUMENT DRAWER

Equipped with lock with patent insert.  
19" assembly, height 2 U, depth 465 mm.  
Internal dimensions: 460 x 413 x 55 mm.

**Material:**

1.5 mm thick sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

**Scope of delivery:**

Drawer with fixing accessories for assembling into the mounting profiles.

Package	Colour	Catalogue number
1 pc.	RAL 7035	WZ-SB67-00-00-011
	RAL 9005	WZ-SB67-00-00-161



## DOCUMENT POCKET

For fixing on the cabinet's door.  
A4 size, light grey (RAL 7035) or black (RAL 9005) colour.

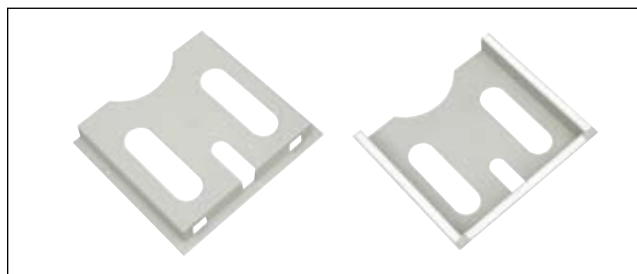
**Material:**

Plastic

**Scope of delivery:**

Drawer with self-adhesive fixing tape.

Package	Colour	Catalogue number
1 pc.	RAL 7035	WZ-SB00-40-00-011
	RAL 9005	WZ-SB00-40-00-161



## BRUSH PANELS

Make easier to organise cables in data cabinets.  
19" assembly, height 1 U.  
With 341 x 21.5 mm brush opening.  
Support plate can be used in order to keep cross cables which are in excess.

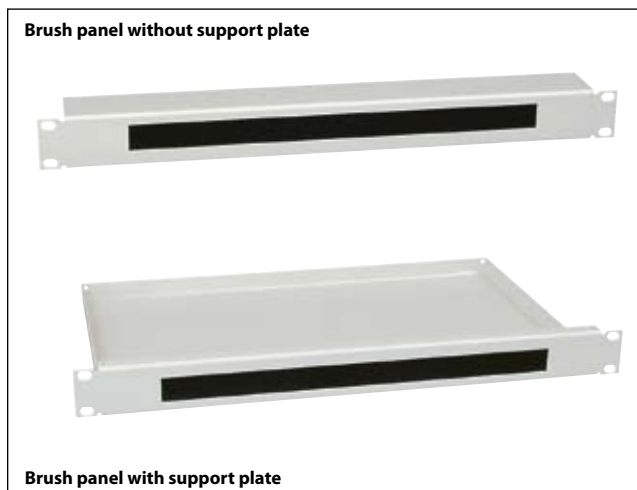
**Material:**

1.5 mm thick sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

**Scope of delivery:**

Brush panel with fixing accessories for assembling into the 19" mounting profiles.

Type of panel	Depth [mm]	Package	Colour	Catalogue number
Without support plate	50	1 pc.	RAL 7035	WZ-SB63-00-01-011
			RAL 9005	WZ-SB63-00-01-161
With support plate	300	1 pc.	RAL 7035	WZ-SB63-00-02-011
			RAL 9005	WZ-SB63-00-02-161



## 19" BLANKING PLATES

For covering empty 19" space.

**Material:**

1.5 mm thick sheet steel or 0.8 mm thick sheet aluminium textured powder painted in light grey (RAL 7035) or black (RAL 9005).

**Scope of delivery:**

Blanking plate with fixing accessories.

Height [U = 44.45 mm]	Catalogue number		
	Steel blanking plate RAL 7035	Steel blanking plate RAL 9005	Aluminium blanking plate RAL 7035
1 U	WZ-SB00-33-01-011	WZ-SB00-33-01-161	WZ-SB00-32-01-011
1,5 U	WZ-SB00-33-15-011	WZ-SB00-33-15-161	WZ-SB00-32-15-011
2 U	WZ-SB00-33-02-011	WZ-SB00-33-02-161	WZ-SB00-32-02-011
3 U	WZ-SB00-33-03-011	WZ-SB00-33-03-161	WZ-SB00-32-03-011
4 U	WZ-SB00-33-04-011	WZ-SB00-33-04-161	WZ-SB00-32-04-011
5 U	WZ-SB00-33-05-011	WZ-SB00-33-05-161	WZ-SB00-32-05-011
6 U	WZ-SB00-33-06-011	WZ-SB00-33-06-161	WZ-SB00-32-06-011

Package: 1 pc.



## VERTICAL MASKING PANELS

For covering space between front 19" mounting profiles and cabinet's sides (see pictures on pages 23).

**Material:**

1.5 mm thick sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

**Scope of delivery:**

Two vertical masking panels with fixing accessories.

Height [U = 44.45 mm]	Catalogue number		
	Vertikal masking panels for SZB, OTS1 and SZB PC cabinets RAL 7035	Vertikal masking panels for SZB SE and SZB SEI cabinets RAL 7035	Vertikal masking panels for SZB SE and SZB SEI cabinets RAL 9005
47 U	—	WZ-1718-59-01-011	WZ-1718-59-01-161
45 U	WZ-SB19-00-01-011	WZ-1718-59-02-011	WZ-1718-59-02-161
42 U	WZ-SB19-00-02-011	WZ-1718-59-03-011	WZ-1718-59-03-161
39 U	WZ-SB19-00-13-011	—	—
36 U	WZ-SB19-00-05-011	WZ-1718-59-05-011	—
33 U	WZ-SB19-00-14-011	—	—
30 U	WZ-SB19-00-15-011	—	—
27 U	WZ-SB19-00-16-011	—	—
24 U	WZ-SB19-00-08-011	WZ-1718-59-07-011	—
18 U	WZ-SB19-00-09-011	—	—
15 U	WZ-SB19-00-10-011	—	—

Package: 1 set = 2 pcs.



Vertical masking panels for cabinets 800 mm wide



## CABLE CLAMPS

**Intended for fixing:**

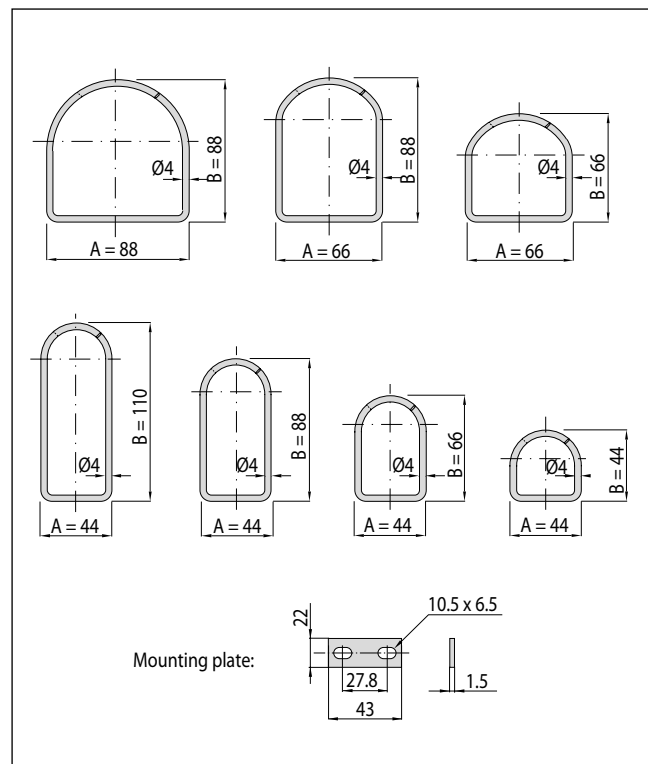
- on cable management bars (see picture below),
- on mounting profiles.




**Material:**

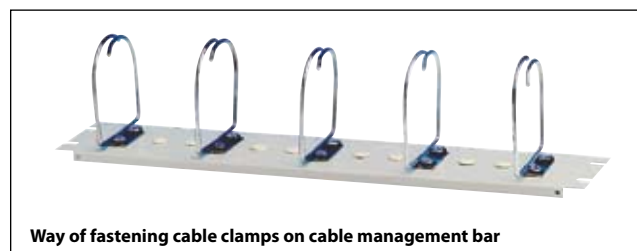
Zn coated steel.

**Scope of delivery:**

The cable clamps are sold in sets: 5 pcs. of clamps and fixing accessories.



Type of cable clamp	Package	Dimensions A x B [mm]	Catalogue number
	5 pcs.	88 x 88	WZ-SB52-00-01-000
		66 x 88	WZ-SB52-00-02-000
		66 x 66	WZ-SB52-00-03-000
		44 x 110	WZ-SB52-00-04-000
		44 x 88	WZ-SB52-00-05-000
		44 x 66	WZ-SB52-00-06-000
		44 x 44	WZ-SB52-00-07-000
	5 pcs.	88 x 88	WZ-SB53-00-01-000
		66 x 88	WZ-SB53-00-02-000
		66 x 66	WZ-SB53-00-03-000
		44 x 110	WZ-SB53-00-04-000
		44 x 88	WZ-SB53-00-05-000
		44 x 66	WZ-SB53-00-06-000
		44 x 44	WZ-SB53-00-07-000
	5 pcs.	88 x 88	WZ-SB54-00-01-000
		66 x 88	WZ-SB54-00-02-000
		66 x 66	WZ-SB54-00-03-000
		44 x 110	WZ-SB54-00-04-000
		44 x 88	WZ-SB54-00-05-000
		44 x 66	WZ-SB54-00-06-000
		44 x 44	WZ-SB54-00-07-000



## CABLE MANAGEMENT BARS

19" assembly, height: 1 U or 2 U.

With slots for mounting cable clamps.

**Material:**

1.0 mm thick sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

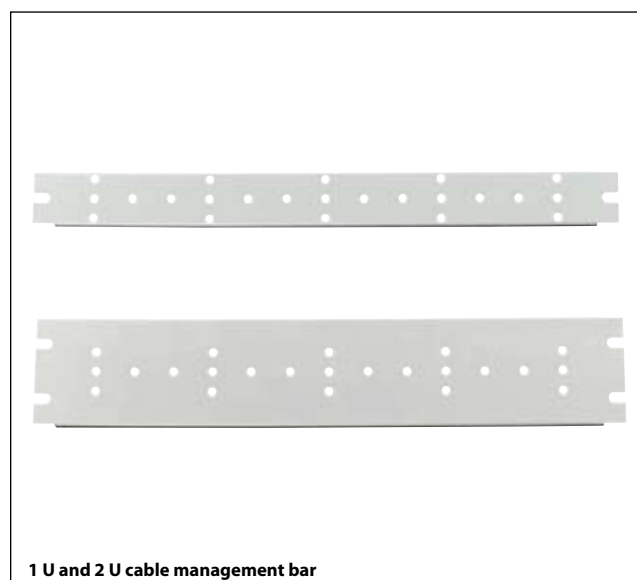
**Scope of delivery:**

Cable management bar, 8 rubber covers for not used slots, fixing accessories.

**Note:**

Cable clamps should be ordered separately.

Height [U = 44.45 mm]	Package	Colour	Catalogue number
1 U	1 pc.	RAL 7035	WZ-SB55-00-00-011
		RAL 9005	WZ-SB55-00-00-161
2 U	1 pc.	RAL 7035	WZ-SB56-00-00-011
		RAL 9005	WZ-SB56-00-00-161



## MOUNTING PROFILES, MOUNTING ANGLES

For installing 19" equipment in cabinets SZB, OTS1, SZB PC, SZE2 PC, SZB SE, SZB SEI and DSR. In cabinets 600 mm wide, mounting profiles bars are fixed directly to the frame; in cabinets 800 mm wide, in order to achieve 19" spacing, it is necessary to use outriggers.

Note: Mounting profiles and mounting angles for wall-mounted cabinets are described on page 64.

### Material:

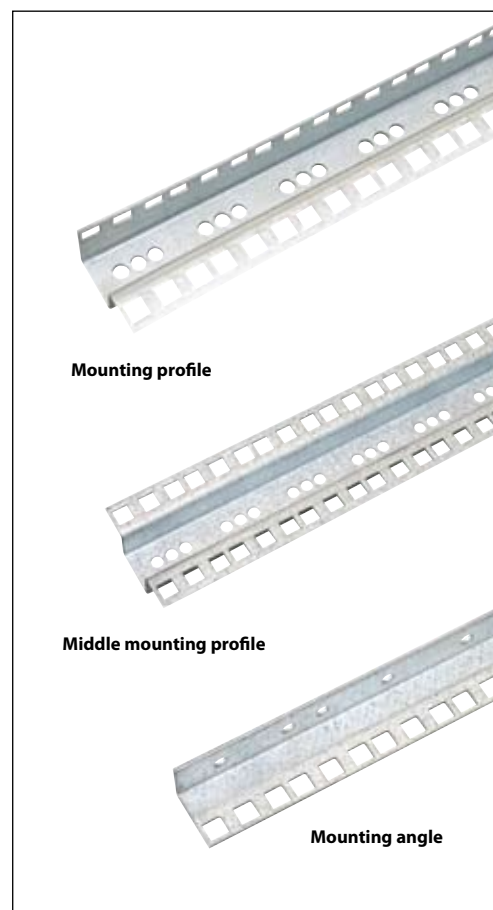
2.0 mm thick Al-Zn coated sheet steel (mounting profile, middle mounting profile, mounting angle) and 3.0 mm for reinforced mounting angle.

### Scope of delivery:

Mounting bar or mounting angle without fixing accessories.

Height [U = 44.45 mm]	Catalogue number			
	Mounting profile	Middle mounting profile	Mounting angle	Reinforced mounting angle
47 U	WZ-1391-04-01-000	WZ-SB00-53-13-000	WZ-SB00-30-13-000	WZ-1600-30-01-000
45 U	WZ-SB00-01-01-000	WZ-SB00-53-01-000	WZ-SB00-30-01-000	WZ-1600-30-02-000
42 U	WZ-SB00-01-02-000	WZ-SB00-53-02-000	WZ-SB00-30-02-000	WZ-1600-30-03-000
40 U	WZ-SB00-01-03-000	WZ-SB00-53-03-000	WZ-SB00-30-03-000	WZ-1600-30-04-000
39 U	WZ-SB00-01-13-000	WZ-SB00-53-14-000	WZ-SB00-30-14-000	WZ-1600-30-05-000
38 U	WZ-SB00-01-04-000	WZ-SB00-53-04-000	WZ-SB00-30-04-000	WZ-1600-30-06-000
36 U	WZ-SB00-01-05-000	WZ-SB00-53-05-000	WZ-SB00-30-05-000	WZ-1600-30-07-000
33 U	WZ-SB00-01-14-000	WZ-SB00-53-15-000	WZ-SB00-30-15-000	WZ-1600-30-08-000
32 U	WZ-SB00-01-06-000	WZ-SB00-53-06-000	WZ-SB00-30-06-000	WZ-1600-30-09-000
30 U	WZ-SB00-01-15-000	—	WZ-SB00-30-16-000	WZ-1600-30-10-000
28 U	WZ-SB00-01-07-000	WZ-SB00-53-07-000	WZ-SB00-30-07-000	WZ-1600-30-11-000
27 U	WZ-SB00-01-16-000	—	WZ-SB00-30-17-000	WZ-1600-30-12-000
24 U	WZ-SB00-01-08-000	WZ-SB00-53-08-000	WZ-SB00-30-08-000	WZ-1600-30-13-000
21 U	WZ-SB00-01-17-000	—	WZ-SB00-30-18-000	WZ-1600-30-14-000
18 U	WZ-SB00-01-09-000	WZ-SB00-53-09-000	WZ-SB00-30-09-000	WZ-1600-30-15-000
15 U	WZ-SB00-01-10-000	WZ-SB00-53-10-000	WZ-SB00-30-10-000	WZ-1600-30-16-000
12 U	WZ-SB00-01-11-000	WZ-SB00-53-11-000	WZ-SB00-30-11-000	WZ-1600-30-17-000
10 U	WZ-SB00-01-12-000	WZ-SB00-53-12-000	WZ-SB00-30-12-000	WZ-1600-30-18-000

Package: 1 pc.



## OUTRIGGER

For fixing mounting profiles in cabinets 800 mm wide, in order to achieve 19" or 21" spacing. Depending on the cabinet design, two or three outriggers are required for assembling one mounting profile.

### Material:

2.0 mm thick zinc-coated sheet steel.

### Scope of delivery:

One outrigger with fixing accessories to install the outrigger to the mounting profile and cabinet's frame.

For cabinets	Spacing	Package	Catalogue number
SZB, OTS1, SZB PC, SZB SE, SZB SEI	19"	1 pc.	WZ-3752-72-00-000
	21"	1 pc.	WZ-1600-27-00-000



## FIXING ACCESSORIES SET

For fixing appliances to the mounting profiles. Offered in sets: 1 set = 10 pcs. of each element.

Description of set	Package	Catalogue number
Screw M6x16 - 10 pcs. Cage nut M6 - 10 pcs. Plastic washer - 10 pcs.	1 set	T1Z-00-0002



## CROSS BAR

Fixed to the rear mounting profiles in 19" cabinets.  
For installing cables or supporting appliances in the cabinet.  
With holes for M6 bolts.

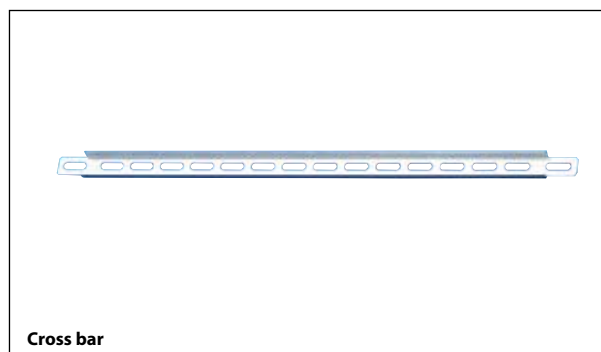
**Material:**

1.5 mm thick zinc-coated sheet steel.

**Scope of delivery:**

Cross bar with fixing accessories.

Length [mm]	Package	Catalogue number
500	1 pc.	WZ-SB00-28-01-000
335	1 pc.	WZ-SB00-28-02-000



## GUIDE BAR

Fixed horizontally to the front and rear mounting profile, parallel to the cabinet's side.  
For supporting appliances in the cabinet.  
With holes for M6 bolts.

**Material:**

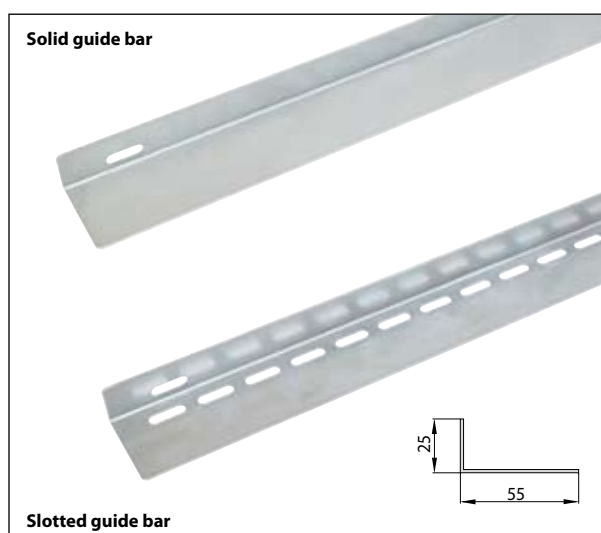
1.5 mm thick zinc-coated sheet steel.

**Scope of delivery:**

Guide bar (solid or perforated) with fixing accessories.

Length [mm]	Catalogue number	
	Solid guide bar	Slotted guide bar
650	WZ-SB00-26-01-000	WZ-SB00-27-01-000
550	WZ-SB00-26-02-000	WZ-SB00-27-02-000
450	WZ-SB00-26-03-000	WZ-SB00-27-03-000
350	WZ-SB00-26-04-000	WZ-SB00-27-04-000
250	WZ-SB00-26-05-000	WZ-SB00-27-05-000

Package: 1 pc.



## CABLE HOLDER

Fixed horizontally to the front and rear mounting profiles, parallel to the cabinet's side.  
For installing cable bundle.  
With holes for M6 bolts.

**Material:**

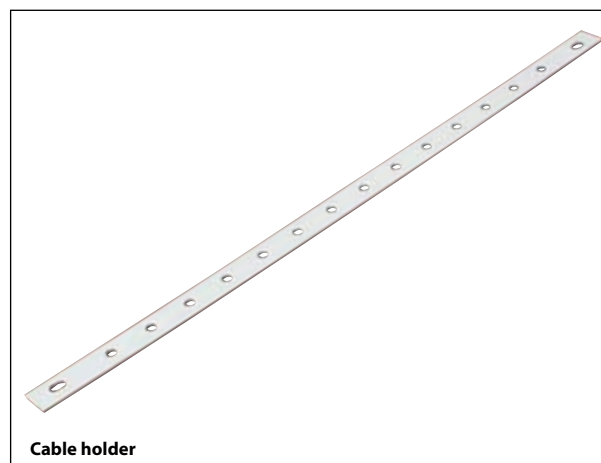
3.0 mm thick zinc-coated sheet steel.

**Scope of delivery:**

Cable holder with fixing accessories.

Length [mm]	Catalogue number
500	WZ-SB00-29-01-000
410	WZ-SB00-29-02-000
335	WZ-SB00-29-03-000
310	WZ-SB00-29-04-000
210	WZ-SB00-29-05-000

Package: 1 pc.



## SWING FRAME

For installing 19" equipment in SZB or OTS1 cabinets 800 mm wide.

Position of frame: middle

Maximum depth of appliances mounted into the frame: 350 mm

The standard design of SZB and OTS1 cabinets makes it possible to use swing frames for full usable height of the cabinet (see cabinet's heights in the chart below).

When smaller swing frames are used, it is necessary to use additional C-profiles.

### Material:

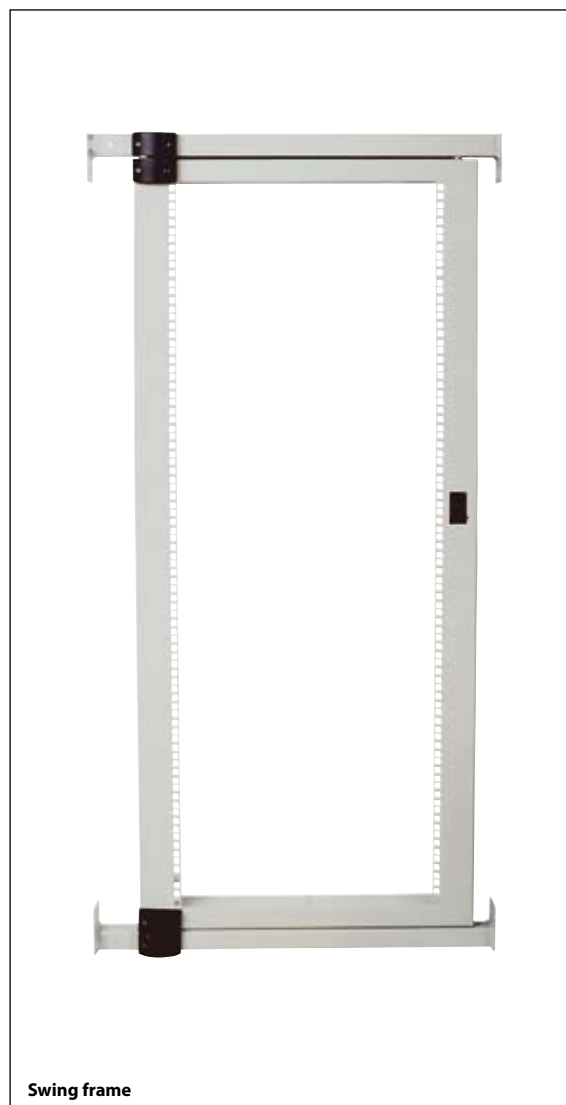
Sheet steel textured powder painted in light grey (RAL 7035).

### Scope of delivery:

Swing frame set with fixing accessories.

Swing frame's height [U = 44.45 mm]	For cabinet's height [U = 44.45 mm]	Catalogue number
10 U	15 U	WZ-SB23-00-03-011
12 U	15 U, 18 U	WZ-SB23-00-04-011
14 U	18 U	WZ-SB23-00-05-011
16 U	21 U	WZ-SB23-00-06-011
18 U	21 U, 24 U	WZ-SB23-00-07-011
20 U	24 U	WZ-SB23-00-08-011
22 U	27 U	WZ-SB23-00-09-011
24 U	27 U, 30 U	WZ-SB23-00-10-011
26 U	30 U	WZ-SB23-00-11-011
28 U	33 U	WZ-SB23-00-12-011
30 U	33 U, 36 U	WZ-SB23-00-13-011
32 U	36 U	WZ-SB23-00-14-011
34 U	39 U	WZ-SB23-00-15-011
36 U	39 U, 42 U	WZ-SB23-00-16-011
38 U	42 U	WZ-SB23-00-17-011
40 U	45 U	WZ-SB23-00-18-011

Package: 1 pc.



## PVC CABLE DUCTS

On customer's request, both floor-standing and wall-mounted cabinets can be equipped with PVC cable ducts (in accordance with specifications provided by customer or prepared by ZPAS). Cable ducts are available in the following dimensions (WxD): 60x120, 60x100, 60x80, 40x60, 40x40 mm.

### C-profile for stiffening PVC cable ducts

Fixed together with cable duct to the frame's cross bars.

#### Material:

1.5 mm sheet steel textured powder painted in light grey (RAL 7035).

#### Scope of delivery:

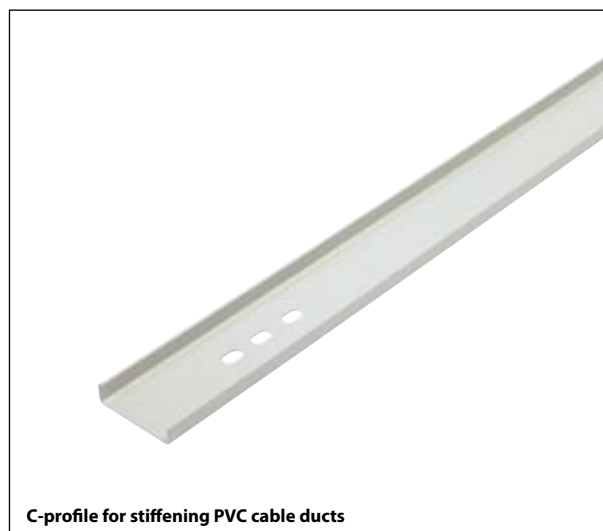
C-profile with fixing accessories.

Height [U = 44.45 mm]	Catalogue number	
	C-profile for PVC cable duct stiffening, 60 mm wide	C-profile for PVC cable duct stiffening, 40 mm wide
47 U	WZ-SB00-31-25-011	WZ-SB00-31-31-011
45 U	WZ-SB00-31-01-011	WZ-SB00-31-13-011
42 U	WZ-SB00-31-02-011	WZ-SB00-31-14-011
40 U	WZ-SB00-31-03-011	WZ-SB00-31-15-011
39 U	WZ-SB00-31-26-011	WZ-SB00-31-32-011
38 U	WZ-SB00-31-04-011	WZ-SB00-31-16-011
36 U	WZ-SB00-31-05-011	WZ-SB00-31-17-011
33 U	WZ-SB00-31-27-011	WZ-SB00-31-33-011
32 U	WZ-SB00-31-06-011	WZ-SB00-31-18-011
30 U	WZ-SB00-31-28-011	WZ-SB00-31-34-011
28 U	WZ-SB00-31-07-011	WZ-SB00-31-19-011
27 U	WZ-SB00-31-29-011	WZ-SB00-31-35-011
24 U	WZ-SB00-31-08-011	WZ-SB00-31-20-011
21 U	WZ-SB00-31-30-011	WZ-SB00-31-36-011
18 U	WZ-SB00-31-09-011	WZ-SB00-31-21-011
15 U	WZ-SB00-31-10-011	WZ-SB00-31-22-011

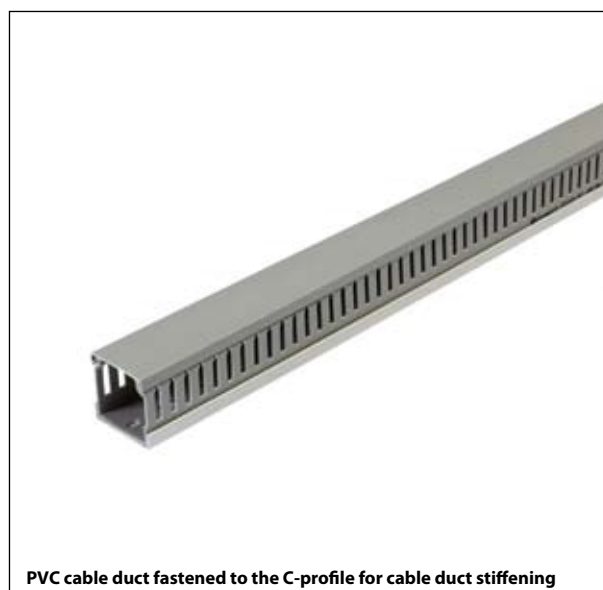
Package: 1 pc.



PVC cable ducts



C-profile for stiffening PVC cable ducts



PVC cable duct fastened to the C-profile for cable duct stiffening



PVC cable duct with a C-profile for cable duct stiffening, installed in the SZB cabinet



# PERFORATED CABLE TRAY

Designed for vertical organization of cables inside the cabinet.  
 Fixed to horizontal C-profiles at the cabinet's side walls.  
 Tray edges protected by plastic shields.  
 Width: 150 mm

**Material:**  
 1.25 mm thick sheet steel Al-Zn coated

**Scope of delivery:**  
 Cable tray with fixing accessories.

## Reference chart

Cable tray lenght [mm]	For cabinet height [U = 44,45 mm]	Catalogue number
2000	45 - 47 U	WZ-4755-20-01-000
1800	40 - 42 U	WZ-4755-20-02-000
1700	38 - 39 U	WZ-4755-20-03-000
1600	36 U	WZ-4755-20-04-000
1400	32 - 33 U	WZ-4755-20-05-000
1300	30 U	WZ-4755-20-06-000
1200	27 - 28 U	WZ-4755-20-07-000
1100	24 U	WZ-4755-20-08-000

**Package:** 1 pc.



WIRE CABLE TRAY

Designed for vertical organization of cables inside the cabinet.  
Fixed to horizontal C-profiles at the cabinet's side walls.  
Width: 150 mm

**Material:**  
Galvanized steel

**Scope of delivery:**  
Cable tray with fixing accessories.

Reference chart

Cable tray lenght [mm]	For cabinet height [U = 44.45 mm]	Catalogue number
2000	45 - 47 U	WZ-4755-25-01-000
1800	40 - 42 U	WZ-4755-25-02-000
1700	38 - 39 U	WZ-4755-25-03-000
1600	36 U	WZ-4755-25-04-000
1400	32 - 33 U	WZ-4755-25-05-000
1300	30 U	WZ-4755-25-06-000
1200	27 - 28 U	WZ-4755-25-07-000
1100	24 U	WZ-4755-25-08-000

**Package:** 1 pc.



## BAYING BOLT

For baying SZB, OTS1, SZB SE or SZB SEI cabinets in rows. In order to join 2 cabinets, a total of 4 baying bolts are required.

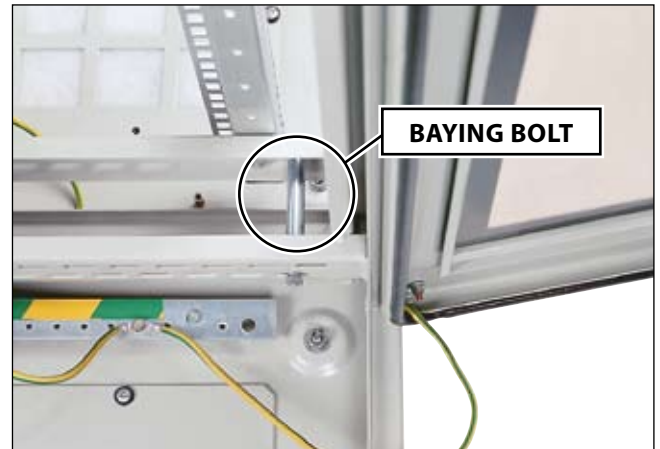
**Material:**

Galvanized steel

**Scope of delivery:**

Baying bolt - 1 pc. with nuts and washers.

Package	Catalogue number
1 pc.	WZ-SB25-00-00-000



Baying of SZB cabinets

## EARTHING BAR

For free-standing cabinets.

In the following cabinets: SZB, OTS1, SZB PC, SZB SE and SZB SEI, the earthing bar is screwed to threaded bushings placed in the bottom of the cabinet frame.

In DSR cabinet, the earthing bar is fixed onto the frame's post/profile using 2 fixing/spacer bolts.

**Material:**

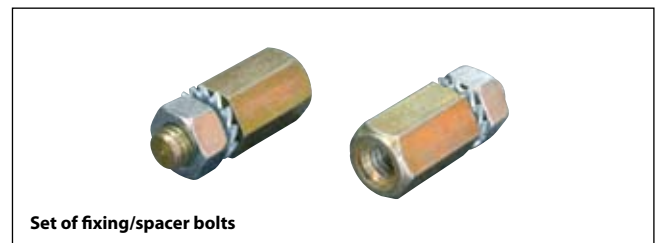
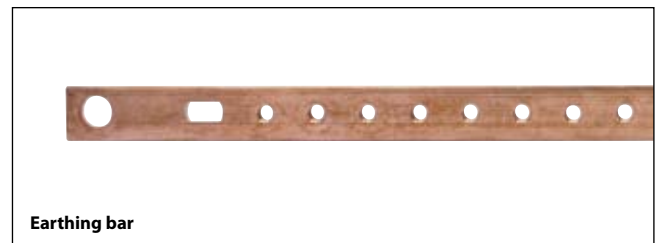
Copper

**Scope of delivery:**

Earthing bar with screws for assembling in the cabinet.

Two fixing/spacer bolts for mounting the earthing bar in DSR cabinet are to be ordered separately.

Type of element	Package	Catalogue number
Earthing bar Cu 15x5x375 mm	1 pc.	WZ-3393-11-00-000
Set of 2 fixing/spacer bolts for mounting the earthing bar in DSR cabinet	1 set	WZ-2645-15-00-000



## EARTHING CABLE SET

Insulated copper cables for joining removable elements of the cabinet with earthing bar.

Equipped with contact eyes Ø 6 mm.

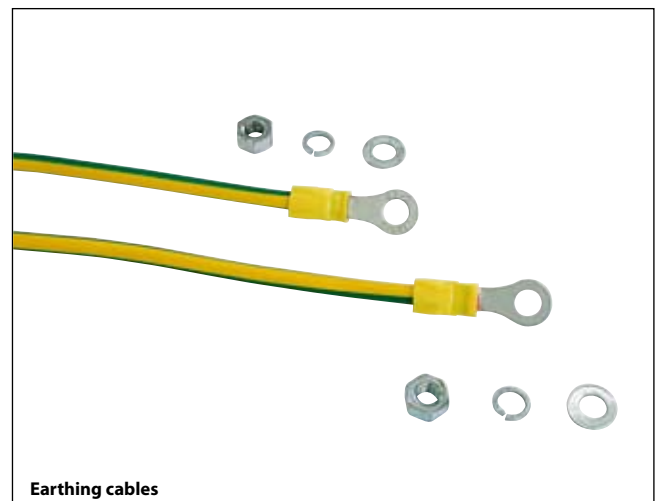
**Material:**

Copper cables 6 mm<sup>2</sup>

**Scope of delivery:**

Earthing cables are sold in sets in accordance with the chart below.

Description of set	Package	Catalogue number
Cable 300 mm long - 4 pcs. Cable 400 mm long - 2 pcs. Cable 600 mm long - 1 pc. Fixing accessories	1 set	WZ-SB12-00-01-000
Cable 300 mm long - 2 pcs. Cable 400 mm long - 2 pcs. Cable 600 mm long - 1 pc. Fixing accessories	1 set	WZ-SB12-00-02-000



## SUPPLEMENTARY ACCESORIES FOR DSR CABINETS

### Blanking plate for DSR cable opening

For concealing unused cable openings in the top and bottom plate of DSR cabinet.

One cable opening (580 x 40 mm) accommodates four blanking plates.

**Material:**

1.0 mm thick Al-Zn coated sheet steel.

**Scope of delivery:**

Blanking plate complete with self-tapping screw for fixing to the top or bottom plate of the cabinet.

Dimensions [mm]	Package	Catalogue number
145 x 70 x 6	1 pc.	WZ-2645-12-01-000



### Cable opening cover for DSR divider

For covering unused cable openings in the horizontal divider of DSR cabinets.

One blanking plate is designed for covering one or two cable openings.

**Material:**

1.0 mm thick sheet steel textured powder painted in light grey (RAL 7035).

**Scope of delivery:**

Cable opening cover with self-tapping screw for fixing to the divider.

Dimensions [mm]	Package	Catalogue number
300 x 46 x 23	1 pc.	WZ-2645-11-01-011



### Self-adhesive insert of DSR divider

The self-adhesive insert is used to seal horizontally between the dividers and the side panels within DSR colocation cabinets. This prevents foreign objects passing between compartments.

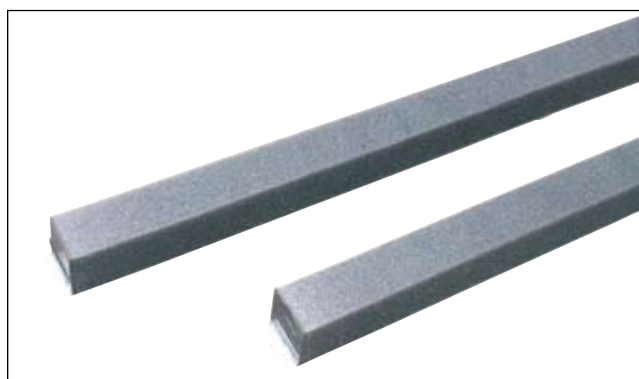
**Material:**

Polyurethane gasket 30 x 30 mm.

**Scope of delivery:**

One 2 m length is sufficient for sealing 3 dividers within colocation cabinet.

Package	Catalogue number
2 m	WZ-2645-09-00-000



## SUPPLEMENTARY ACCESORIES FOR SZU CABINETS

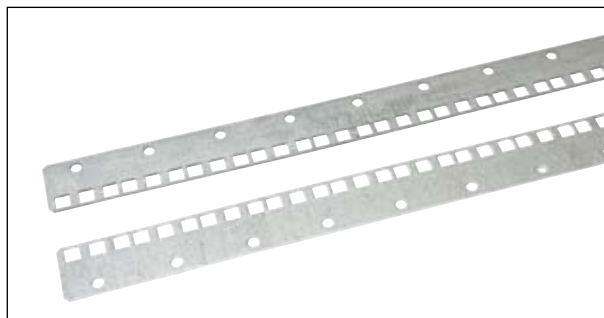
### Adapters for installing 19" appliances on 21" mounting profiles

**Material:**

2.0 mm thick sheet steel Al-Zn coated

**Scope of delivery:**

Set of 2 adapters 47 U high with fixing accessories.



Package	Catalogue number
2 pcs.	WZ-3196-27-00-000

### Roof mounted cable supports for SZU cabinet

Cable supports are screwed to the top plate of the cabinet.  
Height of the supports: 508 mm

**Material:**

3.0 mm thick sheet steel, zinc-coated

**Scope of delivery:**

Set of 2 supports including accessories for fixing in the cabinet.



For cabinet depth [mm]	Package	Catalogue number
800	2 pcs.	WZ-3034-15-00-000
600	2 pcs.	WZ-2899-40-02-000
300	2 pcs.	WZ-3196-10-00-000

### Brackets for fixing SZU cabinet to the wall

Brackets improve stability of the cabinet set against the wall.  
Brackets are screwed to the top plate of the cabinet.

**Material:**

2.0 mm thick sheet steel, powder painted in light grey (RAL 7035)

**Scope of delivery:**

Set of 2 brackets including accessories for fixing in the cabinet.



Package	Catalogue number
2 pcs.	WZ-3196-28-00-011

### Elements for anchoring the SZU cabinet to the groundwork

**Scope of delivery:**

FSA 12/50 B M10/121 FE/ZN FISCHER



Package	Catalogue number
4 pcs.	WZ-2899-73-00-000

## SUPPLEMENTARY ACCESORIES FOR SZU CABINETS

### Lifting eyes

Screwed to threaded holes in the top plate of the cabinet's frame. Eye diameter: 30 mm, thread for fastening: M12

**Material:**

Galvanised steel

**Scope of delivery:**

Lifting eyes are sold as individual items.

Package	Catalogue number
1 pc.	M1F-00-0106



## LIGHTING KIT

For floor-standing and wall-mounted cabinets.

19" assembly, usable height 1 U.

Possibility for fixing the light fitting on mounting bracket in 3 different positions.

**Material of mounting bracket:**

1.0 mm thick sheet steel, powder painted in light grey (RAL 7035) or black (RAL 9005)

**Scope of delivery:**

Electric light fitting with a fluorescent lamp 230 V, 8 W and a switch, a bracket for fixing the electric light fitting on the 19" mounting profiles, power supply cable, fixing accessories.

The power supply cable can be equipped with a micro switch that automatically switches on and off the light when the door opens and closes.

Product name	Package	Colour	Catalogue number
Lighting kit without a micro switch	1 set	RAL 7035	WZ-3074-64-00-011
		RAL 9005	WZ-3074-64-00-161
Lighting kit with a micro switch	1 set	RAL 7035	WZ-3477-11-00-011
		RAL 9005	WZ-3477-11-00-161

Lighting kit without a micro switch



Lighting kit with a micro switch



## MAINTENANCE AND CLEANING AGENTS FOR PAINTED SURFACES

Product name	Package	Catalogue number
Spray paint, colour RAL 7035	400 ml	M1D-01-0004
Spray paint, colour RAL 9005 matt	400 ml	M1D-01-0010
Maintenance and cleaning foam for painted surfaces	400 ml	M1N-02-0073



Spray paint



Maintenance and cleaning foam



## POWER STRIPS

### Characteristics:

- Optimum height of 19" strips - 1 U (44.45 mm).
- 35° rotated position of outlet box enables unlimited usage of angular plugs (possibility of fixing strip directly one over another).
- Body of the strips made of anodized aluminium profile.
- Colour of outlets and front: light grey (RAL 7035).

### Technical data:

- Voltage rating ..... 230 V AC
- Maximum current ..... 16 A
- Attach power ..... 16 A / 3600 W
- Cable ..... 3 m, black, conductor section 1.5 mm<sup>2</sup>
- Protection degree ..... IP 20
- Surge current ..... 6,5 kA

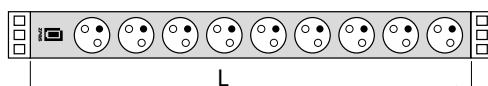
### Scope of delivery:

Power strip with brackets and set of fixing accessories.

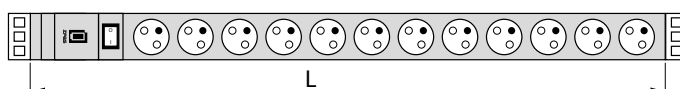
19" power strip  
with plastic  
mounting brackets



19" power strip



Power strip for fixing  
in vertical position



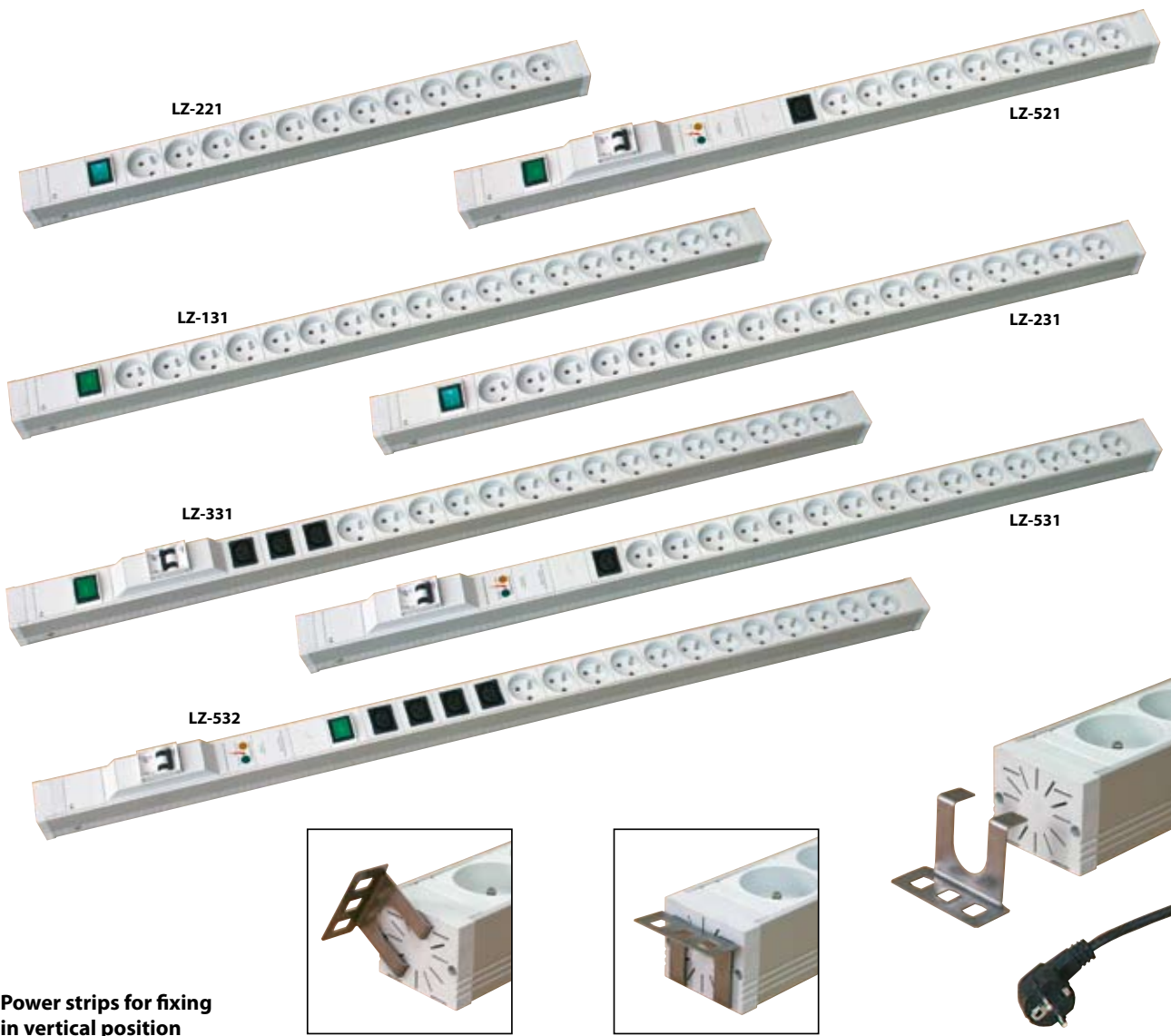
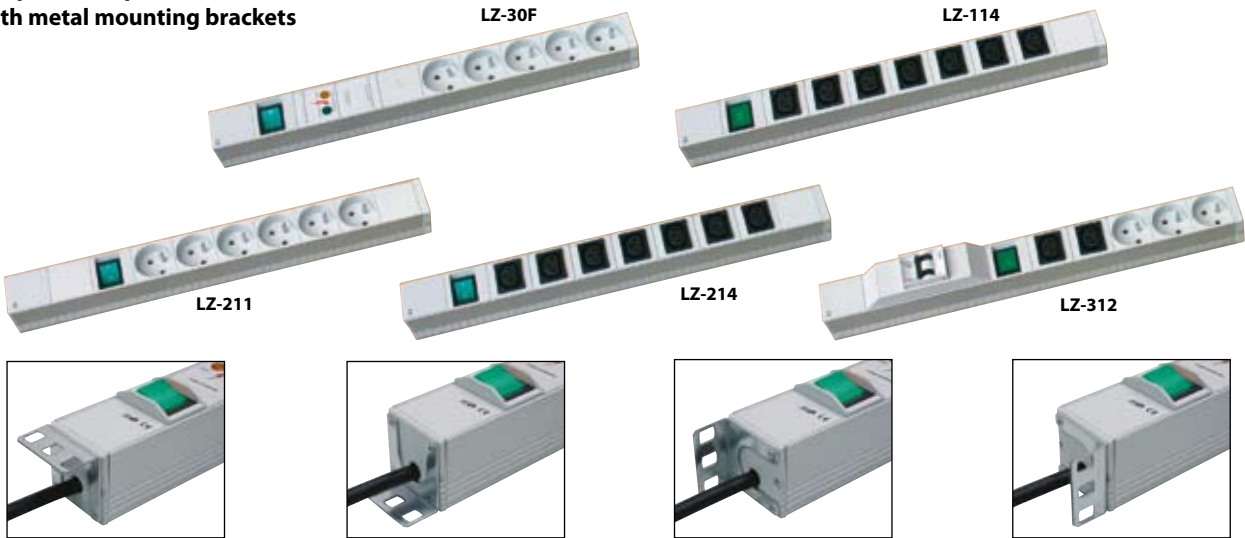
	Power strip type	Dimensions [mm]			Accessories						Catalogue number
		Length L [mm]	Width W [mm]	Depth D [mm]	Check lamp	Illuminated switch	Overvoltage protection with net filter	Miniature circuit breaker 2xC10	Number of plug-sockets type E (CEE 7/5)	Number of computer sockets IEC C14	
19" power strips	LZI-30/9	440	44	44					9		WZ-LZI30-09-00-000
	LZ-30F	440	44	44		●	●		5		WZ-LZ30-F0-00-000
	LZ-114	440	44	44	●					7	WZ-LZ11-40-00-000
	LZ-211	440	44	44		●			6		WZ-LZ21-10-00-000
	LZ-214	440	44	44		●				7	WZ-LZ21-40-00-000
	LZ-312	440	44	44	●			●	3	2	WZ-LZ31-20-00-000
Power strips for fixing in vertical position	LZ-221	660	52	44		●			12		WZ-LZ22-10-00-000
	LZ-521	830	52	44	●		●	●	9	1	WZ-LZ52-10-00-000
	LZ-131	915	52	44	●				18		WZ-LZ13-10-00-000
	LZ-231	915	52	44		●			18		WZ-LZ23-10-00-000
	LZ-331	1040	52	44	●			●	15	3	WZ-LZ33-10-00-000
	LZ-531	1040	52	44			●	●	15	1	WZ-LZ53-10-00-000
	LZ-532	1090	52	44	●		●	●	12	4	WZ-LZ53-20-00-000

Package: 1 pc.

Type of sockets								
Standard sockets			Sockets available on special request					
Type E (CEE 7/5) 230 V; 10/16 A	IEC C14 230 V; 10 A	Schuko 230 V; 10/16 A	Switzerland 230 V; 10 A	USA 125 V; 10 A	Denmark 230 V; 10 A	England 230 V; 13 A	Italy 230 V; 10/16 A	Australia 240 V; 10 A

POWER STRIPS

19" power strips  
with metal mounting brackets



Power strips for fixing  
in vertical position

## PDU-1 SWITCHED POWER STRIP

The power strip is equipped with 8 sockets. It is intended for 19" server cabinets. It is designed for 1 U enclosures because of small diameter. It is equipped with RJ 45 socket for Ethernet connection according to the SNMP protocol. Thanks to notification of SNMP traps, e-mails and sound signals, the service can be alerted in the event of exceptional occurrences. Additionally, the digital pointer informing about the power supply of connected servers is installed in the front section.

The power strip is equipped with additional software for manual monitoring of power consumption in particular ports, setting off the alarm in the event of exceeding preset conditions.

**Additionally, the strip makes it possible to monitor all supplying ports via a web browser or attached software.**



Package	Colour	Catalogue number
1 pc.	RAL 9005	T1Z-01-0004

Basic parameters	
Installation	horizontally installed in 19" racks
Current meter	digital true RMS
Power monitor	meter, Web, SNMP, free bundle software
Remote power control	Web, SNMP
Audible alarm	2 Phase, warning and overload
Event alert	e-mail, trap SNMP, audible alarm
Protection	circuit breaker 16 A
Output	8 sockets IEC320 C13
Input	IEC320 C20 attached power cord, 3 m
Communication	
Ethernet LED	1 yellow LED
Status LED	1 green LED
Power LED	8 green LED
Power monitor	RJ45
Power measurement	digital meter; range: 0-20 A
Metering range	resolution: 0.1 A
Operation and environment	
Input voltage	230 V
Frequency	50/60 Hz (full range)
Max. output current	16 A
Temperature	0-40 °C
Humidity	0-90%
Size	90 x 432 x 44 mm
Weight	3 kg

VOLTAGE DISTRIBUTION PANEL

Universal 19" enclosure for modular devices.  
In the standard version equipped with DIN rail and housing with 402.5 x 45.5 mm opening.

Dimensions:

- height:..... 133 mm (3 U),
- width: ..... 19" (internal width: 446 mm),
- depth: ..... 60 mm

**Capacity of panel** - maximum number of built-in S-type modules (width of module 17.5 mm): 22 pcs.

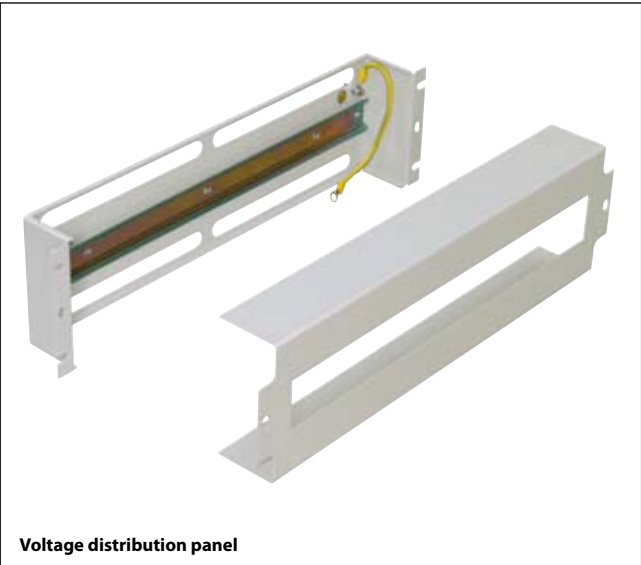
Material:

1.5 mm thick sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

Scope of delivery:

- In the standard version, panels are sold as empty enclosures, complete with:
- mounting base,
  - DIN rail,
  - housing,
  - fixing accessories.

Package	Colour	Catalogue number
1 pc.	RAL 7035	WZ-PS3U-00-00-011
	RAL 9005	WZ-PS3U-00-00-161



Voltage distribution panel



On individual request, the panel can be fitted with electrical equipment in accordance with technical documentation prepared by ZPAS or by the customer.

## PW FAN UNITS - 19" ASSEMBLY

Fan units 1 U high, intended for assembly on 19" mounting profiles or in 19" swing frames.

In the standard version, they are equipped with between 2 and 6 fans, an illuminated switch and a fuse.

PW fan units can be controlled by thermostat or microprocessor panel for fan control.

### Technical data:

Parameter	Type of fan unit			
	PW-1.2	PW-1.3	PW-2.4 PW-3.4	PW-2.6 PW-3.6
Power supply	230 V, 50 Hz			
Rated current [A]	0.24	0.36	0.48	0.72
Number of fans	2	3	4	6
Power rating [W]	30	45	60	90
Capacity [m³/h]	320	480	640	960
Ambient temperature [°C]	from -20 to +70			
Relative humidity [%]	from 20 to 80			
Protection degree	IP 20			
Electric shock protection	neutralization			

### Material of enclosure:

Rear part - 1.5 mm thick sheet steel

Front panel - 3.0 mm thick sheet aluminium

### Enclosure colour:

Light grey (RAL 7035) or black (RAL 9005)

### Scope of delivery:

Fan unit with power cable (without plug) and fixing accessories.

Type of fan unit	Possibility of controlling fan units by		Catalogue number	
	KTS thermostat*	microprocessor panel for fan control**	RAL 7035	RAL 9005
PW-1.2	●		WZ-PW12-00-00-011	WZ-PW12-00-00-161
PW-1.3	●		WZ-PW13-00-00-011	WZ-PW13-00-00-161
PW-2.4	●	●	WZ-PW24-A0-00-011	WZ-PW24-A0-00-161
PW-2.6	●		WZ-PW26-00-00-011	WZ-PW26-00-00-161
PW-3.4	●		WZ-PW34-00-00-011	WZ-PW34-00-00-161
PW-3.6	●		WZ-PW36-00-00-011	WZ-PW36-00-00-161

Package: 1 pc.

\*) Thermostat - see page 102

\*\*) Microprocessor panels for fan control - see pages 104-105

### Fans used in fan units:

PW, PWD and PD fan units are provided with high quality fans with ball bearings.

### Technical data of one fan:

- voltage rating..... 230 V
- frequency ..... 50 Hz
- power rating..... 22 W
- rated current ..... 0.14 A
- speed of rotation ..... 2 600 1/min
- level of noise ..... about 40 dB
- pressure ..... 75 Pa
- capacity ..... 162 m³/h
- durability ..... min. 50 000 h
- dimensions..... 119x119x38 mm



PW-1.2



PW-1.3



PW-2.4



PW-2.6



PW-3.4



PW-3.6



## PWD AND PD ROOF FAN UNITS

PWD-4W and PWD-2W fan units are intended for assembly to 380 x 380 mm openings which are located in the top plates of SZB, OTS1, SZB PC, SZB SE and SZB SEI cabinets.

The PD-2W fan unit can be assembled to the 380 x 210 mm opening in the top plate of the SZB SE and SZB SEI cabinet.

In the standard version, the units are equipped with 2 or 4 fans, an illuminated switch and a safety device.

PWD-4W fan units can be controlled by thermostat or microprocessor panel for fan control.

PWD-2W and PD-2W fan units can be controlled only by thermostat.

### Technical data:

Parameter	Typ panelu		
	PWD-4W	PWD-2W	PD-2W
Power supply	230 V, 50 Hz		
Rated current [A]	0,48	0,24	0,24
Number of fans	4	2	2
Power rating [W]	60	30	30
Capacity [m³/h]	640	320	320
Ambient temperature [°C]	from -20 to +70		
Relative humidity [%]	from 20 to 80		
Protection degree	IP 20 (refers to fan units mounted in the cabinet)		
Electric shock protection	neutralization		

### Material of enclosure:

PWD-4W and PWD-2W fan units - plastic

PD-2W fan unit - sheet steel

### Enclosure colour:

Light grey (RAL 7035) or black (RAL 9005)

### Scope of delivery:

Fan unit with power cable (without plug) and fixing accessories.



PWD-4W



PWD-2W



PD-2W

Type of fan unit	Number of fans	For opening's dimensions [mm]	Possibility of controlling fan units by		Catalogue number	
			KTS thermostat*	microprocessor panel for fan control**	RAL 7035	RAL 9005
PWD-4W	4	380 x 380	●	●	WN-0200-06-01-011	WN-0200-06-01-161
PWD-2W	2	380 x 380	●		WN-0200-07-01-011	WN-0200-07-01-161
PD-2W	2	380 x 210	●		WN-0200-03-00-011	WN-0200-03-00-161

Package: 1 pc.

\*) Thermostat - see page 102

\*\*) Microprocessor panels for fan control - see pages 104-105



# THERMOSTAT

## Application:

Thermostats are used for controlling fan units, heaters and heat exchangers; they can also be used as signal generators for monitoring the internal temperature of the enclosure.

## Technical data:

- Sensor element:  
thermal bimetal
- Temperature range:  
0-60 °C, hysteresis ca. 7 °C.
- Contact types:  
snap action contact
- Power carrying capacity:  
6 A (1) 250 V AC
- Radio frequency interference:  
N (according to VDE 0875)

## Scope of delivery:

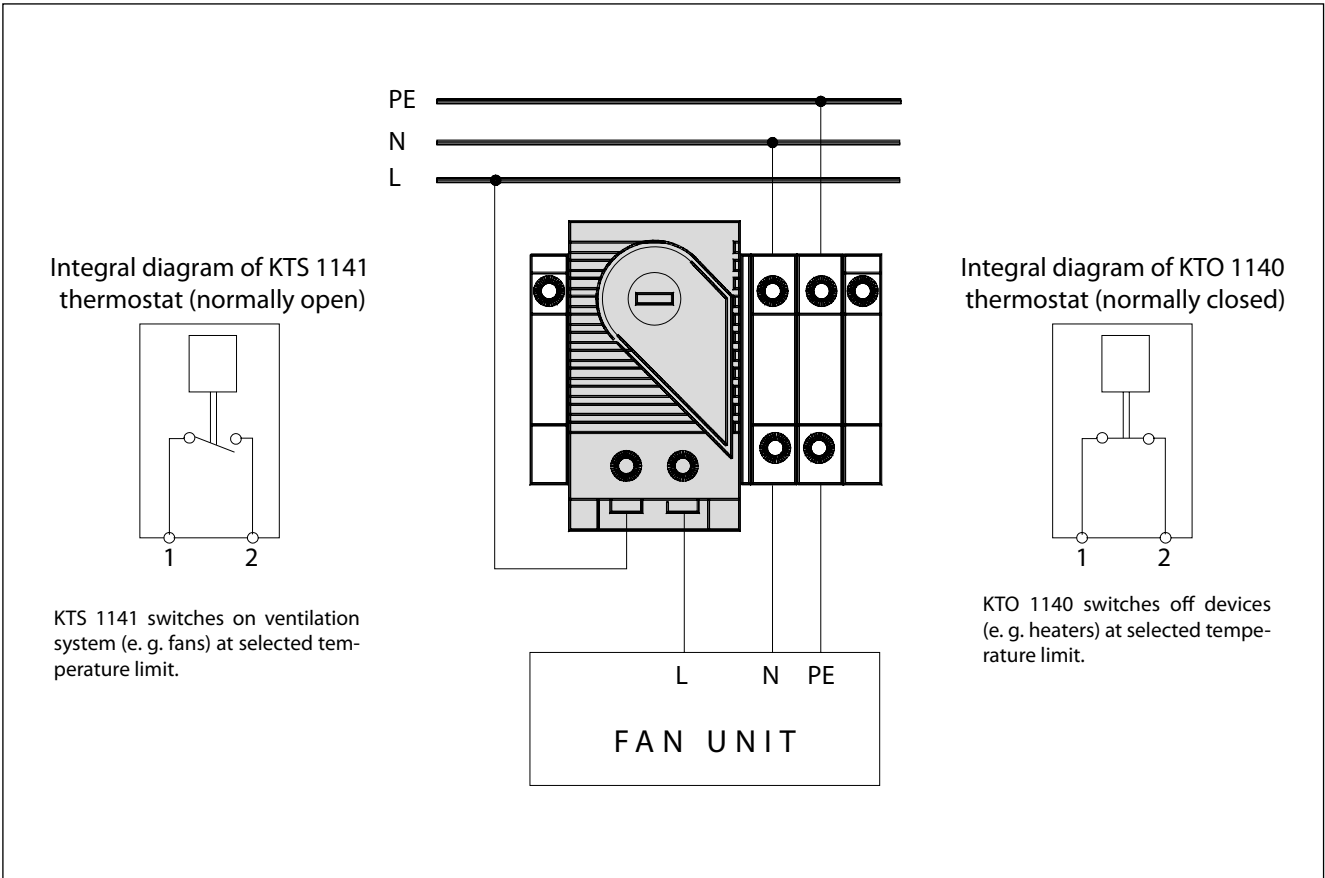
- KTS 1141 or KTO 1140 thermostat,
- DIN rail,
- two holders,
- two screw clamps.



KTS 1140 - thermostat normally open

Type of thermostat	Colour of handwheel	Package	Catalogue number
KTO 1140 - normally closed	●	1 pc.	WN-0201-01-00-000/A
KTS 1141 - normally open	●	1 pc.	WN-0201-02-00-000/A

## Connection diagram



HYGROSTAT

Application:

Electric regulator of humidity controls air humidity, switches on fans, heaters or air conditioning units.

Technical data:

Measuring range:

50-100 % of relative humidity.

Measuring accuracy:

±3 % of relative humidity.

Operating range:

50-90 % of relative humidity.

Deviation of switching referred to 50 % of relative humidity:

about 4 % of relative humidity.

Maximum voltage:

250 V AC.

Maximum load:

100 mA 20 V DC/AC.

Maximum load:

resistive 5 A, 230 V,

inductive cos q = 0.8: 0.2 A 230 V AC,

inductive L/R = 3 ms: 1 A to 50 V DC,  
0.5 A to 75 V DC.

Scope of delivery:

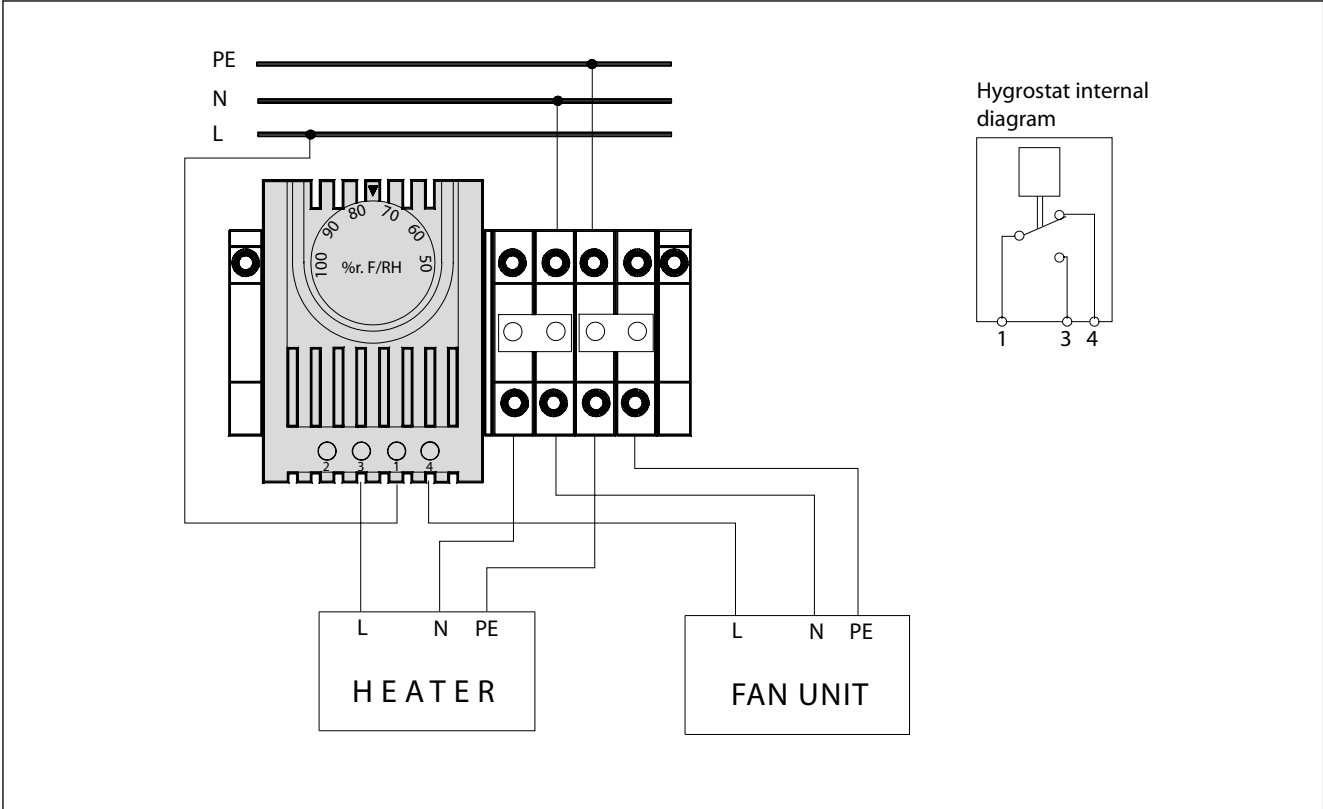
- hygrostat MFR 012i,
- DIN rail,
- two holders,
- two screw clamps.



MFR 012i hygrostat

Hygrostat	Package	Catalogue number
MFR 012i	1 pc.	WN-0201-03-00-000

Connection diagram



## MPSK G0 MICROPROCESSOR PANEL FOR FAN CONTROL

### Application:

Microprocessor panel for fan control is designed for measurement, control and automatic cabinet temperature maintenance at the pre-set threshold in 19" cabinets.

### Principle of operation:

Panel temperature sensor continuously monitors and compares current temperature with pre-set threshold value, and causes switch on the fans of alternating current in four sequences.

### Function possibilities:

- continuous temperature measurement,
- automatic fan selection for maintenance of pre-set parameters,
- possibility of service from PC by using RS 232 interface (data transmission in both directions),
- memory storage of pre-set parameters in case of power supply interruption,
- priority signalling (ex. alarm signal) on RS 232 interface in the event of switched all fans sequences (LED display blinks).

### Scope of delivery:

Microprocessor panel for fan control, temperature sensor with 2 m cable, fixing accessories.

**Software for communication with the MPSK G0 panel via a serial port can be downloaded from our web site at [www.zpas.pl](http://www.zpas.pl)**

Product name	Package	Colour	Catalogue number
MPSK G0 microprocessor panel for fan control with temperature sensor	1 set	RAL 7035	WZ-SB66-00-00-011
		RAL 9005	WZ-SB66-00-00-061

### Technical data:

Temperature measurement:

- measurement range from +5 °C to +80 °C
- indication resolution  $\pm 1$  °C
- measuring accuracy  $\pm 1$  °C

Setting parameters:

- control range of pre-set temperature threshold value from +5 °C to +80 °C
- tolerance range from the temperature threshold value from +1 °C to +10 °C
- delay range of switching on/off fans from 1 s to 99 s
- recovery time from the setting function to measurement: 10 s.

Displaying of measuring parameters:

Two-digit module LED:

- digits' height 14 mm
- green colour
- improved quality

Housing form:

- 19" panel 1 U height, light grey colour (RAL 7035) or black (RAL 9005).

Communication protocol with computer:

Parameters of RS 232 interface:

- transmission speed rate 9600 b/s
- 8 bits, without even parity bit
- 1 stop bit

Temperature sensor:

Miniature, fixed to metal structure by means of latch, cable length - 2 m

Fan connections:

- number of inputs - 4
- power supply - 230 V, 50 Hz
- input's power carrying capacity - 100 W

Power supply of the panel: 230 V, 50 Hz

Max. power consumption: 2 W



## MPSK G1 MICROPROCESSOR PANEL FOR FAN CONTROL AND CABINET SAFETY MONITORING

### Intended purpose:

The basic function of the control device is overheating and over-cooling protection of devices installed in the 19" standard cabinets by measuring temperature and humidity levels in selected points within the cabinet and appropriate control of fans placed in the ventilation panel and heaters.

In addition, the control device makes it possible to supervise cabinet safety by monitoring two-step sensors (e.g. sensors signalling door-opening, flooding, power failure, smoke, etc.) and recording changes in status as events (with a time record) in the history of events which can then be read by the master system (e.g. PC) via a serial port. The event-recording function is also used to save e.g. instances of temperature and humidity sensors exceeding preset alarm levels and instances of detecting sensor failure.

Fully compatible with fire-extinguishing systems, the control unit cuts off power supply to output devices (fans, heaters) in the event of a fire hazard.

In the standard version, the control device is provided with a serial port which, in addition to event viewing, enables full remote control of the device. Communication is effected in the RS 232 or RS 485 standard via the Modbus protocol. Optionally, the MPSK G1 panel can be equipped with the Ethernet or USB interface.



MPSK G1 panel with connected integrated temperature and humidity sensor

### Usable functions:

- 4 relay outputs for fan control.
- 1 relay output for heater control.
- 3-step control of fan unit operations by switching 2 or 4 fans depending on the maximum temperature of sensors.
- cooperation with the 4-fan or 6-fan panel (double parallel connection of two fans).
- function of uniform fan wear with programmable switching period.
- 3 two-step inputs for event-recording sensors activated e.g. by cabinet door opening or shock.
- event-recording function, activated e.g. by changes of the two-step input state, exceeding alarm levels of sensor temperature, sensor failure, fan failure, power supply failure (with max. 100 events recorded).
- built-in device clock, memory of settings, states and recorded events, battery-supplied.
- asynchronous RS 232 or RS 485 serial interface for communication with the master system to monitor sensor states, read recorded events, read and record settings and system time of the device.
- for each sensor, programmable and recordable settings of fan activation levels, hysteresis, alarm levels and correction factors of measurement errors.
- LCD display, 2x16 characters with illumination and 4-button keyboard for device programming and monitoring.
- password-protected access to settings and configuration via panel buttons and the serial interface.
- option of manual fan and heater control.

### Parameters:

- Power supply: 12 V DC, 1 A
- Relay outputs: 250 V AC/DC, 16 A
- Measuring range: temperature from -50 °C to +99 °C; humidity from 10 % to 90 %
- Measurement accuracy: temperature 1 °C; humidity 1 %
- Dimensions: 19" x 1 U x 150 mm

### Scope of delivery:

Control panel with fixing accessories for assembly inside a cabinet.

Note: For the device to operate properly, a temperature or humidity sensor is needed, that has to be ordered separately.

Product name	Package	Colour	Catalogue number
MPSK G1 microprocessor panel for fan control	1 pc.	RAL 7035	WN-0201-05-00-011
Temperature sensor with 2 m cable	1 pc.	—	WN-0201-06-00-000
Integrated temperature and humidity sensor with 2 m cable	1 pc.	—	WN-0201-08-00-000
ERS converter RS232/Ethernet	1 pc.	—	T1Z-00-0004
Connecting cable for ERS converter	1 pc.	—	T1Z-00-0005

**Software for communication with the MPSK G1 panel via a serial port can be downloaded from our web site at [www.zpas.pl](http://www.zpas.pl)**

## FK-RACK FIRE EXTINGUISHER

### Design

FK-RACK is designed as a single monolithic 19" panel, 3 U in height, made up of:

- central fire-extinguishing and fire detection unit
- two optical smoke detectors
- main manifold
- one or two tanks containing 1 kg of fire-extinguishing gas
- solenoid valve
- pressure switch
- fire supply 230 V AC / 24 V DC
- two 12 V batteries
- sounder
- pressure gauge



FK-RACK panel – front view

### Operation

FK-RACK, a single-zone automatic fire alarm control panel, is designed for fire detection and control of the fireextinguishing process via the solenoid valve fitted in the main manifold connected to tanks containing FE-36 extinguishing gas. The panel can be fitted in RACK-type server cabinets or automatic control cabinets with a maximum volume of 3 m³.

The panel is equipped with two optical smoke sensors, each in a separate fire detection line, which analyse air transparency. Following detection of aerosols such as smoke, they activate an appropriate procedure.

An activation of one sensor triggers a sounder and a red LED (PREALARM) lights up in one of the detection lines. An activation of the other sensor causes the red alarm LED to light up (the PREALARM LED goes out) and the in-built clock starts counting down to the release of the FE-36 extinguishing agent. After 30 seconds, the solenoid valve in the main manifold is opened, releasing FE-36 gas.

Throughout the entire process, the user controls the operation of the panel by means of a range of LEDs and a pressure gauge indicating the pressure level in the manifold. Additionally, pressure is controlled by means of pressure switch placed on the manifold. Any pressure drop makes the orange LED light up.

All electrical circuits of the sensors, solenoid valve and pressure gauge are monitored for continuity. Any interruption of circuit continuity causes a corresponding LED to light up, signalling the fault of a specific element.

In the event of failure of the basic power supply, the central control unit is provided with a battery (2 x 12 V).

Product name	Package	Catalogue number
Fire extinguisher FK-RACK-1 Master with 1 kg of the FE-36 extinguishing agent	1 pc.	T-SO-990-150
Fire extinguisher FK-RACK-2 Master with 2 kg of the FE-36 extinguishing agent	1 pc.	T-SO-990-151
Fire extinguisher FK-RACK-1 Slave with 1 kg of the FE-36 extinguishing agent	1 pc.	T-SO-990-152
Fire extinguisher FK-RACK-2 Slave with 2 kg of the FE-36 extinguishing agent	1 pc.	T-SO-990-154
Cylinder for the fire extinguisher with 1 kg of FE-36, complete with manifold and valve	1 pc.	T-SO-990-155
Cylinder for the fire extinguisher with 2 kg of FE-36, complete with manifold and valve	1 pc.	T-SO-990-156



FK-RACK panel – rear view

## UPS BATTERY BACKUPS

Emergency UPS suitable for assembly in 19" rack cabinets and as free-standing tower-type units.  
Tower-type UPS solutions with maximum power rating of 400 kVa (are also available on request).

### Cover Partner RM

<b>Technology:</b>	True On-Line , Double Conversion, VFI-SS-111 (according to PN-EN 62040-3)
<b>Power range:</b>	1-3 kVA
<b>Phases in/out:</b>	1/1 (Plug&Play)
<b>Software:</b>	UPSentry Smart 2000

#### Typical application:

- servers
- work stations
- graphical stations
- systems in 19" cabinets
- control and automation systems
- medical equipment



Model	Power rating	Backup time	Specification	Dimensions	Weight	Catalogue number
<b>Cover Partner RM10</b>	1.0 kVA	8 min 22 min 40 min 70 min	UPS UPS + 1 battery module RM 1.0 kVA UPS + 2 battery modules RM 1.0 kVA UPS + 3 battery modules RM 1.0 kVA	440 x 434 x 88 mm (2 U)	19 kg	T-S0-910-100
<b>Cover Partner RM22</b>	2.2 kVA	8 min 20 min 35 min 50 min	UPS UPS + 1 battery module RM 2.2 kVA UPS + 2 battery modules RM 2.2 kVA UPS + 3 battery modules RM 2.2 kVA	440 x 526 x 88 mm (2 U)	24 kg	T-S0-910-200
<b>Cover Partner RM30</b>	3.0 kVA	8 min 20 min 35 min 50 min	UPS UPS + 1 battery module RM 3.0 kVA UPS + 2 battery modules RM 3.0 kVA UPS + 3 battery modules RM 3.0 kVA	440 x 503 x 132 mm (3 U)	33 kg	T-S0-910-300

Accessories	Catalogue number
SNMP module - see page 110	T-S0-910-400
Environmental sensor (requires SNMP module) - see page 110	T-S0-910-401
Battery module RM 1.0 kVA, dimensions 440x434x88 mm (2U), weight 24 kg	T-S0-910-402
Battery module RM 2.2 kVA, dimensions 440x434x88 mm (2U), weight 22 kg	T-S0-910-403
Battery module RM 3.0 kVA, dimensions 440x434x88 mm (2U), weight 25 kg	T-S0-910-404
External bypass switch RM	T-S0-910-405
External bypass switch RM, 19" rack mount, 1 U	T-S0-910-406
Rails for 19" rack mounting	T-S0-910-407



## UPS BATTERY BACKUPS

### Cover Partner RT

**Technology:** True On-Line, Double Conversion, VFI-SS-111 (according to PN-EN 62040-3)

**Power range:** 5-11 kVA

**Phases in/out:** 1/1

**Software:** UPSentry Smart 2000

#### Typical application:

- servers
- work stations
- graphical stations
- systems in 19" cabinets
- control and automation systems
- medical equipment

#### Dimensions:

445 x 563 x 130 mm (3 U)  
(concerns all UPS and battery modules)



Model	Power rating	Backup time	Specification	Weight	Catalogue number
<b>Cover Partner RT50</b>	5.0 kVA	- 12 min 30 min 50 min	UPS UPS + 1 battery module RT 5.0 kVA, 7 Ah UPS + 2 battery modules RT 5.0 kVA, 7 Ah UPS + 3 battery modules RT 5.0 kVA, 7 Ah	20.5 kg	T-SO-910-500
<b>Cover Partner RT70</b>	7.0 kVA	- 8 min 20 min 32 min	UPS UPS + 1 battery module RT 7.0 kVA, 7 Ah UPS + 2 battery modules RT 7.0 kVA, 7 Ah UPS + 3 battery modules RT 7.0 kVA, 7 Ah	20.5 kg	T-SO-910-700
<b>Cover Partner RT90</b>	9.0 kVA	- 8 min 17 min 26 min	UPS UPS + 1 battery module RT 9.0 kVA, 9 Ah UPS + 2 battery modules RT 9.0 kVA, 9 Ah UPS + 3 battery modules RT 9.0 kVA, 9 Ah	24.5 kg	T-SO-910-900
<b>Cover Partner RT110</b>	11.0 kVA	- 5 min 14 min 22 min	UPS UPS + 1 battery module RT 11.0 kVA, 9 Ah UPS + 2 battery modules RT 11.0 kVA, 9 Ah UPS + 3 battery modules RT 11.0 kVA, 9 Ah	24.5 kg	T-SO-910-910

Accessories	Catalogue number
SNMP module - see page 110	T-SO-910-400
Environmental sensor (requires SNMP module) - see page 110	T-SO-910-401
Wireless signal panel RAM Partner RT	T-SO-910-408
Battery module RT 7.0 kVA, 7 Ah, weight 69.5 kg	T-SO-910-409
Battery module RT 11.0 kVA, 9 Ah, weight 69.5 kg	T-SO-910-410
External wireless bypass RT (wall-mounted)	T-SO-910-411
External wireless bypass RT Rack (19" rack mount)	T-SO-910-412
Fire switch (REPO)	T-SO-910-413
Rails for 19" rack mounting	T-SO-910-407

## UPS BATTERY BACKUPS

### Cover Partner SE2

**Technology:** True On-Line Double Conversion  
VFI - SS - 111 (according to PN-EN 62040-3)

**Power range:** 1 kVA

**Phases in/out:** 1/1 (Plug&Play)

**Software:** UPSentry Smart 2000

#### Typical application:

- servers
- work stations
- graphical stations
- systems in 19" cabinets
- control and automation systems
- medical equipment



Model	Power rating	Backup time	Dimensions:	Weight	Catalogue number
Cover Partner 10 SE	1000 VA / 800 W	8 min	140 x 242 x 363 mm	15 kg	T-SO-910-099

Accessories	Catalogue number
SNMP module - see page 110	T-SO-910-400
Environmental sensor (requires SNMP module) - see page 110	T-SO-910-401

## ACCESORIES FOR UPS BATTERY BACKUPS

### SNMP card

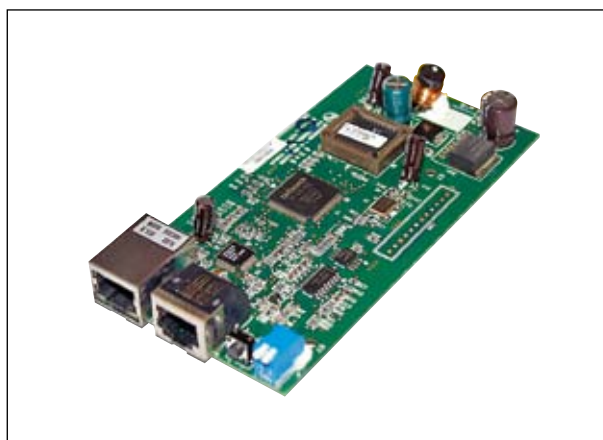
**Catalogue number:** T-SO-910-400

SNMP InsightPower card is an interface between the UPS and the computer network. The card makes it possible to obtain information about the operating status of the device and execute control commands remotely. Users can easily control the operation of the device using their Internet browser or tools based on SNMP, a popular network management protocol.

The system is complemented by the InsightPowerClient software compatible with the SNMP card. In the event of prolonged power outage, the software automatically shuts down computers working under Windows operating systems. A simpler software version called SNMP ShutdownAgent is capable of working with a wide array of popular system platforms.

#### Properties and functionalities:

- In-built SNMP agent and HTTP server for UPS monitoring
- Configuration through a terminal or via telnet
- Management of different user rights levels
- Firmware updating option
- UPS monitoring and control
- Recording events and parameters in the card's memory
- UPS starting, restarting and testing programme
- "Wake On LAN" feature for automatic PC start
- Sending e-mail messages and SNMP traps in the event of alarms
- Cooperation with the InsightPower Client software – the Windows platform
- Cooperation with the Shutdown Agent software for shutting down operating systems automatically (support for many leading system platforms).



### Sensor of environmental conditions

**Catalogue number:** T-SO-910-401

The sensor of environmental conditions makes it possible to monitor climatic conditions inside cabinets:

- temperature
- humidity
- door opening
- possibility of smoke sensor connection

All exceeded parameters are registered in the computer system and visualised on a local or remote computer through the Internet.

Connection of the sensor to the computer requires an SNMP card (see above).

The sensor connected to the SNMP card enables remote monitoring of the state of current parameters of the environment in the cabinet or in the room in which it is installed. Values of different parameters are available after connection via the Internet browser. In the same location, it is possible to preset permitted values of environmental parameters (temperature, humidity) and the status of the remaining sensors (smoke, fire, flooding, access) for the monitored room. If pre-set values are exceeded, an alarm is triggered.



## SOLUTIONS FOR SERVER ROOMS



## ZPAS DATA CENTER

### Modular server room based on SZB SE 19" cabinets

In the era of globalised business process information, appropriate protection against business and operating risks is vital if companies want to ensure their uninterrupted operation. Unlimited and complete access to information, at any time, is currently becoming one of the most valuable business resources. In many cases, data stored on company hard disks represent the most precious assets of the enterprise. Therefore, important data require a suitable level of protection and security.

ERP systems are becoming increasingly popular, and their continuous operation is of big importance to ensure proper functioning of the entire enterprise. A dedicated Data Center, i.e. a secure facility provided with independent power supply, cooling and communications systems, ensures an appropriate level of company data protection. The server room is equipped with centrally coordinated systems of power supply, air conditioning, access control and security measures, which ensures a high level of working comfort and safety, as well as reliable protection against unauthorised access.

New trends in the IT industry, such as **HIGH DENSITY** (maximum number of blade servers accommodated in a rack) and **server virtualisation** (division of one physical server into multiple isolated virtual environments), produce a markedly increased demand for power and cooling capacity in the server room.

ZPAS Data Center is a comprehensive tool designed for banks, telecommunications operators and major companies.

#### ZPAS Data Center includes:

- a system of cabinets with slide doors and a roof,
- a cooling system based on ice water or a different cooling agent,
- guaranteed power supply system,
- power supply management system,
- access control system, burglary and fire alarm system,
- fire extinguishing system,
- climate control system,
- network management solution,
- IT-room booths,
- consoles and KVM switches,
- servers.



## ZPAS DATA CENTER

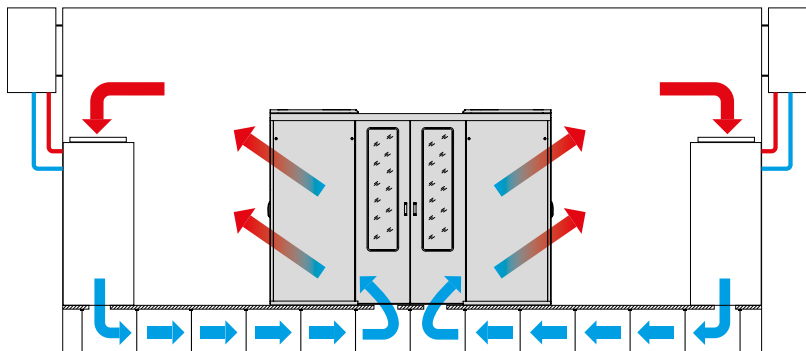
The cabinet system makes it possible to deliver a data processing centre in the "cool corridor" or "hot corridor" technology. The solution ensures a controlled flow of cold air stream and reduces costs of server room cooling.

Thanks to advanced KVM switches and smart power strips, server administration can be performed remotely from any location around the world.

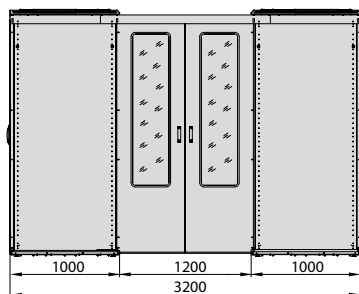
ZPAS Data Center is a combination of innovative cooling and power supply systems, and cost-effective approach to the construction of data processing centres, ensuring complete protection and monitoring of IT systems. Major benefits include:

- **reliability,**
- **modularity** (possibility to add extra cabinets, power and cooling components to the existing system, if necessary),
- **redundancy** of power supply and cooling systems,
- **remote access and administration** of all elements of the system via LAN/WAN and GSM,
- **scalability** (system adjustment to match actual customer needs),
- **cost-efficiency,**
- **environmental protection.**

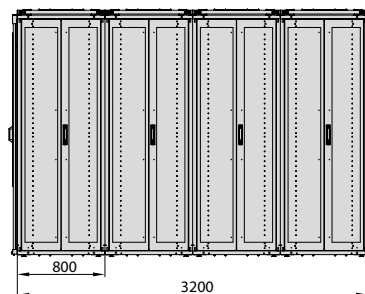
### Server room cooling in the "cold corridor" technology



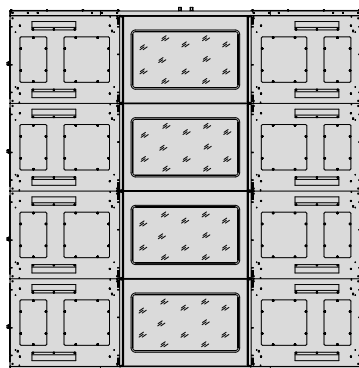
Front view



Side view



Top view



Sample server room consisting of eight SZB SE 47 U cabinets, 800x1000 mm



KVM switches and consoles – see pages 138-145



Cooling systems – pages 116-121



Monitoring of ambient conditions – see pages 105, 131



Access control – see pages 132-133



Network management – see page 136



Guaranteed power supply – see pages 122-126



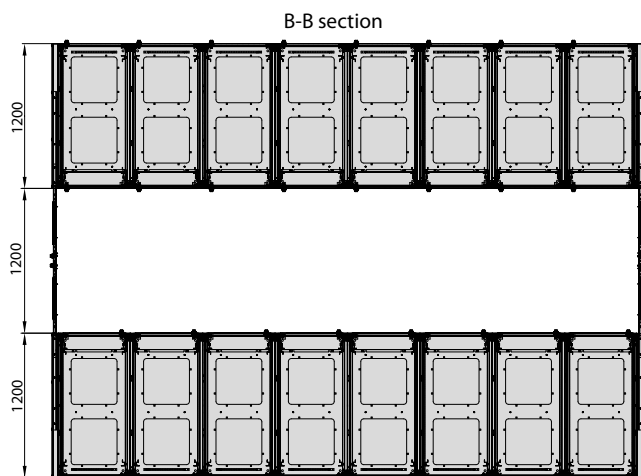
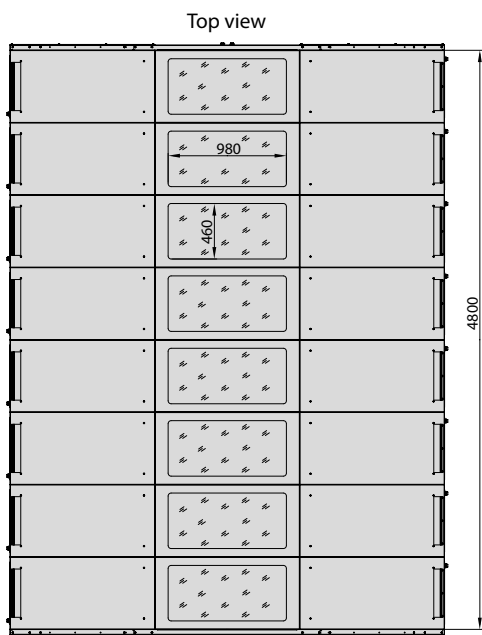
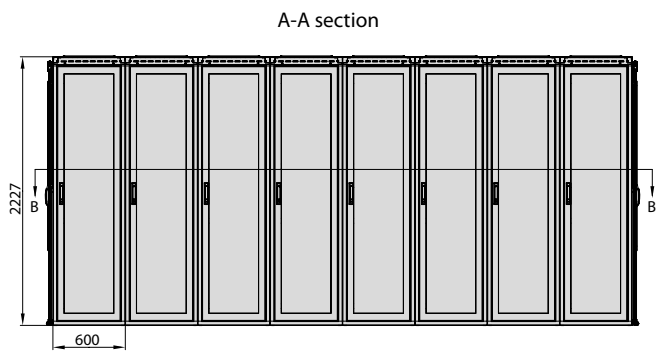
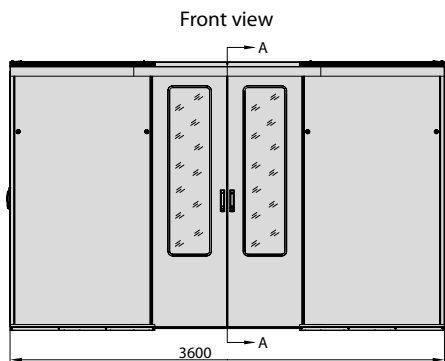
Cabinets and accessories – see pages 28-39, 73-110



## ZPAS DATA CENTER



ZPAS DATA CENTER



Sample server room consisting of sixteen SZB SE 47 U cabinets, 600x1200 mm

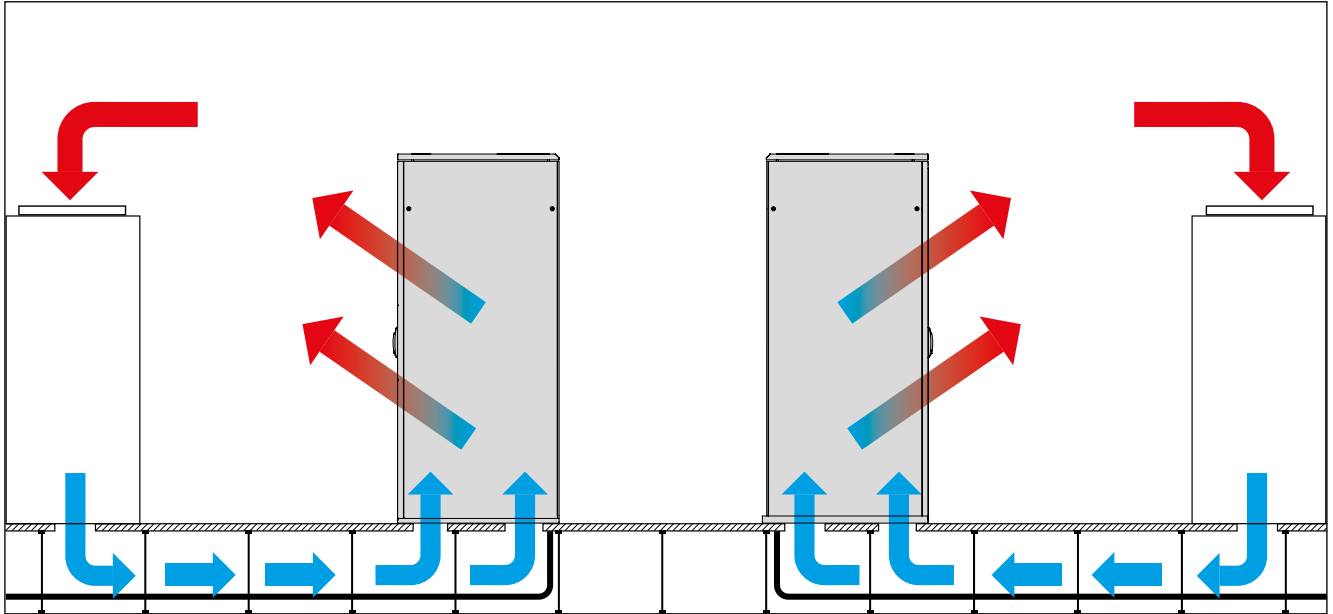


## SERVER CABINET COOLING SYSTEMS

Cooling systems can be classified into three groups. The first comprises precise air-conditioning cabinets. The second consists of solutions based on water-to-air heat exchangers (including ice water generator). The third group includes separate air-conditioning units mounted at the side of the cabinet or on the roof.

### Precise air-conditioning cabinets

Precise air-conditioning cabinets are autonomous climate control solutions containing a cooling unit and heat exchanger within a single enclosure. Air-conditioning cabinets are designed for delivering cool air to a specific location.



Precise air-conditioning is necessary for ensuring appropriate ambient conditions for electronic equipment operation. As opposed to the popular comfort air-conditioning designed for residential areas, precise air-conditioning is designed for maintaining appropriate temperature, humidity and air purity for electronic equipment operating uninterruptedly 24/7 all year round. In the precise air-conditioning range, ZPAS Group offers three groups of air-conditioning equipment, as well as interfaces for ambient monitoring and air-conditioning control systems. In the standard version, all equipment is based on R22 as a refrigerant, however any device can also be delivered in a version using R407C, a newer and more environmentally-friendly cooling agent.



**MINIDAT and MODULAR precise air-conditioning cabinets**  
Available in cooling capacity options ranging from 5 to 118 kW

## SERVER CABINET COOLING SYSTEMS

### Water-to-air heat exchangers

Nowadays, data centres are usually cooled by means of cool air inlets running in the access floor. However, in large server rooms it may be difficult to provide an adequate volume of cool air to all locations and protect cool air supplied to the premises from mixing with warm air carried off from the room. The cooling method makes it possible to obtain the cooling capacity of up to 6 kW per one cabinet.

If blade-type servers are used, the required cooling capacity can be much higher, up to 30 kW per one cabinet. Another vital thing is to ensure uniform distribution of cooling air between different servers to avoid the formation of hot spots. In such cases, cabinets should be cooled directly, using SideCooler heat exchangers.



Sample set of two SZB SE server cabinets and the SideCooler

**SideCooler** – heat exchanger fixed to the right or left cabinet wall.

- Heat is carried off directly from the location where it is generated.
- Easy mounting without any interference inside the cabinet.
- Constant flow of air.
- SideCoolers can be installed in any cabinet type using adapter modules (IP 54 protection class is not required).
- Server room safety is ensured by means of a system of leak detection and water condensation in the heat exchanger.
- The device is maintenance-free. Fans can be replaced during operation.
- Exchanger redundancy N+1 can be easily achieved.
- Space saving thanks to a patented shape.
- Optimum air circulation in a closed circuit: cooling air flows horizontally from the front section towards the rear of the cabinet.

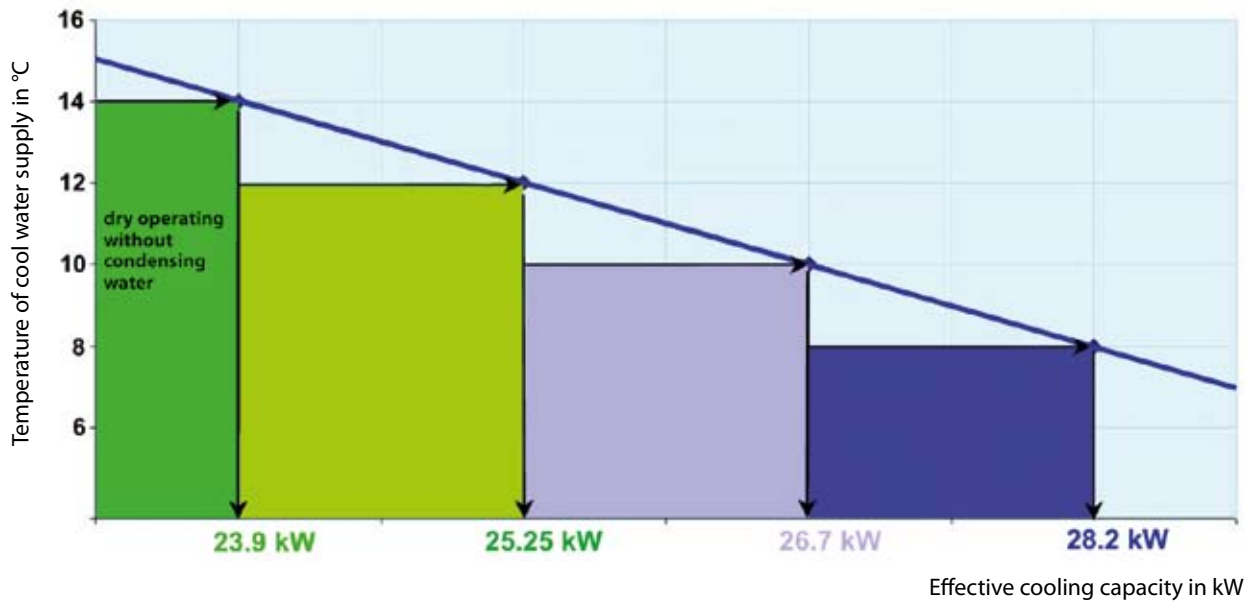
Available heat exchanger versions:

- Cooling agent supply from the top or from the bottom of the heat exchanger.
- Heat exchanger dimensions adjusted to cabinets with a height ranging from 24 to 47 U.
- Heat exchanger versions with a direct evaporator (gas cooling instead of water cooling).

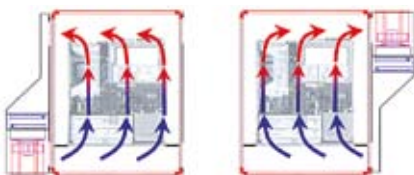


## SERVER CABINET COOLING SYSTEMS

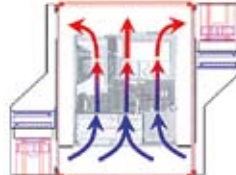
Sample effective cooling capacity in kW for SideCooler SC1200



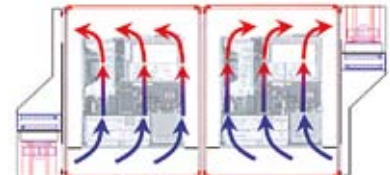
Heat exchanger location options



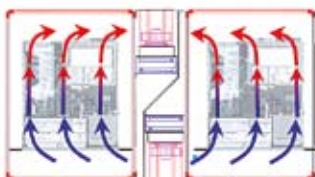
Installation on the left and right wall respectively



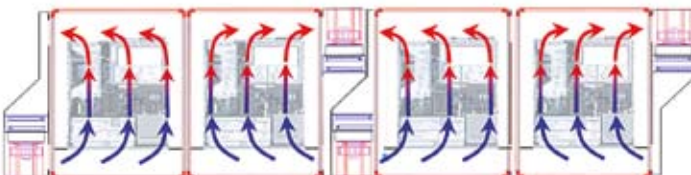
Redundant option



Partially redundant option



Space-saving location



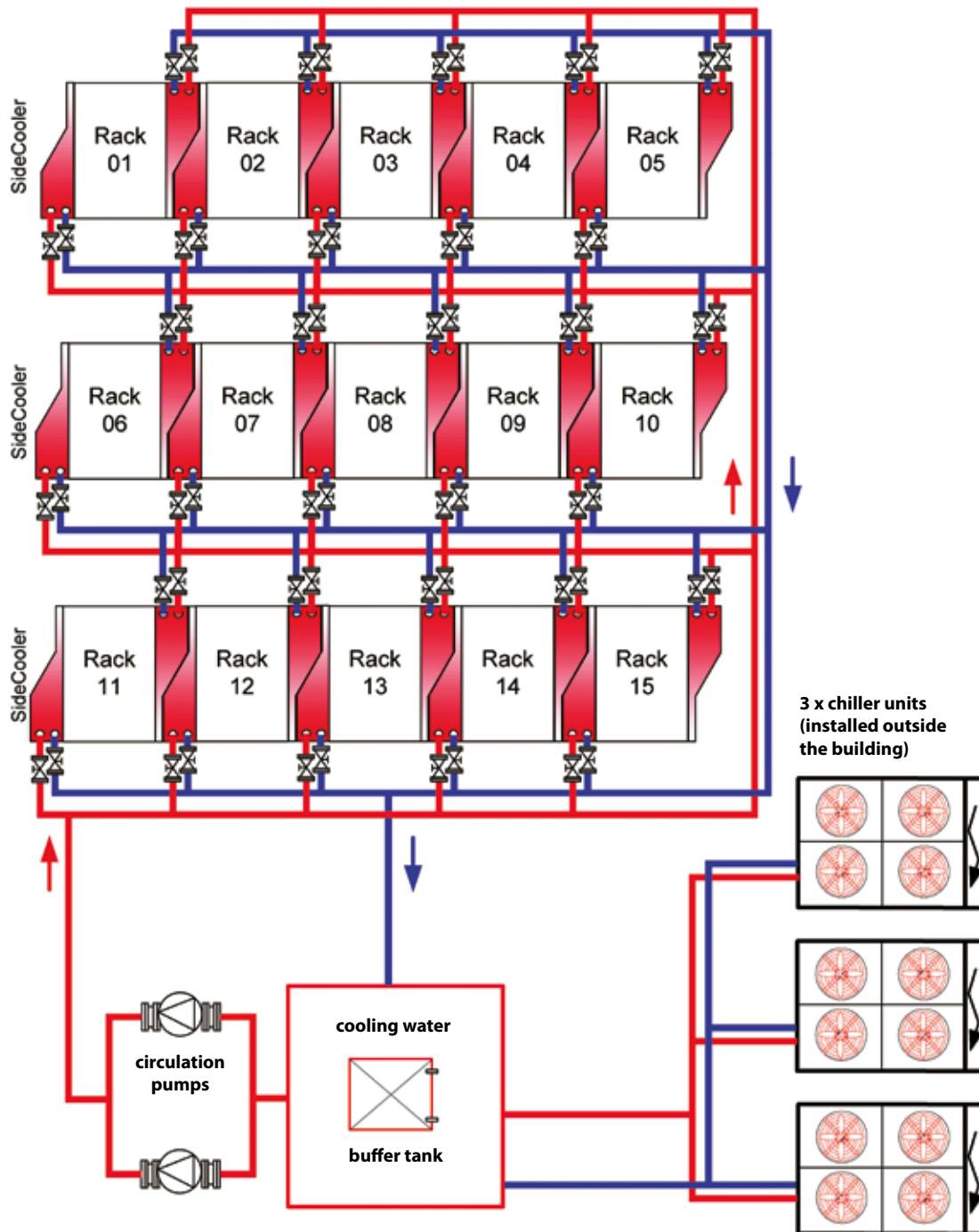
Space-saving location with a partial redundancy





## SERVER CABINET COOLING SYSTEMS

Sample server room air-conditioning system using SideCooler heat exchangers



The cooling agent is supplied from an appropriate chiller unit whose power output, redundancy potential and installation method need adjustment to specific working conditions. Our product range includes chiller units with different power rating, both for outside and inside applications.

For systems that make use of a chiller unit existing in the building and in order to provide cooling water circulation, as well as water temperature adjustment, we deliver complete cooling water distribution units. They are made up of circulation pumps, a heat exchanger and a control unit. Distribution units prevent water condensation in the heat exchanger and guarantee stable operations in heat abstraction.



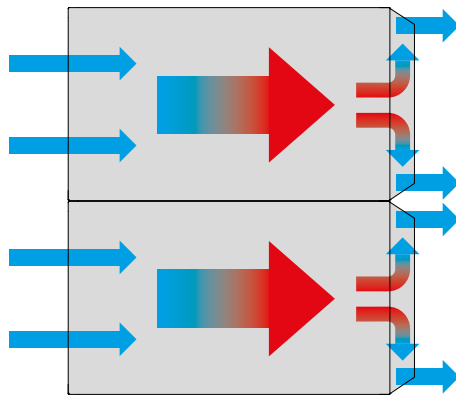
## SERVER CABINET COOLING SYSTEMS

### Back Side Cooler – heat exchanger mounted on the cabinet's rear door

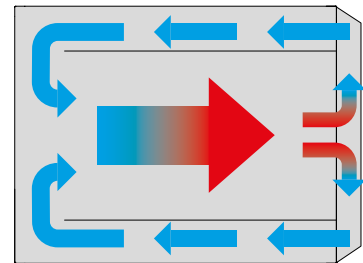
Back Side Cooler heat exchangers are mounted by means of a special adapter to the rear door of the server cabinet. They are equipped with three fans with a high total capacity (3000 m<sup>3</sup>/h). Depending on the model, they have a cooling capacity of 12 or 18 kW. The exchangers use ice water or R410a as the refrigerant. They are compatible with standard chiller units. The heat exchangers can operate in the open or closed circuit.



#### Open circuit



#### Closed circuit



### Water chiller units

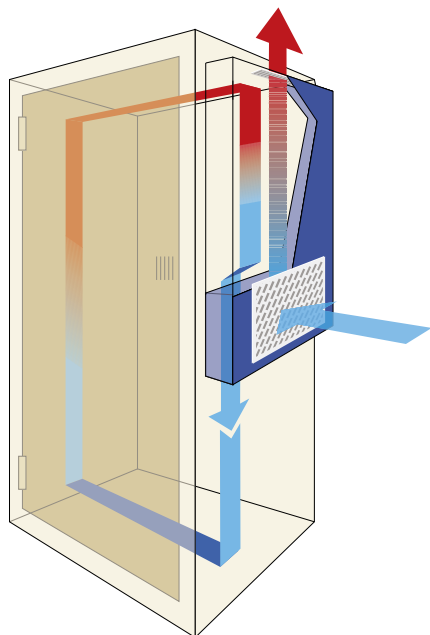
ZPAS Group offers a broad choice of water chiller units. Depending on the required cooling capacity, we offer units ranging from 17 to 1517 kW. Water chiller units are equipped with air diffusers which enable the use of cold atmospheric air for cooling server rooms, thus reducing air-conditioning costs. The units are designed for outside assembly. Most chiller units with higher cooling capacity have semi-irtight or airtight rotary screw compressors.



## SERVER CABINET COOLING SYSTEMS

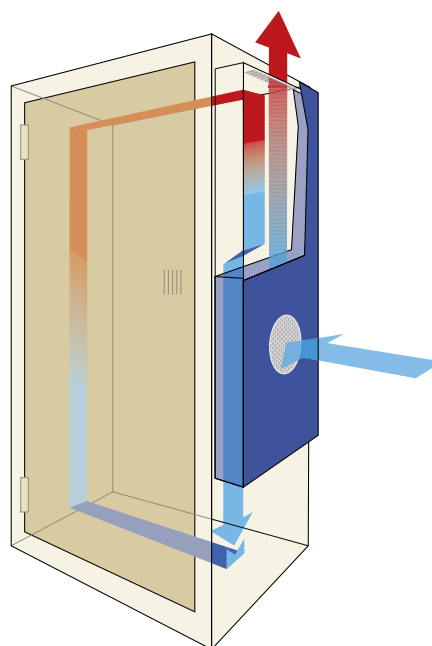
### Separate air-conditioning units

Separate air-conditioning units make up a group of air-conditioning equipment designed for RACK type cabinets. Separate air-conditioning units make additional devices delivering air into the cabinet unnecessary.



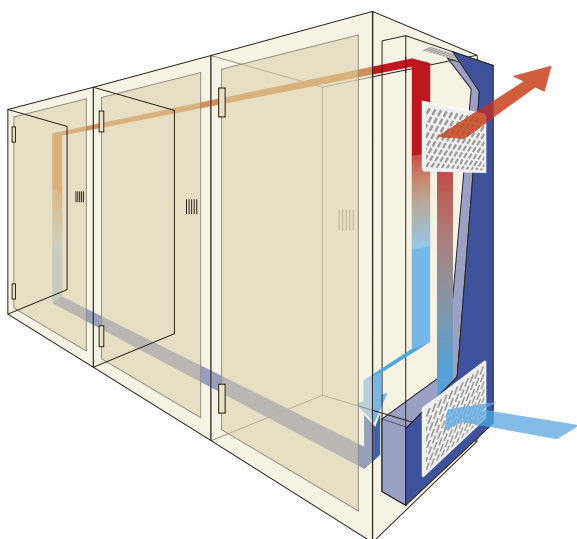
#### PROTHEM

Air-conditioning unit mounted on the cabinet's side panel  
Cooling capacity ranging from 300 to 4000 W



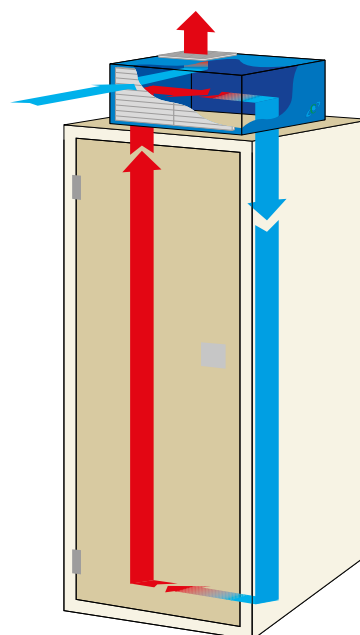
#### SLIM

Air-conditioning unit mounted on the cabinet's door or side panel  
Cooling capacity: 1400 or 2000 W



#### MODULE

Air-conditioning unit intended for cooling more than one cabinet.  
Mounted on the side of a system of combined cabinets.  
Cooling capacity ranging from 5800 to 10000 W



#### TOP

Rooftop air-conditioning unit  
Cooling capacity ranging from 330 to 5200 W

## GUARANTEED POWER SUPPLY – HIGH-PERFORMANCE UPS

### ALP UPS range 10-400 kVA

#### Design with full galvanic insulation

UPS design with full galvanic insulation of UPS input/output completely resolves potential problems in the voltage supply system – higher harmonics, surge, etc. The insulation transformer placed at the UPS output can eliminate the problem of poorer input earthing, i.e. leakage current to earth.

#### Surge protection and protection against current flow in the neutral conductor

The protective devices ensure safety and stability of UPS output power. An additional protective device at the UPS input delivers a high degree of UPS safety and safeguards against the effects of surge (e.g. lightning strike hitting the power supply network, connection of inductive loads, etc.).

#### Protection against inappropriate handling

The UPS has switches equipped with auxiliary contacts indicating their position status to the UPS. The solution protects the UPS against damage due to operations that violate the procedures in place.

#### Advanced DSP and IGBT technology as well as connection components

The device incorporates elements with the highest technical parameters to increase reliability.

#### Control redundancy – software/hardware – system control

The system is specifically designed to ensure high standards of safety and reliability. Independent controllers used in the control system monitor the operation of the system and take over in the event of fault, indicating the UPS fault status; critical UPS functions are designed for parallel redundant operation to improve the degree of reliability.

#### Plug and Play modular design

The UPS has a modular structure. Any repairs that might be necessary apply to the defective module only.

#### Each phase with a separate back-up system (inverter)

At 100% non-linear load, no deterioration in input parameters is noted in the UPS system.

#### Smart rectifier with temperature compensation of battery charging

To increase battery life, the rectifier is equipped with a temperature compensation system adjusting the charging voltage to ambient temperature. The compensation setting level is programmable similarly to the battery charging current. The rectifier can charge UPS supporting batteries for 8 hours and use of additional rectifiers is not necessary.

#### Intelligent battery testing system

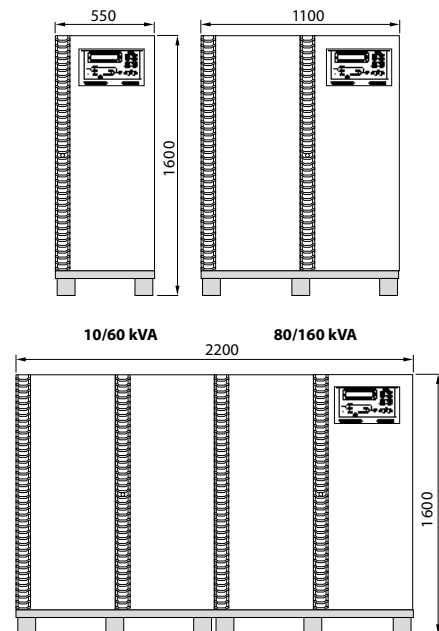
Battery tests are performed safely, without switching off the rectifier and inverter. The battery autotest function checks the battery at programmable intervals, determining their status.

#### Intelligent system for fan turbine monitoring

The system is especially designed for reducing the fan's rotary speed in low load conditions. The solution provides excellent conditions for increasing fan service life.



#### ALP range – dimensions [mm]



#### Well designed heat evacuation passages

Control and supply system circuits are physically separated. Consequently, the UPS system can operate properly even in unfavourable ambient conditions.

#### Cold start function

The UPS can be switched on without mains power supply (battery start) and without high current surge.

#### Parallel operation

A maximum of 8 UPS can be connected to increase fault-free operation of the supply system.

#### Redundant operation

The UPS units enable redundancy system operation in the n+1 arrangement. In the event of failure, other UPS take over the load of the defective one.

## GUARANTEED POWER SUPPLY – HIGH-PERFORMANCE UPS

### Technical specifications

PHASE		3-phase input/3-phase output																
kVA		10	15	20	30	40	50	60	80	100	120	160	200	240	300	320	340	400
Inputs (RECTIFIER)																		
Supply voltage		3 x 380 / 400 / 415 V																
Input voltage tolerance		± 20 % (> ± 20 % available as an option)																
Input frequency		50 / 60 Hz ± 5 Hz (programmable)																
Power Walk In		0 % - 100 %: 20 sec.																
Rectifier efficiency		~ 98 %																
Voltage control		± 1 %																
BATTERIES																		
Battery type		Maintenance-free lead-acid batteries																
Maximum charging current A DC (programmable)				10	15	20	25	30	40	50	60	80		120		160		
Cold start function		Yes, the UPS can start without AC source																
INVERTER																		
Output voltage		3 x 380 / 400 / 415 V , ± 1 %																
Pattern type		Sinusoidal																
Output power factor		0,8																
Output frequency		50 / 60 Hz ± 3 Hz																
Output frequency with no load		50 / 60 Hz ± 0,1 Hz																
THD (linear load)		< 2 %																
Overload	<110 %	Unlimited																
	110 -125 %	15 minutes																
	125-150 %	10 minutes																
	>150 %	1 minute																
Efficiency (100 % load)				93 %	93 %	93.5 %	93.5 %	94 %	94.5 %	94.5 %	95 %	95 %		95 %		95 %		
STATIC SWITCH																		
Input voltage range		173-277 V AC (L-N) (other volta ges available as an option)																
Supply network ↔ inverter		0 ms																
GENERAL FEATURES																		
System efficiency				91 %	91 %	91.5 %	92 %	92 %	92.5 %	92.5 %	93 %	93 %		93 %		93 %		
Heat loss (kW)				1.3	1.9	2.6	3	3.5	4.6	5.4	6.5	8.7		13		17.4		
Height x width x depth (mm)		1600 x 550 x 800						1600 x 1100 x 800						1600 x 2200 x 800				
Weight (kg without batteries)				300	400	480	550	680	820	950	1180	1450		1950		2450		
Noise level		< 65 dBA/1 m						< 67 dBA/1 m										
Ambient temperature		0-40 °C																
Humidity		0-90 % (With no condensation)																
Max. operating altitude		< 1500 m above sea level																
EN50091-1,-2		YES																
Short-circuit protection		YES																
Surge protection/EMC filters		MOV /Inputs-outputs (FCC CLASS A)																
Galvanic insulation		Full galvanic insulation Inputs-Outputs																
LED, LCD, Sound alarm		YES																
Remote control/ Communication interface		Monitoring of 1-99 UPS simultaneously / Set of dry contacts, RS232, RS485																

## GUARANTEED POWER SUPPLY – HIGH-PERFORMANCE UPS

### Battery cabinet for ALP line UPS

#### Battery cabinet design

The battery is designed and manufactured in the same dimensions and appearance as the UPS offered in the ALP line. As a result, a uniform look can be achieved for a system of battery cabinets and UPS connected in parallel.

Battery cabinets can accommodate 1 or 2 sets of batteries for UPS up to 60 kVA. For larger UPS above 60 kVA, or for longer on-battery run time, there are also battery cabinets which can house one set of high-capacity batteries.

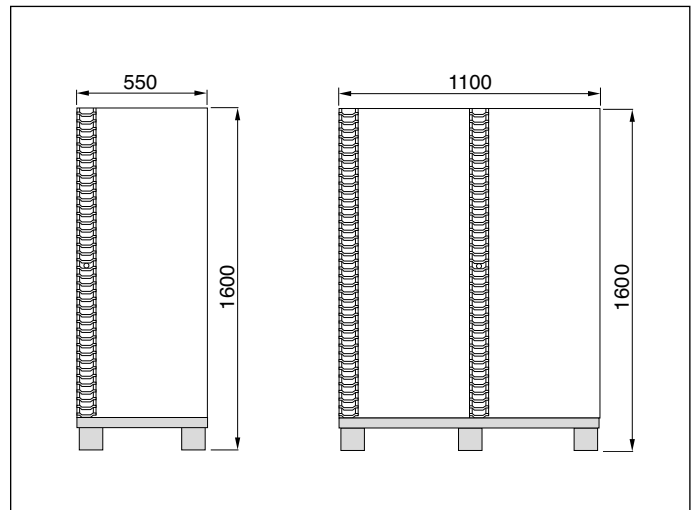
#### Dimensions

Battery cabinet for 1 or 2 sets of batteries for UPS up to 60 kVA

1600 x 550 x 800 mm

Battery cabinet for 1 set of batteries for UPS above 60 kVA

1600 x 1100 x 800 mm



### Accessories for ALP-line UPS

#### UPS SCAN™ – Remote indicator panel

Convenient LCD and LED display for monitoring between 1 and 99 UPS connected in series with RS-485 for the distance of < 1000 m.

#### UPSCALL™ – Automatic phone dialler module

In emergency situations, a pre-programmed telephone number to a service centre or to the Customer's supervision service is automatically dialled by the module. Multiple telephone numbers can be set without using a dedicated telephone line.

#### UPSCOM™ – UPS monitoring software

The software, installed in the workstation, monitors between 1 and 99 UPS via RS232 or RS232 concentrator. The software supplies status information in real time. It can also send e-mail messages to the user via the Internet.

#### SNMP 3 Phase Card

Dedicated to UPS monitoring and management through the Web/SNMP or Java applet, delivering phase information.

#### DCMAN™ – Battery control module

An intelligent module monitoring all batteries housed in a battery cabinet or on a stand, connected in series. The module communicates the status of each battery and signals possible damage.

#### ACMAN™ – Power management module

An intelligent module communicating with the UPS to manage, monitor and record UPS status and load.

#### Emergency switch

Designed for installation outside or near the UPS. The switch turns the UPS completely off in the event of emergency (e.g. electric shock, fire, earthquake, etc.).

GUARANTEED POWER SUPPLY – POWER GENERATORS

Power generators

We offer VISA power generators: stationary, mobile, without enclosure or housed in enclosures or containers with sound proofing and resistant to weather conditions, with power ranging from 9 kVA to 2000 kVA. The power generators have diesel engines from Perkins, Deutz, Volvo, John Deere or Mitsubishi and alternators from Marelli or Stamford.

The power generators are equipped with fault-proof automatic systems which activate the generators in the event of power outage in the municipal (industrial) power supply network, as well as accessories enabling the generators to start in any weather conditions. The wide range of power generator accessory options includes remote panels of potential-free contacts, GSM control panels, software enabling control via the Ethernet, RS232, as well as the RS485 port in the Modbus protocol.

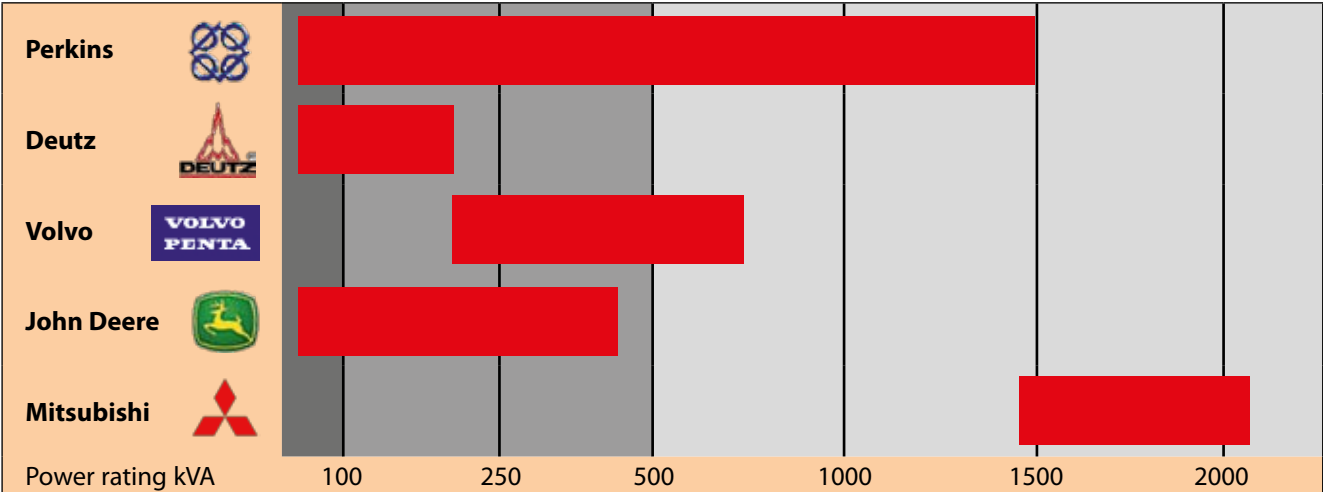
The power generators have digital panels with large legible LCD displays in a range of options: for manual start-up, for automatic start-up compatible with an outside automatic transfer switching equipment (ATSE) system, for automatic start-up compatible with a dedicated automatic transfer switching equipment (ATSE) system, panels for power generator synchronization with the network and for synchronization of two power generators. Additional equipment options for the engine and the compressor increase the power generator's stability, helping to maintain constant rotational speed regardless of increase in load (i.e. keep up the frequency). AVR and AVR+PMG voltage regulators stabilize the power generator's output voltage and are resistant to sudden load surges from 0 to 100 %.

Additionally, expanding the standard internal tank of the power generator is also possible. This way, without building costly external fuel installations, the generator's operating time can be extended up to 24 hours (depending on the generator's power rating). Obviously, even the expanded fuel tank has a limited volume, being an internal tank placed on the power generator's frame.

We complete power generating systems, as well as any other additional installations required (ventilation, exhaust evacuation and fuel systems with extra fuel tanks).



Table listing power ratings of VISA power generators, depending on engine type





## GUARANTEED POWER SUPPLY – POWER GENERATORS

### General description of power generators

#### Technical specifications

VISA power generators have diesel engines from Perkins, Deutz, Volvo, John Deere or Mitsubishi and alternators from Marelli or Stamford, mounted on an anti-vibration frame. The power generators can be fully automated to enable a quick start and automatic switching of users in the event of failure in the industrial network. The power generator achieves its rate parameters within 5-15 seconds from the start. The generators can be used as emergency power supply and are compatible with uninterruptible power supply (UPS). The generators can be supplied in sound-proof enclosures. The noise level for power generators housed in sound-proof enclosures is 70-80 dB(A). The power generators also come with:

- Guard Evolution Manual control panel for starting the generator manually,
- system for charging the start-up battery during downtime to ensure full readiness for engine start-up at any time,
- integrated internal fuel tank,
- Industrial-type exhaust gas damper,
- start-up batteries,
- oil and coolant,
- electronic rotational speed regulator (depending on engine type).

#### Extra accessories

- **Automatic transfer switching system.** Dedicated system for network monitoring and automatic switching of load supply between the network and the power generator.
- **Residential-type exhaust gas damper.** It reduces the noise level by ca. -30 dB(A) from the power generator's own noise level.

- **Coolant heater.** The device heats up the engine block to make sure it starts in any conditions. Supplied with single-phase alternating voltage, the heater has an automatic system built in the control panel.
- **Fuel system.** The majority of power generators have an integrated internal fuel tank. Available are internal tanks of varying capacity featuring automatic or manual filling systems (option: fuel pump) and, if necessary, top/bottom level limit switches (option: 2-contact fuel sensors).
- **Water-tight and sound-proof containers.** All power generator models can be provided with separate water-tight and sound-proof container enclosures. They can be delivered in variants similar to standard containers. Moreover, models with extra sound proofing (up to ca. 50 dB(A)/1m) for special applications, e.g. in hospitals, residential districts, etc. are also possible.

#### Enclosure types

- **C (Cover)** – featuring light sound-proofing and resistant to weather conditions, reducing the noise level by approx. -8 dB(A) from the power generator's own noise emission level and conforming to applicable EU standards.
- **S (Silent)** – sound-proofed and resistant to weather conditions, reducing the noise level by approx. -15 dB(A) from the power generator's own noise emission level and conforming to applicable environmental protection standards.
- **SS (Super Silent)** – extra sound-proofed and resistant to weather conditions, reducing the noise level by approx. -20 dB(A) from the power generator's own noise emission level and conforming to applicable environmental protection standards.

### Guard Evolution control panel

Advanced microprocessor and digital control panels for power generators with manual or automatic start-up. The panels make it possible to monitor key power generator parameters such as: voltage, current, frequency, number of hours in operation, oil frequency, battery status etc.



#### Guard Evolution Manual

Standard manual operating mode with remote control



#### Guard Evolution Automatic

Standard automatic operating mode with remote control



#### Guard Evolution Sync

Automatic synchronization of up to 8 power generators operating in parallel as basic or back-up power supply.

## POWER SUPPLY MANAGEMENT

### PM 4-IP, PM 4-IPS switchable power management strip

- 4 power sockets (IEC320C13 type)
- maximum load per one socket: 8 A
- strip socket with IEC320C14 plug, 10 A / 230 V
- socket supply status indicated with LED
- dimensions: 44.5 x 441 x 63 mm;
- enclosure suitable for mounting in the 19" profile (height 1 U) or for vertical assembly
- weight: 1.25 kg
- RJ45 network interface, 10 Mbit (Ethernet 10BaseT)
- serial interface for administration purposes
- operating temperature: from +5 to - 50 °C
- maximum relative humidity: from 5 to 85 % without condensation
- management of socket switching on power supply connection
- remote on and off switching of strip sockets via HTTP and/or SNMP (only in the IPS version); applies to individual sockets
- up to 4 users with selective access rights
- scope of delivery: power strip, 4 cables with cold sealed plug connectors, mains cable, cable with serial connector, CD



### PM 8-IP, PM 8-IPS switchable power management strip

- 8 (2x4) power sockets IEC320C13 type
- maximum load per one socket: 8 A
- 2 strip sockets with IEC320C14 plugs, 10 A / 230 V (double-phase supply possible)
- socket supply status indicated with LED
- dimensions: 44.5 x 788 x 63 mm
- enclosure suitable for vertical assembly
- weight: 2.05 kg
- RJ45 network interface, 10 Mbit (Ethernet 10BaseT)
- serial interface for administration purposes
- operating temperature: from +5 to - 50 °C
- maximum relative humidity: from 5 to 85 % without condensation
- management of socket switching on power supply connection
- remote on and off switching of strip sockets via HTTP and/or SNMP (only in the IPS version); applies to individual sockets
- up to 8 users with selective access rights
- possible correlation of simultaneous on/off switching of 2 sockets on both ends of a strip
- scope of delivery: power strip, 8 cables with cold sealed plug connectors, 2 mains cables, cable with serial connector, CD



## POWER SUPPLY MANAGEMENT

### PM 821-IP, PM 821-IPS switchable power management strip

- 2x4 power sockets (IEC320C13 type)
- maximum load per one socket: 8 A
- 2 strip sockets with IEC320C14 plugs, 10 A / 230 V (double-phase supply possible)
- socket supply status indicated with LED
- dimensions: 44.5 x 441 x 220 mm
- enclosure designed for assembly in the 19" profile (1 U height)
- weight: 2.75 kg
- RJ45 network interface, 10 Mbit (Ethernet 10BaseT)
- serial interface for administration purposes
- operating temperature: from +5 to - 50 °C
- maximum relative humidity: from 5 to 85 % without condensation
- management of socket switching on power supply connection
- remote on and off switching of strip sockets via HTTP and/or SNMP (only in the IPS version); applies to individual sockets
- up to 8 users with selective access rights
- possible correlation of simultaneous on/off switching of 2 sockets on both ends of the strip
- scope of delivery: power strip, 8 cables with cold sealed plug connectors, 2 mains cables, cable with serial connector, CD



### PM 211-MIP remote-controlled master-slave type power strip

- 1+2+2 sockets with earth-pin or Schuko (1x master, 2x2 slave)
- maximum load per one socket: 5 A
- socket supply status indicated with LED
- dimensions: 60 x 600 x 55 mm
- weight: 1.5 kg
- power consumption: 1.5 VA
- RJ45 network interface, 10 Mbit (Ethernet 10BaseT)
- integrated web server with static IP address or dynamic DHCP
- possible on and off switching of power in slave sockets via http, WAP and dynDNS
- local on or off switching of power in "slave" sockets controlled by on/off switching of device supplied from the "master" socket
- sample applications: switching the computer on to enable remote data access, remote control of power supply to household appliances etc.



## POWER SUPPLY MANAGEMENT

### PM 201-RD remote-controlled “watchdog over IP” power strip

- 2 Schuko-type sockets
- maximum load per one socket: 8 A
- power supply cable (2 m)
- socket supply status indicated with LED
- enclosure designed for universal assembly
- RJ45 network interface, 10 Mbit (Ethernet 10BaseT)
- integrated web server with static IP address or dynamic DHCP
- possible remote on and off switching of power in individual sockets via HTTP, WAP and dynDNS
- “watchdog over IP” function effected by sending a ping; in the event of no reply, the strip automatically performs a hard reset, switching power supply in the appropriate socket off and on



### PM 410-B power distribution unit

PM 410-B is the power distribution module for 19" cabinets. It can be supplied from two independent three-phase circuits (6 phases in total, each circuit with two three-phase outputs). It controls electrical parameters such as energy consumption, current consumption or voltage level. Data can be configured and read using an Internet browser or an SNMP agent.

#### Technical data:

- 2 three-phase input sockets, 16 A / 400 V AC each, red (galvanically separated)
- 4 three-phase output sockets, 16 A / 400 V AC each, IEC309 type, red (2 output sockets per each input socket)
- measurement of effective power supply parameters for each circuit
- enclosure designed for assembly in 19" cabinets (2 U height)
- fast and easy installation (Plug & Play)
- simple and flexible configuration using Internet browser
- SNMP support
- manual IP setting or automatic IP configuration with DHCP protocol
- password-protected access
- dimensions (W x H x D) 480 x 88 x 302 mm
- weight: 6.5 kg





## POWER SUPPLY MANAGEMENT

### PM 410-C power distribution unit

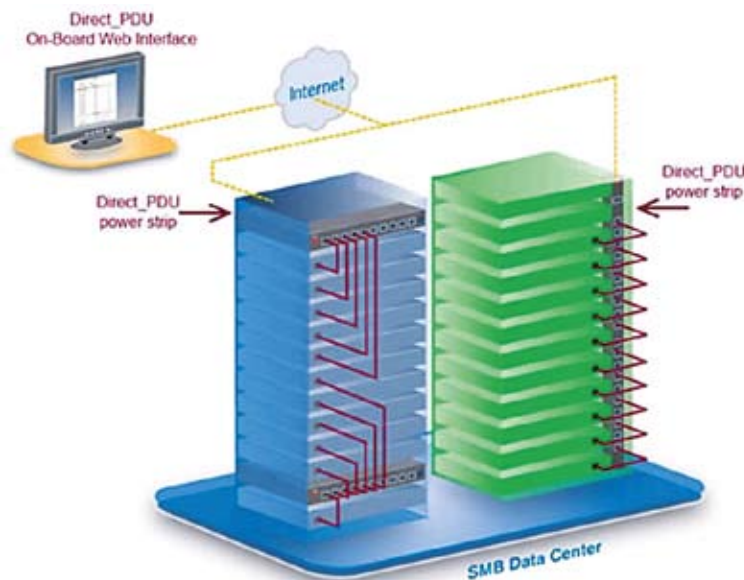
PM 410-C is the power distribution module for 19" cabinets. It can be supplied from two independent three-phase circuits (6 phases in total, each circuit with two three-phase outputs). It controls electrical parameters such as energy consumption, current consumption or voltage level. Data can be configured and read using an Internet browser or an SNMP agent.

#### Technical data:

- 2 three-phase input sockets, 32 A / 400 V AC each, red (galvanically separated)
- 4 three-phase output sockets, 32 A / 400V AC each, IEC309 type, red (2 output sockets per each input socket)
- measurement of effective power supply parameters for each circuit
- enclosure designed for assembly in 19" cabinets (2 U height)
- fast and easy installation (Plug & Play)
- simple and flexible configuration using Internet browser
- SNMP and Syslog support
- manual IP setting or automatic IP configuration with DHCP protocol
- password-protected access
- dimensions (W x H x D) 480 x 88 x 300 mm
- weight: 6.5 kg



### Power supply structure based on PDU switchable power strips



A structure of power supply management based on PDU strips offers a high degree of convenience in power management through the standard Ethernet infrastructure. Management is effected via WWW interface from any computer connected to the network.

#### Advantages:

- Modular design
- Easy assembly
- Intuitive configuration
- Availability of all sorts of plugs and sockets
- Adjustment to individual needs

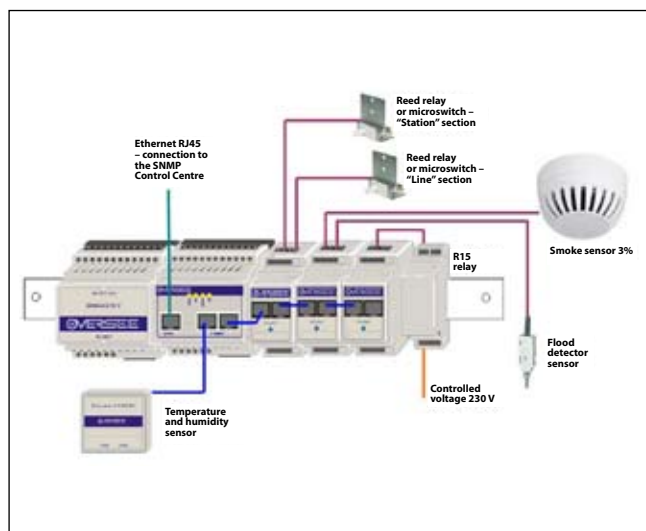
## MONITORING OF AMBIENT CONDITIONS

### System of monitoring equipment operating conditions in power enclosures and ICT infrastructure rooms

Access to accurate data of both the supplier and the user of any given medium helps to prevent disputes that might arise as a result of conflicts of interests. Within the ZPAS Control Oversee system, we propose two basic technology and equipment solutions designed for the acquisition of data from facilities:

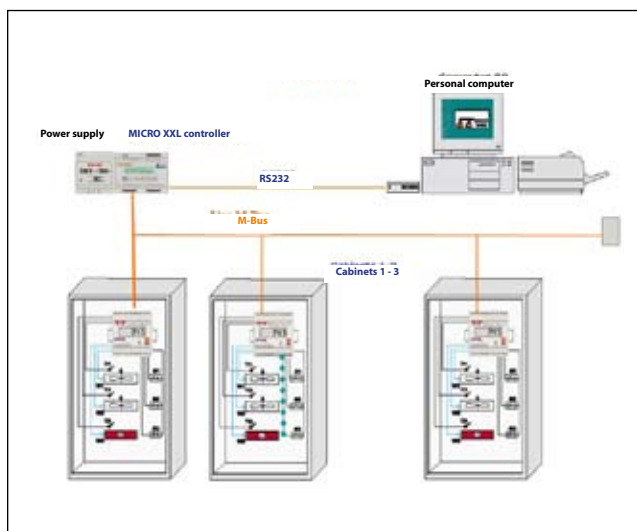
#### Oversee 1-Wire

The system comprises a set of equipment designed for constant monitoring of the facility's operating conditions, including temperature, humidity and other physical factors. The devices are equipped with the 1-Wire interface, which makes it possible to easily combine them into networks of virtually any typology. Being functional and cost-effective, they are universal and practical solutions for facility monitoring. The solution is complemented by a controller with an Ethernet outlet as well as ModBus RTU and SNMP protocols.



#### Oversee M-Bus

A solution derived from industrial automation technology, used for monitoring climatic conditions in server rooms, data communication and power enclosures. A wide range of devices using the ModBus RTU communication protocol makes it possible to achieve a complete and autonomous system of automatic control, management, monitoring and alarm functions, together with event logging in the controller. The solution enables the creation of a large measurement network with in-built response logic for alarm situations.



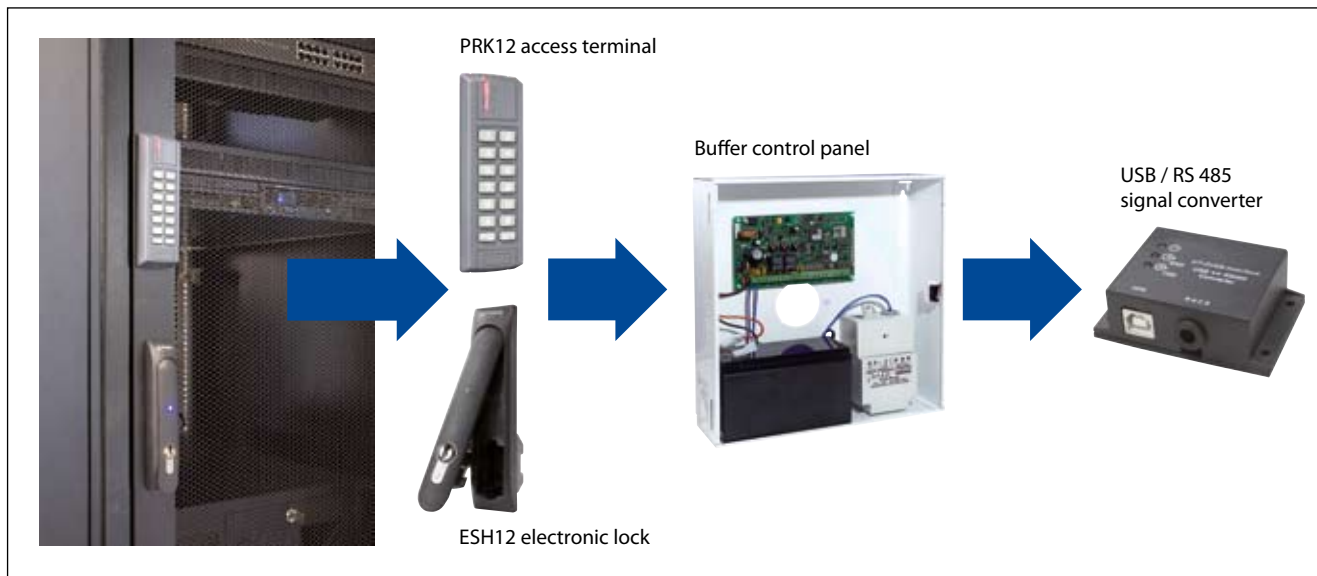
The above systems can be integrated into a single ZPAS Control Oversee platform. The solution is targeted at computer system administrators, offering them a possibility of viewing conditions in different facilities. Simple in operation and easy in implementation, the system is a perfect solution for monitoring various facilities (e.g. server rooms) distributed in remote locations.

More information about the system is available on our website at [www.zpas.net](http://www.zpas.net) and in a separate catalogue.



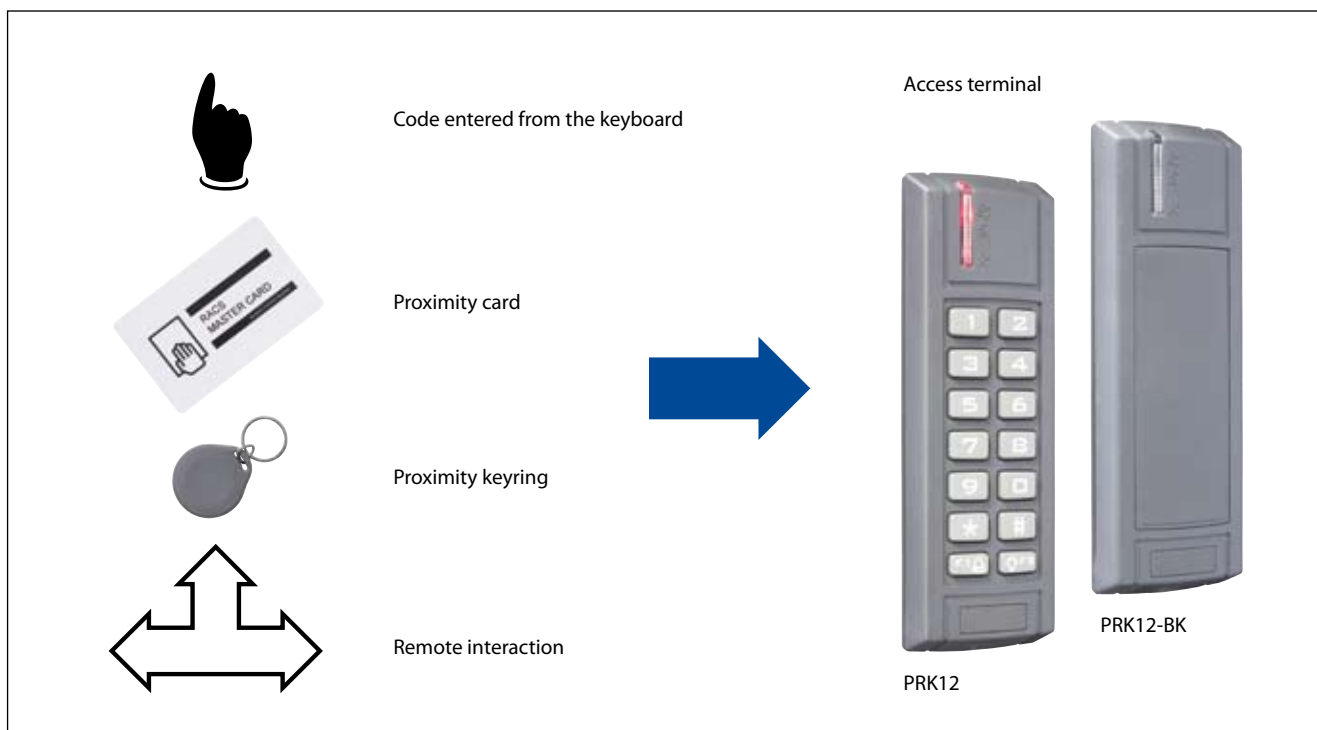
## ACCES CONTROL TO DATA COMMUNICATION CABINETS

Main elements of the system of access control to data communication cabinets include the ESH12 electronic lock and access terminal. In the simplest option, the access control system may only operate in one cabinet, protecting it by means of an automatically functioning terminal. Depending on the terminal version, the lock in the cabinet door opens after entering an appropriate access code or using an authorised proximity card. If PRK12 or PRK12-BK terminals are used, the system can be expanded by connecting it to the operator's external computer station.



### Available types of access terminals:

- **PRK6** – an external digital lock with 55 user codes; provided with one relay output and two transistor outputs.
- **PRK12** – an extended external access controller equipped with a keyboard and in-built reader for cards or proximity keyrings. Additional functionalities include alarm signalling, notification of forced entry and cooperation with the network access control system. Memory capacity for 120 users together with an access time schedule.
- **PRK12-BK** – PRK12 terminal version without keyboard for entering PIN codes.



If the PRK12 or PRK12-BK terminals operate in the network mode, their functionality is significantly extended. Firstly, it is possible to divide users into access groups and assign appropriate time schedules to them. Secondly, there is a possibility to define special time schedules that will control user identification mode and door mode (door armed and door disarmed).

## ACCES CONTROL TO DATA COMMUNICATION CABINETS

### ESH12 electronic lock

Since the lock incorporates a motor mechanism (instead of electric strike), it does not generate strong magnetic field, which eliminates unnecessary danger from the inside of the cabinet. Another advantage of the solution is the fact that it is not easily amenable to wear and tear. The possibility of opening the lock with a key, e.g. in the event of a power failure, is an important feature of the device. Lock status signals are transmitted via the terminal to the operator. As a result, any such event is reported and may not go unnoticed. Furthermore, the operator is able to distinguish correctly closed lock from open or even from inadequately closed lock.



### Software

The system is provided by ZPAS with extra software which, in addition to remote terminal configuration, makes it possible to remotely receive alarm reports and visualise the current system status. If an attempt is made to authorise a user who does not have the right to enter, the terminal communicates with the operator's computer and reports an access request with simultaneous user verification. The operator is authorised to open cabinets remotely or add new users to the terminal memory. The software also includes the option to define access zones and control access to different facilities.

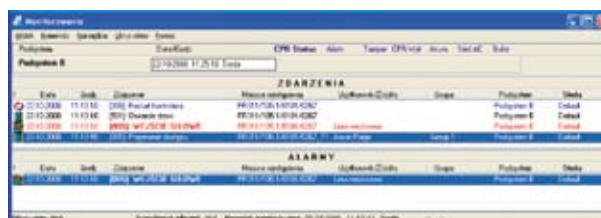
In order to make it easier to navigate around a greater number of zones, the programme is equipped with a map editor which visually represents the spatial layout. The system can control access to different rooms by connecting electric strikes fitted in doors. Since terminals and locks comply with the protection class IP 65, the solution may also be adapted to protect outside cabinets.

### Buffer control panel

If the access control system is to enable recording events without an ongoing connection to the operator's computer, it must be provided with a buffer control panel. The panel records events and concentrates signals transmitted by 32 terminals. The buffer control panel also functions as a power supply protection device in the event of a power failure. The extended system ensures full control of access to cabinets and control of activities performed by different users.

### Signal converters

Appropriate signal converters: RS 485 / RS 232, RS 485 / USB and RS 485 / ETHERNET have been specially designed to obtain remote access to terminals. The converters can be installed at a maximum distance of 1200 m from the buffer control panel. If the task of the system is to protect a number of cabinets and terminals are connected to the buffer control panel, only one signal converter is sufficient for the operator to establish a connection to control all the cabinets.

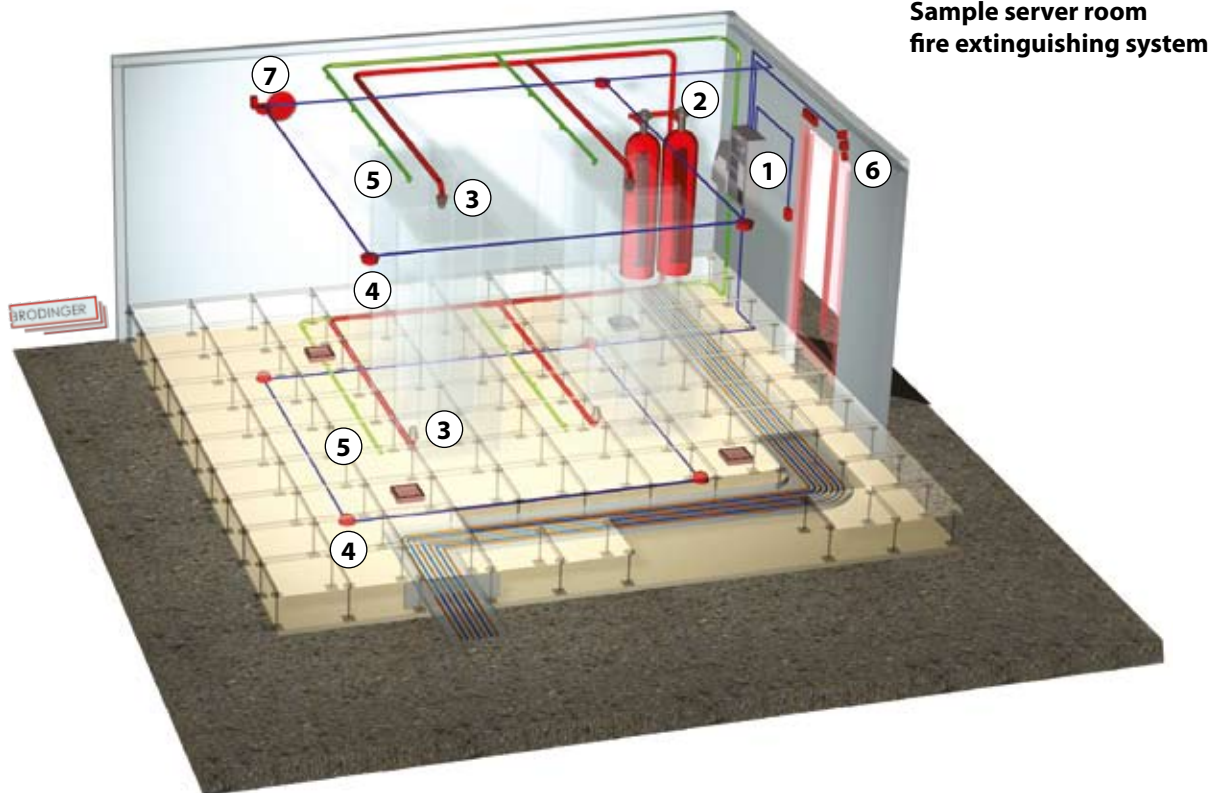


## FIRE EXTINGUISHING SYSTEMS

We offer complete fire protection infrastructure for large and small server rooms. Our services comprise fire extinguishing system design (selection and optimum adjustment to the area being protected), delivery and complete assembly of equipment for fire detection and extinguishing, as well as service and maintenance of the system.

### FM-200-based fire extinguishing system

A fire extinguishing system based on FM-200 gas is a decisive element ensuring appropriate fire safety of the premises being protected. Consequently, it should be operated and maintained according to applicable technical construction regulations, standards in place, principles of technical knowledge and relevant documentation.



Sample server room  
fire extinguishing system

#### Components of the fire extinguishing system

1. Smoke detector central unit
2. FM-200 gas cylinders
3. Extinguishing nozzles
4. Fire detectors
5. Smoke extraction system
6. Mechanism for manual deactivation of fire extinguishing
7. Mechanism for manual activation of fire extinguishing



## FIRE EXTINGUISHING SYSTEMS

FM200 is stored in cylinders with special quick opening gas valves. The available range of cylinders holding between 5 and 180 l makes it possible to adjust the required volume of gas in the smallest possible cylinder. Cylinders can be combined into sets connected with a gas manifold. Cylinders are fastened to the wall or another permanent structure with clamps.

### Side effects of gas release

The following phenomena accompany the release of FM-200:

- Blast – release of several dozen kilograms of gas within a period not exceeding 10 sec. Blast results in strong air currents capable of moving around free-standing office equipment.
- Noise – gas release produces noise of relatively high intensity, though without damage to hearing.
- Mist – gas release results in the formation of mist around the nozzles, which reduces visibility and disappears a moment after total gas release.



## NOVEC 1230-based fire extinguishing system

NOVEC 1230 is stored as liquid and released during emergency as gas.

It is a fast-acting extinguishing agent thanks to the combined effect of physical absorption of heat and chemical influence on flames.

### Safe

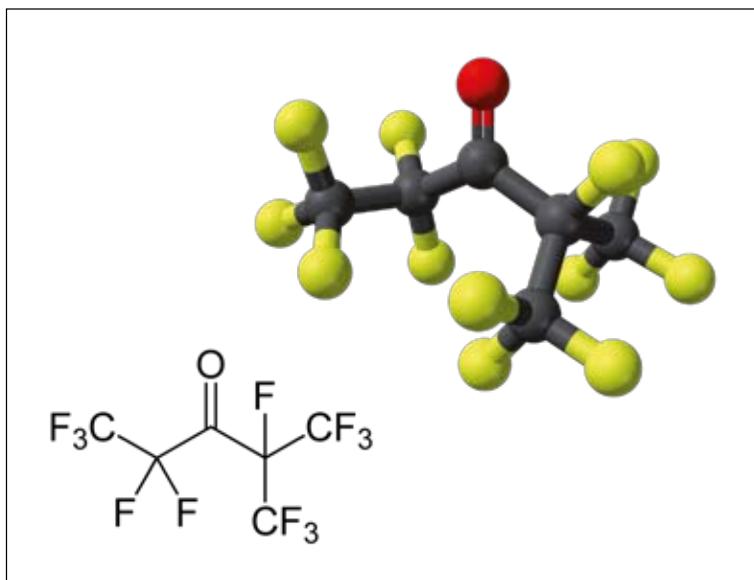
Independent research has shown that Novec 1230 poses no risk to humans staying in the premises in which the agent is released at the fire extinguishing concentration. In addition, NOVEC 1230 ensures up to 100 % safety margin – much higher than any other pure extinguishing reference agent used in terms of reference.

### Effective

NOVEC 1230 extinguishes fire very quickly, before damage is caused. This is possible due to the fact that the extinguishing concentration is achieved within a maximum of 10 seconds. It is very efficient in extinguishing class A and B fires, as well as fires affecting live equipment.

### Pure

NOVEC 1230 is released as a clear, non-conductive and non-corrosive gas. It leaves no remains, which eliminates the problem of removing deposits.





## NETWORK MANAGEMENT

As a certified partner of Huawei, a leading supplier of telecommunications solutions, we offer a complete range of network equipment, including:

- routers
- switches
- platforms for metropolitan networks (Metro Ethernet)

Huawei products are a better and cheaper alternative to Cisco!

Nearly 70 % of 50 largest telecommunications operators worldwide use Huawei products and solutions, including: UK's BT, Spanish Telefonica, Russian Rostelecom and Hungarian Magyar Telekom – as well as Chinese operators China Telecom, China Mobile, China Netcom and China Unicom.

In Poland, Huawei technology has already been implemented for example by Dialog or mobile P4 (Play).



## IT-ROOMS BOOTHS FOR DATA CENTRES

In cooperation with our partners, we deliver complete data processing and storage facilities (data centres, server rooms), including:

- IT-Room booths,
- guaranteed power supply,
- precise air-conditioning,
- electronic security systems,
- fire extinguishing systems



### IT-Room – safety and security for server rooms

The central element of such facilities is the so-called secure storage unit (IT-Room). The design and basic parameters of IT-Rooms are regulated by the Polish Standard PN-EN 1047-2 (a translation of the corresponding European standard). Key parameters ensuring the safety of data and equipment are:

- elimination of electromagnetic emanation,
- protection against electromagnetic and ionizing radiation,
- fire resistance (maintaining the temperature inside the IT ROOM below 70 °C during a fire outside the booth),
- fire resistance (keeping the humidity level inside the IT ROOM below 85 % during a fire outside the booth),
- burglary protection/access control.

As a complete unit, the booth was certified according to the PN-EN 1047-2 standard specifying the stability of operating conditions for ICT equipment during a fire outside. Parameters offered by the booth are much better than those laid down in the standard: the booth maintains the temperature below 30 °C and humidity below 67 % during a fire with a duration of at least one hour.





Safe IT booths have the following basic elements and features:

- structural elements (walls, ceiling, floor, security door, cable ducts, ventilation valves) certified for fire resistance rating of 120 minutes,
- IP 65 protection rating – dust-tight and protected against fire extinguishing water.





## KVM CONSOLES AND SWITCHES

KVM consoles are devices designed for network administrators managing multiple servers. The consoles are equipped with 15", 17" or 19" LCD displays with an TFT Active Matrix, ultraslim keyboard and touchpad. A single console occupies a height of 1 U in a 19" rack-type cabinet. The consoles secure the highest quality of image, and are compatible with dedicated KVM MER, VEN and MAR switches.

Console	 CORN 15	 CORN 17	 CORN 19	 GEM 15
<b>Catalogue number</b>	T-SO-970-101	T-SO-970-102	T-SO-970-103	T-SO-970-001
<b>Usage</b>	1 PC to 1 console	1 PC to 1 console	1 PC do 1 console	1 PC to 1 console
<b>Matrix</b>	Active TFT LCD, 15"	Active TFT LCD, 17"	Active TFT LCD, 19"	Active TFT LCD, 15"
<b>Resolution capabilities</b>	1024 x 768	1280 x 1024	1280 x 1024	1024 x768
<b>Pixel pitch</b>	0.297 x 0.297 mm	0.264 x 0.264 mm	0.298 x 0.294 mm	0.297 x 0.297 mm
<b>Viewing angle</b>	130° right-left view 100° up-down view	70° right-left view 60° up-down view	140° right-left view 140° up-down view	130° right-left view 100° up-down view
<b>Contrast ratio</b>	400 ÷ 1	450 ÷ 1	500 ÷ 1	400 ÷ 1
<b>Brightness</b>	250 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>
<b>Back light</b>	2 lamps	4 lamps	4 lamps	2 lamps
<b>Supported colors</b>	16.7 milion colors	16.7 milion colors	16.7 milion colors	16,7 milionów
<b>Response time</b>	5 ms (rising time) 11 ms (decay time)	2 ms (rising time) 14 ms (decay time)	2 ms (rising time) 10 ms (decay time)	5 ms (rising time) 11 ms (decay time)
<b>Slots number</b>	1	1	1	1
<b>Ports number PC</b>	1	1	1	1
<b>Synchronization</b>	45 ÷ 80 kHz	45 ÷ 80 kHz	45 ÷ 80 kHz	45 ÷ 80 kHz
<b>Keyboard</b>	106 buttons, PS/2, touchpad	106 buttons, PS/2, touchpad	106 buttons, PS/2, touchpad	106 buttons, PS/2, touchpad
<b>Power consumption</b>	16 W	25 W	25 W	16 W
<b>Power supply</b>	~230 V AC	~230 V AC	~230 V AC	~230 V AC
<b>Temperature</b>	0 °C ÷ 50 °C	0 °C ÷ 50 °C	0 °C ÷ 50 °C	0 °C ÷ 50 °C
<b>Humidity</b>	10 % ÷ 90 %, non-condensing	10 % ÷ 90 %, non-condensing	10 % ÷ 90 %, non-condensing	10 % ÷ 90 %, non-condensing
<b>Certification</b>	CE, FCC, UL, CUL, C-Tick, GOST	CE, FCC, UL, CUL, C-Tick, GOST	CE, FCC, UL, CUL, C-Tick, GOST	CE, FCC, UL, CUL, C-Tick, GOST

## KVM CONSOLES AND SWITCHES

	
<b>GEM 17</b>	<b>GEM 19</b>
T-SO-970-002	T-SO-970-003
1 PC to 1 console	1 PC to 1 console
Active TFT LCD, 17"	Active TFT LCD, 19"
1280 x 1024	1280 x 1024
0.264 x 0.264 mm	0.298 x 0.294 mm
70° right-left view 60° up-down view	140° right-left view 140° up-down view
450 ÷ 1	500 ÷ 1
250 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>
4 lamps	4 lamps
16.7 milion colors	16.7 milion colors
2 ms (rising time) 14 ms (decay time)	2 ms (rising time) 10 ms (decay time)
1	1
1	1
45 ÷ 80 kHz	45 ÷ 80 kHz
106 buttons, PS/2, touchpad	106 buttons, PS/2, touchpad
25 W	25 W
~230 V AC	~230 V AC
0 °C ÷ 50 °C	0 °C ÷ 50 °C
10 % ÷ 90 %, non-condensing	10 % ÷ 90 %, non-condensing
CE, FCC, UL, CUL, C-Tick, GOST	CE, FCC, UL, CUL, C-Tick, GOST




**Console with KVM switch**  
**Oxca KLA-108**


<b>Catalogue number</b>	T-SO-970-609
<b>Usage</b>	8 PC to 2 consoles (1+1) / stackable
<b>Matrix</b>	active TFT LCD, 19"
<b>Resolution capabilities</b>	1024 x 768
<b>Viewing angle</b>	140° right-left view 140° up-down view
<b>Contrast ratio</b>	500 ÷ 1
<b>Brightness</b>	260 cd/m <sup>2</sup>
<b>Back light</b>	2 lamps
<b>Supported colors</b>	16.2 milion colors
<b>Response time</b>	16 ms
<b>Types of supported PC ports (keyboard/mouse)</b>	PS/2 or USB
<b>Console ports</b>	1x VGA HDB15(F)+ 2x PS/2 mini DIN 6(F), 1 widening port for the module of remote console
<b>Available modules of the remonte console</b>	Cat. 5 or IP
<b>Port Daisy Chain</b>	1x HDB15(F)
<b>Max. ports connections</b>	64
<b>Max. switch connections</b>	8 (serial)
<b>Choice of the active PC port</b>	keyboard shortcut / OSD / button
<b>Display menu OSD</b>	yes
<b>Interval of automatic scanning ports</b>	from 5 to 99 sec.
<b>Max. resolution (remote console)</b>	1600x1200 for cat. 5 module 150 m, 1024x768 for cat. 5 module 300 m, 1600x1200 for IP module
<b>Keyboard</b>	105 buttons, PS/2, touchpad
<b>Power supply</b>	~230 V AC
<b>Temperature</b>	0 °C ÷ 50 °C
<b>Humidity</b>	10% ÷ 90% non-condensing
<b>Certification</b>	CE
<b>Dimensions</b>	600 x 450 x 44 mm
<b>Weight</b>	19.2 kg
<b>Guarantee</b>	2 years
<b>Manufacturer</b>	Oxca





Consoles with 16-port and 1-port switches are also available.

## KVM SWITCHES

Designed for connecting KVM console with workstations (servers). KVM MER, VEN and MAR switches are dedicated to CORN and GEM consoles.

Switch	 <b>MER 8D</b>	 <b>MER 16D</b>	 <b>VEN 8D</b>
<b>Catalogue number</b>	T-SO-970-201	T-SO-970-202	T-SO-970-203
<b>Usage</b>	8 PC to 1 user / stackable, for mounting in CORN/GEM consoles	16 PC to 1 user / stackable, for mounting in CORN/GEM consoles	8 PC to 2 users (1+1) / stackable, for mounting in CORN/GEM consoles
<b>PC ports</b>	8x HDB15(F)	16x HDB15(F)	8x HDB15(F)
<b>Max. distance (KVM switch - Host)</b>	5 m (depending on terminal type)	5 m (depending on terminal type)	5 m (depending on terminal type)
<b>Required cabling</b>	dedicated integrated connections	dedicated integrated connections	dedicated integrated connections
<b>Types of supported PC ports (keyboard/mouse)</b>	PS/2	PS/2	PS/2 or USB
<b>Console ports</b>	–	–	1 (one local) 1 IP-based remote console
<b>Available modules of the remote console</b>	–	–	Cat. 5 or IP
<b>Port Daisy Chain</b>	1x HDB15(F)	1x HDB15(F)	1x HDB15(F)
<b>Max. PC connections</b>	64	128	64
<b>Max. switch connections</b>	8 (serial)	8 (serial)	8 (serial)
<b>Choice of the active PC port</b>	keyboard shortcut / OSD	keyboard shortcut / OSD	keyboard shortcut / OSD
<b>Display menu OSD</b>	Yes	Yes	Yes
<b>Interval of automatic scanning ports</b>	from 5 to 99 sec.	from 5 to 99 sec.	from 5 to 99 sec.
<b>Max. resolution (Local console)</b>	1920 x 1440	1920 x 1440	1920 x 1440
<b>Max. resolution (Remote console)</b>	–	–	1600 x 1200 for cat. 5 module 150 m, 1024 x 768 for cat. 5 module 300 m, 1600 x 1200 for IP module
<b>Cover</b>	metal	metal	metal
<b>Power supply</b>	DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz	DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz	DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz
<b>Dimensions</b>	420 x 170 x 41.4 mm	420 x 170 x 41.4 mm	420 x 170 x 41.4 mm

## KVM SWITCHES



			
<b>VEN 16D</b>	<b>MAR 8D</b>	<b>MAR 16D</b>	<b>MAR 32D</b>
T-SO-970-204	T-SO-970-205	T-SO-970-206	T-SO-970-207
16 PC to 2 users (1+1) / stackable, for mounting in CORN/GEM consoles	8 PC to 2 users (1+1) / stackable, for mounting in CORN/GEM consoles	16 PC to 2 users (1+1) / stackable, for mounting in CORN/GEM consoles	32 PC to 2 users (1+1) / stackable, for mounting in CORN/GEM consoles
16x HDB15(F)	8x 8p8c(F) RJ-45	16x 8p8c(F) RJ-45	32x 8p8c(F) RJ-45
5 m (depending on terminal type)	150 m with the DCC-001	150 m with the DCC-001	150 m with the DCC-001
dedicated integrated connections	twisted pair cable, category 5e, 6 or higher	twisted pair cable, category 5e, 6 or higher	twisted pair cable, category 5e, 6 or higher
PS/2 or USB	PS/2 or USB	PS/2 or USB	PS/2 or USB
1 (one local) 1 IP-based remote console	1 (one local) 1 IP-based remote console	1 (one local) 1 IP-based remote console	1 (one local) 1 IP-based remote console
Cat. 5 or IP	Cat. 5 or IP	Cat. 5 or IP	Cat. 5 or IP
1x HDB15(F)	1x HDB15(F)	1x HDB15(F)	1x HDB15(F)
128	64	128	256
8 (serial)	8 (serial)	8 (serial)	8 (serial)
keyboard shortcut / OSD	keyboard shortcut / OSD	keyboard shortcut / OSD	keyboard shortcut / OSD
Yes	Yes	Yes	Yes
from 5 to 99 sec.	from 5 to 99 sec.	from 5 to 99 sec.	from 5 to 99 sec.
1920 x 1440	1600 x 1200	1600 x 1200	1600 x 1200
1600 x 1200 for cat. 5 module 150 m, 1024 x 768 for cat. 5 module 300 m, 1600 x 1200 for IP module	1600 x 1200 for cat. 5 module 150 m, 1024 x 768 for cat. 5 module 300 m, 1600 x 1200 for IP module	1600 x 1200 for cat. 5 module 150 m, 1024 x 768 for cat. 5 module 300 m, 1600x1200 for IP module	1600 x 1200 for cat. 5 module 150 m, 1024 x 768 for cat. 5 module 300 m, 1600 x 1200 for IP module
metal	metal	metal	metal
DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz	DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz	DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz	DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz
420 x 170 x 41.4 mm	420 x 170 x 41.4 mm	420 x 170 x 41.4 mm	420 x 170 x 41.4 mm

## KVM SWITCHES OXCA 19"



Switch	KSC-108A	KSC-108B	KSC-108E	KCC-108A
<b>Catalogue number</b>	T-SO-970-600	T-SO-970-602	T-SO-970-604	T-SO-970-606
<b>Usage</b>	8 PC to 1 user / stackable	8 PC to 2 users (1+1) / stackable	8 PC to 2 users (1+1) / stackable	8 PC to 2 users (1+1) / stackable
<b>PC ports</b>	8x HDB15(F)	8x HDB15(F)	8x HDB15(F)	8x 8p8c(F) RJ-45
<b>Max. distance (KVM switch - Host)</b>	5 m (depending on terminal type)	5 m (depending on terminal type)	5 m (depending on terminal type)	150 m with Oxca DCC-001
<b>Required cabling</b>	dedicated integrated connections	dedicated integrated connections	dedicated integrated connections	twisted pair cable, category 5e, 6 or higher
<b>Types of supported PC ports (keyboard/mouse)</b>	PS/2 or USB	PS/2 or USB	PS/2 or USB	PS/2 or USB
<b>Console ports</b>	1x VGA HDB15(F) + 2x PS/2 mini DIN 6(F), 1 widening port for the module of remote console	1x VGA HDB15(F) + 2x PS/2 mini DIN 6(F), 1 widening port for the module of remote console	1x VGA HDB15(F) + 2x USB A(F), 1 widening port for the module of remote console	1x VGA HDB15(F) + 2x USB A(F), 1 widening port for the module of remote console
<b>Available modules of the remote console</b>	–	Cat. 5 or IP	Cat. 5 or IP	Cat. 5 or IP
<b>Port Daisy Chain</b>	1x HDB15(F)	1x HDB15(F)	1x HDB15(F)	1x HDB15(F)
<b>Max. PC connections</b>	64	64	64	64
<b>Max. switch connections</b>	8 (serial)	8 (serial)	8 (serial)	8 (serial)
<b>Choice of the active PC port</b>	keyboard shortcut / OSD / button	keyboard shortcut / OSD / button	keyboard shortcut / OSD / button	keyboard shortcut / OSD / button
<b>Display of the switch number</b>	7-sectional LED	7-sectional LED	7-sectional LED	7-sectional LED
<b>Numbers of LED diodes of the state</b>	16 (2 for each PC port)	16 (2 for each PC port)	16 (2 for each PC port)	16 (2 for each PC port)
<b>Display menu OSD</b>	Yes	Yes	Yes	Yes
<b>Interval of automatic scanning ports</b>	from 5 to 99 sec.	from 5 to 99 sec.	from 5 to 99 sec.	from 5 to 99 sec.
<b>Max. resolution (Local console)</b>	1920 x 1440	1920 x 1440	1920 x 1440	1600 x 1200
<b>Max. resolution (Remote console)</b>	–	1600 x 1200 for cat. 5 module 150 m, 1024 x 768 for cat. 5 module 300 m, 1600 x 1200 for IP module	1600 x 1200 for cat. 5 module 150 m, 1024 x 768 for cat. 5 module 300 m, 1600 x 1200 for IP module	1600 x 1200 for cat. 5 module 150 m, 1024 x 768 for module cat. 5 module 300 m, 1600 x 1200 for IP module
<b>Cover</b>	19", metal	19", metal	19", metal	19", metal
<b>Power supply</b>	DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz	DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz	DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz	DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz
<b>Dimensions</b>	470 x 190 x 44 mm	470 x 190 x 44 mm	470 x 190 x 44 mm	470 x 190 x 44 mm

## KVM SWITCHES OXCA 19"

				
KSC-116A	KSC-116E	KCC-116A	KSC-116B	KCC-132A
T-SO-970-601	T-SO-970-605	T-SO-970-607	T-SO-970-603	T-SO-970-608
16 PC to 1 user / stackable	16 PC to 2 users (1+1) / stackable	16 PC to 2 users (1+1) / stackable	16 PC to 2 users (1+1) / stackable	16 PC to 2 users (1+1) / stackable
16x HDB15(F)	16x HDB15(F)	16x 8p8c(F) RJ-45	16x HDB15(F)	32x 8p8c(F) RJ-45
5 m (depending on terminal type)	5 m (depending on terminal type)	150 m with Oxca DCC-001	5 m (depending on terminal type)	150 m with Oxca DCC-001
dedicated integrated connections	dedicated integrated connections	twisted pair cable, category 5e, 6 or higher	dedicated integrated connections	twisted pair cable, category 5e, 6 or higher
PS/2 or USB	PS/2 or USB	PS/2 or USB	PS/2 or USB	PS/2 or USB
1x VGA HDB15(F) + 2x PS/2 mini DIN 6(F), 1 widening port for the module of remote console	1x VGA HDB15(F) + 2x USB A(F), 1 widening port for the module of remote console	1x VGA HDB15(F) + 2x USB A(F), 1 widening port for the module of remote console	1x VGA HDB15(F) + 2x PS/2 mini DIN 6(F), 1 widening port for the module of remote console	1x VGA HDB15(F) + 2x USB A(F), 1 widening port for the module of remote console
-	Cat. 5 or IP	Cat. 5 or IP	Cat. 5 or IP	Cat. 5 or IP
1x HDB15(F)	1x HDB15(F)	1x HDB15(F)	1x HDB15(F)	1x HDB15(F)
128	128	128	128	256
8 (serial)	8 (serial)	8 (serial)	8 (serial)	8 (serial)
keyboard shortcut / OSD / button	keyboard shortcut / OSD / button	keyboard shortcut / OSD / button	keyboard shortcut / OSD / button	keyboard shortcut / OSD / button
7-sectional LED	7-sectional LED	7-sectional LED	7-sectional LED	7-sectional LED
32 (2 for each PC port)	32 (2 for each PC port)	32 (2 for each PC port)	32 (2 for each PC port)	64 (2 for each PC port)
Yes	Yes	Yes	Yes	Yes
from 5 to 99 sec.	from 5 to 99 sec.	from 5 to 99 sec.	from 5 to 99 sec.	from 5 to 99 sec.
1920 x 1440	1920 x 1440	1600 x 1200	1920 x 1440	1600 x 1200
-	1600 x 1200 for cat. 5 module 150 m, 1024 x 768 for cat. 5 module 300 m, 1600 x 1200 for IP module	1600 x 1200 for cat. 5 module 150 m, 1024 x 768 for cat. 5 module 300 m, 1600 x 1200 for IP module	1600 x 1200 for cat. 5 module 150 m, 1024 x 768 for cat. 5 module 300 m, 1600 x 1200 for IP module	1600 x 1200 for cat. 5 module 150 m, 1024 x 768 for cat. 5 module 300 m, 1600 x 1200 for IP module
19", metal	19", metal	19", metal	19", metal	19", metal
DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz	DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz	DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz	DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz	DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz
470 x 190 x 44 mm	470 x 190 x 44 mm	470 x 190 x 44 mm	470 x 190 x 44 mm	470 x 190 x 44 mm



## SUPPLEMENTARY ACCESSORIES FOR KVM SWITCHES AND CONSOLES

### 19" keyboard KBD-106TP-USB

**Catalogue number:** T-SO-970-400; T-SO-970-401

**Interface:** PS/2 (T-SO-970-400) or USB (T-SO-970-401)

**Dimensions:** 437.4 x 436.6 x 44 mm

**Weight:** 6.0 kg

**Power supply:** from keyboard port



19" keyboard KBD-106TP-USB

### Cable HD-MD

**PC ports:** 1x HD-15M, 2x MD-6M

**Console ports:** 1x HD-15M

Cable type	Length	Catalogue number
KC-1501	1.8 m	T-SO-970-301
KC-1503	3.0 m	T-SO-970-303
KC-1505	5.0 m	T-SO-970-305



Cable HD-MD

### Cable HD-USB

**PC ports:** 1x HD-15M, 1x USB type A (M)

**Console ports:** 1x HD-15M

Cable type	Length	Catalogue number
KC-1501-USB	1.8 m	T-SO-970-311
KC-1503-USB	3.0 m	T-SO-970-313
KC-1505-USB	5.0 m	T-SO-970-315



Cable HD-USB

### Adapter for KVM cat. 5, DCC-001

**Catalogue Number:** T-SO-970-620

**Application:** Adapter RJ-45 to PS/2+VGA for KVM cat. 5

**PC port:** 1x VGA HDB15(F) + 2x PS/2 mini DIN 6(F)

**Types of supported PC ports (keyboard/mouse):**

PS/2 or USB (from CUP-101)

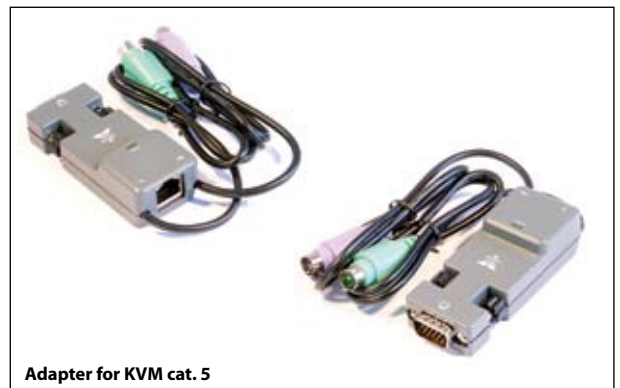
**KVM port:** 1x 8p8c(F) RJ-45

**Numbers of LED diodes of the state:** 1

**Dimensions:** 90 x 30 x 20 mm

**Power supply:**

from PS/2 ports, the external power supply is not necessary



Adapter for KVM cat. 5

## SUPPLEMENTARY ACCESSORIES FOR KVM SWITCHES AND CONSOLES

### Console module KVM 1+1 with cat. 5 port, type DCC -150

**Catalogue number:** T-SO-970-622

**Application:**

remote access to KVM 1+1 through the twisted-pair cable

**Contain:** local module, remote module

**Max range:** 150 m

**Demand wire:** twisted-pair cable cat. 5e, 6 or higher

**Access control:** on the level of remote console module

**Local module:**

**Application:** for the cat. 5 remote module connection

**Port cat. 5:** 1x 8p8c(F) RJ-45

**Dimensions:** 108 x 72 x 20 mm

**Remote module:**

**Application:** for the remote console connection to KVM 1+1,  
integrated KVM 2 PC for 1 user

**PC port:** 1x HDB15(F)

**KVM port 1+1:** 1x 8p8c(F) RJ-45

**Types of supported PC ports (keyboard/mouse):** PS/2 or USB

**Console ports:** 1x VGA HDB15(F) + 2x USB A(F)

**Choice of the active PC/Cat.5 port:**

keyboard shortcut / OSD / button

**Number of LED diodes of the state:** 2

**Max. resolution:** 1280 x 1024

**Cover:** desktop, metal

**Dimensions:** 160 x 70 x 25 mm

**Power supply:** 9 V DC 500 mA, ~230 V AC 50 Hz



Console module KVM 1+1 with cat. 5 port

### Console module KVM 1+1 with IP port, type DIP-101

**Catalogue number:** T-SO-970-330

**Application:** remote access to KVM 1+1 through the IP network

**Max. resolution:** local 1600x1200, remote 1280x1024

**IP port:** 1x 10/100 Mbps RJ-45, access HTTP/HTTPS and telnet

**Terminal port:** 1x DB9, access to the basic configuration locally or  
through a modem

**Line port:** 1x miniUSB B(F) 2.0, remote access to the mass storage

**Service of protocols:** DHCP, static IP (support for DDNS), Bootp

**Data encryption:** SSL 256-bit

**Access control:** login + password, user profiles, user groups

**Compatibility:** IE6.0, Mozilla 1.6, Netscape 7.0, Opera 8.0

**Access through the HTTP:** required installation Java RE 1.4.2

**Simultaneous access of multiple users:**

recommended number: not more than 15 users

**Number of users accounts:**

recommended number: not more than 150 accounts

**Log on of events:** NFS, SMTP, SNMP Trap

**Dimensions:** 108 x 72 x 20 mm

**Software update:** Yes



Console module KVM 1+1 with IP port

## SERVERS

ZPAS Group offers **NTT SYSTEM<sup>®</sup>** servers

### Tytan S29 Series

**Board:** dual processor type, 7 x PCI-e 2.0 x 8 (connectors x 16)

**Processor:** Xeon 5500

**Memory:** max 144 GB RAM (12 memory sticks), DDR3

**Network:** 2 x GbE

**Management:** integrated module with dedicated network card, possibility for redirecting drives and KVM console

**Disks:** optional



#### Tytan 4208S29 Business

Tower or 4 U rack enclosure, dual power supply, 8 x 3.5" bays, hot-swap function



#### Tytan 2208S29 Advanced

2 U rack enclosure, dual power supply, 8 x 3.5" bays, hotswap function



#### Tytan 2216S29 Advanced

2 U rack enclosure, dual power supply, 16 x 2.5" bays, hotswap function

### Tytan S23 Series

**Board:** dual processor type, 2 x PCI-e 2.0 x 8

**Processor:** Xeon 5500

**Memory:** max 144 GB RAM (12 memory sticks), DDR3

**Network:** 2 x GbE

**Management:** integrated module with dedicated network card, possibility for redirecting drives and KVM console

**Disks:** optional



#### Tytan 1204S23 Advanced

1 U rack enclosure, dual power supply, 4 x 3.5" bays, hotswap function



#### Tytan 1208S23 Advanced

1 U rack enclosure, dual power supply, 8 x 2.5" bays, hotswap function

## FLOOR-STANDING CABINETS



## SZE2 CABINETS



Front view



Cabinet 600 mm wide including mounting plate and without side panels



Placement of mounting plate inside the cabinet

- Universal industrial cabinets designed for both outdoor and indoor applications.
- Design of the cabinet allows easy baying in rows.
- Manufactured in 19 standard dimensions according to the chart below.
- Cabinets of non-standard dimensions or in stainless steel version can be manufactured on individual customer's request.

### Chart of standard cabinet dimensions

	Total width of the cabinet [mm]		Total depth of the cabinet [mm]	Height of the cabinet without plinth [mm]	
	with flushed side panels	with external side panels		1800	2000
				Catalogue numbers of cabinets	
Cabinets with single-wing door	600	650	400	—	WZ-1951-01-50-011
			500	WZ-1951-01-24-011	WZ-1951-01-12-011
			600	WZ-1951-01-23-011	WZ-1951-01-11-011
			800	—	WZ-1951-01-10-011
	800	850	400	—	WZ-1951-01-49-011
			500	WZ-1951-01-21-011	WZ-1951-01-09-011
			600	WZ-1951-01-20-011	WZ-1951-01-08-011
			800	—	WZ-1951-01-07-011
Cabinets with double-wing door	1000	1050	500	—	WZ-1951-01-06-011
			600	—	WZ-1951-01-05-011
	1200	1250	500	WZ-1951-01-15-011	WZ-1951-01-03-011
			600	WZ-1951-01-14-011	WZ-1951-01-02-011
			800	—	WZ-1951-01-01-011
			800	—	WZ-1951-01-01-011

### Technical data

Element type	Material sheet steel	Surface finishing
Cabinet's frame - top and bottom plate - posts	2.0 mm 2.5 mm	Standard cabinet is powder painted in RAL 7035 (epoxide-polyester paint of coarse-grained structure, applied for internal conditions). On customer's request, it is possible to use special paint with increased resistance to adverse weather conditions and using polyzinc base.
Doors	2.0 mm	
Panels	1.5 mm	
Roof	1.5 mm	
Plinth - corners - covers	2.5 mm 1.25 mm	
Mounting plate	3.0 mm	Zinc coated
Mounting rails	1.5 and 2.0 mm	Al-Zn coated

#### Note:

On request, the frame, door, side panels, roof and the plinth can be made of stainless steel.

#### Protection degree in accordance with EN 60 529 / IEC 529

IP 64 for both single-wing or double-wing door cabinets.

### Description of SZE2 cabinet design

#### Welded framework of the cabinet

- Slotted side framework enables fixing a system of mounting rails or a mounting plate.
- The top plate of the frame is fitted with openings designed for cable entries or for mounting fan units. In the standard version, they are blinded with solid blanking plates.
- The bottom plate of the frame is fitted with one or two openings designed for cable entries. In the standard version, they are blinded with sliding gland plates.

#### Front door, rear panel

- Cabinets 1000 and 1200 mm wide are equipped with a double-wing door, while cabinets 800 and 600 mm wide are equipped with a single-wing door. A rear panel can be replaced with a rear door in all available widths of the cabinets.



## SZE2 CABINETS



The cabinet with the roof and flushed side panels



The cabinet with the roof and external side panels



The cabinet with a roof, flushed side panels and lifting eyes



Sealing double-wing door to assure IP 64 protection



Lock with double-bit insert

- Easy change of door opening direction (by turning the door wing and the lock).
- Standard door is equipped with a 3-point lock and a stiffening slotted frame used for cable ducts, bundles of cables etc.
- Locking systems: factory-mounted lock with double-bit insert, option of replacement with a lock provided with a swing handle and cylinder insert.
- Possibility of manufacturing doors with a glass window and perforation.
- Maximum door opening angle is 120°.

### Two options of side panels

- Flushed panels - kept within cabinet dimensions.
- External panels - expanding the cabinet by 25 mm on each side; especially recommended for outdoor applications.

### Roof

- As a part of supplementary accessories.
- Recommended for cabinets placed outside the buildings.

### Lifting eyes

- Lifting eyes are available if requested. They are fixed to the threaded holes in the top of the frame.

### Base

- The cabinet is normally placed on either 100 mm or 200 mm plinth.
- It is possible to set the cabinet directly on the cable duct, however this option needs to be discussed with our technical staff.

### Sealing gasket

- Doors, panels and solid blanking plates used in the top are sealed with polyurethane foam.

### Earthing and potential equalisation

- Each part of the cabinet can be grounded on request.
- Earthing cables, bars, or potential equalisation bar are ordered separately.

### Fastening appliances in the cabinet

- Mounting plate - fits within the light of the cabinet, easy positioning by means of 2 sliding profiles on both sides; quick fastening using 4 bolts.
- Mounting rails - make it possible to build a required racking system within the cabinet (openings in the rails match the horizontal and vertical openings of the frame).
- 19" mounting profiles.
- 19" swing frame for cabinets 800 mm wide.

### Baying cabinets in rows

- Possibility to bay cabinets in rows.
- Bayed cabinets can be additionally equipped with a partition.



Cabinet 800 mm wide including 19" swing frame



Cabinet 800 mm wide including 19" mounting profiles, without side panels



Fixing of 19" mounting profiles in 600 mm wide cabinet



Lock with swing handle and cylinder insert



Baying cabinets in rows by using mounting plate infill



Example of the rack assembled of mounting rails and shelves

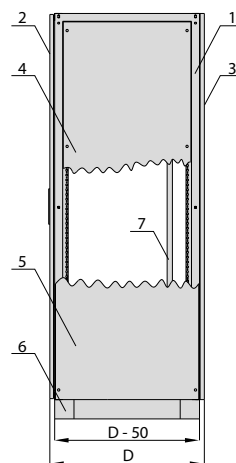


## DESIGN OF SZE2 CABINETS

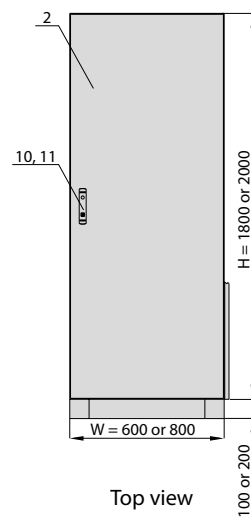


**SZE2 cabinet 1200 mm wide, without side panels, intended for baying in rows**

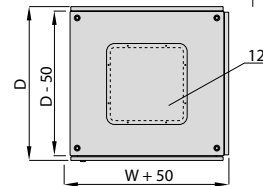
**Side view**  
(comparison of flushed and external side panels)



**Front view**  
(cabinet with single-wing door)



**Top view**



**Notes:**  
Dimensions of bottom and top plates are specified on pages 154-155.  
Detailed drawings of the cabinet are given on pages 152-153.

### Ordering instruction

Placement of orders for SZE2 cabinet and supplementary accessories should be done by specifying **catalogue numbers from relevant charts**.

### Reference chart

Dimensions of cabinet's frame [mm]	Height H	1800					
	Width W	600		800		1200	
	Depth D	500	600	500	600	500	600
Door's type	Number of wings	1	1	1	1	2	2
Dimensions of mounting plate [mm]	Height HP	1730	1730	1730	1730	1730	1730
	Width WP	512	512	712	712	1112	1112

**\*) SZE2 cabinet - basic configuration:** cabinet's frame, front door with a lock that incl. double-bit insert (no handle), rear panel, mounting plate for the full height of the cabinet, set of sliding gland plates for cabinet's bottom plate.

**Note:** side panels, plinth, roof, lifting eyes and other supplementary accessories should be ordered separately.

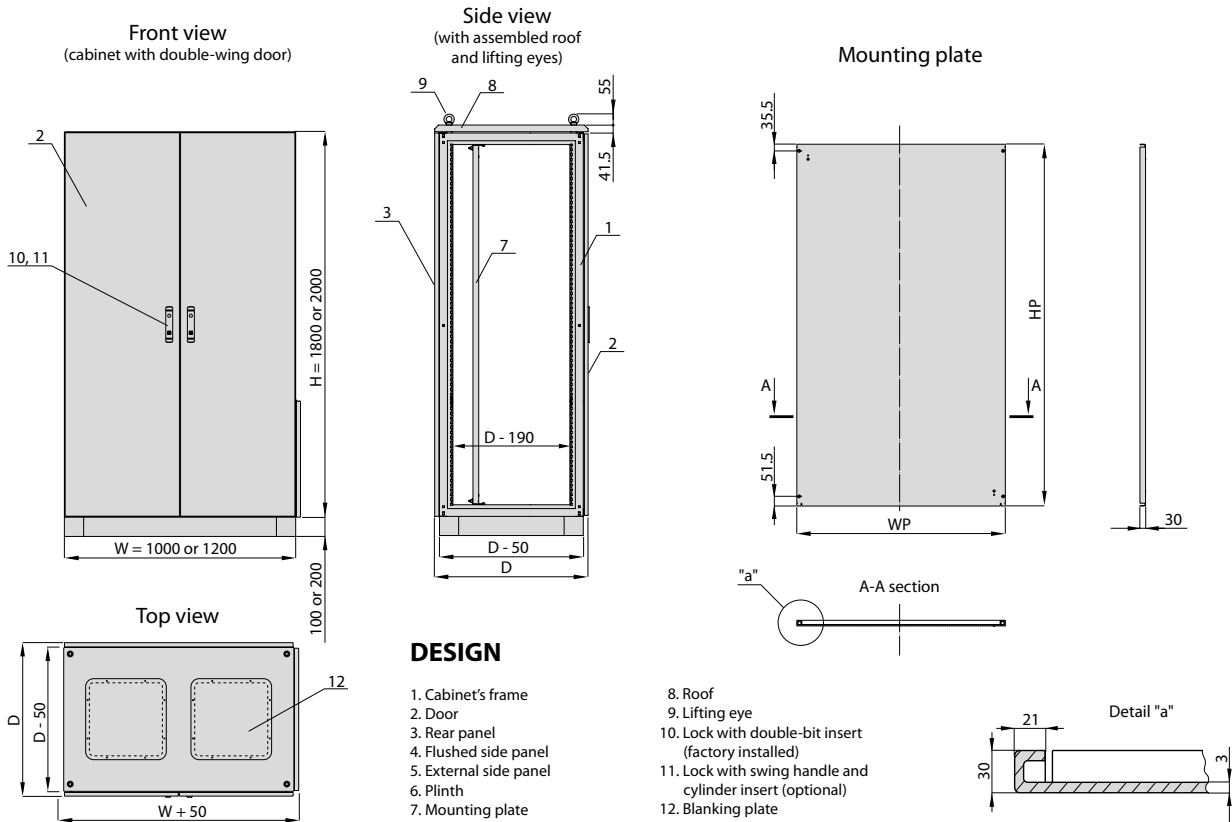
**Material:**

See page 148.

**\*\*) Detailed list of supplementary accessories:** page 157-176.

		Package	CATALOGUE NUMBERS					
Cabinet SZE2*		1 pc.	WZ-1951-01-24-011	WZ-1951-01-23-011	WZ-1951-01-21-011	WZ-1951-01-20-011	WZ-1951-01-15-011	WZ-1951-01-14-011
Supplementary accessories**	Flushed in side panels	2 pcs.	WZ-1951-09-06-011	WZ-1951-09-05-011	WZ-1951-09-06-011	WZ-1951-09-05-011	WZ-1951-09-06-011	WZ-1951-09-05-011
	External side panels	2 pcs.	WZ-1951-07-14-011	WZ-1951-07-13-011	WZ-1951-07-14-011	WZ-1951-07-13-011	WZ-1951-07-14-011	WZ-1951-07-13-011
	Roof for cabinet with flushed side panels	1 pc.	WZ-1951-27-13-011	WZ-1951-27-12-011	WZ-1951-27-09-011	WZ-1951-27-08-011	WZ-1951-27-03-011	WZ-1951-27-02-011
	Roof for cabinet with external side panels	1 pc.	WZ-1951-28-13-011	WZ-1951-28-12-011	WZ-1951-28-09-011	WZ-1951-28-08-011	WZ-1951-28-03-011	WZ-1951-28-02-011
	100 mm modular plinth	1 pc.	WZ-001C-60-45-011	WZ-001C-60-55-011	WZ-001C-80-45-011	WZ-001C-80-55-011	WZ-001C-12-45-011	WZ-001C-12-55-011
	200 mm modular plinth	1 pc.	WZ-002C-60-45-011	WZ-002C-60-55-011	WZ-002C-80-45-011	WZ-002C-80-55-011	WZ-002C-12-45-011	WZ-002C-12-55-011
	100 mm welded plinth	1 pc.	WZ-1951-71-13-011	WZ-1951-71-12-011	WZ-1951-71-09-011	WZ-1951-71-08-011	WZ-1951-71-03-011	WZ-1951-71-02-011
	200 mm welded plinth	1 pc.	WZ-1951-74-13-011	WZ-1951-74-12-011	WZ-1951-74-09-011	WZ-1951-74-08-011	WZ-1951-74-03-011	WZ-1951-74-02-011
	Mounting plates infill	1 pc.	WZ-1951-47-02-000	WZ-1951-47-02-000	WZ-1951-47-02-000	WZ-1951-47-02-000	WZ-1951-47-02-000	WZ-1951-47-02-000
	19" symmetrical swing frame	1 pc.	-----	-----	WZ-1951-29-02-011	WZ-1951-29-02-011	-----	-----
	19" asymmetrical swing frame	1 pc.	-----	-----	WZ-1951-20-02-011	WZ-1951-20-02-011	-----	-----
	Earthing bar set	1 pc.	WZ-1951-24-04-000	WZ-1951-24-04-000	WZ-1951-24-03-000	WZ-1951-24-03-000	WZ-1951-24-01-000	WZ-1951-24-01-000
	Potential equalisation bar	1 pc.	WZ-1951-25-04-000	WZ-1951-25-04-000	WZ-1951-25-03-000	WZ-1951-25-03-000	WZ-1951-25-01-000	WZ-1951-25-01-000
	Cable bar	1 pc.	WZ-1951-22-04-000	WZ-1951-22-04-000	WZ-1951-22-03-000	WZ-1951-22-03-000	WZ-1951-22-01-000	WZ-1951-22-01-000
	Support for cable bar	1 pc.	WZ-1951-66-03-000	WZ-1951-66-02-000	WZ-1951-66-03-000	WZ-1951-66-02-000	WZ-1951-66-03-000	WZ-1951-66-02-000
	Transverse cable bar	1 pc.	WZ-1951-65-03-000	WZ-1951-65-02-000	WZ-1951-65-03-000	WZ-1951-65-02-000	WZ-1951-65-03-000	WZ-1951-65-02-000
	Lightening set	1 set	WZ-1951-38-04-011	WZ-1951-38-04-011	WZ-1951-38-03-011	WZ-1951-38-03-011	WZ-1951-38-01-011	WZ-1951-38-01-011
Kit of system lighting	1 set	WZ-1951-80-04-011	WZ-1951-80-04-011	WZ-1951-80-03-011	WZ-1951-80-03-011	WZ-1951-80-01-011	WZ-1951-80-01-011	

DESIGN OF SZE2 CABINETS

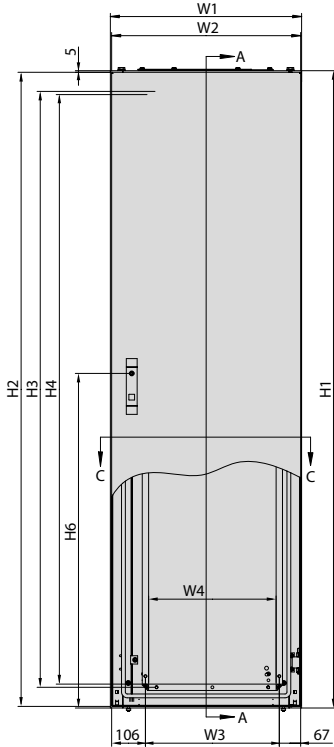


2000												
600				800				1000		1200		
400	500	600	800	400	500	600	800	500	600	500	600	800
1	1	1	1	1	1	1	1	2	2	2	2	2
1930	1930	1930	1930	1930	1930	1930	1930	1930	1930	1930	1930	1930
512	512	512	512	712	712	712	712	912	912	1112	1112	1112

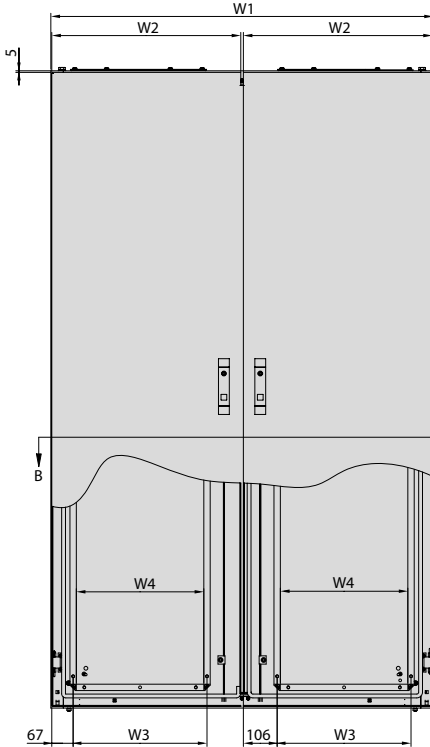
WZ-1951-01-50-011	WZ-1951-01-12-011	WZ-1951-01-11-011	WZ-1951-01-10-011	WZ-1951-01-09-011	WZ-1951-01-09-011	WZ-1951-01-08-011	WZ-1951-01-07-011	WZ-1951-01-06-011	WZ-1951-01-05-011	WZ-1951-01-03-011	WZ-1951-01-02-011	WZ-1951-01-01-011
WZ-1951-09-13-011	WZ-1951-09-03-011	WZ-1951-09-02-011	WZ-1951-09-01-011	WZ-1951-09-13-011	WZ-1951-09-03-011	WZ-1951-09-02-011	WZ-1951-09-01-011	WZ-1951-09-03-011	WZ-1951-09-02-011	WZ-1951-09-03-011	WZ-1951-09-02-011	WZ-1951-09-01-011
WZ-1951-07-29-011	WZ-1951-07-07-011	WZ-1951-07-06-011	WZ-1951-07-05-011	WZ-1951-07-29-011	WZ-1951-07-07-011	WZ-1951-07-06-011	WZ-1951-07-05-011	WZ-1951-07-07-011	WZ-1951-07-06-011	WZ-1951-07-07-011	WZ-1951-07-06-011	WZ-1951-07-05-011
WZ-1951-27-14-011	WZ-1951-27-13-011	WZ-1951-27-12-011	WZ-1951-27-11-011	WZ-1951-27-10-011	WZ-1951-27-09-011	WZ-1951-27-08-011	WZ-1951-27-07-011	WZ-1951-27-06-011	WZ-1951-27-05-011	WZ-1951-27-03-011	WZ-1951-27-02-011	WZ-1951-27-01-011
WZ-1951-28-14-011	WZ-1951-28-13-011	WZ-1951-28-12-011	WZ-1951-28-11-011	WZ-1951-28-10-011	WZ-1951-28-09-011	WZ-1951-28-08-011	WZ-1951-28-07-011	WZ-1951-28-06-011	WZ-1951-28-05-011	WZ-1951-28-03-011	WZ-1951-28-02-011	WZ-1951-28-01-011
WZ-001C-60-35-011	WZ-001C-60-45-011	WZ-001C-60-55-011	WZ-001C-60-75-011	WZ-001C-80-35-011	WZ-001C-80-45-011	WZ-001C-80-55-011	WZ-001C-80-75-011	WZ-001C-10-45-011	WZ-001C-10-55-011	WZ-001C-12-45-011	WZ-001C-12-55-011	WZ-001C-12-75-011
WZ-002C-60-35-011	WZ-002C-60-45-011	WZ-002C-60-55-011	WZ-002C-60-75-011	WZ-002C-80-35-011	WZ-002C-80-45-011	WZ-002C-80-55-011	WZ-002C-80-75-011	WZ-002C-10-45-011	WZ-002C-10-55-011	WZ-002C-12-45-011	WZ-002C-12-55-011	WZ-002C-12-75-011
WZ-1951-71-14-011	WZ-1951-71-13-011	WZ-1951-71-12-011	WZ-1951-71-11-011	WZ-1951-71-10-011	WZ-1951-71-09-011	WZ-1951-71-08-011	WZ-1951-71-07-011	WZ-1951-71-06-011	WZ-1951-71-05-011	WZ-1951-71-03-011	WZ-1951-71-02-011	WZ-1951-71-01-011
WZ-1951-74-14-011	WZ-1951-74-13-011	WZ-1951-74-12-011	WZ-1951-74-11-011	WZ-1951-74-10-011	WZ-1951-74-09-011	WZ-1951-74-08-011	WZ-1951-74-07-011	WZ-1951-74-06-011	WZ-1951-74-05-011	WZ-1951-74-03-011	WZ-1951-74-02-011	WZ-1951-74-01-011
WZ-1951-47-01-000	WZ-1951-47-01-000	WZ-1951-47-01-000	WZ-1951-47-01-000	WZ-1951-47-01-000	WZ-1951-47-01-000	WZ-1951-47-01-000	WZ-1951-47-01-000	WZ-1951-47-01-000	WZ-1951-47-01-000	WZ-1951-47-01-000	WZ-1951-47-01-000	WZ-1951-47-01-000
----	----	----	----	WZ-1951-29-01-011	WZ-1951-29-01-011	WZ-1951-29-01-011	WZ-1951-29-01-011	----	----	----	----	----
----	----	----	----	WZ-1951-20-01-011	WZ-1951-20-01-011	WZ-1951-20-01-011	WZ-1951-20-01-011	----	----	----	----	----
WZ-1951-24-04-000	WZ-1951-24-04-000	WZ-1951-24-04-000	WZ-1951-24-04-000	WZ-1951-24-03-000	WZ-1951-24-03-000	WZ-1951-24-03-000	WZ-1951-24-03-000	WZ-1951-24-02-000	WZ-1951-24-02-000	WZ-1951-24-01-000	WZ-1951-24-01-000	WZ-1951-24-01-000
WZ-1951-25-04-000	WZ-1951-25-04-000	WZ-1951-25-04-000	WZ-1951-25-04-000	WZ-1951-25-03-000	WZ-1951-25-03-000	WZ-1951-25-03-000	WZ-1951-25-03-000	WZ-1951-25-02-000	WZ-1951-25-02-000	WZ-1951-25-01-000	WZ-1951-25-01-000	WZ-1951-25-01-000
WZ-1951-22-04-000	WZ-1951-22-04-000	WZ-1951-22-04-000	WZ-1951-22-04-000	WZ-1951-22-03-000	WZ-1951-22-03-000	WZ-1951-22-03-000	WZ-1951-22-03-000	WZ-1951-22-02-000	WZ-1951-22-02-000	WZ-1951-22-01-000	WZ-1951-22-01-000	WZ-1951-22-01-000
WZ-1951-66-04-000	WZ-1951-66-03-000	WZ-1951-66-02-000	WZ-1951-66-01-000	WZ-1951-66-04-000	WZ-1951-66-03-000	WZ-1951-66-02-000	WZ-1951-66-01-000	WZ-1951-66-03-000	WZ-1951-66-02-000	WZ-1951-66-03-000	WZ-1951-66-02-000	WZ-1951-66-01-000
WZ-1951-65-04-000	WZ-1951-65-03-000	WZ-1951-65-02-000	WZ-1951-65-01-000	WZ-1951-65-04-000	WZ-1951-65-03-000	WZ-1951-65-02-000	WZ-1951-65-01-000	WZ-1951-65-03-000	WZ-1951-65-02-000	WZ-1951-65-03-000	WZ-1951-65-02-000	WZ-1951-65-01-000
WZ-1951-38-04-011	WZ-1951-38-04-011	WZ-1951-38-04-011	WZ-1951-38-04-011	WZ-1951-38-03-011	WZ-1951-38-03-011	WZ-1951-38-03-011	WZ-1951-38-03-011	WZ-1951-38-02-011	WZ-1951-38-02-011	WZ-1951-38-01-011	WZ-1951-38-01-011	WZ-1951-38-01-011
WZ-1951-80-04-011	WZ-1951-80-04-011	WZ-1951-80-04-011	WZ-1951-80-04-011	WZ-1951-80-03-011	WZ-1951-80-03-011	WZ-1951-80-03-011	WZ-1951-80-03-011	WZ-1951-80-02-011	WZ-1951-80-02-011	WZ-1951-80-01-011	WZ-1951-80-01-011	WZ-1951-80-01-011

DESIGN OF SIZE2 CABINETS

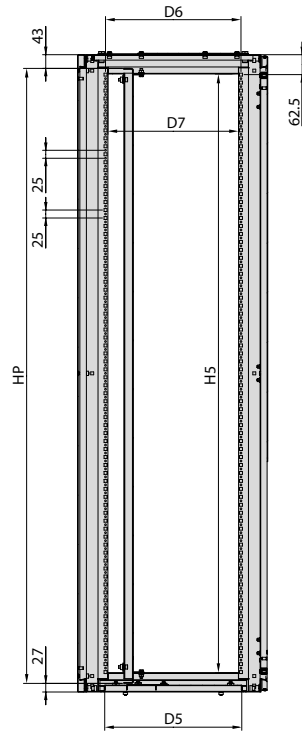
Front view  
(cabinets with single-wing door)



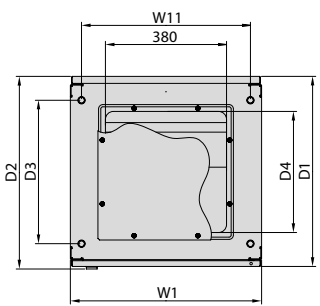
Front view  
(cabinet with double-wing door)



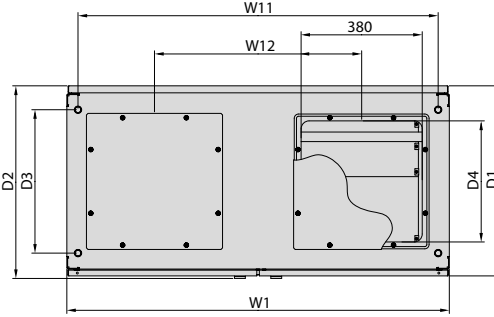
A-A section



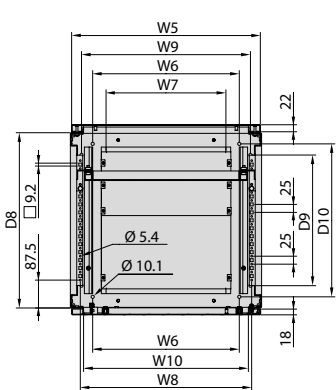
Top view



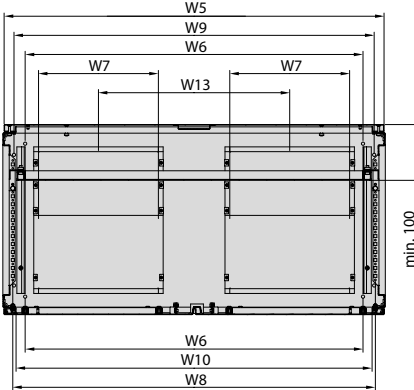
Top view



C-C section

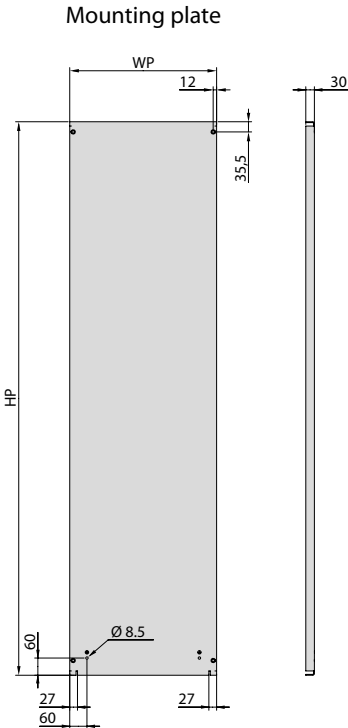
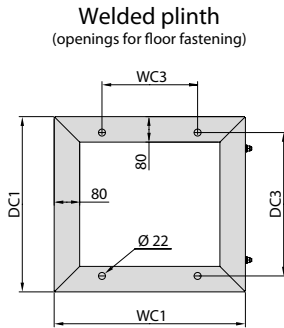
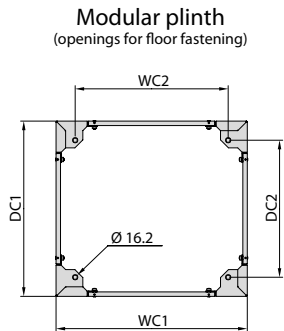


B-B section



Cabinet's catalogue number	HEIGHT DIMENSIONS					
	H1	H2	H3	H4	H5	H6
WZ-1951-01-01-011	2000	1990	1870	1850	1879	1050
WZ-1951-01-02-011	2000	1990	1870	1850	1879	1050
WZ-1951-01-03-011	2000	1990	1870	1850	1879	1050
WZ-1951-01-05-011	2000	1990	1870	1850	1879	1050
WZ-1951-01-06-011	2000	1990	1870	1850	1879	1050
WZ-1951-01-07-011	2000	1990	1870	1850	1879	1050
WZ-1951-01-08-011	2000	1990	1870	1850	1879	1050
WZ-1951-01-09-011	2000	1990	1870	1850	1879	1050
WZ-1951-01-49-011	2000	1990	1870	1850	1879	1050
WZ-1951-01-10-011	2000	1990	1870	1850	1879	1050
WZ-1951-01-11-011	2000	1990	1870	1850	1879	1050
WZ-1951-01-12-011	2000	1990	1870	1850	1879	1050
WZ-1951-01-50-011	2000	1990	1870	1850	1879	1050
WZ-1951-01-14-011	1800	1790	1670	1650	1679	950
WZ-1951-01-15-011	1800	1790	1670	1650	1679	950
WZ-1951-01-20-011	1800	1790	1670	1650	1679	950
WZ-1951-01-21-011	1800	1790	1670	1650	1679	950
WZ-1951-01-23-011	1800	1790	1670	1650	1679	950
WZ-1951-01-24-011	1800	1790	1670	1650	1679	950

DESIGN OF SZE2 CABINETS

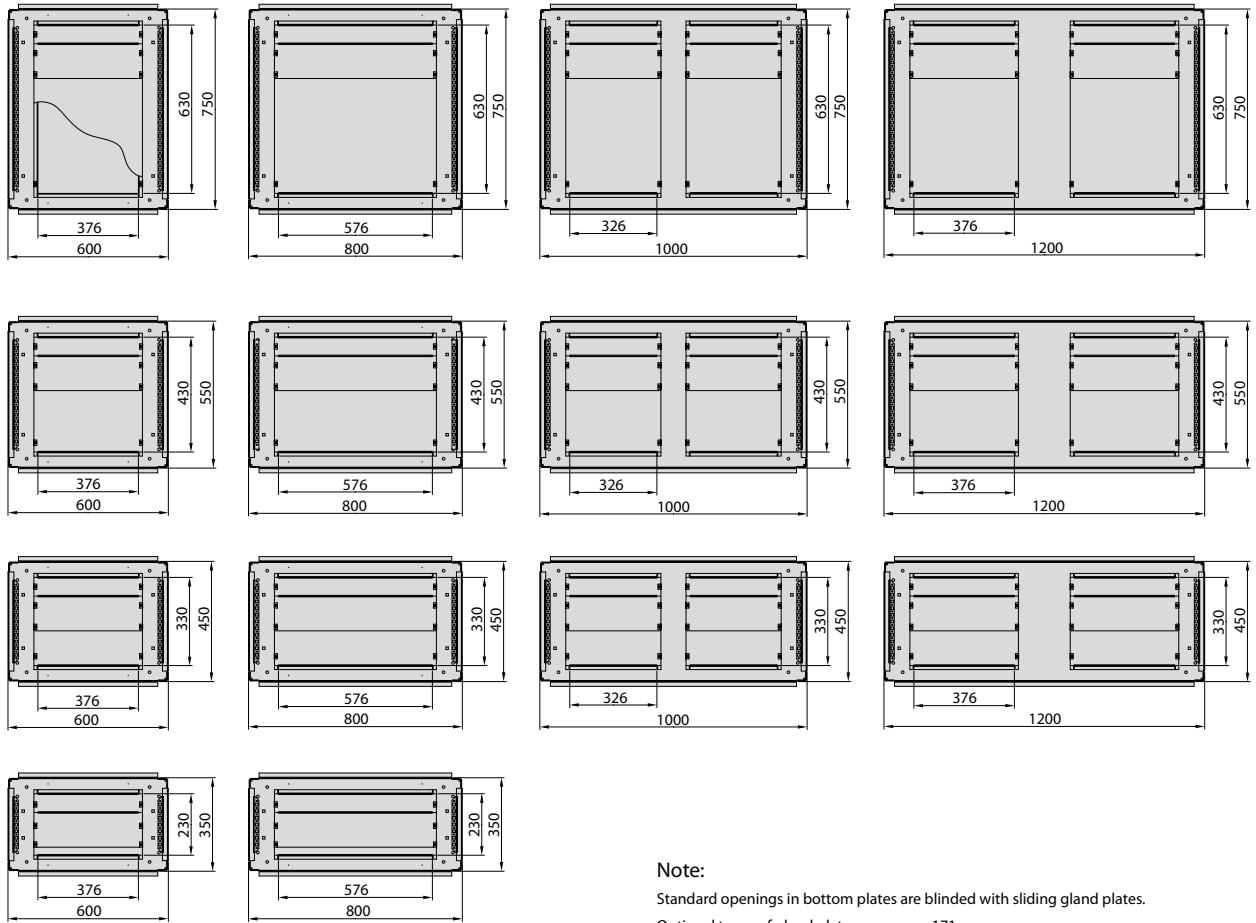


Note:  
After mounting of external side panels the cabinet expands by 25 mm on each side.  
An additional distance of 3 mm (gasket gauge) should be considered between bayed cabinets.

WIDTH DIMENSIONS													DEPTH DIMENSIONS										MOUNTING PLATE		PLINTH					
W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	HP	WP	WC1	WC2	WC3	DC1	DC2	DC3
1200	593	420	400	1192	1060	376	1137,6	1130	1117	1130	650	600	800	808	650	380	630	625	610	750	610	680	1930	1112	1200	1080	900	750	630	650
1200	593	420	400	1192	1060	376	1137,6	1130	1117	1130	650	600	600	608	450	380	430	425	410	550	410	480	1930	1112	1200	1080	900	550	430	450
1200	593	420	400	1192	1060	376	1137,6	1130	1117	1130	550	600	500	508	350	380	330	325	310	450	310	380	1930	1112	1200	1080	900	450	330	350
1000	493	320	300	992	860	326	937,6	930	917	930	—	450	600	608	450	380	430	425	410	550	410	480	1930	912	1000	880	700	550	430	450
1000	493	320	300	992	860	326	937,6	930	917	930	—	450	500	508	350	380	330	325	310	450	310	380	1930	912	1000	880	700	450	330	350
800	793	620	600	792	660	579	737,6	730	717	730	—	—	800	808	650	380	630	625	610	750	610	680	1930	712	800	680	500	750	630	650
800	793	620	600	792	660	579	737,6	730	717	730	—	—	600	608	450	380	430	425	410	550	410	480	1930	712	800	680	500	550	430	450
800	793	620	600	792	660	579	737,6	730	717	730	—	—	500	508	350	380	330	325	310	450	310	380	1930	712	800	680	500	450	330	350
800	793	620	600	792	660	579	737,6	730	717	730	—	—	400	408	250	210	230	225	210	350	210	280	1930	712	800	680	500	350	230	250
600	593	420	400	592	460	376	537,6	530	517	530	—	—	800	808	650	380	630	625	610	750	610	680	1930	512	600	480	300	750	630	650
600	593	420	400	592	460	376	537,6	530	517	530	—	—	600	608	450	380	430	425	410	550	410	480	1930	512	600	480	300	550	430	450
600	593	420	400	592	460	376	537,6	530	517	530	—	—	500	508	350	380	330	325	310	450	310	380	1930	512	600	480	300	450	330	350
600	593	420	400	592	460	376	537,6	530	517	530	—	—	400	408	250	210	230	225	210	350	210	280	1930	512	600	480	300	350	230	250
1200	593	420	400	1192	1060	376	1137,6	1130	1117	1130	650	600	600	608	450	380	430	425	410	550	410	480	1730	1112	1200	1080	900	550	430	450
1200	593	420	400	1192	1060	376	1137,6	1130	1117	1130	550	600	500	508	350	380	330	325	310	450	310	380	1730	1112	1200	1080	900	450	330	350
800	793	620	600	792	660	576	737,6	730	717	730	—	—	600	608	450	380	430	425	410	550	410	480	1730	712	800	680	500	550	430	450
800	793	620	600	792	660	576	737,6	730	717	730	—	—	500	508	350	380	330	325	310	450	310	380	1730	712	800	680	500	450	330	350
600	593	420	400	592	460	376	537,6	530	517	530	—	—	600	608	450	380	430	425	410	550	410	480	1730	512	600	480	300	550	430	450
600	593	420	400	592	460	376	537,6	530	517	530	—	—	500	508	350	380	330	325	310	450	310	380	1730	512	600	480	300	450	330	350

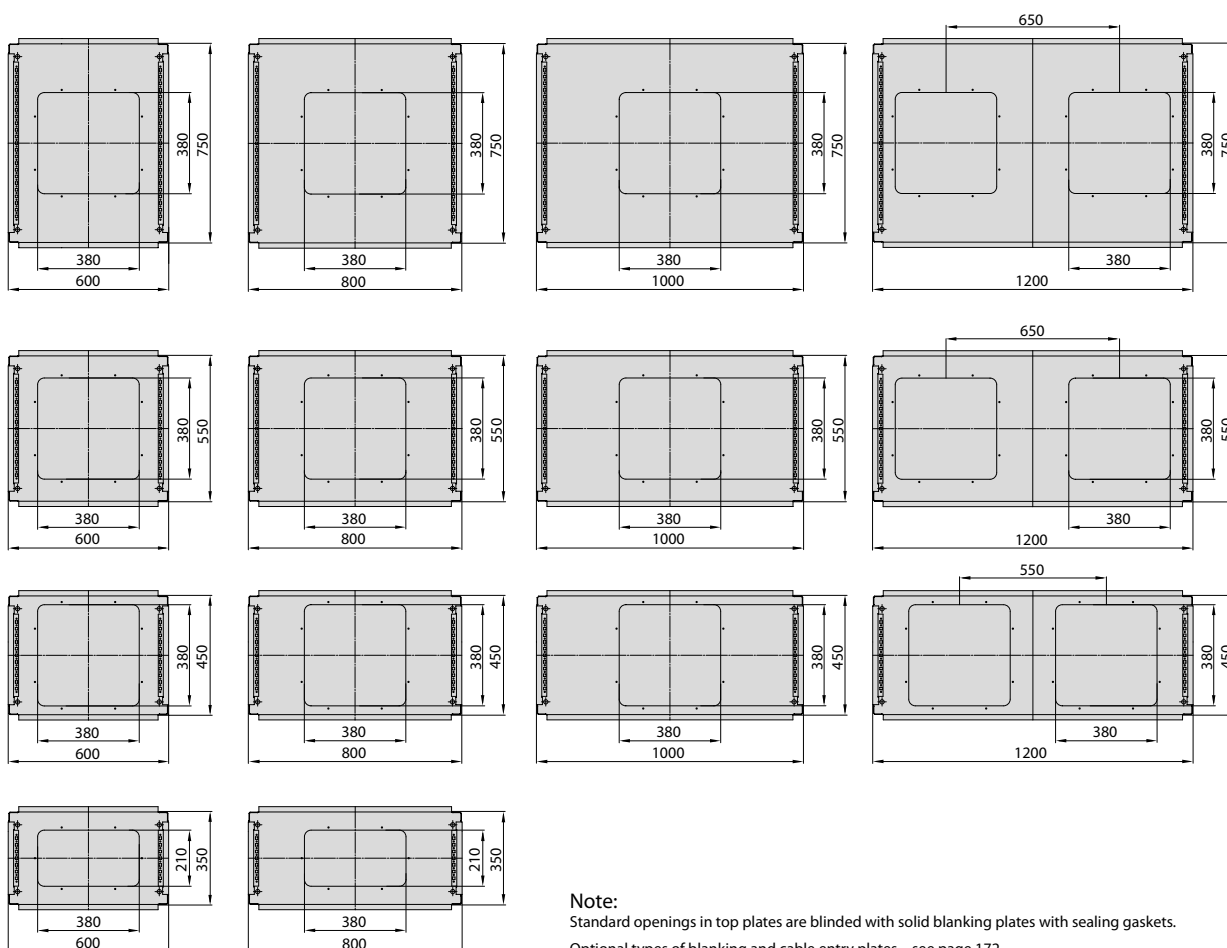
## DESIGN OF SZE2 CABINETS

### BOTTOM PLATE TYPES



## DESIGN OF SIZE2 CABINETS

### TOP PLATE TYPES



**Note:**

Standard openings in top plates are blinded with solid blanking plates with sealing gaskets.  
Optional types of blanking and cable entry plates – see page 172



Blanking and cable entry plates for the cabinet's top plate – see page 172



## SAMPLE CUSTOMISED CABINETS

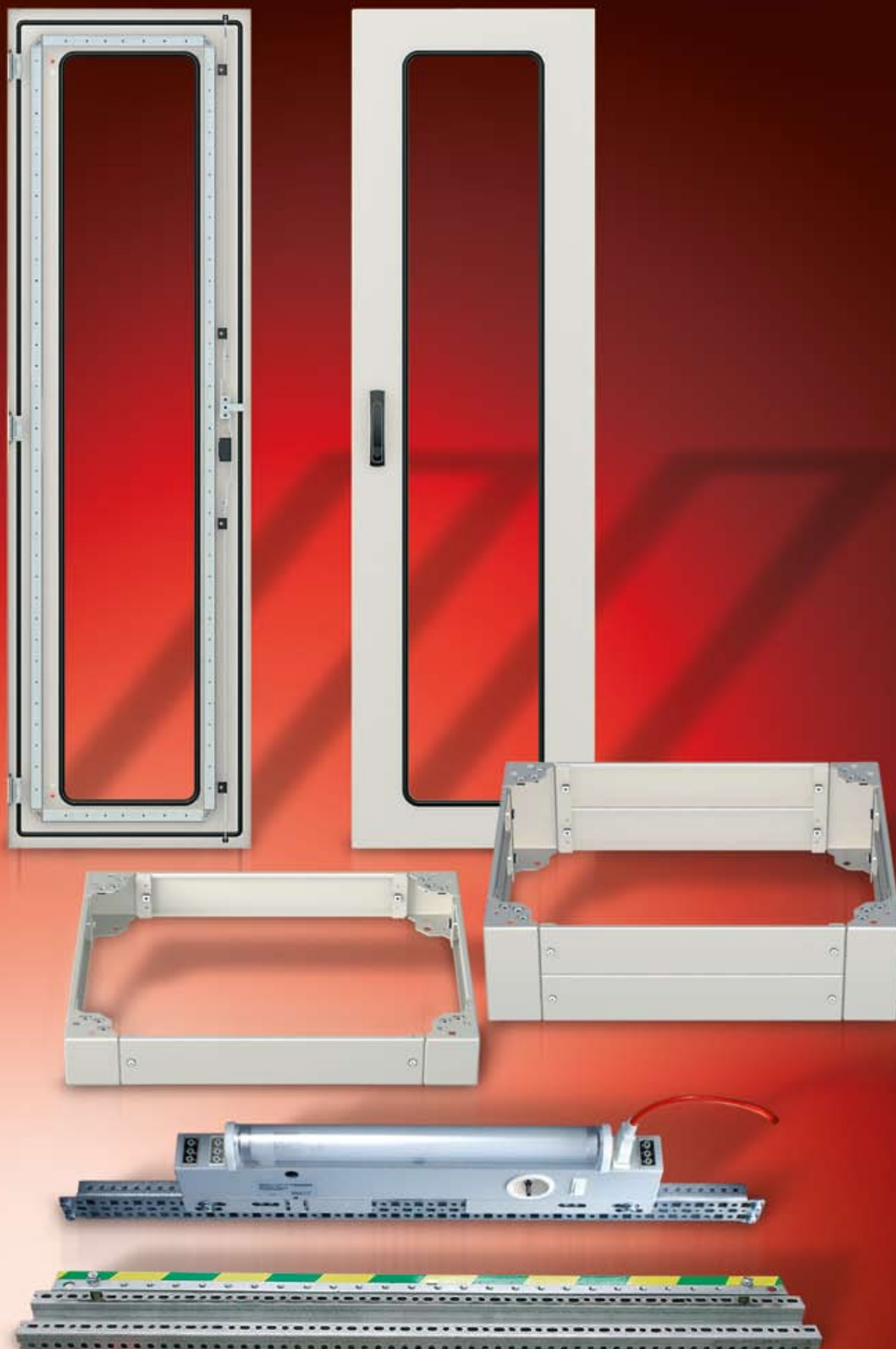


Cabinets made of stainless steel



Cabinet for hydraulic measuring converters

## SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS



## SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

### Doors

Intended for use instead of front solid door or rear panel.

In perforated doors suitable IP protection is achieved by using roof shaped louvers shielded with an inside mesh.

Maximum door opening angle: 120°

**Material:**  
2 mm thick sheet steel textured powder paint, light grey (RAL 7035), stiffened profiles, 4 mm thick safety glass.

**Scope of delivery:**  
Complete wing of door with hinges and lock that includes double-bit insert (no handle).

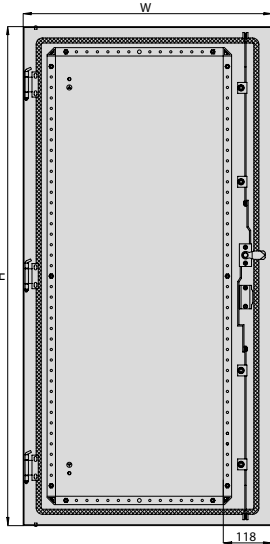


### Single-wing door

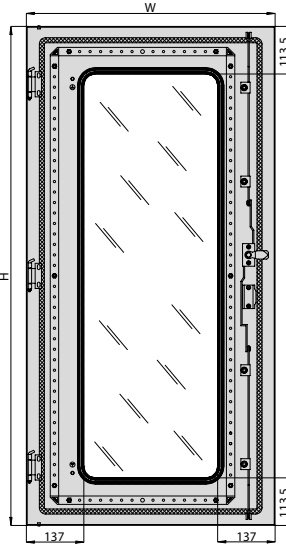
For cabinet		Door dimensions		Catalogue number					
height [mm]	width [mm]	H [mm]	W [mm]	Solid door IP 64	Door with glass IP 64	Door with ventilation louvers IP 42		Door with glass and ventilation louvers IP 42	
				right/left	right/left	right	left	right	left
2000	800	1990	793	WZ-1951-10-01-011	WZ-1951-17-01-011	WZ-1951-40-01-011	WZ-1951-40-09-011	WZ-1951-36-01-011	WZ-1951-36-09-011
	600	1990	593	WZ-1951-10-02-011	WZ-1951-17-02-011	WZ-1951-40-02-011	WZ-1951-40-10-011	WZ-1951-36-02-011	WZ-1951-36-10-011
1800	800	1790	793	WZ-1951-10-03-011	WZ-1951-17-03-011	WZ-1951-40-03-011	WZ-1951-40-11-011	WZ-1951-36-03-011	WZ-1951-36-11-011
	600	1790	593	WZ-1951-10-04-011	WZ-1951-17-04-011	WZ-1951-40-04-011	WZ-1951-40-12-011	WZ-1951-36-04-011	WZ-1951-36-12-011

Package: 1 pc.

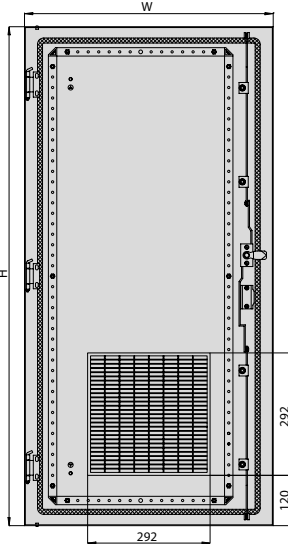
Solid door



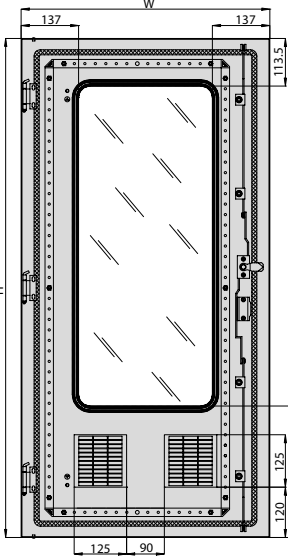
Door with glass



Door with ventilation louvers



Door with glass and ventilation louvers



Notes:

- 1) The drawing shows the right door.
- 2) Solid door and glass door have a universal design, which makes it possible to change the direction of door opening by turning the handle and fastening the wing in the reverse position. In the case of vented doors, the wing has to be replaced with its mirror version.

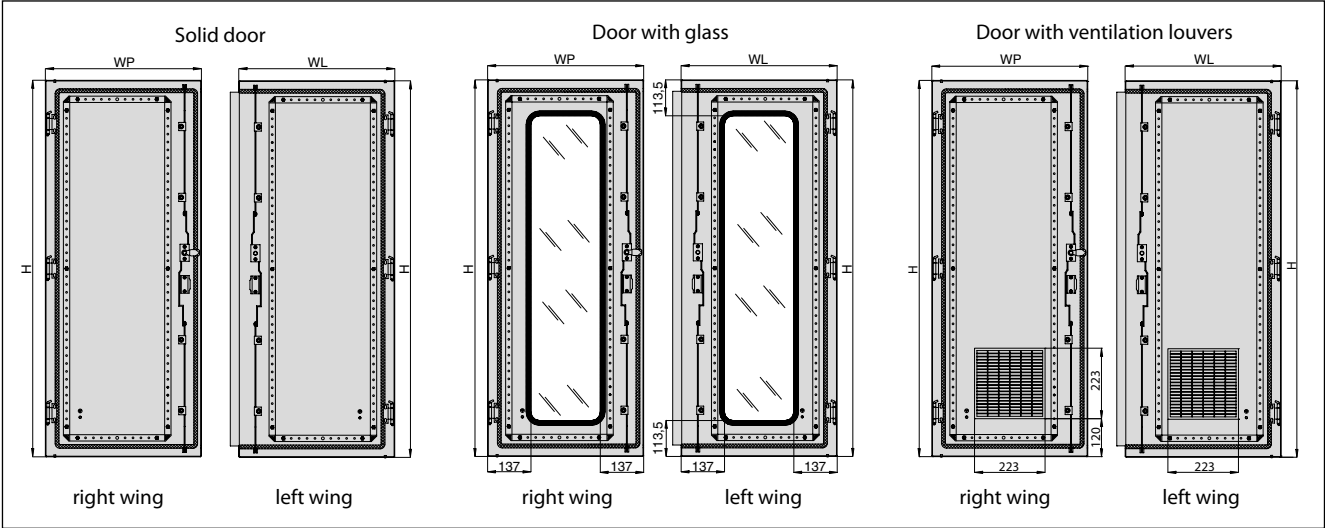
SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

Double-wing door

For cabinet		Door dimensions			Catalogue number					
height [mm]	width [mm]	H [mm]	WR [mm]	WL [mm]	Solid door IP 64		Door with glass IP 64		Door with ventilation louvers IP 42	
					right* wing	left* wing	right* wing	left* wing	right* wing	left* wing
2000	1200	1990	593	619.5	WZ-1951-13-01-011	WZ-1951-15-01-011	WZ-1951-52-01-011	WZ-1951-54-01-011	WZ-1951-59-01-011	WZ-1951-57-01-011
	1000	1790	493	519.5	WZ-1951-13-02-011	WZ-1951-15-02-011	WZ-1951-52-02-011	WZ-1951-54-02-011	WZ-1951-59-02-011	WZ-1951-57-02-011
1800	1200	1990	593	619.5	WZ-1951-13-03-011	WZ-1951-15-03-011	WZ-1951-52-03-011	WZ-1951-54-03-011	WZ-1951-59-03-011	WZ-1951-57-03-011

Package: 1 pc.

\*) when facing the structure.



Door stop

Protects hinges from damage.  
Fixed into the door's frame and cabinet's frame.  
In the case of self-assembly, it is necessary to punch two 6 mm holes in indicated positions.

**Material:**  
Galvanised sheet steel.

**Scope of delivery:**  
Door stop with fixing accessories for mounting into the cabinet.

Package	Catalogue number
1 pc.	WZ-1951-32-00-000



Swing handle with cylinder insert for the door's lock

For applying in the cabinet instead of the standard pattern that includes double-bit insert.

**Material of the body:**  
Plastic

**Scope of delivery:**  
Swing handle and cylinder are to be ordered separately.

Product name	Package	Catalogue number
Swing handle without cylinder insert	1 pc.	M1H-01-0024
Cylinder insert for swing handle + 2 keys	1 set	M1H-02-0028



## SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

### Side panels

#### Available in two options:

- 1) flushed side panels - do not affect overall dimensions of the cabinet, also used as partition if cabinets are bayed.
- 2) external side panels - expanding the cabinet by 25 mm on each side. All side panels are equipped with PU sealing gasket and stud-bolts for earthing cables.

#### Material:

1.5 mm thick sheet steel powder painted in RAL 7035

#### Scope of delivery:

2 side panels (flushed or external) with fixing accessories for mounting into the cabinet.



1 - flushed side panel



2 - external side panel



For cabinet		Catalogue number	
height [mm]	depth [mm]	Flushed side panels	External side panels
2000	800	WZ-1951-09-01-011	WZ-1951-07-05-011
	600	WZ-1951-09-02-011	WZ-1951-07-06-011
	500	WZ-1951-09-03-011	WZ-1951-07-07-011
	400	WZ-1951-09-13-011	WZ-1951-07-29-011
1800	600	WZ-1951-09-05-011	WZ-1951-07-13-011
	500	WZ-1951-09-06-011	WZ-1951-07-14-011

Package: 2 pcs.

#### Note:

Possibility to equip side panels with snapped filter fans and exhaust filter - see page 175.

### Roof

Each cabinet can be equipped with a roof in two widths:

- roof for cabinet with flushed side panels (roof's width in accordance with cabinet's frame width).
- roof for cabinet with external side panels (the roof's width expanded by 50 mm in comparison with the cabinet's frame).

Roof's height with fixing/spacer bolts: 41.5 mm.

#### Material:

1.5 mm thick sheet steel powder painted in RAL 7035

#### Scope of delivery:

Roof with 4 fixing/spacer bolts for mounting.  
(Assembly screws M12 are delivered with the cabinet.)

For cabinet		Catalogue number	
height [mm]	depth [mm]	Roof for cabinet with flushed side panels	Roof for cabinet with external side panels
1200	800	WZ-1951-27-01-011	WZ-1951-28-01-011
	600	WZ-1951-27-02-011	WZ-1951-28-02-011
	500	WZ-1951-27-03-011	WZ-1951-28-03-011
1000	600	WZ-1951-27-05-011	WZ-1951-28-05-011
	500	WZ-1951-27-06-011	WZ-1951-28-06-011
800	800	WZ-1951-27-07-011	WZ-1951-28-07-011
	600	WZ-1951-27-08-011	WZ-1951-28-08-011
	500	WZ-1951-27-09-011	WZ-1951-28-09-011
	400	WZ-1951-27-10-011	WZ-1951-28-10-011
600	800	WZ-1951-27-11-011	WZ-1951-28-11-011
	600	WZ-1951-27-12-011	WZ-1951-28-12-011
	500	WZ-1951-27-13-011	WZ-1951-28-13-011
	400	WZ-1951-27-14-011	WZ-1951-28-14-011

Package: 1 pc.



Roof and fixing/spacer bolts

## SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

### Lifting accessories

Fixed to threaded holes in the top plate of the cabinet's frame or (when the roof is used) to fixing/spacer bolts.

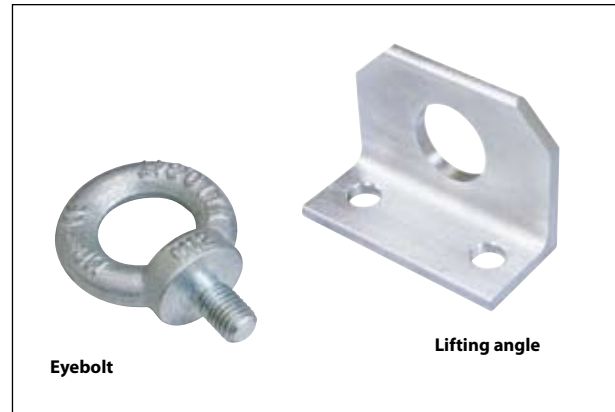
**Offered in two options:**

- 1) eyebolts - galvanised steel, eye diameter: 30 mm, thread for fastening: M12;
- 2) lifting angle for cabinets bayed in rows - galvanised steel angle, lifting hole diameter: 38 mm, two holes for mounting screws M12 (screws are delivered with the cabinet)

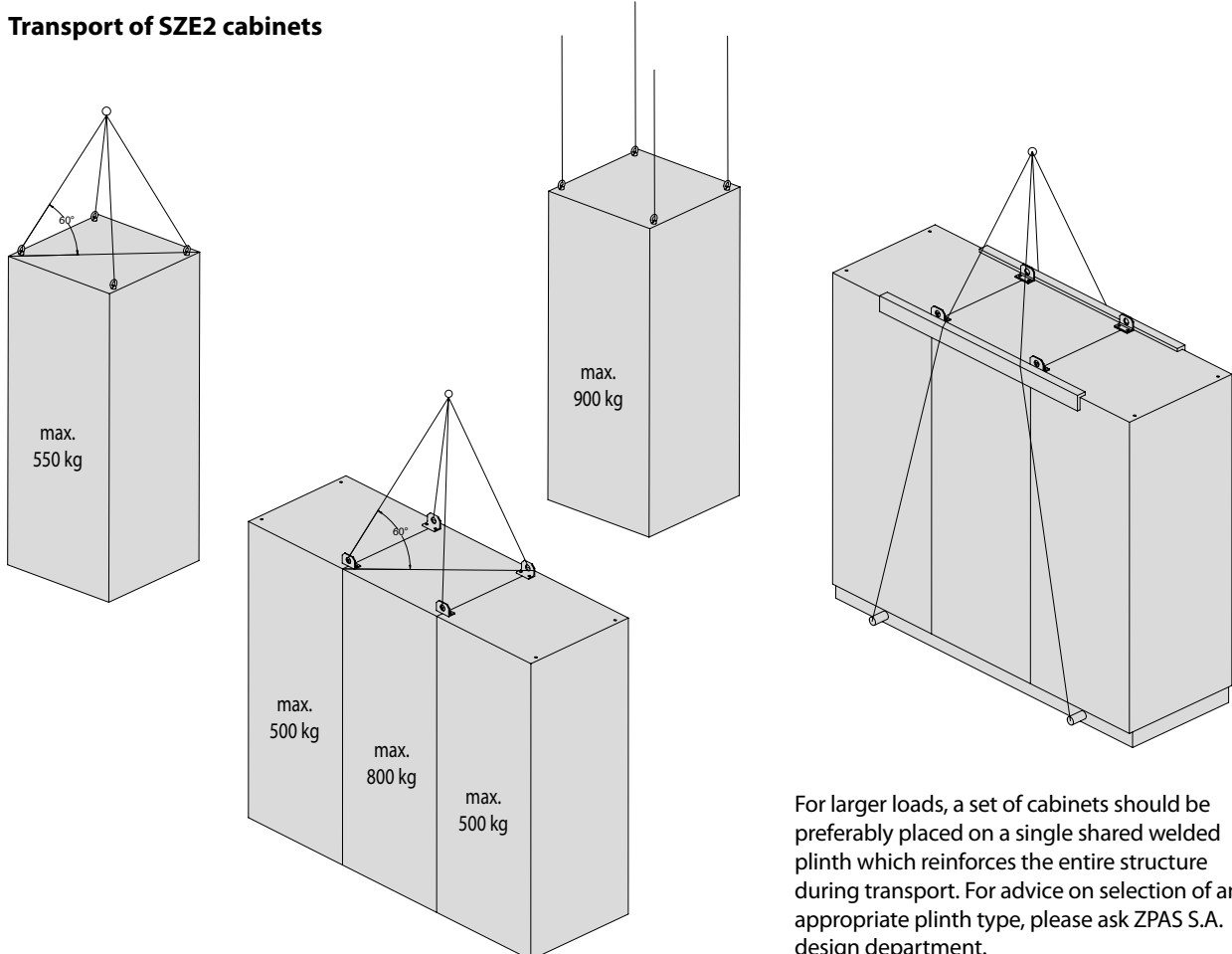
**Scope of delivery:**

Lifting accessories are sold separately.

Element type	Package	Catalogue number
eyebolt	1 p.c.	M1F-00-0106
lifting angle	1 p.c.	WZ-1951-68-00-000



### Transport of SIZE2 cabinets



For larger loads, a set of cabinets should be preferably placed on a single shared welded plinth which reinforces the entire structure during transport. For advice on selection of an appropriate plinth type, please ask ZPAS S.A. design department.



## SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

### Modular plinth

It consists of 4 corners and 4 or 8 removable covers. Total weight of the cabinet is carried by plinth corners. It is possible to reach the area under the cabinet by unscrewing the covers.

Plinth can be mounted to the base by optionally using 4 rubber vi-bro-shock absorbers.

**Material:**

- Plinth: 2.5 mm thick sheet steel (corners) and 1.25 mm thick (covers) textured powder paint, light grey RAL 7035
- Vibro-shock absorbers: rubber 10 mm thick

**Scope of delivery:**

Complete plinth and mounting accessories for fastening plinth to the cabinet.

Vibro-shock absorbers should be ordered separately.

For cabinet		Catalogue number		
width [mm]	depth [mm]	Plinth 100 mm height	Plinth 200 mm height	Vibro-shock absorber
1200	800	WZ-001C-12-75-011	WZ-002C-12-75-011	M1Z-00-0048
	600	WZ-001C-12-55-011	WZ-002C-12-55-011	
	500	WZ-001C-12-45-011	WZ-002C-12-45-011	
1000	600	WZ-001C-10-55-011	WZ-002C-10-55-011	
	500	WZ-001C-10-45-011	WZ-002C-10-45-011	
800	800	WZ-001C-80-75-011	WZ-002C-80-75-011	
	600	WZ-001C-80-55-011	WZ-002C-80-55-011	
	500	WZ-001C-80-45-011	WZ-002C-80-45-011	
	400	WZ-001C-80-35-011	WZ-002C-80-35-011	
600	800	WZ-001C-60-75-011	WZ-002C-60-75-011	
	600	WZ-001C-60-55-011	WZ-002C-60-55-011	
	500	WZ-001C-60-45-011	WZ-002C-60-45-011	
	400	WZ-001C-60-35-011	WZ-002C-60-35-011	

**Package:** Plinth – 1 pc.

Vibro-shock absorber – 1 pc.



### Welded plinth

Indicated for heavy duty cabinets. Provide to transport cabinets with forklift truck without using transport pallet.

**Material:**

3 mm thick sheet steel textured powder paint, light grey RAL 7035

**Scope of delivery:**

Plinth with mounting accessories for fastening plinth to the cabinet.

For cabinet		Catalogue number	
width [mm]	depth [mm]	Plinth 100 mm high	Plinth 200 mm high
1200	800	WZ-1951-71-01-011	WZ-1951-74-01-011
	600	WZ-1951-71-02-011	WZ-1951-74-02-011
	500	WZ-1951-71-03-011	WZ-1951-74-03-011
1000	600	WZ-1951-71-05-011	WZ-1951-74-05-011
	500	WZ-1951-71-06-011	WZ-1951-74-06-011
800	800	WZ-1951-71-07-011	WZ-1951-74-07-011
	600	WZ-1951-71-08-011	WZ-1951-74-08-011
	500	WZ-1951-71-09-011	WZ-1951-74-09-011
	400	WZ-1951-71-10-011	WZ-1951-74-10-011
600	800	WZ-1951-71-11-011	WZ-1951-74-11-011
	600	WZ-1951-71-12-011	WZ-1951-74-12-011
	500	WZ-1951-71-13-011	WZ-1951-74-13-011
	400	WZ-1951-71-14-011	WZ-1951-74-14-011

**Package:** 1 pc.



SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

19" swing frame

Intended for SIZE2 cabinets 800 mm wide.  
Available in symmetrical and asymmetrical options.  
Equipped with door-stop.  
Two locks with double-bit insert.  
Possibility of left- or right-side assembly by 180° rotation.  
Maximum opening angle: 120°  
Load capacity: 150 kg

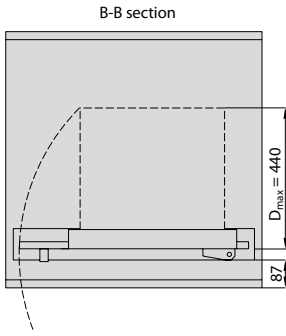
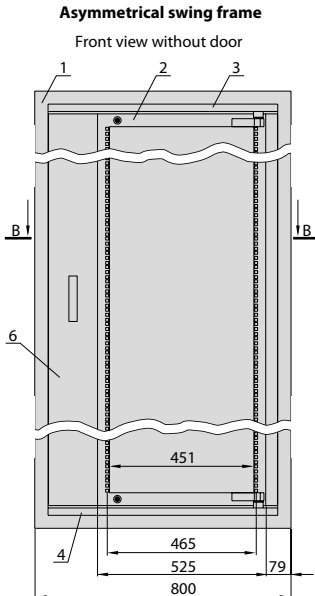
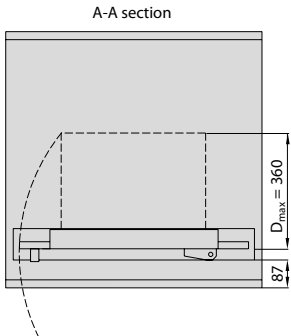
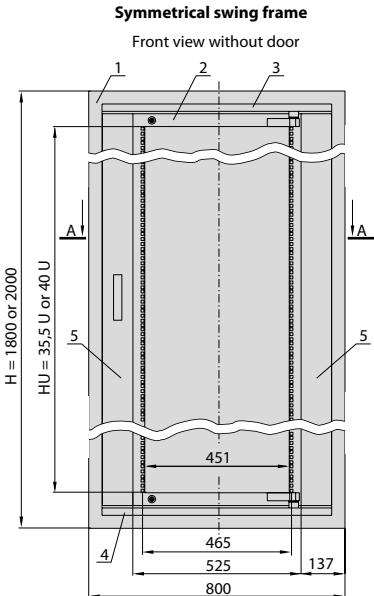
**Material:**  
Sheet steel and steel profiles powder painted in RAL 7035

**Scope of delivery:**  
Swing frame with fixing accessories for mounting to the cabinet.

Swing frame type	For cabinet height H [mm]	Usable height of the frame HU [U = 44.45 mm]	Maximum depth for installations D <sub>max</sub> [mm]	Catalogue number
symmetrical	2000	40 U	360	WZ-1951-29-01-011
	1800	35,5 U	360	WZ-1951-29-02-011
asymmetrical	2000	40 U	440	WZ-1951-20-01-011
	1800	35,5 U	440	WZ-1951-20-02-011

Package: 1 pc.

Asymmetrical swing frame in the cabinet



- DESIGN**
- 1. Cabinet frame
  - 2. 19" swing frame
  - 3. Top supporting bar
  - 4. Bottom supporting bar
  - 5. Masking panel for symmetrical frame
  - 6. Masking panel for asymmetrical frame

## SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

### 19" mounting profile

Used for installing 19" equipment in cabinets 600 or 800 mm wide. They are fixed to the cabinet's frame by using mounting bars UNI; in order to achieve the 19" spacing in cabinets 800 mm wide it is necessary to use outriggers, while in cabinets 1000 and 1200 mm wide an individual rack made of mounting bars.

**Material:**

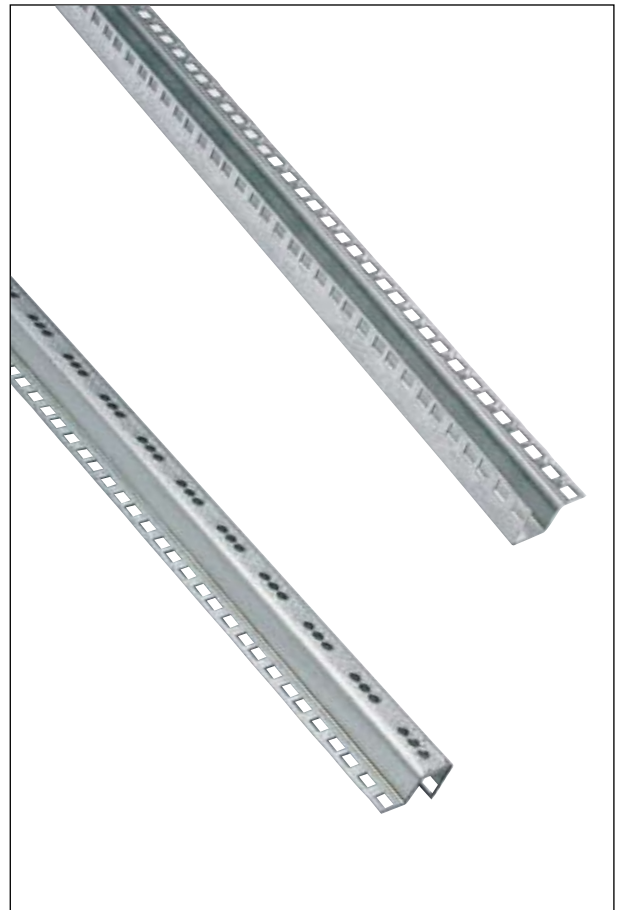
2.0 mm thick Al-Zn coated sheet steel

**Scope of delivery:**

Mounting profile without fixing accessories.

Length of mounting profile		Catalogue number
[mm]	[U = 44.45 mm]	
1868	42 U	WZ-SB00-01-02-000
1779	40 U	WZ-SB00-01-03-000
1734	39 U	WZ-SB00-01-13-000
1690	38 U	WZ-SB00-01-04-000
1601	36 U	WZ-SB00-01-05-000
1468	33 U	WZ-SB00-01-14-000
1423	32 U	WZ-SB00-01-06-000
1334	30 U	WZ-SB00-01-15-000
1245	28 U	WZ-SB00-01-07-000
1201	27U	WZ-SB00-01-16-000
1067	24 U	WZ-SB00-01-08-000
934	21U	WZ-SB00-01-17-000
801	18 U	WZ-SB00-01-09-000
667	15 U	WZ-SB00-01-10-000
534	12 U	WZ-SB00-01-11-000
445	10 U	WZ-SB00-01-12-000

Package: 1 pc.



### Outrigger

For fixing mounting profile in SIZE2 cabinet 800 mm wide.

**Material:**

2.0 mm thick galvanised sheet steel

**Scope of delivery:**

1 outrigger with fixing accessories for fastening to mounting profile and mounting bar UNI.

Package	Catalogue number
1 pc.	WZ-3752-72-00-000

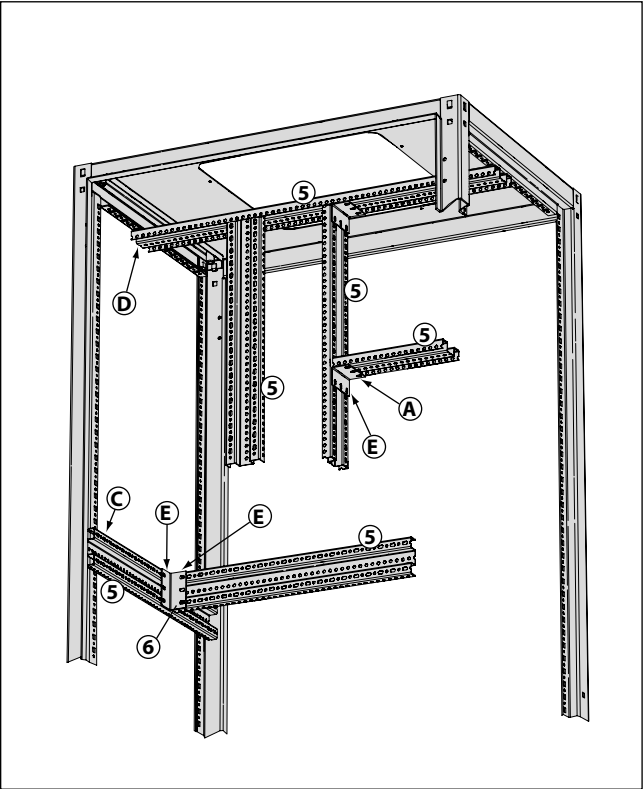
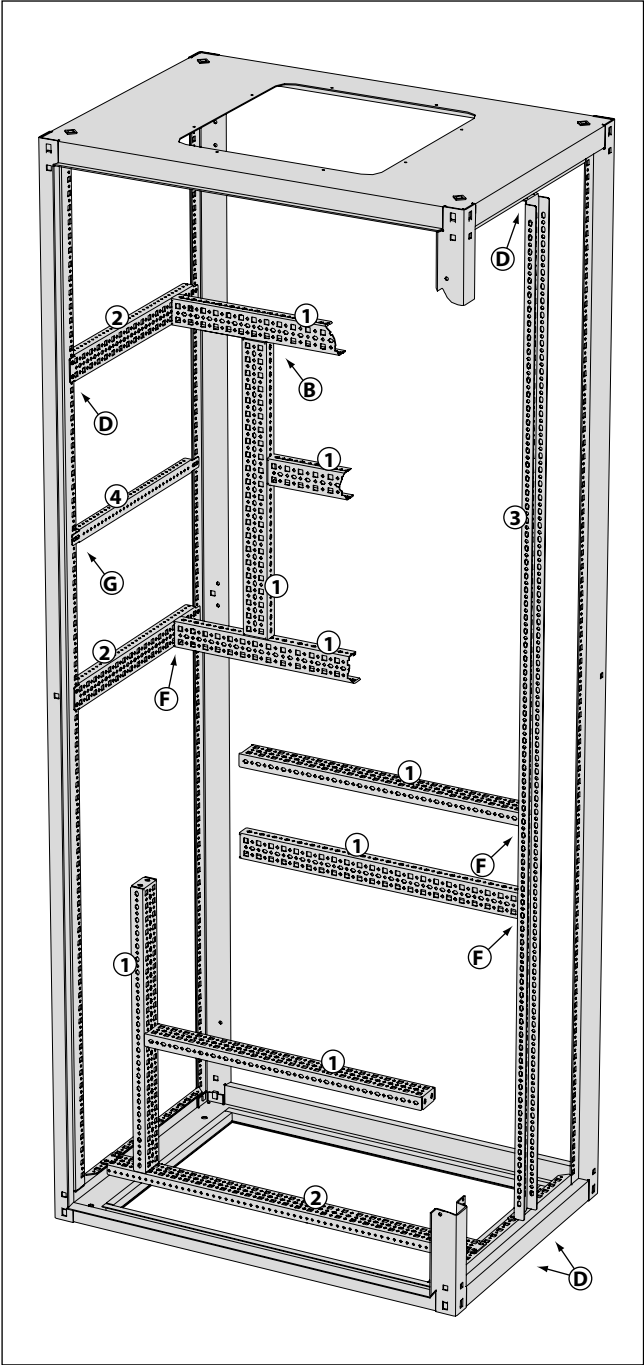


SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

Racking systems

CLASSIC system

- 1. Mounting bar CLASSIC (page 166)
- 2. Cross bar CLASSIC (page 166)
- 3. Vertical bar CLASSIC (page 166)
- 4. Transverse cable bar (page 168)



System UNI

- 5. Mounting bar UNI (page 167)
- 6. Angle-element for joining mounting bars UNI (page 167)

Fixing accessories

	Description	pcs.	From set* cat. number
A	screw with nut and washers	1	WZ-1951-44-03-000
B	screw with nut and washers	2	WZ-1951-44-03-000
C	self-forming screw	1	WZ-1951-44-01-000
	or screw with cage nut and washer	2	WZ-1951-44-02-000
D	self-forming screw	2	WZ-1951-44-01-000
	or screw with cage nut and washer	2	WZ-1951-44-02-000
E	self-forming screw	2	WZ-1951-44-01-000
	or screw with nut and washers	2	WZ-1951-44-03-000
F	screw with cage nut and washer	2	WZ-1951-44-02-000
	or screw with nut and washers	2	WZ-1951-44-03-000
G	self-forming screw	1	WZ-1951-44-01-000
	or screw with cage nut and washer	1	WZ-1951-44-02-000

\*) Fixing accessories are sold in sets 20 pcs/1 set.  
A detailed description is available on page 167.

## SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

### Mounting bar CLASSIC

Fixed to cross bars or vertical bar

**Material:**

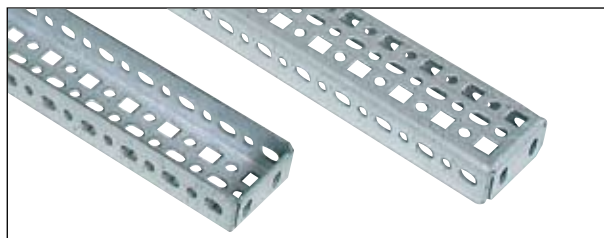
2.0 mm thick Al-Zn coated sheet steel

**Scope of delivery:**

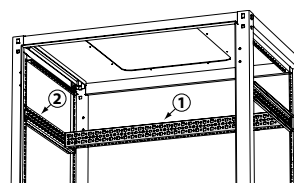
Mounting bar without fixing accessories (fixing accessories are listed on page 167).

Mounting bar length [mm]	Catalogue number	Mounting bar length [mm]	Catalogue number
1200	WZ-0573-12-01-000	650	WZ-0573-12-13-000
1150	WZ-0573-12-02-000	600	WZ-0573-12-14-000
1100	WZ-0573-12-03-000	550	WZ-0573-12-15-000
1050	WZ-0573-12-04-000	525	WZ-0573-12-16-000
1000	WZ-0573-12-05-000	500	WZ-0573-12-17-000
950	WZ-0573-12-06-000	450	WZ-0573-12-18-000
900	WZ-0573-12-07-000	400	WZ-0573-12-19-000
850	WZ-0573-12-08-000	350	WZ-0573-12-20-000
800	WZ-0573-12-09-000	300	WZ-0573-12-21-000
755	WZ-0573-12-10-000	275	WZ-0573-12-22-000
750	WZ-0573-12-11-000	250	WZ-0573-12-23-000
700	WZ-0573-12-12-000	225	WZ-0573-12-24-000
		200	WZ-0573-12-25-000

Package: 1 pc.



#### MATCHING MOUNTING BAR CLASSIC TO CABINET'S WIDTH



1. Mounting bar CLASSIC
2. Cross bar CLASSIC

Cabinet width [mm]	Length of mounting bar CLASSIC [mm]
1200	1150
1000	950
800	750
600	550

### Vertical bar CLASSIC

Fixed to the bottom and top plate of the cabinet's frame.

**Material:**

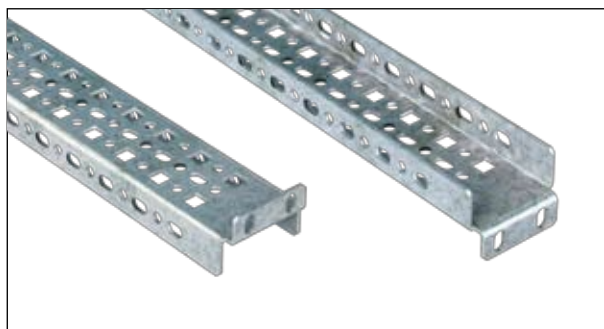
2.0 mm thick Al-Zn coated sheet steel

**Scope of delivery:**

Vertical bar without fixing accessories (fixing accessories are listed on page 167).

For cabinet height [mm]	Vertical bar length [mm]	Catalogue number
2000	1875	WZ-1951-48-01-000
1800	1675	WZ-1951-48-02-000

Package: 1 pc.



### Cross bar CLASSIC

Fixed to vertical or horizontal slots of the cabinet's frame.

**Material:**

2.0 mm thick Al-Zn coated sheet steel

**Scope of delivery:**

Cross bar without fixing accessories (fixing accessories are listed on page 167).

For cabinet		Cross bar length [mm]	Catalogue number
width [mm]	depth [mm]		
—	800	640	WZ-1951-46-01-000
—	600	440	WZ-1951-46-02-000
—	500	340	WZ-1951-46-03-000
—	400	240	WZ-1951-46-04-000
1200	—	1152.5	WZ-1951-46-05-000
1000	—	952.5	WZ-1951-46-06-000
800	—	752.5	WZ-1951-46-07-000
600	—	552.5	WZ-1951-46-08-000

Package: 1 pc.



## SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

### Mounting bar UNI

Mounting bars UNI enable configuration of any rack inside the cabinet.

Slots in the bars are adjusted both for horizontal and vertical slots of the cabinet's frame.

The standard offer includes bars whose length is adjusted to the cabinet's dimensions (see the chart below). Other lengths of bars are available on customer's request.

It is possible to select the length of bar individually by cutting bars during the assembly.

**Material:**

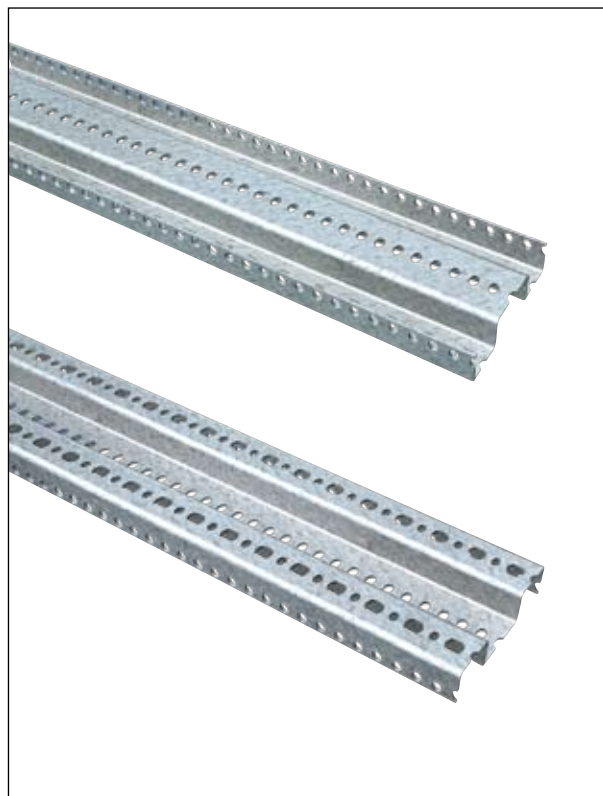
1.5 mm thick Al-Zn coated sheet steel

**Scope of delivery:**

Mounting bar without fixing accessories.

For cabinet			Length of mounting bar [mm]	Catalogue number
height <sup>1</sup> [mm]	width <sup>2</sup> [mm]	depth <sup>3</sup> [mm]		
2000	—	—	1875	WZ-1951-19-01-000
1800	—	—	1675	WZ-1951-19-02-000
1600	—	—	1475	WZ-1951-19-03-000
1200	—	—	1075	WZ-1951-19-04-000
—	1200	—	1162.5	WZ-1951-19-05-000
—	1000	—	962.5	WZ-1951-19-06-000
—	800	—	762.5	WZ-1951-19-07-000
—	600	—	562.5	WZ-1951-19-08-000
—	—	800	700	WZ-1951-19-09-000
—	—	600	500	WZ-1951-19-10-000
—	—	500	400	WZ-1951-19-11-000
—	—	400	300	WZ-1951-19-12-000

Package: 1 pc.



**Methods of fastening bars in the cabinet (look at page 165):**

- 1) Indirect fastening by bars cat. No from WZ-1951-19-05-000 to WZ-1951-19-08-000.
- 2) Direct fastening to the bottom or top plate.
- 3) Direct fastening to the cabinet's posts.

### Angle element for joining mounting bars UNI

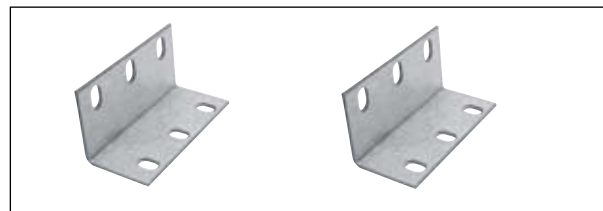
**Material:**

1.5 mm thick Al-Zn coated sheet steel

**Scope of delivery:**

1 angle element without fixing accessories.

Package	Catalogue number
1 pc.	WZ-1951-21-00-000

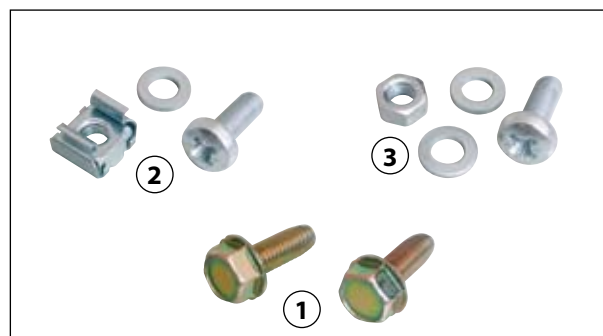


### Fixing accessories for CLASSIC and UNI bars

Application in accordance with instructions on page 165.

They are sold in sets of 20 pcs. each.

Type of element	Package = 1 set	Catalogue number
1) Self forming screw M6x16	20 pcs.	WZ-1951-44-01-000
2) Screw M6x16 Cage nut M6 Washer 6.4	20 pcs. 20 pcs. 20 pcs.	WZ-1951-44-02-000
3) Screw M6x16 Nut M6 Washer 6.4	20 pcs. 20 pcs. 40 pcs.	WZ-1951-44-03-000





## SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

### Transverse cable bar

Used for cable bundle assemblies.  
Fixed in the horizontal position to the side of the cabinet (to slots in the frame profiles - see drawing on page 165) or to the door frame.

**Material:**

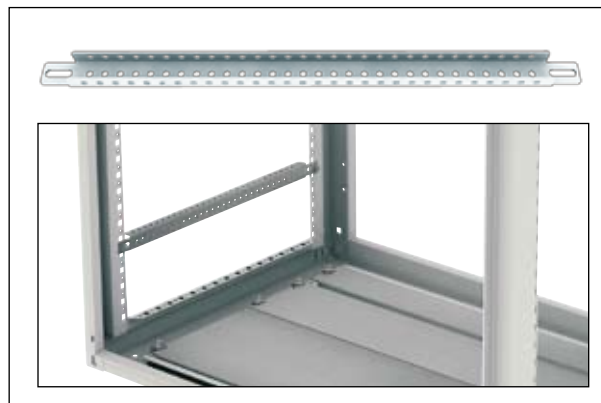
1.5 mm thick Al-Zn coated sheet steel.

**Scope of delivery:**

Transverse cable bar without fixing accessories (fixing accessories are listed on page 167).

For cabinet depth [mm]	Length of bar [mm]	Catalogue number
800	640	WZ-1951-65-01-000
600	440	WZ-1951-65-02-000
500	340	WZ-1951-65-03-000
400	240	WZ-1951-65-04-000

Package: 1 pc.



### Cable bar, cable clamps

For fixing cables with cable clamps.  
Cable bar is to be mounted on horizontal profile of the cabinet's frame or 200 mm plinth.

**Material:**

Cable bar - 2.0 mm thick Al-Zn coated sheet steel.

Cable clamps - zinc coated sheet steel.

**Scope of delivery:**

Cable bar sold without fixing accessories (fixing accessories are listed on page 167).

Cable clamps should be ordered separately.

**Cable clamps**

For cable diameter [mm]	Catalogue number
8-12	WZ-K12U-00-00-000
12-16	WZ-K16U-00-00-000
16-20	WZ-K20U-00-00-000
20-24	WZ-K24U-00-00-000
24-28	WZ-K28U-00-00-000
28-32	WZ-K32U-00-00-000
32-36	WZ-K36U-00-00-000
36-40	WZ-K40U-00-00-000
40-44	WZ-K44U-00-00-000
44-48	WZ-K48U-00-00-000
48-52	WZ-K56U-00-00-000

Package: 1 pc.



**Cable bar**

For cabinet width [mm]	Cable bar dimensions [mm] (length x width x height)	Catalogue number
1200	1158 x 49 x 20	WZ-1951-22-01-000
1000	958 x 49 x 20	WZ-1951-22-02-000
800	758 x 49 x 20	WZ-1951-22-03-000
600	558 x 49 x 20	WZ-1951-22-04-000

Package: 1 pc.

### Support for cable bar

For mounting the cable bar on the 200 mm plinth. Fixed on the interior side of the plinth.

**Material:**

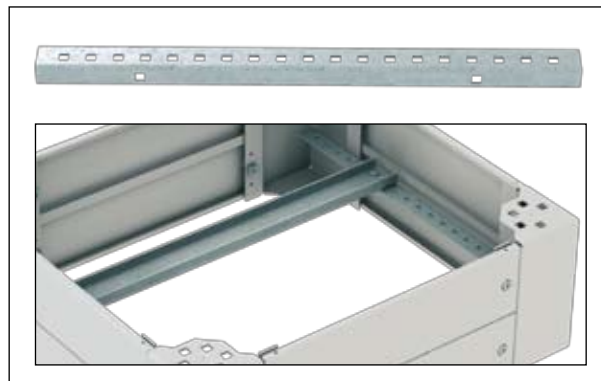
2.0 mm thick Al-Zn coated sheet steel.

**Scope of delivery:**

Support for cable bar without fixing accessories (fixing accessories are listed on page 167).

For cabinet depth [mm]	Length of support for cable bar [mm]	Catalogue number
800	700	WZ-1951-66-01-000
600	500	WZ-1951-66-02-000
500	400	WZ-1951-66-03-000
400	300	WZ-1951-66-04-000

Package: 1 pc.



## SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

### Earthing bar set

Consists of earthing bar and horizontal mounting bar UNI intended for fixing on the horizontal profiles of the cabinet's frame.

Earthing bar with threaded openings M6 for cables fixing.

**Material:**

Earthing bar: zinc-coated steel rail 30 x 4 mm

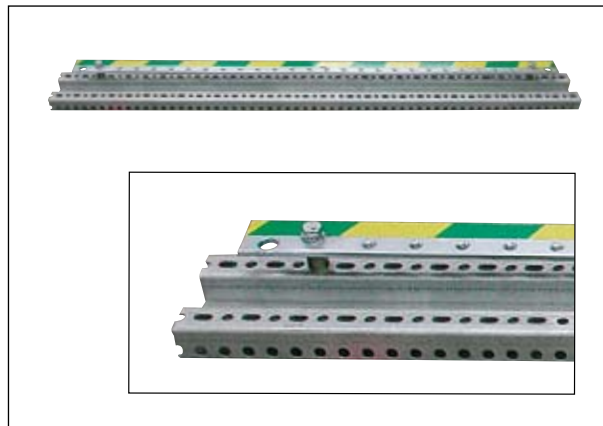
Mounting bar UNI: 1.5 mm thick Al-Zn coated sheet steel

**Scope of delivery:**

Earthing bar set with fixing accessories for assembling into the cabinet.

For cabinet width [mm]	Length of mounting bar [mm]	Length of earthing bar [mm]	Catalogue number of set
1200	1162.5	1113.5	WZ-1951-24-01-000
1000	962.5	913.5	WZ-1951-24-02-000
800	762.5	713.5	WZ-1951-24-03-000
600	562.5	513.5	WZ-1951-24-04-000

Package: 1 set



### Potential equalisation bar

Fixed on the mounting bar UNI, which is the part of earthing bar set.

With threaded holes M6 for cables fixing.

**Material:**

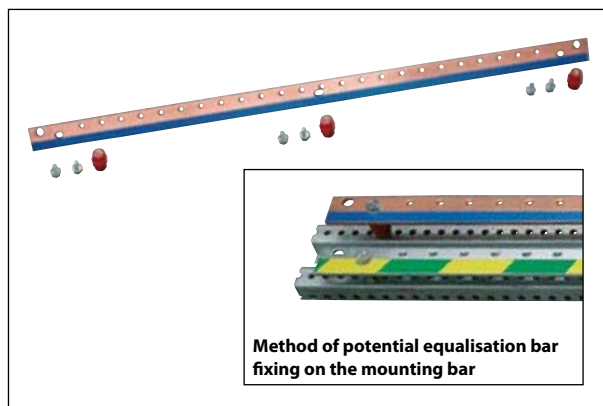
Copper bar 30 x 4 mm

**Scope of delivery:**

Potential equalisation bar with 3 insulators and screws for fixing to the mounting bar UNI.

For cabinet width [mm]	Length of potential equalisation bar [mm]	Catalogue number
1200	1113.5	WZ-1951-25-01-000
1000	913.5	WZ-1951-25-02-000
800	713.5	WZ-1951-25-03-000
600	513.5	WZ-1951-25-04-000

Package: 1 pc.



### Earthing cable set

Copper cables for joining removable elements of the cabinet with earthing bar, equipped with contact eyes for M6 screws.

**Material:**

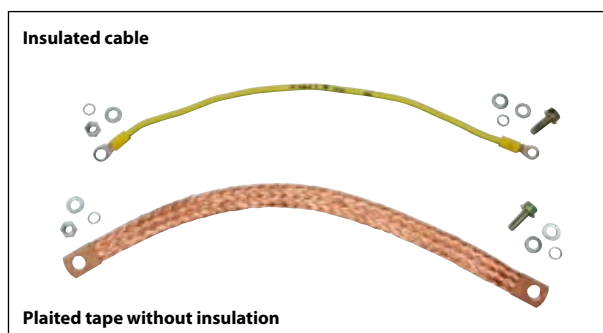
Copper

**Scope of delivery:**

Set: 8 insulated cables, full section 6 mm<sup>2</sup>, 3 plaited tapes without insulation about 20 mm<sup>2</sup>, fixing accessories.

Note: Plaited tapes are intended for door and mounting plate earthing.

Package	Catalogue number
1 set	WZ-1951-33-00-000



### Micro switch set

Mounted at the cabinet's door. Depending on wire connection, pressing the button closes or opens the circuit.

**Scope of delivery:**

Micro switch, mounting bracket, 2 screws

Package	Catalogue number
1 pc.	WZ-1951-41-03-000



## SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

### System lighting set

Fixed into the horizontal slots in the top part of the cabinet's frame using CLASSIC-type cross bar.  
Equipped with a Schuko power socket and a switch. Possibility of direct power supply or use of the connecting cable from an adjacent lighting fitting.  
Possibility of micro switch control.

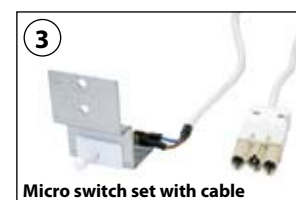
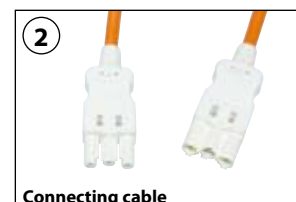
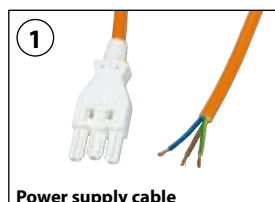
**Material:**

Electric light fitting -- sheet steel powder painted in RAL 7035

**Scope of delivery:**

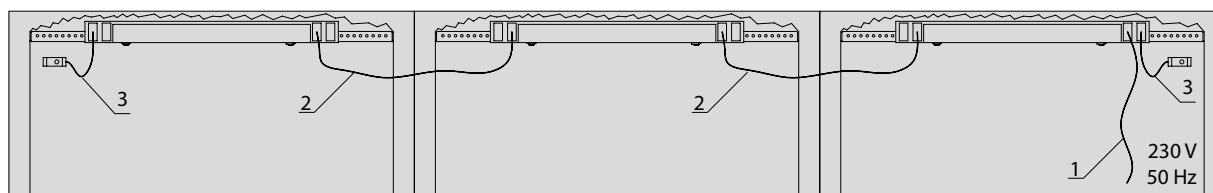
Set contains: electric light fitting with a 14 W fluorescent lamp, a cross bar CLASSIC with adjusted length to the cabinet's width, fixing accessories.

Connecting cable, power supply cable and micro switch set are to be ordered separately.



Product name	For cabinet width [mm]	Catalogue number
System lighting set	1200	WZ-1951-80-01-011
	1000	WZ-1951-80-02-011
	800	WZ-1951-80-03-011
	600	WZ-1951-80-04-011
Connecting cable 0.6 m	600 - 800	M1T-02-0012
Connecting cable 1.0 m	1000 - 1200	M1T-02-0011
Power supply cable 3.0 m		M1T-02-0016
Micro switch set with 1.0 m cable		WZ-1951-41-01-000

Package: 1 set

**Connection diagram**


### Lighting set

Fixed into horizontal slots in the top part of the cabinet's frame.

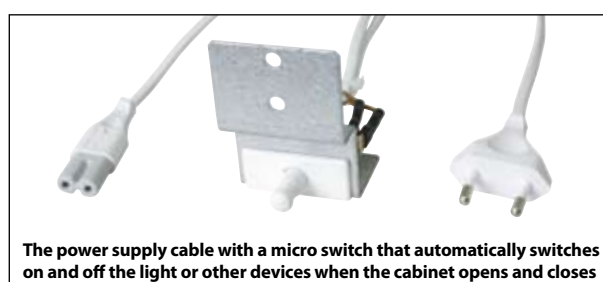
**Material:**

Mounting bracket - 1.5 mm thick sheet steel powder painted in RAL 7035.  
Mounting bar - 1.5 mm thick Al-Zn coated steel (only for cabinets 1000 and 1200 mm wide).

**Scope of delivery:**

Set: electric light fitting with a fluorescent lamp 230 V, 8 W, a mounting bracket, a mounting rail (only for the cabinets 1000 and 1200 mm wide), a 1.6 m power supply cable and fixing accessories for mounting the set in the cabinet.

The power supply cable equipped with a micro switch is to be ordered separately.



Product name	For cabinet width [mm]	Catalogue number
Lighting set	1200	WZ-1951-38-01-011
	1000	WZ-1951-38-02-011
	800	WZ-1951-38-03-011
	600	WZ-1951-38-04-011
Power supply cable 1.6 + 1.0 m with a micro switch		WN-0208-04-00-000

Package: 1 set

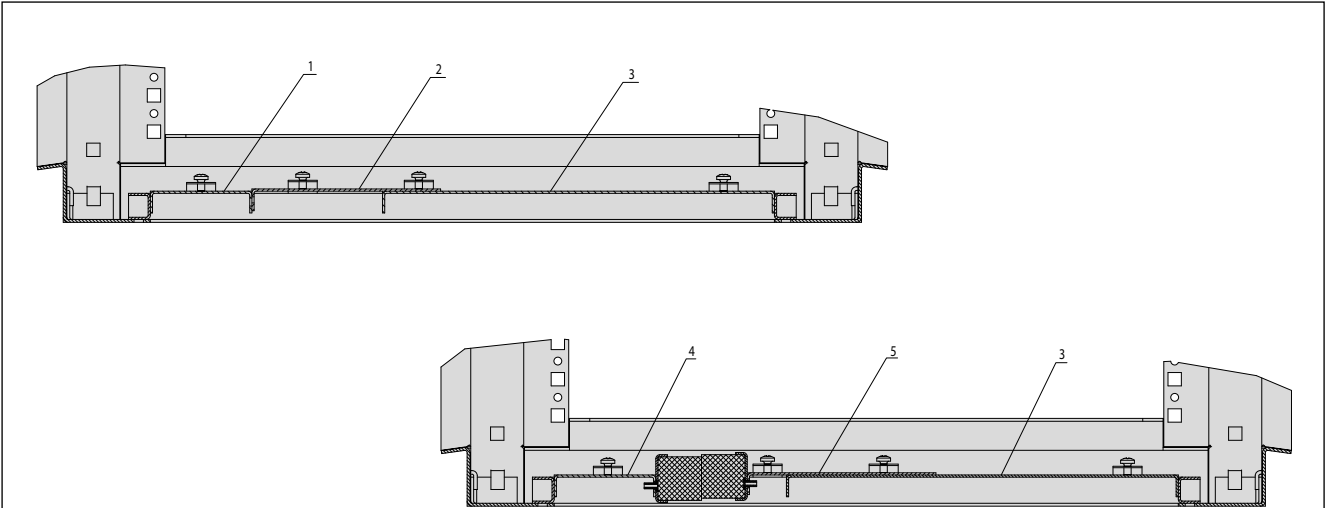
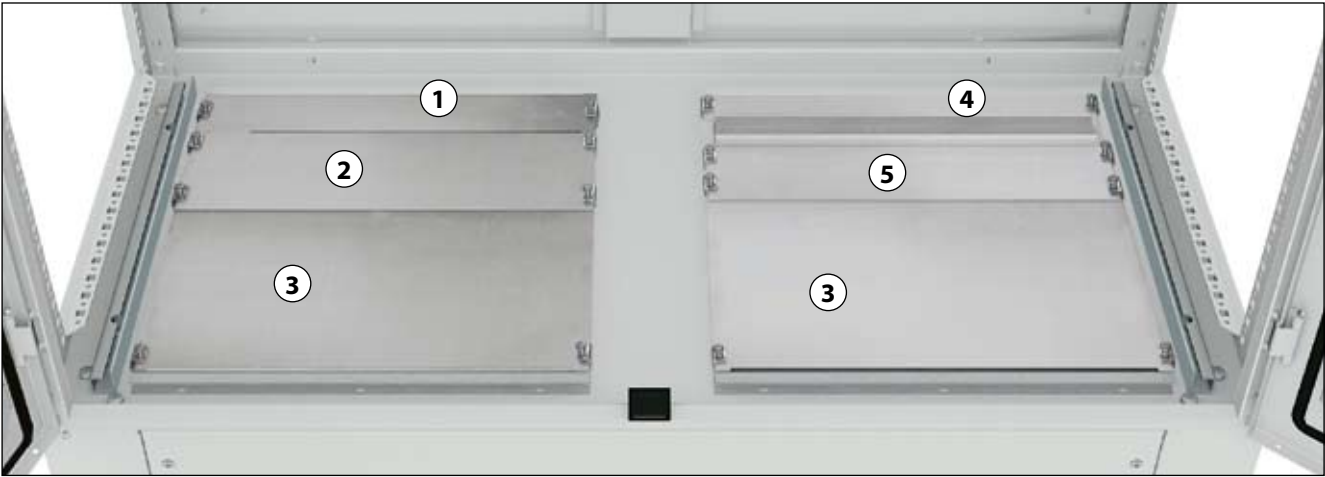
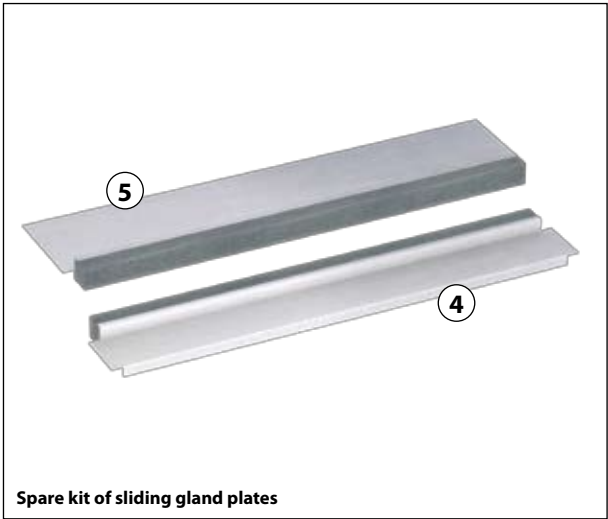
SUPPLEMENTARY ACCESSORIES FOR SZE2 CABINETS

Spare kit of sliding gland plates with foam for cabinet's bottom plate

Intended for application instead of standard sliding gland plates.  
They create a cable opening with adjustable width.  
Sealing foam protects cable isolation lead into the cabinet from any defects, at the same time increasing the cabinet's tightness.  
Types, dimensions and openings in the bottom plate of SZE2 cabinet – see page 154.

**Material:**  
1.5 mm thick Al-Zn coated sheet steel, polyurethane foam.  
**Scope of delivery:**  
Set of 2 sliding gland plates with sealing foam.

For cabinet width [mm]	Gland plates width [mm]	Package	Catalogue number
800	656	1 set	WZ-1951-81-01-000
1200 or 600	456	1 set	WZ-1951-81-02-000
1000	406	1 set	WZ-1951-81-03-000



**Method of fastening sliding gland plates in the bottom plate of the SZE2 cabinet**  
Supply of all cabinets includes:  
1, 2, 3 – sliding gland plates without foam.  
Supplementary accessories:  
4, 5 – sliding gland plates with sealing foam intended for fastening instead of 2 standard gland plates without foam (1, 2).

## SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

### Blanking and cable entry plates for cabinet's top plate

For types, dimensions and spacing of openings in the top plate of the SZE2 cabinet, see page 155.

#### Available in 5 types:

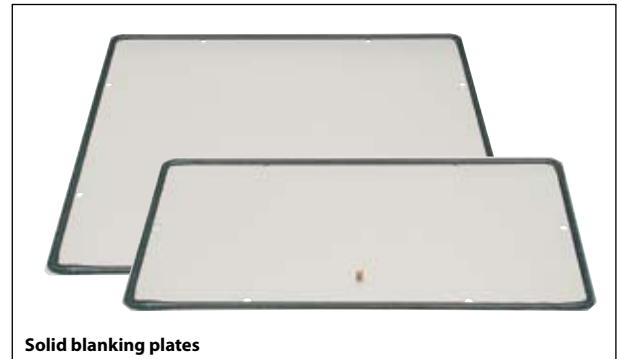
- Solid blanking plates with a sealing gasket  
- to ensure tight closure of the top plate
- Perforated blanking plates  
- with ventilation openings, 2.5 mm wide
- Blanking plates with a fabric filter  
- with a replaceable fabric filter insert
- Cable entry plates with a brush strip  
- 320 x 50 mm opening for cable entry
- Cable entry plates with a foam strip  
- 320 x 50 mm opening for cable entry

#### Material:

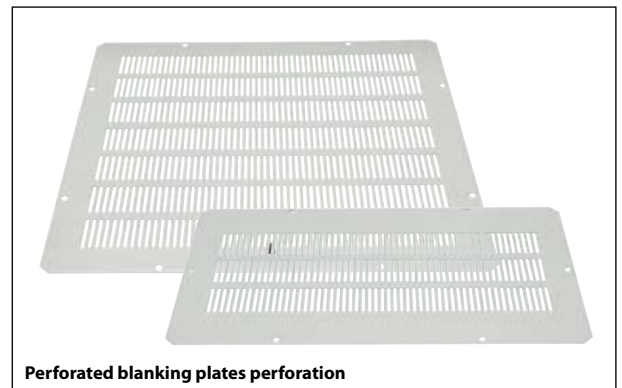
Sheet steel, 1.5 mm thick, powder painted in RAL 7035

#### Scope of delivery:

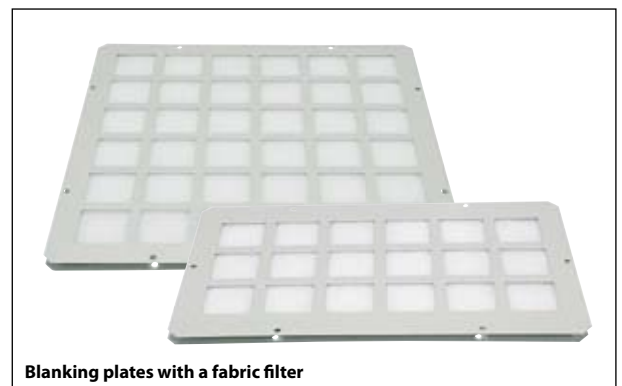
Blanking or cable entry plate with mounting elements for fixing inside the cabinet.



Solid blanking plates



Perforated blanking plates perforation



Blanking plates with a fabric filter

Type of blanking or cable entry plate	Protection degree of cabinets equipped with a blanking plate		For opening [mm]	Catalogue number
	Cabinet without a roof	Cabinet with a roof		
Solid blanking plate	IP 64	IP 64	380x380	WZ-1441-35-03-011
			380x210	WZ-1951-26-00-011
Perforated blanking plate	IP 20	IP 21	380x380	WZ-1718-39-01-011
			380x210	WZ-1718-39-02-011
Blanking plate with a fabric filter	IP 10	IP 21	380x380	WZ-1718-42-01-011
			380x210	WZ-1718-42-02-011
Cable entry plate with a brush strip	IP 10	IP 21	380x380	WZ-1718-37-01-011
			380x210	WZ-1718-37-02-011
Cable entry plate with a foam strip	IP 10	IP 21	380x380	WZ-1718-40-01-011
			380x210	WZ-1718-40-02-011

Package: 1 set



Cable entry plates with a foam strip



Cable entry plates with a brush strip



## SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

### Mounting plate infill

The plate infill makes it possible to achieve uniform mounting plane in cabinets bayed in rows.

**Material:**

2.0 mm thick zinc coated sheet steel

**Scope of delivery:**

Mounting plate infill with fixing accessories for mounting into the cabinet.

For cabinet height [mm]	Mounting plate infill dimensions [mm] (HxWxD)	Catalogue number
2000	1867x86x30	WZ-1951-47-01-000
1800	1667x86x30	WZ-1951-47-02-000

Package: 1 pc.



Way of baying mounting plates

### Partition

For the cabinets bayed in rows.

It is assembled in the same way as flushed side panels (see page 160).

**Material:**

1.5 mm thick Al-Zn coated sheet steel

**Scope of delivery:**

Partition (1 pc.) with fixing accessories for mounting into the cabinet.

For cabinet		Catalogue number
height [mm]	depth [mm]	
2000	800	WZ-1951-31-01-000
	600	WZ-1951-31-02-000
	500	WZ-1951-31-03-000
	400	WZ-1951-31-13-000
1800	600	WZ-1951-31-05-000
	500	WZ-1951-31-06-000

Package: 1 pc.



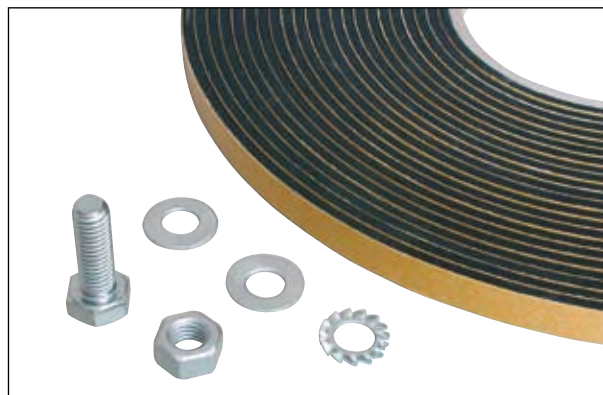
### Set of elements for baying cabinets

For cabinets bayed in rows.

One set is required for baying two cabinets together.

Set includes	Catalogue number
Screw M8x25	WZ-1951-45-00-000
Nut M8	
Washer 8.4	
Corrugated washer 8.4	
Self-adhesive gasket	

Package: 1 set





## SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

### Heater

Compact heat device equipped with fan.

**Technical data:**

- Power supply ..... 230 V AC, 50/60 Hz
- Heating force ..... 200/300/400 W
- Fan capacity ..... 10 m<sup>3</sup>/h
- Protection degree ..... IP 20

Package	Catalogue number
1 pc.	WN-0316-09-00



### Thermostat

Thermostatic regulator indicated for controlling fans, heaters, heat exchanger or for attaching signal generator at exceeding preset temperature limits.

**Technical data:**

- Sensor element:  
thermal bimetal
- Temperature range:  
0-60 °C, hysteresis ca. 7 °C
- Contact types:  
snap action contact
- Power carrying capacity:  
6 A (1) 250 V AC
- Radio frequency interference:  
N (according to VDE 0875)

**Scope of delivery:**

- KTS 1141 or KTO 1140 thermostat,
- DIN rail,
- two holders,
- two screw clamps.

Type of thermostat	Colour of the handwheel	Package	Catalogue number
KTO 1140 – normally closed Switches off devices (e.g. heaters) at selected temperature limit.	●	1 pc.	WN-0201-01-00-000/A
KTS 1141 – normally open Switches on ventilation system (e.g. fans) at selected temperature limit.	●	1 pc.	WN-0201-02-00-000/A



KTS 1141 - thermostat normally open

## SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

### Filter fans and exhaust filters

- Intended for mounting in side panels and door of the cabinet.
- Fastened with latches and screws.
- Enclosure made of ABS material, light grey (RAL 7035).
- Equipped with high quality filter inserts and gaskets.
- Possibility of changing direction of air flow by turning the fan.

#### Capacity:

Filter fans are available in ten options with the following capacities:

- capacity: from 20 to 740 m<sup>3</sup>/h (air flow through filter fan)
- capacity with exhaust filter: from 16 to 530 m<sup>3</sup>/h (air flow through the cabinet equipped with 1 filter fan and 1 exhaust filter).

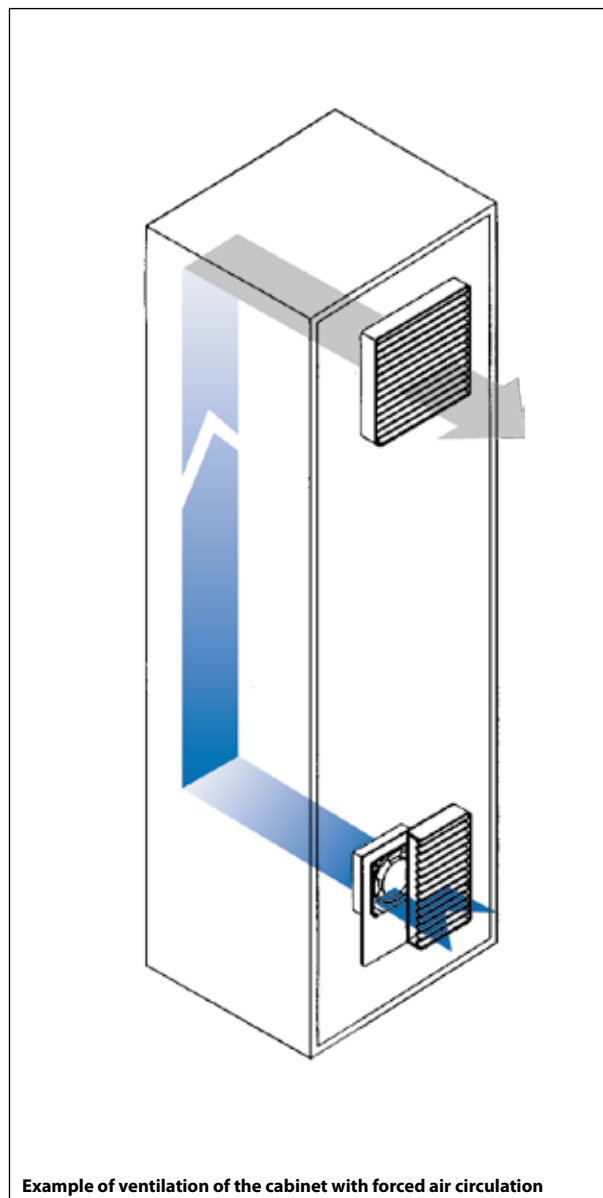
#### Type of fan supply:

- 230 V, 50/60 Hz,
- 115 V, 50/60 Hz,
- 24 V DC (only fans with capacity up to 250 m<sup>3</sup>/h).

#### Protection degree:

IP 54 in accordance with EN 60 529 / IEC 529.

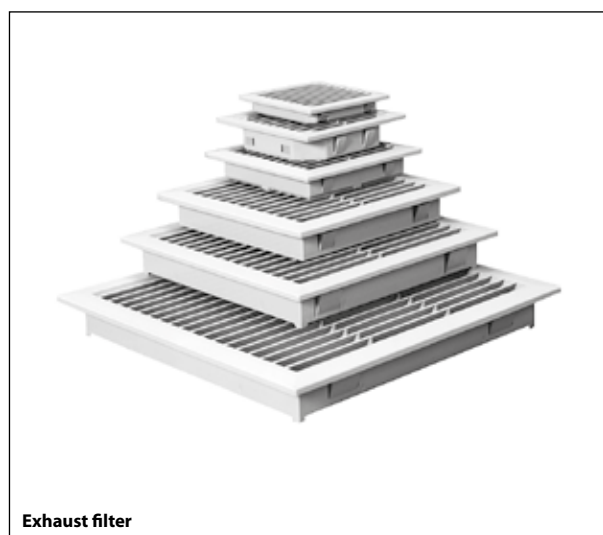
**Selection of filter fans and exhaust filters should be consulted with ZPAS customer service.**



Example of ventilation of the cabinet with forced air circulation



Example of filter fans



Exhaust filter

## SUPPLEMENTARY ACCESSORIES FOR SZE2 CABINETS

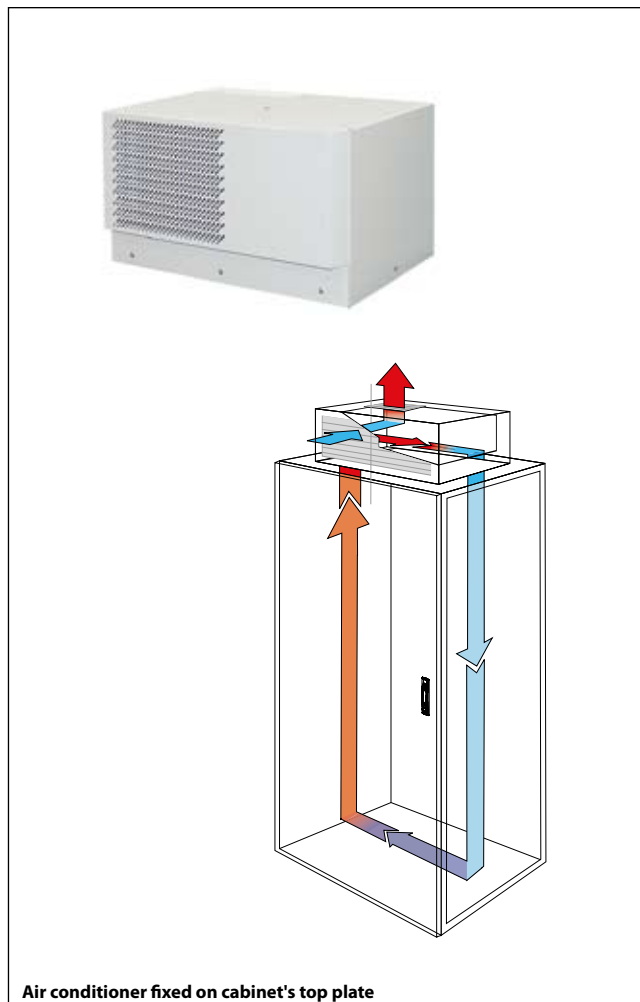
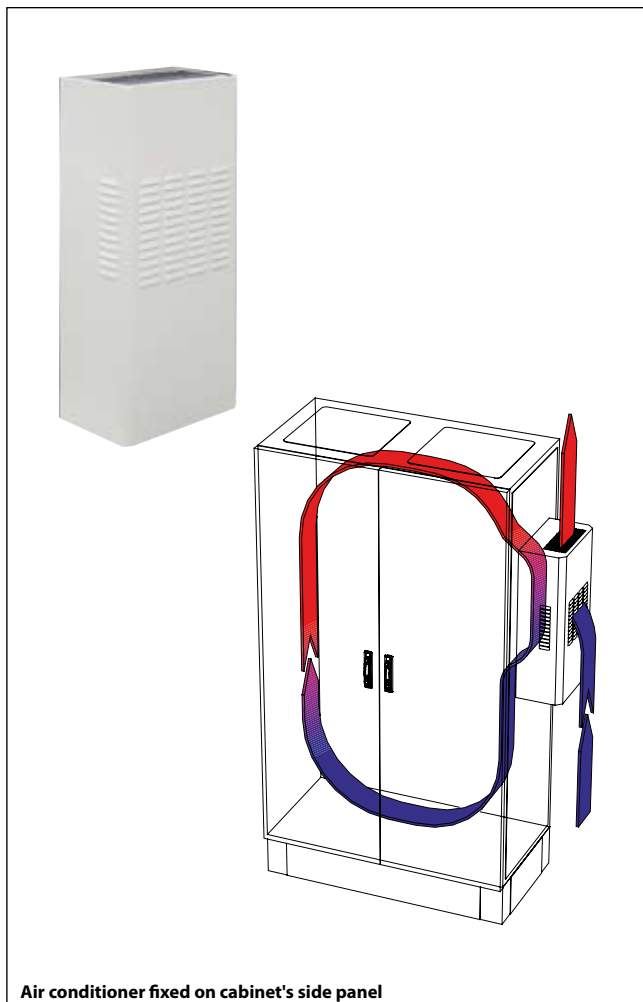
### Air conditioner and heat exchanger

On customer's request, SZE2 cabinets can be equipped with an air conditioner or heat exchanger (air/air type) fixed on the doors, side panels or in the top plate.

#### Mode of operation:

Internal cabinet air is sucked up from the top, cooled inside the air conditioner or heat exchanger and returned to the cabinet at a high speed towards the bottom. This solution ensures optimum cooling of the entire cabinet.

**Selection of the air conditioner or heat exchanger should be consulted with ZPAS customer service.**



## WALL-MOUNTED CABINETS



## SWN WALL-MOUNTED CABINETS



- Compact wall-mounted cabinets designed for electrical installations.
- In the standard version they are designed for indoor applications.
- Manufactured in 20 dimensions in accordance with the chart below.
- Cabinets of non-standard dimensions or stainless steel options are quoted individually.

### Reference chart

Width [mm]	Depth [mm]	Height [mm]					
		300	400	500	600	800	1000
		Catalogue numbers of standard SWN cabinets					
200	115	WZ-2285-01-01-011	—	—	—	—	—
300	150	WZ-2285-01-02-011	—	—	—	—	—
	210	—	WZ-2285-01-03-011	—	—	—	—
400	150	—	—	—	—	—	—
	210	WZ-2285-01-04-011	WZ-2285-01-05-011	WZ-2285-01-06-011	—	—	—
	250	—	—	—	WZ-2285-01-07-011	—	—
	300	—	WZ-2285-01-08-011	WZ-2285-01-09-011	—	—	—
500	210	—	—	WZ-2285-01-10-011	—	—	—
	250	—	WZ-2285-01-11-011	—	WZ-2285-01-12-011	—	—
	300	—	—	—	WZ-2285-01-13-011	—	—
600	250	—	WZ-2285-01-14-011	—	WZ-2285-01-15-011	WZ-2285-01-16-011	WZ-2285-01-17-011
	300	—	—	—	—	WZ-2285-01-18-011	—
800	300	—	—	—	—	WZ-2285-01-19-011	WZ-2285-01-20-011

### Technical data

Type of element	Material sheet steel	Surface finish
Body	1.25 mm or 1.5 mm depending on cabinet's dimensions	Epoxide-polyester thick-texture powder paint in RAL 7035, intended for indoor usage. On customer's request, it is possible to use facade paint with improved resistance to adverse weather conditions and optional use of polyzinc base.
Door		
Blanking plate	1.5 mm	
Mounting plate	2.0 mm	Al-Zn coated

#### Note:

On request, the body, door and blanking plate can be made of stainless steel.

#### Protection degree

IP 65 in accordance with EN 60 529 / IEC 529

### Description of SWN cabinet design

#### Body

- The body of SWN is a tight-welded sheet metal structure. Optimised door light ensures maximum use of available space.
- A multi-folded enclosure aperture protects against dust and moisture even when the door is open.
- In the bottom of the body, there is an opening for a gland plate. Dimensions of the opening depend on cabinet dimensions.
- Inside the body there are self-tapping screws for fixing the mounting plate.
- On the rear side of the body there are cut-outs for mounting the cabinet directly on the wall or by using lifting brackets.

## SWN WALL-MOUNTED CABINETS

### Door

- Cabinets are provided with a single-wing door.
- Depending on height, either one or two locks including double-bit insert are used:
  - cabinets up to 400 mm high - one lock in the middle;
  - cabinets from 500 to 1000 mm high - two locks.
- There are hinges fixed to the door; the number depends on cabinet height: from 300 to 600 mm - two hinges, from 800 to 1000 mm - three hinges.
- Interior of the door including sealing gasket and earthing studs.
- Left or right door option.
- Maximum door opening angle 120°.

### Mounting plate

- Fixed to rear side of the body.
- In cabinets up to 600 mm high the flat mounting plate is used.
- In cabinets 800 or 1000 mm high, a folded mounting plate is used to maintain appropriate stiffness.
- Mounting plate including fixing points for earthing bar.

### Blanking plate - cable entry plate

- Fixed to cut-out in the bottom plate by self-tapping screws.
- Includes sealing gasket and earthing stud.
- Gland cable entries available on request.

### Earthing and potential equalisation

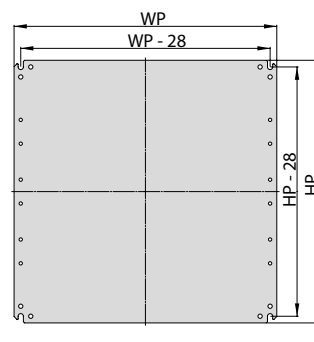
- The door and the blanking plate including earthing studs.
- Earthing bar and potential equalisation bar (for fixing to the mounting plate) and earthing cables are delivered as supplementary accessories.



Blanking plate fixed to the cabinet's bottom

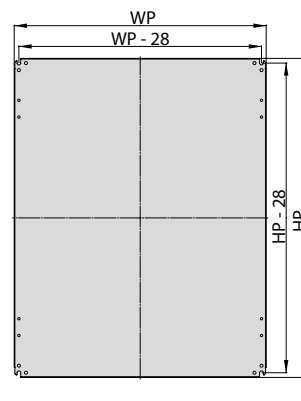


## DESIGN OF SWN CABINETS



**Flat mounting plate**  
(for cabinets from  
300 to 600 mm high)

**Folded mounting plate**  
(for cabinets 800  
and 1000 mm high)



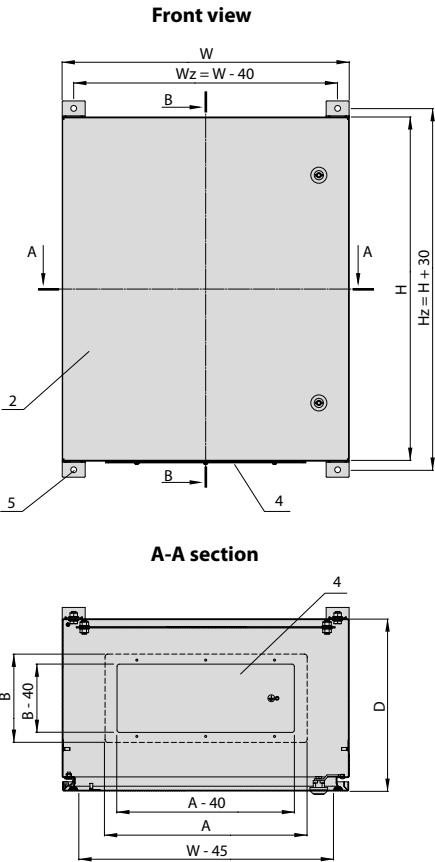
### Reference chart

Cabinet dimensions [mm]	Height H	300			400				
	Width W	200	300	400	300	400	400	500	600
	Depth D	115	150	210	210	210	300	250	250
Number of locks in the door		1	1	1	1	1	1	1	1
Number of hinges in the door		2	2	2	2	2	2	2	2
Mounting plate dimensions [mm]	Height HP	251	251	251	351	351	351	351	351
	Width WP	151	251	251	251	351	251	451	551
Cable entry plate dimensions	A dimension	172	172	341	172	341	341	349	540
	B dimension	82	82	101	82	101	101	159	159

		Package	Catalogue numbers							
<b>SWN cabinet*</b>		1 pc.	WZ-2285-01-01-011	WZ-2285-01-02-011	WZ-2285-01-04-011	WZ-2285-01-03-011	WZ-2285-01-05-011	WZ-2285-01-08-011	WZ-2285-01-11-011	WZ-2285-01-14-011
Supplementary accessories	Potential equalisation bar	1 pc.	WZ-2285-10-01-000	WZ-2285-10-01-000	WZ-2285-10-01-000	WZ-2285-10-01-000	WZ-2285-10-01-000	WZ-2285-10-01-000	WZ-2285-10-02-000	WZ-2285-10-02-000
	Earthing set	1 set	WZ-2285-13-00-000							
	Set of brackets for wall mounting	1 set = 4 pcs.	WZ-2285-14-00-000							

\*) SWN cabinet - scope of delivery: body, door, mounting plate, blanking plate (cable entry plate).

DESIGN OF SWN CABINETS



DESIGN

- 1. Body
- 2. Door
- 3. Mounting plate
- 4. Blanking plate - cable entry plate
- 5. Wall bracket

Note:  
Wall brackets are ordered separately.



Ordering Instruction

When ordering SWN wall mounted cabinet or supplementary accessories, refer to catalogue numbers from the chart.

500			600				800			1000	
400	400	500	400	500	500	600	600	600	800	600	800
210	300	210	250	250	300	250	250	300	300	250	300
2	2	2	2	2	2	2	2	2	2	2	2
2	2	2	2	2	2	2	3	3	3	3	3
451	451	451	551	551	551	551	751	751	751	951	951
351	351	451	351	451	451	551	551	551	751	551	751
341	341	349	341	349	349	540	540	540	540	540	540
101	101	159	101	159	159	159	159	159	159	159	159

WZ-2285-01-06-011	WZ-2285-01-09-011	WZ-2285-01-10-011	WZ-2285-01-07-011	WZ-2285-01-12-011	WZ-2285-01-13-011	WZ-2285-01-15-011	WZ-2285-01-16-011	WZ-2285-01-18-011	WZ-2285-01-19-011	WZ-2285-01-17-011	WZ-2285-01-20-011
WZ-2285-10-01-000	WZ-2285-10-01-000	WZ-2285-10-02-000	WZ-2285-10-01-000	WZ-2285-10-02-000	WZ-2285-10-02-000	WZ-2285-10-02-000	WZ-2285-10-02-000	WZ-2285-10-02-000	WZ-2285-10-02-000	WZ-2285-10-02-000	WZ-2285-10-02-000
WZ-2285-13-00-000											
WZ-2285-14-00-000											

Detailed description of supplementary accessories: page 182.

## SUPPLEMENTARY ACCESSORIES FOR SWN CABINETS

### Potential equalisation bar

Fixed to the mounting plate by insulators (fixing points are made during assembly).

Threaded holes M5 for fixing wires.

**Material:**

Copper bar 30 x 4 mm.

**Scope of delivery:**

Potential equalisation bar with 2 insulators and screws for fixing on the mounting plate.

For cabinets width [mm]	Length of the bar [mm]	Package	Catalogue number
200 - 400	130	1 pc.	WZ-2285-10-01-000
500 - 800	230	1 pc.	WZ-2285-10-02-000



### Earthing set

Consists of an earthing bar and 2 earthing cables.

**Earthing bar**

- Fixed to mounting plate by distance pins (standard mounting plate includes fixing points for earthing bar).
- Threaded holes M5 for fixing wires.

**Earthing cables**

- Insulated copper wires for joining removable elements of the cabinet with earthing bar or directly with cabinet's body.
- With contact eyes.

**Material:**

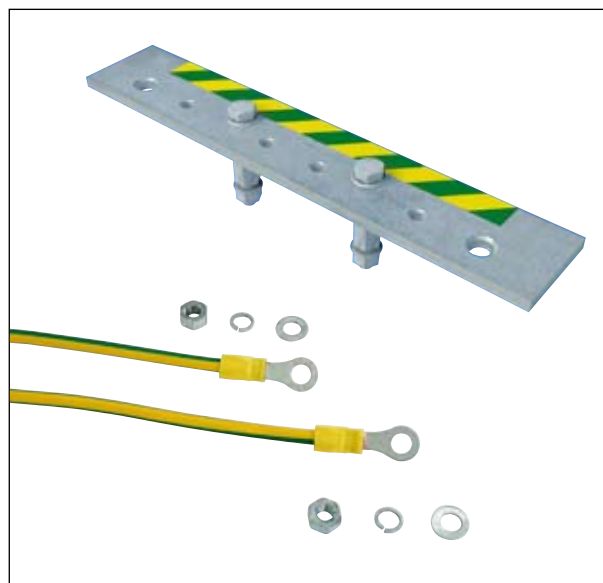
Galvanised steel rail 30 x 4 x 170 mm

Copper cables, full section 6 mm<sup>2</sup>

**Scope of delivery:**

Set: earthing bar 170 mm long with distance pins, washers and nuts for fixing to mounting plate, 2 grounding cables 300 mm long, fixing accessories.

Package	Catalogue number
1 set	WZ-2285-13-00-000



### Set of wall brackets for wall mounting

Wall brackets are fixed to openings in the rear side of the cabinet horizontally or vertically. Diameter of openings: 10 mm. Spacing between rear side of the cabinet and the wall: 20 mm.

1 set = 4 brackets per cabinet.

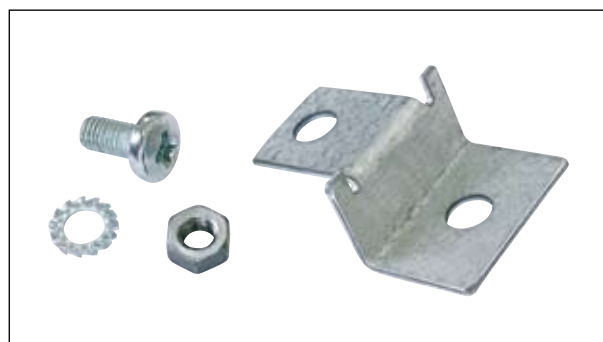
**Material:**

2 mm thick Al-Zn coated sheet steel.

**Scope of delivery:**

Set: 4 wall brackets with screws, nuts and washers for fixing to the rear side.

Package	Catalogue number
1 set = 4 pcs.	WZ-2285-14-00-000



## CABINETS WITH ELECTRICAL EQUIPMENT



**Double-section switchgear  
with modular equipment**

**Control box for Power Plant Bełchatów  
based on SWN-type cabinets**



**ZPAS also offers floor-standing and wall-mounted cabinets including electrical equipment and wiring:**

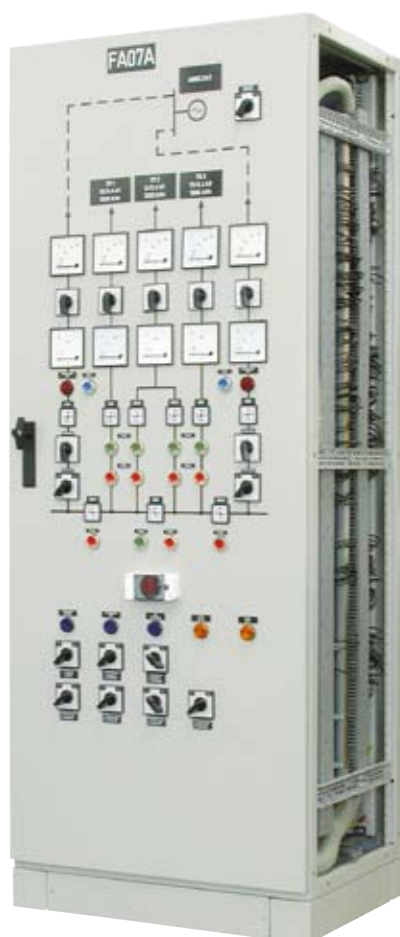
- low voltage up to 2500 A distributor cabinets,
- AC and DC guaranteed voltage distribution cabinets,
- path and cable cabinets,
- meter cabinets,
- protection, control and signalling cabinets,
- remote control engineering cabinets and others.

## CABINETS WITH ELECTRICAL EQUIPMENT



Low-voltage distribution cabinet in Galess Zinc Plant in Świdnica

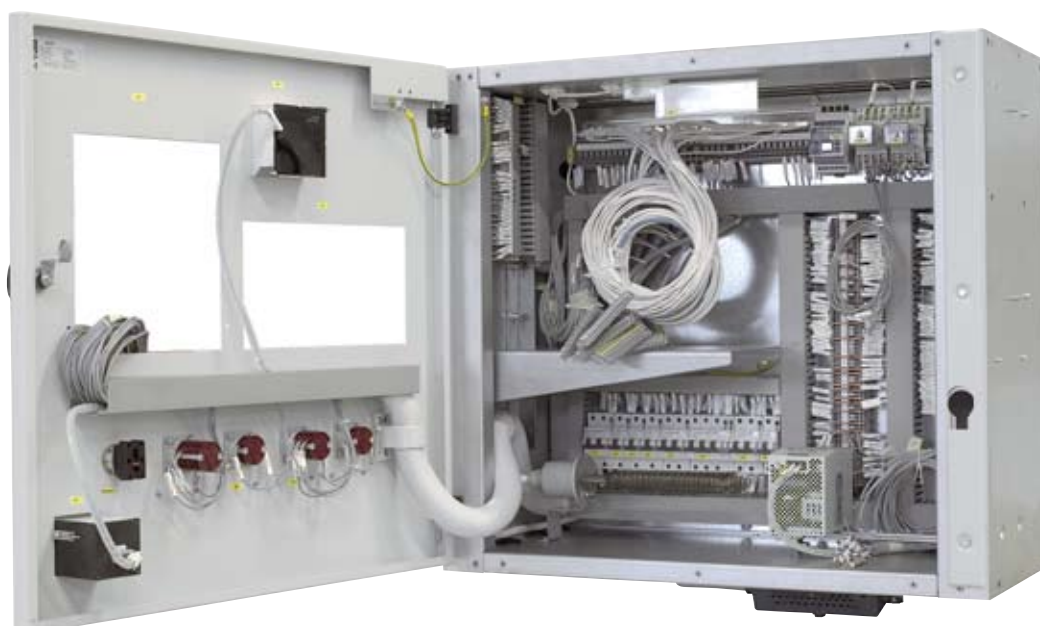
## CABINETS WITH ELECTRICAL EQUIPMENT



Control and measuring cabinet



## CABINETS WITH ELECTRICAL EQUIPMENT



LV chamber for 12 kV power distribution station switchgear (oil extraction industry – Siberia, Russia).

## CABINETS WITH ELECTRICAL EQUIPMENT



LV switchgear for 35/6 kV power distribution station  
(oil extraction industry – Siberia, Russia).

## CABINETS WITH ELECTRICAL EQUIPMENT



220/110/24 V switchgear for a mining company



Set of control and power cabinets for a ceramic plant

## CONTROL DESKS



## PSL CONTROL DESKS

- PSL control desks are designed for mounting control apparatus, monitoring systems, measurement devices and visualisation of production processing.
- They are particularly recommended for operation stations, automated processing lines or machinery rooms.
- Equipped with revolving hinge panel which allows for maintenance of mounted devices.
- Manufactured in 4 configurations and 60 dimensions.
- Option of openings in the hinged panel on customer's request.

### Reference chart

Width W [mm]	Depth D [mm]	Type of configuration			
		Type I	Type II	Type III	Type IV
		Catalogue numbers of standard PSL desks			
600	450	WZ-0950-01-15-011	WZ-0950-01-30-011	WZ-0950-01-45-011	WZ-0950-01-60-011
	600	WZ-0950-01-14-011	WZ-0950-01-29-011	WZ-0950-01-44-011	WZ-0950-01-59-011
	800	WZ-0950-01-13-011	WZ-0950-01-28-011	WZ-0950-01-43-011	WZ-0950-01-58-011
800	450	WZ-0950-01-12-011	WZ-0950-01-27-011	WZ-0950-01-42-011	WZ-0950-01-57-011
	600	WZ-0950-01-11-011	WZ-0950-01-26-011	WZ-0950-01-41-011	WZ-0950-01-56-011
	800	WZ-0950-01-10-011	WZ-0950-01-25-011	WZ-0950-01-40-011	WZ-0950-01-55-011
1000	450	WZ-0950-01-09-011	WZ-0950-01-24-011	WZ-0950-01-39-011	WZ-0950-01-54-011
	600	WZ-0950-01-08-011	WZ-0950-01-23-011	WZ-0950-01-38-011	WZ-0950-01-53-011
	800	WZ-0950-01-07-011	WZ-0950-01-22-011	WZ-0950-01-37-011	WZ-0950-01-52-011
1200	450	WZ-0950-01-06-011	WZ-0950-01-21-011	WZ-0950-01-36-011	WZ-0950-01-51-011
	600	WZ-0950-01-05-011	WZ-0950-01-20-011	WZ-0950-01-35-011	WZ-0950-01-50-011
	800	WZ-0950-01-04-011	WZ-0950-01-19-011	WZ-0950-01-34-011	WZ-0950-01-49-011
1500	450	WZ-0950-01-03-011	WZ-0950-01-18-011	WZ-0950-01-33-011	WZ-0950-01-48-011
	600	WZ-0950-01-02-011	WZ-0950-01-17-011	WZ-0950-01-32-011	WZ-0950-01-47-011
	800	WZ-0950-01-01-011	WZ-0950-01-16-011	WZ-0950-01-31-011	WZ-0950-01-46-011

### Technical data

Type of element	Material: sheet steel	Surface finishing
Body of individual segments	1.5 mm	Epoxide-polyester powder paint, light grey RAL 7035, recommended for indoor applications
Doors	1.5 mm	
Rear panels	1.0 mm	
Plinth - corners - covers	2.5 mm 1.25 mm	
Mounting profiles	2.0 mm	Al-Zn coated

#### Note:

On request, the bodies, doors, panels and plinth can be made of stainless sheet steel.

#### Protection degree

IP 55 in accordance with EN 60 529 / IEC 529



TYPE I



TYPE II

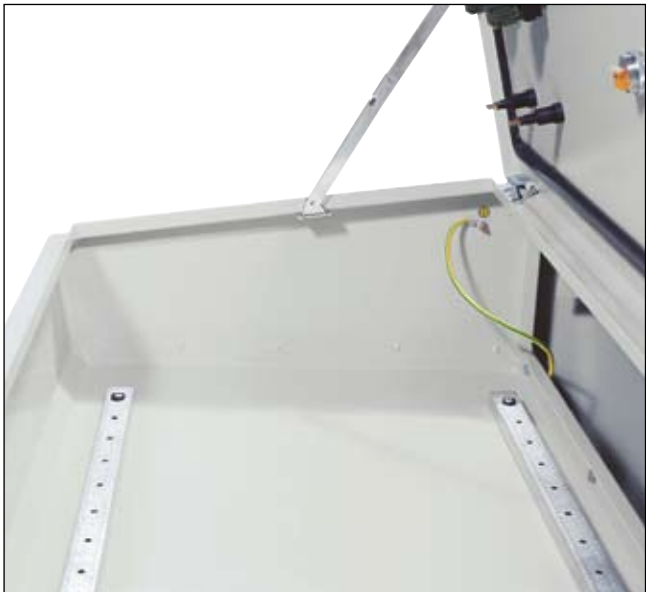


TYPE III



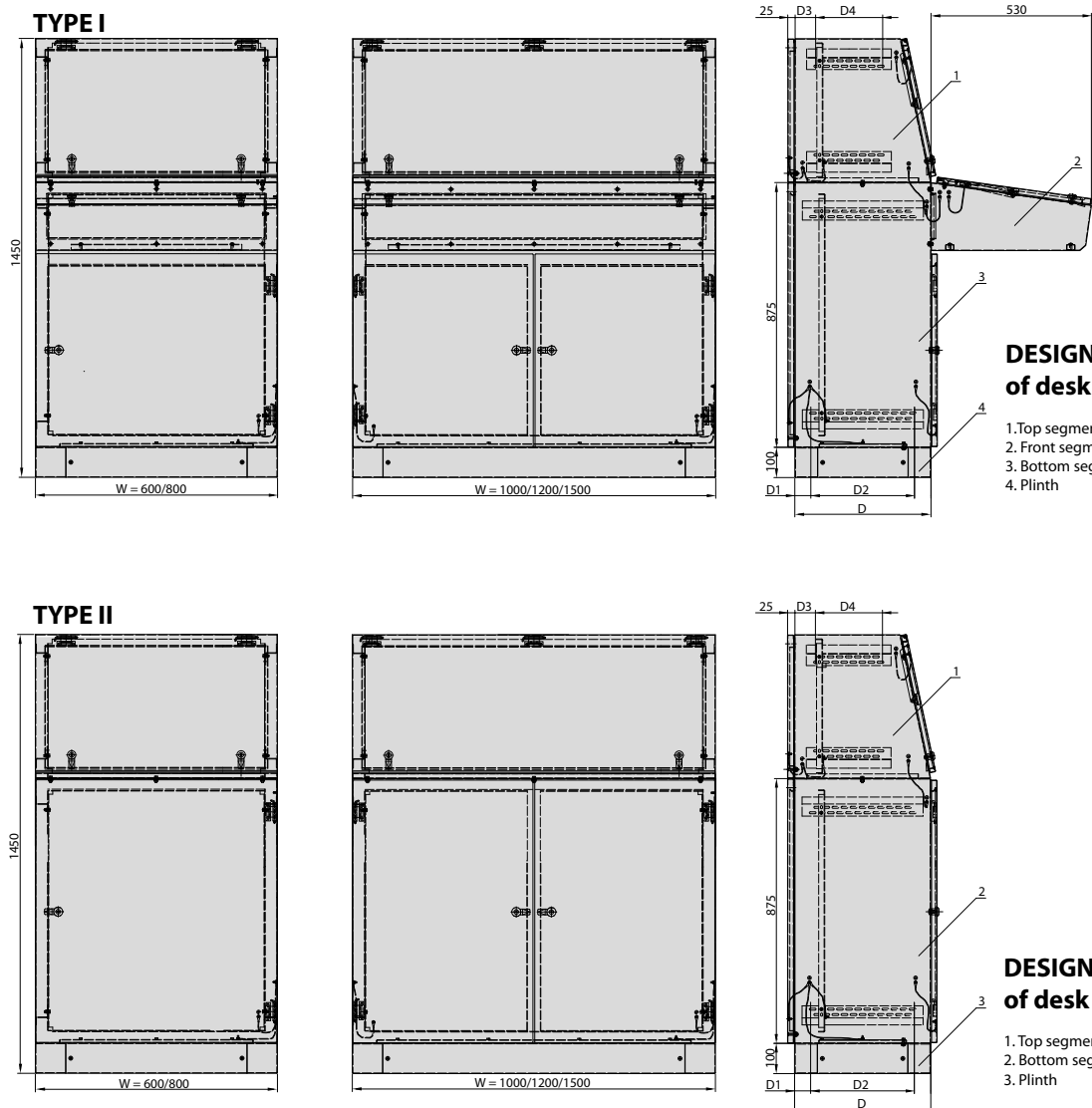
TYPE IV

PSL CONTROL DESKS





## PSL CONTROL DESKS



### Reference chart

Desk dimensions [mm]	Width W	600			800			1000		
	Depth D	450	600	800	450	600	800	450	600	800

		Package	Catalogue numbers								
PSL Desk	Type I	1 pc.	WZ-0950-01-15-011	WZ-0950-01-14-011	WZ-0950-01-13-011	WZ-0950-01-12-011	WZ-0950-01-11-011	WZ-0950-01-10-011	WZ-0950-01-09-011	WZ-0950-01-08-011	WZ-0950-01-07-011
	Type II	1 pc.	WZ-0950-01-30-011	WZ-0950-01-29-011	WZ-0950-01-28-011	WZ-0950-01-27-011	WZ-0950-01-26-011	WZ-0950-01-25-011	WZ-0950-01-24-011	WZ-0950-01-23-011	WZ-0950-01-22-011
	Type III	1 pc.	WZ-0950-01-45-011	WZ-0950-01-44-011	WZ-0950-01-43-011	WZ-0950-01-42-011	WZ-0950-01-41-011	WZ-0950-01-40-011	WZ-0950-01-39-011	WZ-0950-01-38-011	WZ-0950-01-37-011
	Type IV	1 pc.	WZ-0950-01-60-011	WZ-0950-01-59-011	WZ-0950-01-58-011	WZ-0950-01-57-011	WZ-0950-01-56-011	WZ-0950-01-55-011	WZ-0950-01-54-011	WZ-0950-01-53-011	WZ-0950-01-52-011

### Scope of delivery:

Desks are segment-based structures (see drawings). Individual segments consist of:

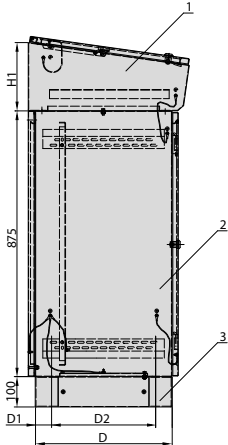
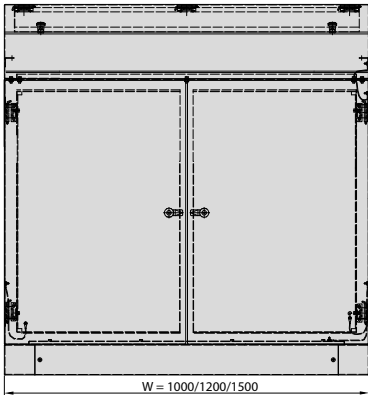
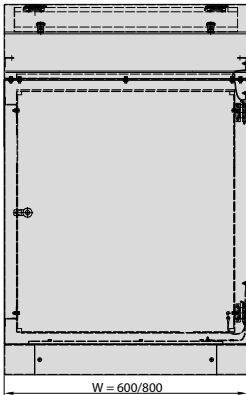
- top segment (higher version) – body, door (revolving hinge panel), rear panel, mounting plate;
- top segment (lower version) – body, door (revolving hinge panel);
- bottom segment – body with cable entry in bottom plate blind with blanking plate, front door, rear panel, mounting plate;
- front segment – body, door (revolving hinge panel), two slotted mounting bars.

The desk is placed on a 100 mm plinth.

Elements of the desk are connected with each other by earthing cables.

PSL CONTROL DESKS

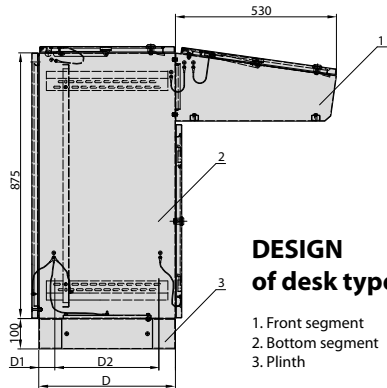
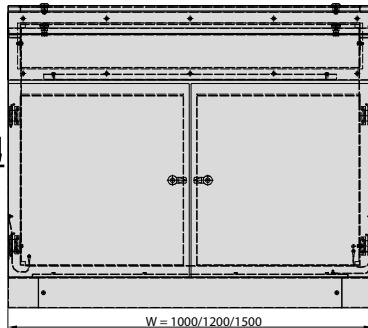
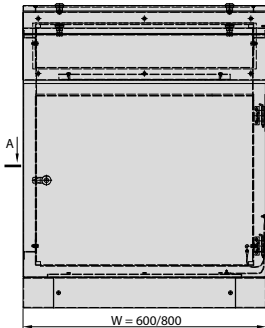
TYPE III



DESIGN of desk type III

- 1. Top segment (lower version)
- 2. Bottom segment
- 3. Plinth

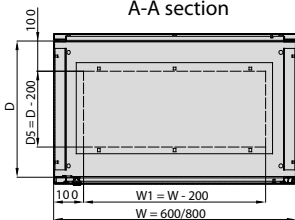
TYPE IV



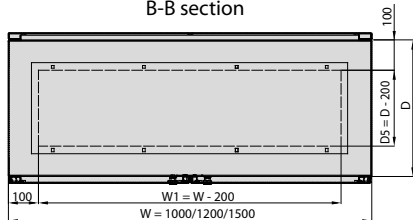
DESIGN of desk type IV

- 1. Front segment
- 2. Bottom segment
- 3. Plinth

A-A section



B-B section



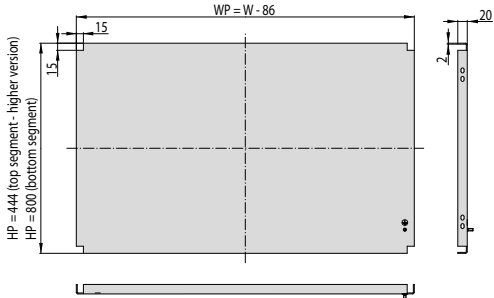
1200			1500		
450	600	800	450	600	800

WZ-0950-01-06-011	WZ-0950-01-05-011	WZ-0950-01-04-011	WZ-0950-01-03-011	WZ-0950-01-02-011	WZ-0950-01-01-011
WZ-0950-01-21-011	WZ-0950-01-20-011	WZ-0950-01-19-011	WZ-0950-01-18-011	WZ-0950-01-17-011	WZ-0950-01-16-011
WZ-0950-01-36-011	WZ-0950-01-35-011	WZ-0950-01-34-011	WZ-0950-01-33-011	WZ-0950-01-32-011	WZ-0950-01-31-011
WZ-0950-01-51-011	WZ-0950-01-50-011	WZ-0950-01-49-011	WZ-0950-01-48-011	WZ-0950-01-47-011	WZ-0950-01-46-011

Ordering instruction

For ordering PSL desks refer to catalogue numbers from the chart.

Mounting plate



Dimensions [mm]					
D	D1	D2	D3	D4	H1
450	60	330	70	210	225
600	60	480	70	330	262
800	55	690	70	360	290

## SAMPLE MODELS OF CONTROL AND DISPATCH DESKS



A detailed description of control and dispatch desks is available in a dedicated catalogue or online at [www.zpas.net](http://www.zpas.net)



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## ZPAS MULTIMEDIA KIOSKS

### Info kiosk structure

Multimedia kiosks are housed in free-standing enclosures which are highly resistant to damage. Furthermore, the enclosures ensure appropriate ventilation and protection of internal devices. The inside part of the info kiosk is equipped with cooling and heating systems, as well as surge protection. The enclosure is made of suitable materials, fully protecting the devices and wiring inside against unauthorized access. Info kiosks designed for outside applications are provided with a high degree of leaktightness, so that no humid air or precipitation is able to penetrate inside the kiosk and damage the computer equipment. The special design of info kiosks makes it possible for people in wheelchairs to use them.

According to standards in place for products of this type, info kiosks are operated using a touch screen. All hardware parameters of the computer and monitor are customized to meet customer's requirements. A standard version of the info kiosk is provided with a 17" LCD panel, stereo speakers and an advanced Pentium® IV computer with good technical parameters.

Optionally, the kiosk can be operated using a special vandal-proof keyboard with an extra trackball option. **Since ZPAS is a manufacturer, not a distributor, of info kiosks, it is possible to order equipment with any monitor size and non-standard enclosure types.**



Wall-mounted info kiosk



Mobile info kiosk



Free-standing info kiosk

## ZPAS MULTIMEDIA KIOSKS

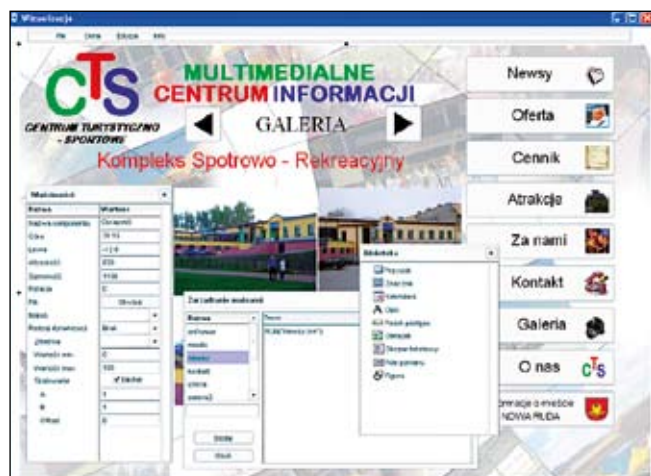
### Updatable software

Info kiosk software has a range of very important functions. It must ensure that the equipment operates without faults, protect it against unauthorized access and provide tools for creating and presenting multimedia content. It is also vital for the info kiosk buyer to have software for tracking web traffic statistics and for using a virtual keyboard. Another desirable feature is the option of administering several info kiosks from one location or remote updating of content.

All the features listed above are contained in ZPAS info kiosk software. The software includes: watchdog module, virtual keyboard, info kiosk configuration module, stats module, screen-saver controller, application for blocking keyboard shortcuts, side menu, module for defining allowed programmes and other functions.

### Software for creating info kiosk content

All the visualisation screens are saved in XML files which can be created using the "Visualization" screen editing programme. Visualizations are prepared by arranging images, animations and other components of visualization screens by dragging and dropping.



Programme for creating visualization screens



Stainless steel info kiosks



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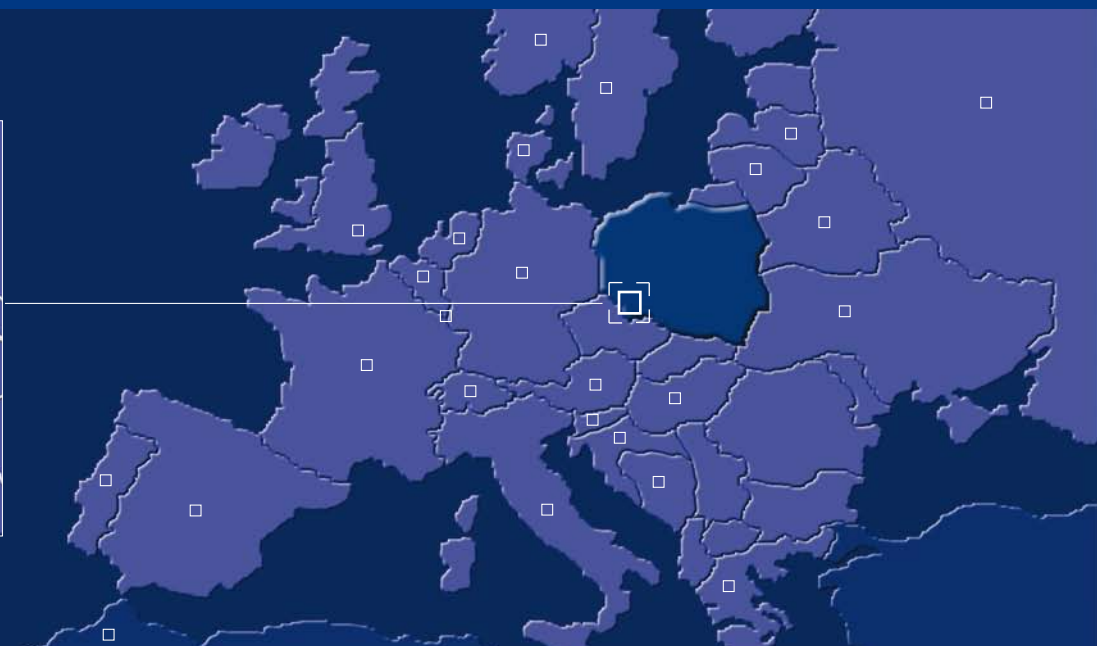
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