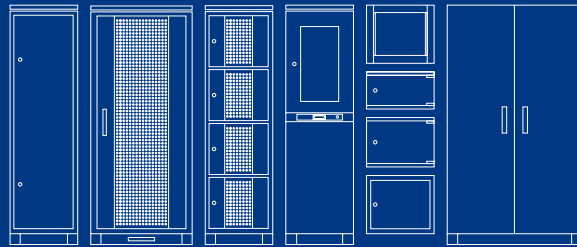


Data communication and industrial enclosures

[2009]

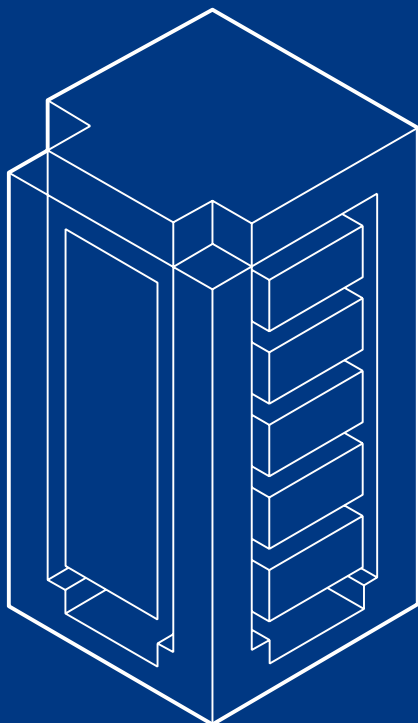


ZPAS

for your connections

ZPAS

G R O U P



**35 YEARS
OF EXPERIENCE
1973-2008**

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 top-quality 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 well-planned organisation of all manufacturing processes are supported by INFOR ERP LN, our IT system.

TABLE OF CONTENTS

ZPAS S.A. **4-10**
 About the company 4
 References. 8
 Guarantee 10

DATA COMMUNICATION ENCLOSURES

Floor-standing cabinets. **11-46**
 SZB 19" cabinet 12
 SZBk 19" cabinet compatible with EMC standard 20
 SZB PC 19" computer cabinet 22
 SZE2 PC 19" computer cabinet – IP 64. 26
 SZB SE 19" server cabinet 28
 ZPAS DATA CENTER modular server room 34
 DSR 19" colocation cabinet. 38
 SZU 19"/21" telecommunication cabinet. 42
 SJB 19" cabinet 44
 Examples of customised cabinets. 46

Wall-mounted cabinets **47-64**
 SU 19" cabinet 48
 SD2 19" cabinet 50
 SJ2 19" cabinet 52
 SW 19" cabinet 54
 SWJ 19" cabinet 56
 SJK 19" cabinet. 58
 SKI2 10" cabinet 60
 Supplementary accessories for wall-mounted cabinets 62

Open racks **65-70**
 SRS, SRD 19" open racks. 66
 SRX 19" open rack. 67
 SRC 19" open rack. 68
 SRK 19" open rack. 69
 Supplementary accessories for open rack 70

Supplementary accessories **71-120**
 Levelling feet 72
 Plinths with solid covers. 72
 Plinths' elements 73
 Castors 74
 Module panel for cable entry 75
 Frame with mesh 75
 Blanking and cable entry plates and strips for bottom plate, top plate and roof. 76
 Shelves 78
 Keyboard drawers. 80
 Keyboard housing for SZE2 PC cabinet 81
 Document drawer. 81
 Document pocket. 81
 Brush panels 81
 19" blanking plates 82
 Vertical masking panels 82
 Cable clamps 83
 Cable management bar 83
 Mounting profiles, mounting angles. 84
 Outriggers. 84
 Fixing accessories set. 84
 Cross bar. 85
 Guide bar 85
 Cable holder 85
 Swing frame 86
 Cable ducts 87
 Baying bolt 88
 Earthing bar. 88
 Earthing cable set 88
 Supplementary accessories for DSR cabinets 89
 Supplementary accessories for SZU cabinets 90
 Lighting kit 91
 Maintenance and cleaning agents for painted surfaces 91
 Power strips. 92
 PDU-1 switched power strip 94
 Voltage distribution panel 95
 PW fan units-19" assembly 96
 PWD and PD roof fan units 97
 Thermostat 98

Hygrostat 99
 MPSK G0 microprocessor panel for fan control 100
 MPSK G1 microprocessor panel for fan control and cabinet safety monitoring 101
 FK-RACK fire extinguisher. 102
 ZPAS Control Oversee monitoring system 103
 Access control to data communication cabinets 104
 KVM switches. 106
 KVM consoles. 110
 Supplementary accessories for KVM switches and consoles 112
 UPS battery backups 115
 Accessories for UPS battery backups. 117
 Air-conditioning for server cabinets 118

INDUSTRIAL ENCLOSURES

SZE2 floor-standing cabinets **.121-130**
 Technical data 122
 Design 124
 Sample customised cabinets. 130

Supplementary accessories for SZE2 cabinets **.131-150**
 Doors 132
 Door stop 133
 Swing handle with cylinder insert for the door's lock 133
 Side panels 134
 Roof 134
 Lifting accessories. 135
 Modular plinth 136
 Welded plinth 136
 19" swing frame 137
 Mounting profile 138
 Outtrigger 138
 Racking systems. 139
 Mounting bar CLASSIC. 140
 Vertical bar CLASSIC 140
 Cross bar CLASSIC. 140
 Mounting bar UNI. 141
 Angle element for joining mounting bars UNI 141
 Fixing accessories for CLASSIC and UNI bars. 141
 Transverse cable bar 142
 Cable bar, cable clamps 142
 Support for cable bar. 142
 Earthing bar set 143
 Potential equalisation bar. 143
 Earthing cable set 143
 Kit of system lighting. 144
 Lighting kit 144
 Spare kit of sliding gland plates for cabinet's bottom plate 145
 Blanking and cable entry plates for cabinet's top plate. 146
 Mounting plate infill 147
 Partition 147
 Set of elements for baying cabinets 147
 Heater 148
 Thermostat 148
 Filter fans and exhaust filters. 149
 Air conditioner and heat exchanger 150

SWN wall-mounted cabinets **.151-160**
 Technical data 152
 Design 154
 Supplementary accessories 156

Cabinets with electrical equipment **157**

CONTROL DESKS

PSL control desks **.161-166**
 Technical data 162
 Design 164
 Sample models of control and dispatch desks 166

MULTIMEDIA KIOSKS **.167**

CATALOGUE NUMBER INDEX **170**

ZPAS S.A.

Floor-standing cabinets

Wall-mounted cabinets

DATA COMMUNICATION ENCLOSURES
 Open racks
 Supplementary accessories

Floor-standing cabinets

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 (CNPAA). 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 m², 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.



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 wall-mounted 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)



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

5 YEARS GUARANTEE





TÜV
CERT
ISO 9001:2000
ZN: 75.100.6807
TÜV Rheinland InterCert



ZPAS
GROUP



TÜV
CERT
ISO 14001:2004
Certificate: 01 104 010785

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

FLOOR-STANDING CABINETS



SZB



SZBk



SZB PC



SZE2 PC



DATA CENTER



SZB SE



DSR



SZU



SJB

SZB 19" CABINET

Standard universal data communication cabinet

- Intended 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 PN 92/E-08106 / 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

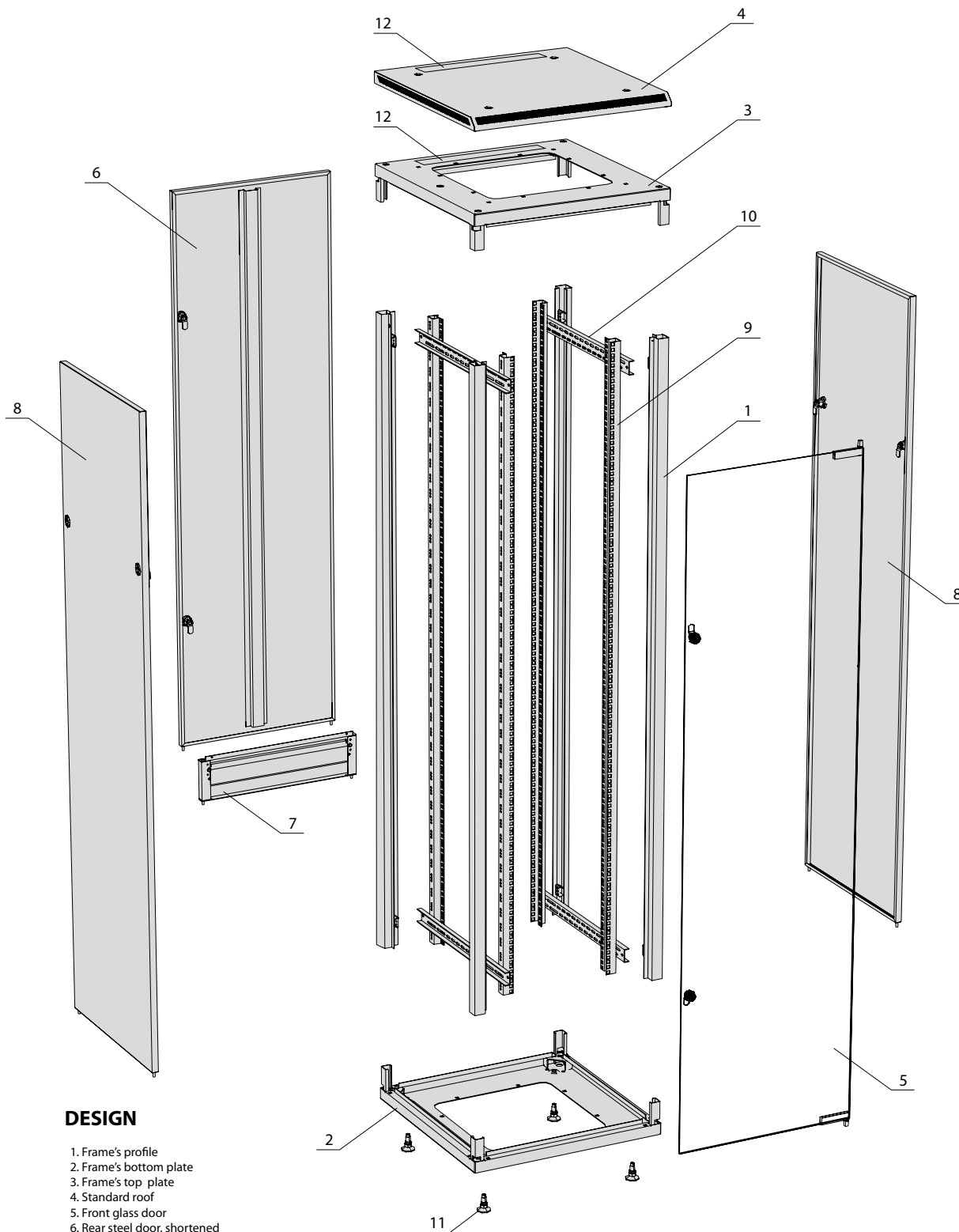


SZB cabinets in the basic configuration, 600 and 800 mm wide

SZB 19" CABINET

SZB cabinet 42 U, 600x600 mm in basic configuration

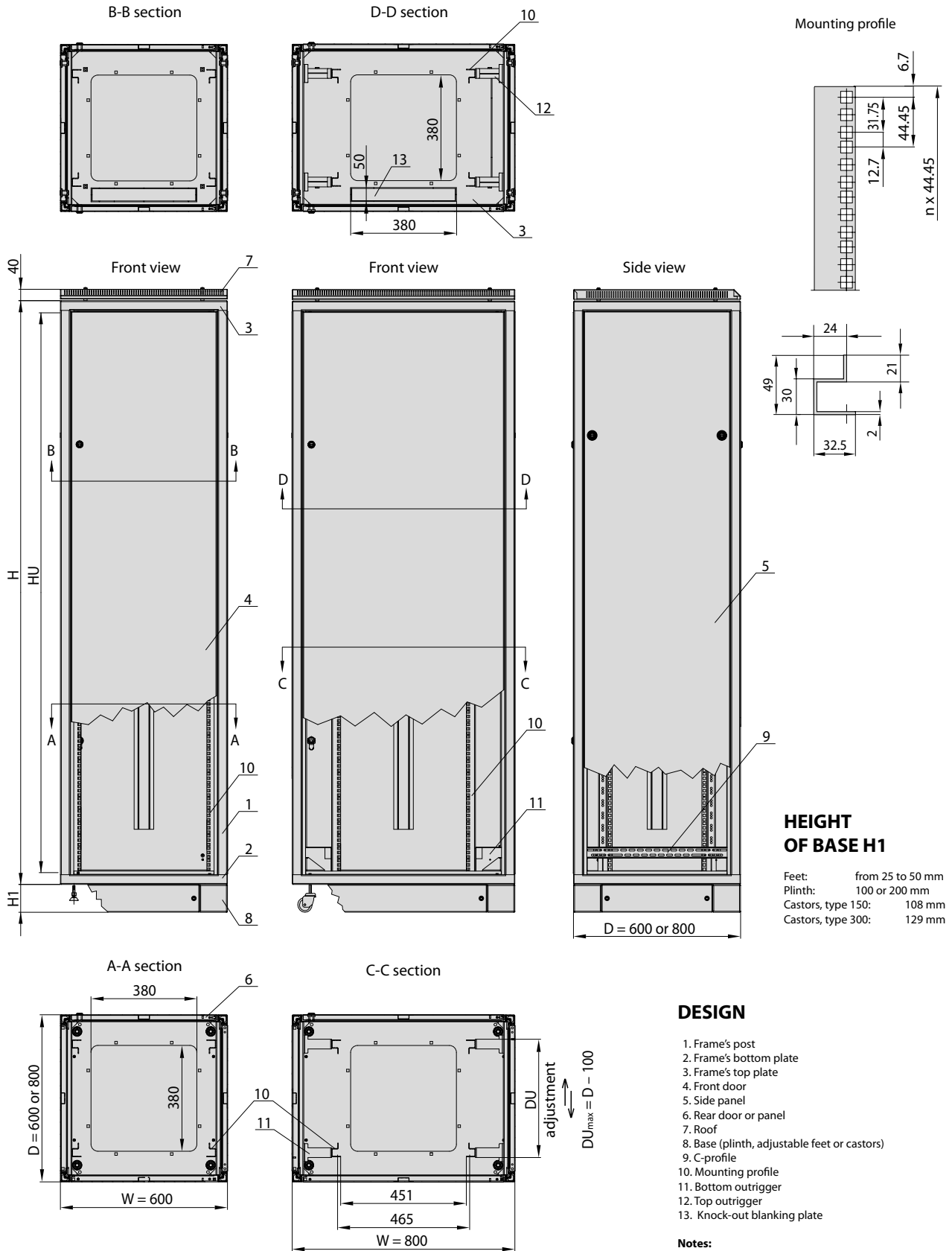
Other available configurations are presented on pages 15-18.



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 with brush strip
8. Steel side panel
9. Mounting profile
10. C-profile
11. Adjustable feet
12. Knock-out blanking plate

SZB 19" CABINET



Notes:
 Cable opening in the top plate of the cabinet is covered with a knock-out blanking plate (12). The same solution can be found in the roof of the cabinet (see the picture of a standard roof on page 18). Blanking plates for openings in the top and bottom plate - see pages 76-77.

SZB 19" CABINET

Reference chart

Total width W [mm]	Total depth D [mm]	Reference number									
		5	17	145	53	149	153	157	89	101	113
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

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

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
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)
Z - glass door with metal sides and rod-latch lock (specially designed as front or rear door for cabinets higher than 18 U)

Base type:
0 - without any base (cabinet set directly on bottom plate)
1 - levelling feet
2 - castors - type 150 (see page 74)
3 - castors - type 300 (see page 74)
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).

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 72-73.

NOTE:
The delivery of a standard SZB cabinet (except for elements listed in cat. no.) includes the following: four mounting profiles, grounding bar and grounding 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 grounded. Cabinet interior is equipped with four mounting profiles installed to the frame by means of 8 outriggers.

Ordering instruction

1. 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.
2. The next step is to specify **catalogue numbers of supplementary accessories** (such as: shelves, blanking plates, power strips, fan units etc. - see pages 71-120). 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 cabinets	
	600 mm wide	800 mm wide
levelling feet	600 kg	400 kg
castors - type 150	150 kg	150 kg
castors - type 300	500 kg	400 kg
plinth	600 kg	400 kg

EXAMPLES OF SZB CABINETS



Note:

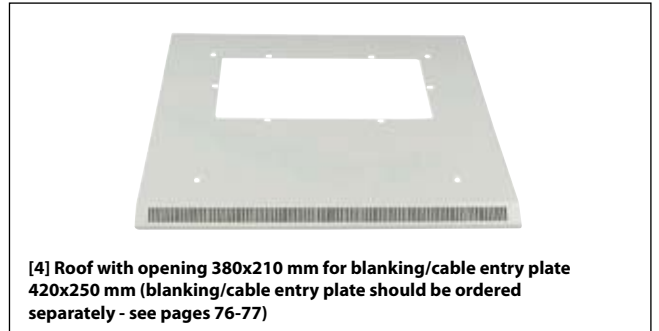
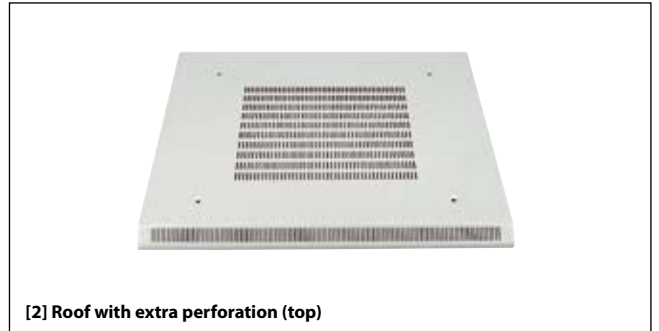
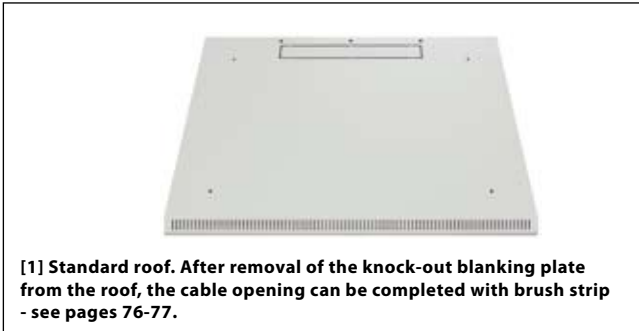
Symbols given in square parentheses [] refer to diagrams on page 15 – Door and panel types

EXAMPLES OF SZB CABINETS



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

ROOF TYPES FOR SZB CABINETS



Note:

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

EXAMPLES OF NON-STANDARD SZB CABINETS



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

SZBk 19" CABINET COMPATIBLE WITH EMC STANDARD

Shielded cabinet for appliances which require protection from high electromagnetic interference

- Cabinet designed for indoor usage in rooms with working appliances which emit electromagnetic waves.
- Compatible with EMC requirements.
- Cabinet has received independent certification which acknowledges its shielding protection effectiveness:
 - certificate of the Institute of Telecommunication and Acoustic, Wrocław University of Technology,
 - certificate the Agency of Security, Warsaw.
- Cabinet can be equipped with optional ventilation and power cabling system, EMC protected.
- Cabinet can be equipped with some elements of supplementary accessories of SZB cabinets - plinths or castors, shelves, power strips etc.
- Non-standard versions on customer's request.

Scope of delivery

- frame,
- solid steel front door,
- two side panels,
- rear panel,
- standard roof,
- blanking plates for top and bottom plate of the frame,
- 2 pairs of 19" mounting profiles,
- earthing bar and cables,
- set on levelling feet,
- doors, panels, and roof fitted with a special conductive EMC seal.

Certificate of electromagnetic protection



JEDNOSTKA CERTYFIKUJĄCA
DEPARTAMENT BEZPIECZEŃSTWA TELEINFORMATYCZNEGO
AGENCJA BEZPIECZEŃSTWA WYWIĘTNEGO

CERTYFIKAT OCHRONY ELEKTROMAGNETYCZNEJ nr 393/2002

Certyfikowany wyrób: Obudowa elektroniczna typ SZBK 43Ux500x600

Producent wyrobu: Zakład Produkcji Automatyki Sieciowej S.A. Przygodzki 209, 57-431 Wollbórz k. Nowej Rudy

Wzrostkodawca: Zakład Produkcji Automatyki Sieciowej S.A. Przygodzki 209, 57-431 Wollbórz k. Nowej Rudy

Kryteria oceny: Norma MIL-STD 285
Procedura pomiarowa PPLOE-3

Data wykonania badań: 22 - 24.10.2002 r.
Dokumentacja badań: Protokół nr 17/2002/A z dnia 29.10.2002 r.
Protokół nr 17/S/2002/A z dnia 29.10.2002 r.

Poziom ochrony: - poziom tłumienia promieniowania elektromagnetycznego, dla składowej elektrycznej, jest nie mniejszy niż 30 dB;
- poziom tłumienia promieniowania elektromagnetycznego, dla składowej magnetycznej, jest nie mniejszy niż 21 dB

Data ważności certyfikatu: bezterminowo

Wykorzystanie certyfikowanego wyrobu jako środka ochrony elektromagnetycznej dla przetwarzania informacji stajejących w rozumieniu przepisów Ustawy z dnia 22 stycznia 1999 r. o ochronie informacji stajejących (Dz. U. nr 11, poz. 95, z 1999 r. ze zm.) wymaga przeprowadzenia jego badań wraz z wyposażeniem.

KIEROWNIK JEDNOSTKI CERTYFIKUJĄCEJ DEPTI ABW
Dyrektor DEPARTAMENTU BEZPIECZEŃSTWA TELEINFORMATYCZNEGO ABW

Apł. inż. Grzegorz Malicki ppłk mgr inż. Przemysław Jastrzębski

Warszawa, 2002-10-30
DEPARTAMENT BEZPIECZEŃSTWA TELEINFORMATYCZNEGO ABW, UL. KARŁOWA 1A, 00-540 WARSZAWA
TEL. 58-47-15, 585-88-07, 832-87-08, FAX 58-67-88



SZBk cabinet 600 wide

Technical data

Material:

Frame	- 2.0 mm thick sheet steel
Side panels	- 1.5 mm thick sheet steel
Doors	- 1.5 mm thick sheet steel
Mounting profiles	- 2.0 mm thick sheet steel
Roof	- 1.0 mm thick sheet steel

Protection degree:

IP 61 in accordance with PN 92/E-08106 / EN 60529 / IEC 529.

Surface finishing:

Frame, roof, panels, doors, plinth - textured powder paint, light grey (RAL 7035).

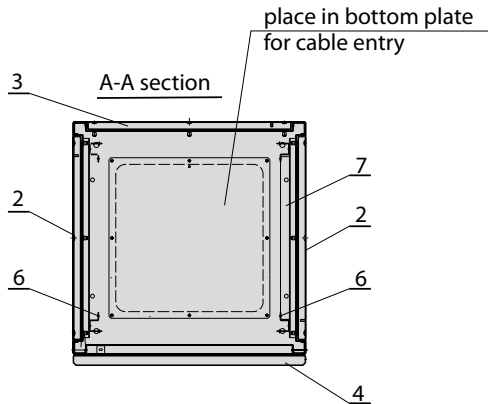
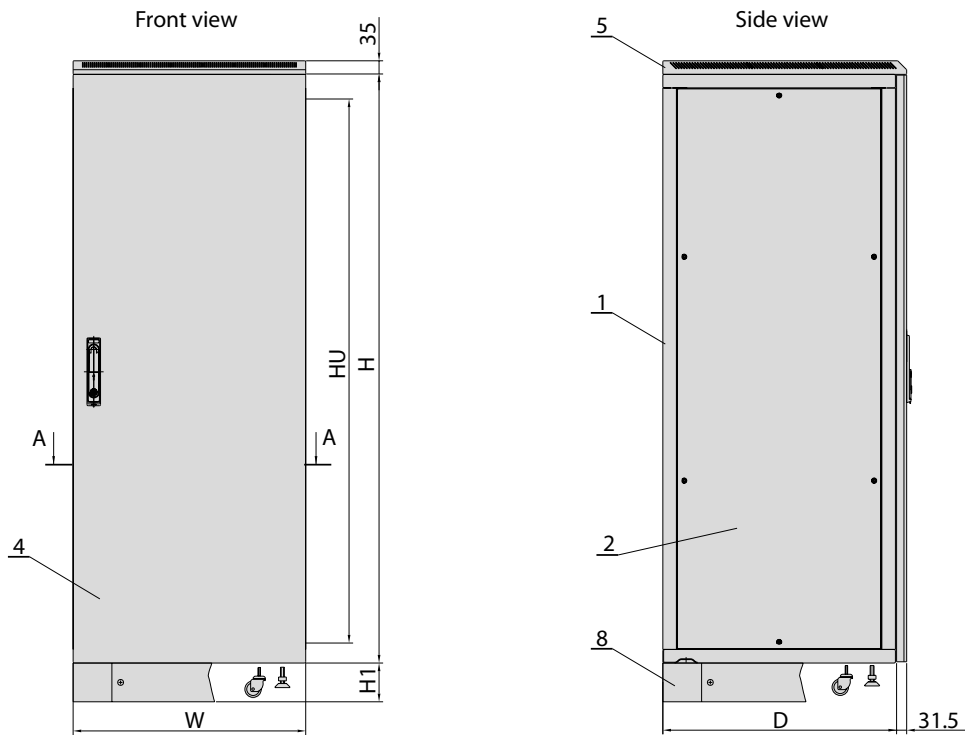
All other colour options on request.

Mounting profiles - Al-Zn coated.

Maximum load capacity:

As given for SZB cabinets – see chart on page 15

SZBk 19" CABINET COMPATIBLE WITH EMC STANDARD



DESIGN

1. Frame
2. Side panel
3. Rear panel
4. Front door
5. Roof
6. Mounting profile
7. Grounding bar
8. Base (plinth, levelling feet or castors)

HEIGHT OF BASE H1

- Feet: from 25 to 50 mm
 Plinth: 100 or 200 mm
 Castors, type 150: 108 mm
 Castors, type 300: 129 mm

Note:
 Standard cabinet is offered with adjustable feet. Plinth or castors should be ordered separately (see pages 72-74).

Reference chart

Total width W [mm]	Frame's depth D [mm]	Catalogue number					
		800	800	WZ-0795-01-01-011	WZ-0795-01-05-011	WZ-0795-01-09-011	WZ-0795-01-13-011
	600	WZ-0795-01-02-011	WZ-0795-01-06-011	WZ-0795-01-10-011	WZ-0795-01-14-011	WZ-0795-01-18-011	WZ-0795-01-22-011
600	800	WZ-0795-01-03-011	WZ-0795-01-07-011	WZ-0795-01-11-011	WZ-0795-01-15-011	WZ-0795-01-19-011	WZ-0795-01-23-011
	600	WZ-0795-01-04-011	WZ-0795-01-08-011	WZ-0795-01-12-011	WZ-0795-01-16-011	WZ-0795-01-20-011	WZ-0795-01-24-011
Usable height HU [U = 44.45 mm]		45 U	42 U	40 U	38 U	32 U	24 U
Frame's height H [mm]		2096	1963	1874	1785	1519	1163

SZB PC 19" COMPUTER CABINET

Designed for computer equipment protection

- Designed for indoor usage.
- 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 solid 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 PN 92/E-08106 / 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 panels

SZB PC 19" COMPUTER CABINET

Reference chart

Total width W [mm]	Frame depth D [mm]	Reference number			
		1	5	9	13
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

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 74)
- 3 - castors - type 300 (see page 74)
- 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 72-73.

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 80.)

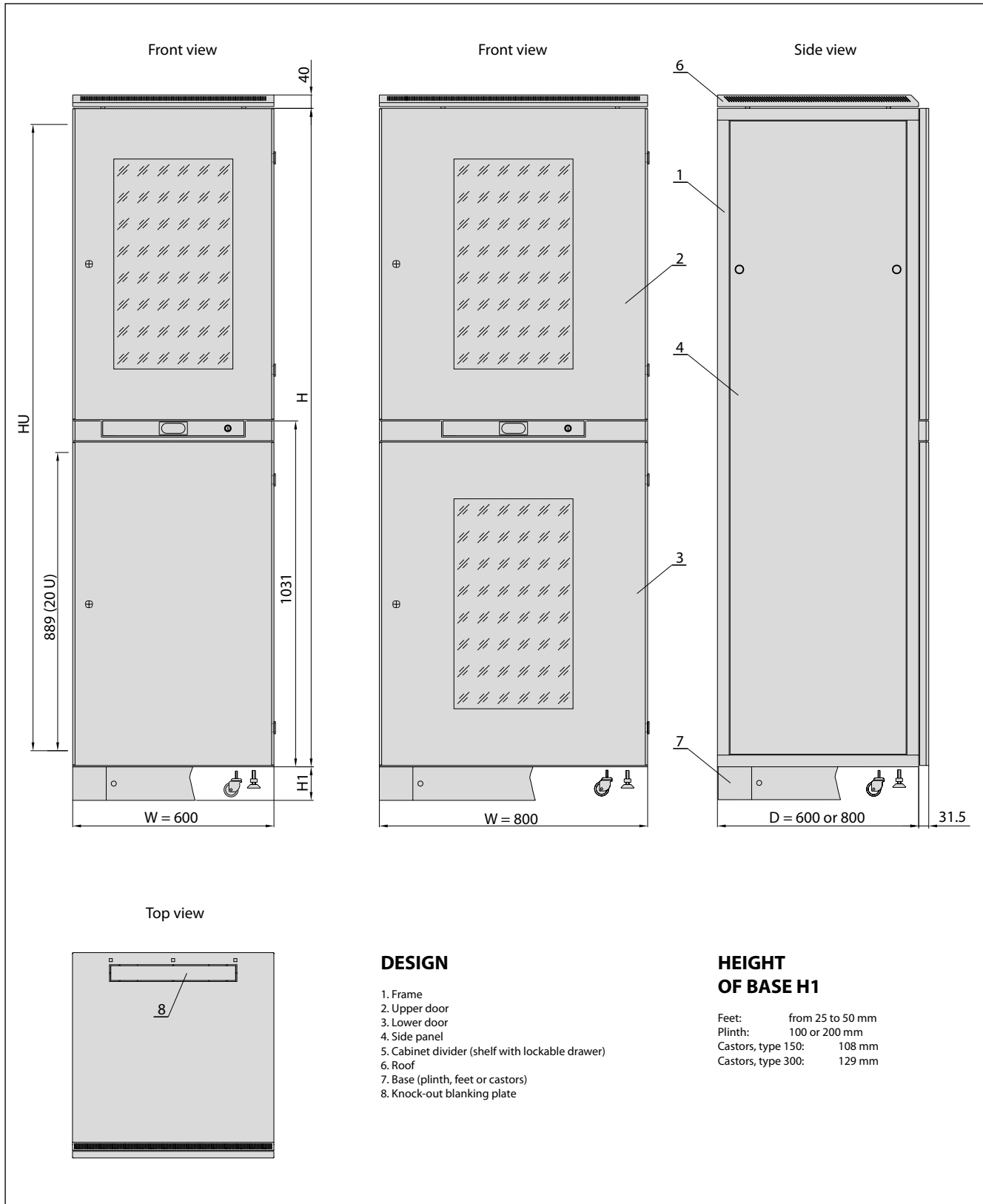
NOTE:

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

Note:

Non-standard SZB PC cabinets (other dimensions, different height of keyboard mounting etc.) on individual customer's request.

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 71-120). 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 131-150) 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 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 PN-92/E-08106 / 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:

Maximum weight of equipment mounted in SZE2 PC cabinets is 600 kg for cabinets 600 mm wide and 400 kg for cabinets 800 mm wide.



Roof - supplementary accessories (page 134)

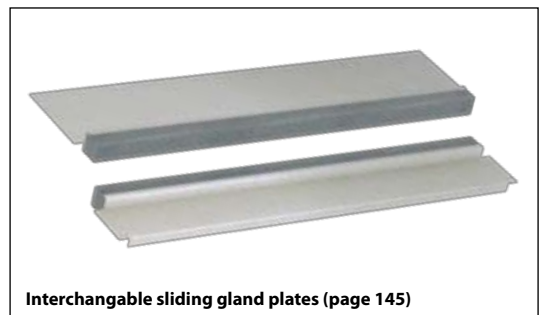
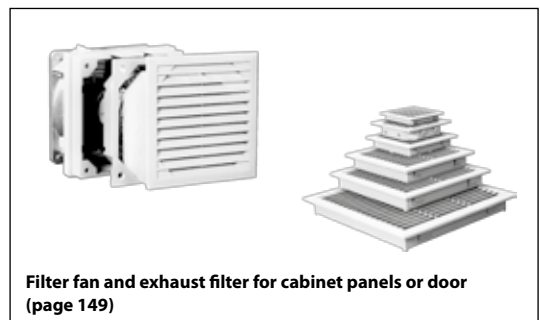
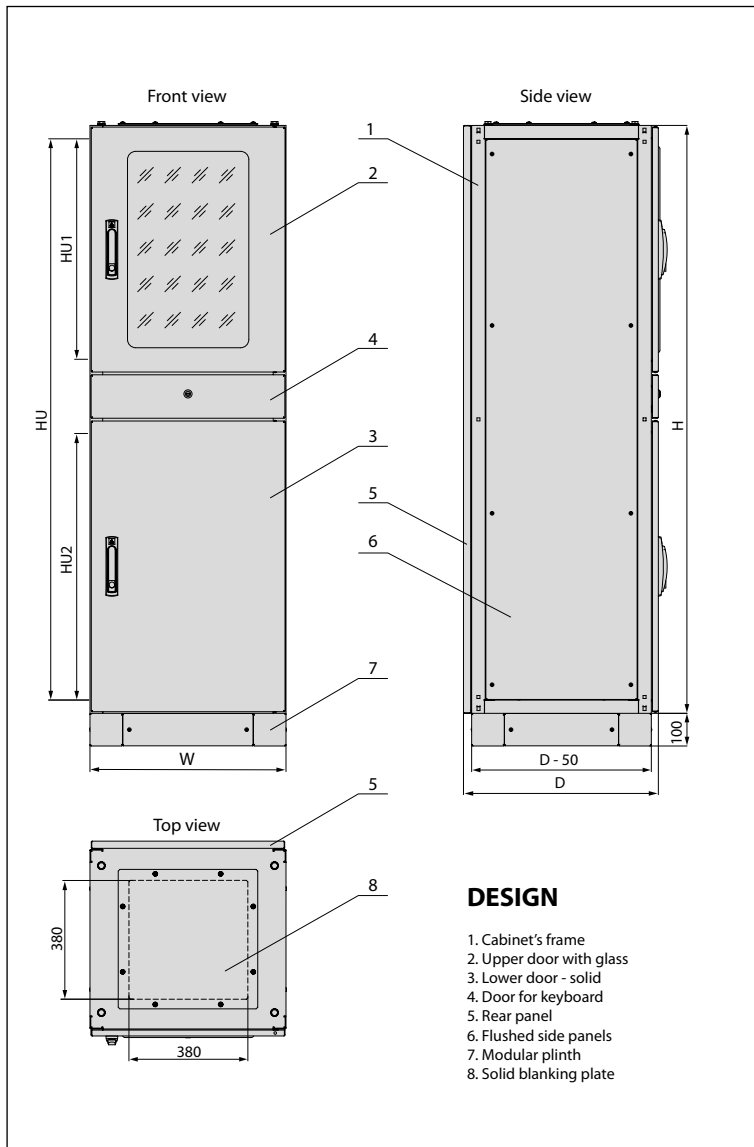


Reference chart

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.



Note:
The opening in the bottom plate of the SZE2 PC cabinet is identical as in the SZE2 cabinet (page 128).

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 p. 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 covers etc.
- Non-standard cabinets on individual customer's request.

Scope of delivery

The cabinets immediately available from the ZPAS S.A. warehouse – see p. 29.
For other cabinet versions, see p. 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 PN 92/E-08106 / 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 15.



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

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

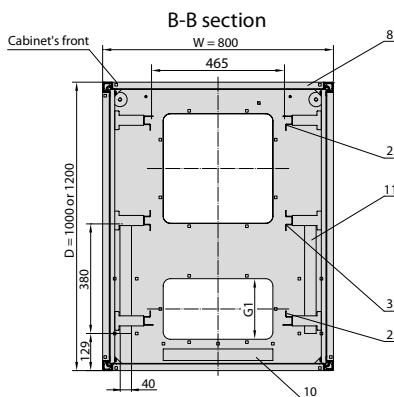
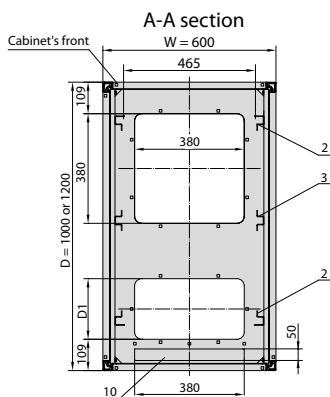
- cabinet frame on a stabilising mounting plinth
- front and rear doors made of perforated steel sheets for increased air penetration, equipped with rod-lath lock and swing handle
- two side panels made of unperforated steel sheets
- roof without opening
- three pairs of mounting profiles, spaced at 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.

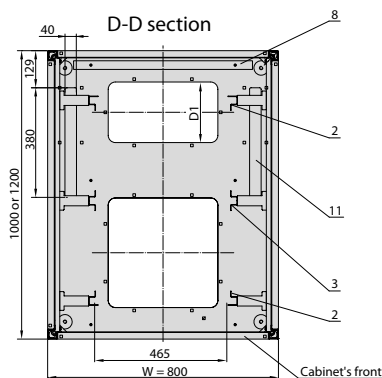
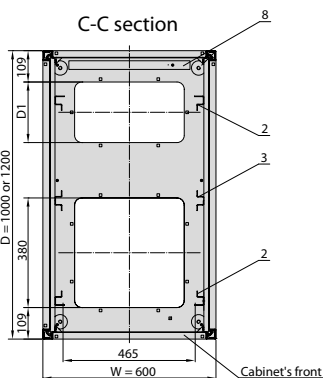
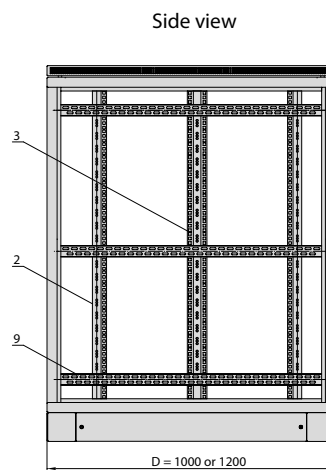
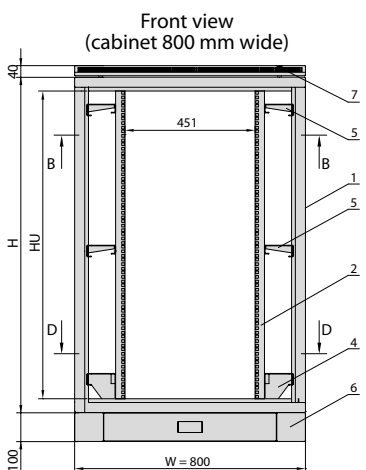
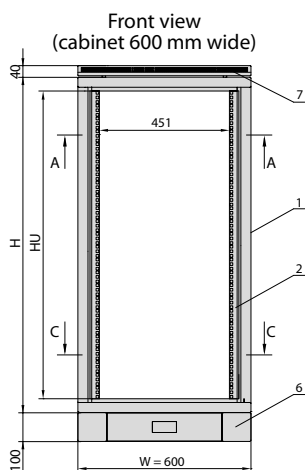
SZB SE 19" SERVER CABINET

FLOOR-STANDING CABINETS



DESIGN

1. Cabinet's frame
2. Mounting profile
3. Middle mounting profile
4. Lower outrigger
5. Outrigger
6. Stabilising mounting plinth
7. Roof
8. Earthing strip
9. C-profile
10. Knock-out side blanking plate
11. Knock-out rear blanking plate

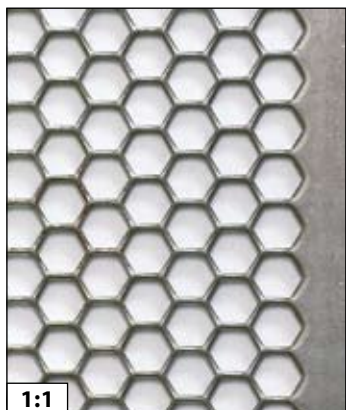


Dimensions [mm]	
D	D1
1000	210
1200	380

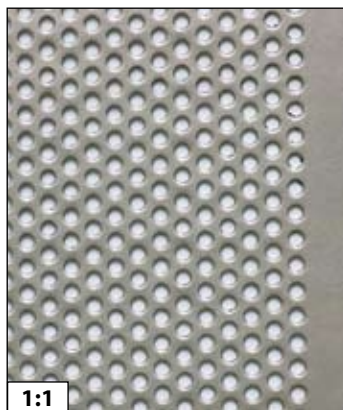
Notes:

- 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 76-77. The 380x40 and 380x50 mm openings are blinded with knock-out blanking plates as a standard.

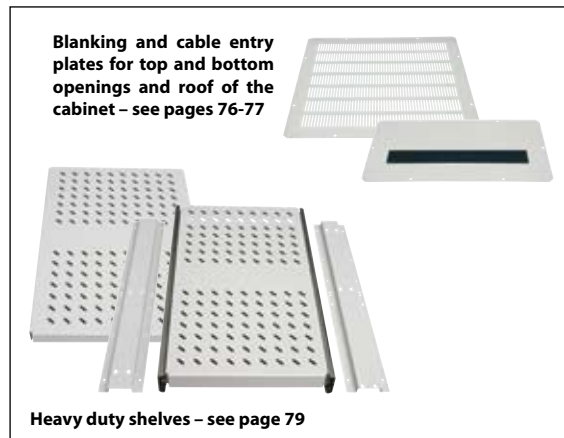
Perforation types for doors and panels



Perforation with increased ventilation



Fine perforation



SZB SE 19" SERVER CABINET

Reference chart

Width W [mm]	Depth D [mm]	Reference number						
		1	3	5	7	9	11	13
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 ZPAS S.A. warehouse – see p. 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

The layout of roof openings is shown on page 76.

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 - perforated steel door (fine perforation)
3 - glass door
4 - glass door with perforated metal sides, rod-lath lock and swing handle
5 - perforated steel door with increased ventilation, equipped with a rod-lath lock and swing handle (available only for the following cabinets: 42 U, 45 U and 47 U)

Base types:
0 - without any base
1 - levelling feet
2 - castors - type 300 (see page 74)
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 72-73.

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

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 - perforated steel door (fine perforation)
5 - perforated steel door (fine perforation), shortened, with one 3 U module panel*
6 - perforated steel door (fine perforation), shortened, with two 3 U module panels*
7 - perforated steel door with increased ventilation (available only for the following cabinets: 42 U, 45 U and 47 U)
8 - perforated steel door with increased ventilation, shortened, with one 3 U module panel* (only for 45 U cabinets)
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 - perforated steel door (fine perforation)
E - perforated steel door (fine perforation), shortened, with one 3 U module panel*
F - perforated steel door (fine perforation), shortened, with two 3 U module panels*
G - perforated steel panel with high ventilation level (available only for the following cabinets: 42 U, 45 U and 47 U)
H - perforated steel panel with increased ventilation, shortened, with one 3 U module panel* (only for 45 U cabinets)

*) 3 U module panel with a brush strip

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.

Perforated area on door and panel surfaces

Perforation types	Door/panel 600 mm wide	Door/panel 800 mm wide
fine	20%	14,5%
with increased ventilation	60%	43%

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 71-120). 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 cabinets	
	600 mm wide	800 mm wide
levelling feet	600 kg	400 kg
castors - type 300	500 kg	400 kg
plinth	600 kg	600 kg

EXAMPLES OF SZB SE CABINETS



Cabinets with finely perforated doors and side panels

EXAMPLES OF SZB SE CABINETS



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,
- UPS to ensure uninterrupted power supply,
- access control system, burglary and fire alarm system,
- power supply management system,
- remote server administration system.



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.**



KVM switches and consoles
- see pages 106-114.



Cooling systems - pages 118-120



Monitoring of ambient conditions
- see pages 101 and 103



Access control - see pages 104-105



Network management

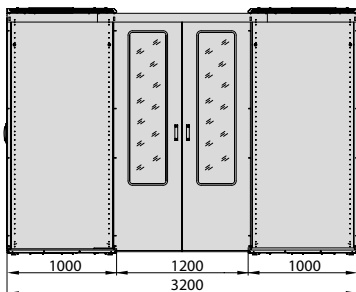


Power supply systems
- see pages 115-117.

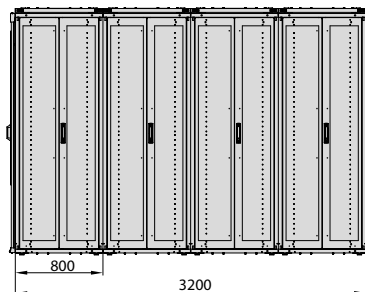


Cabinets and accessories
- see pages 28-33, 72-120

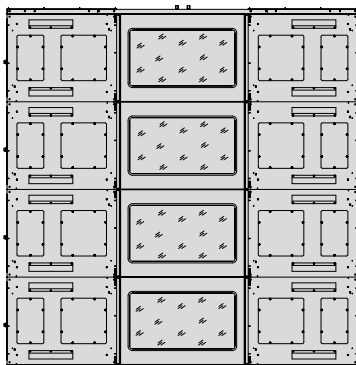
Front view



Side view



Top view

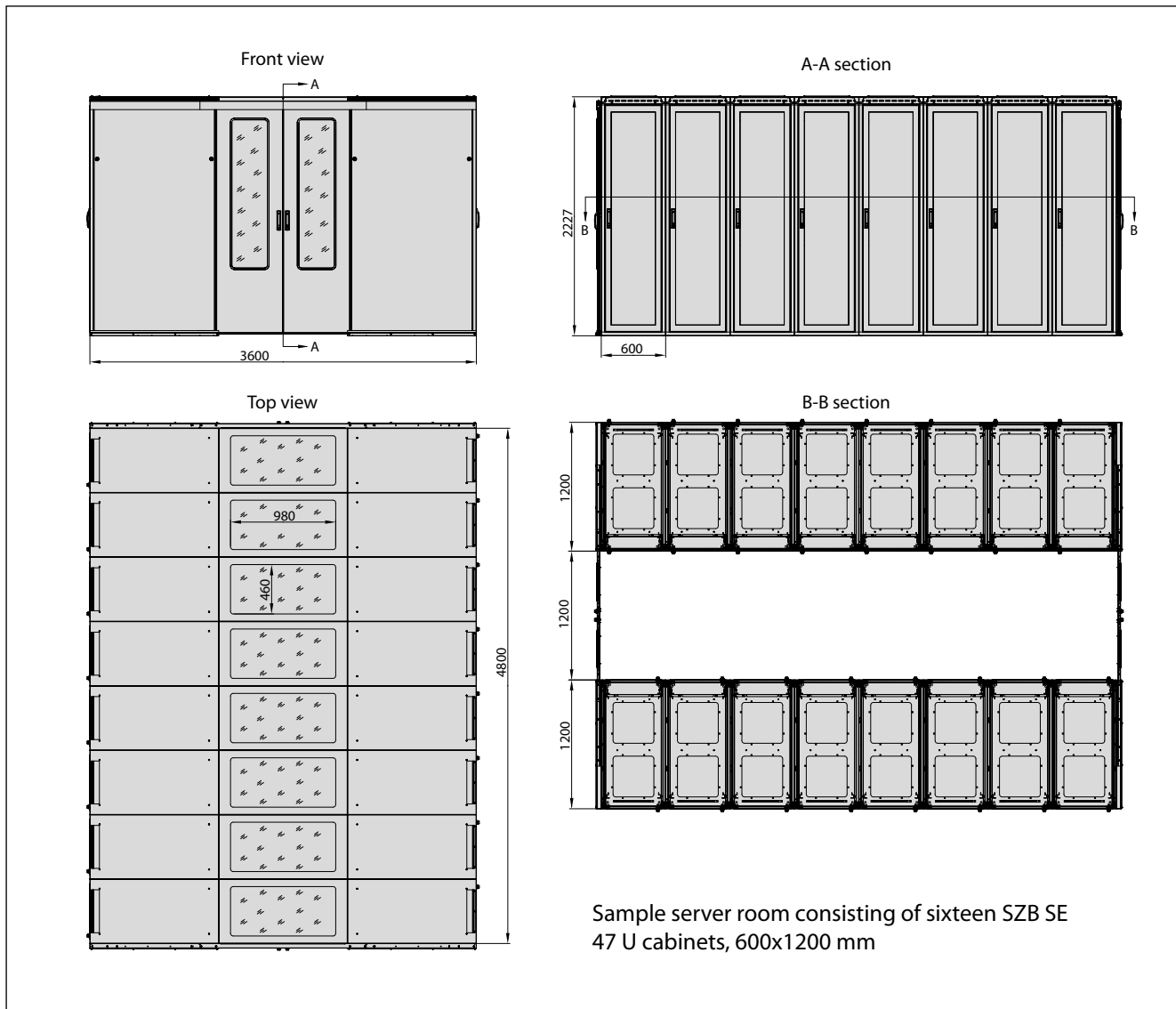


Sample server room consisting of eight SZB SE 47 U cabinets, 800x1000 mm

ZPAS DATA CENTER



ZPAS DATA CENTER



FLOOR-STANDING CABINETS

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 PN 92/E-08106 / 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:

Maximum weight of equipment mounted in DSR cabinets is 600 kg for cabinets 600 mm wide and 400 kg for cabinets 800 mm wide.



DSR cabinets bayed together

Scope of delivery

Cabinet in standard configuration*
 (cat. no. WZ-DSR-00x-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),
- standard roof,
- grounding cables.

*) Other configurations - see instructions on page 41.

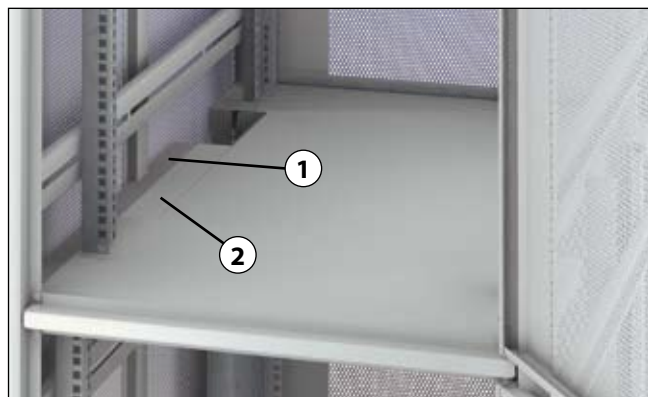
DSR 19" COLOCATION CABINET



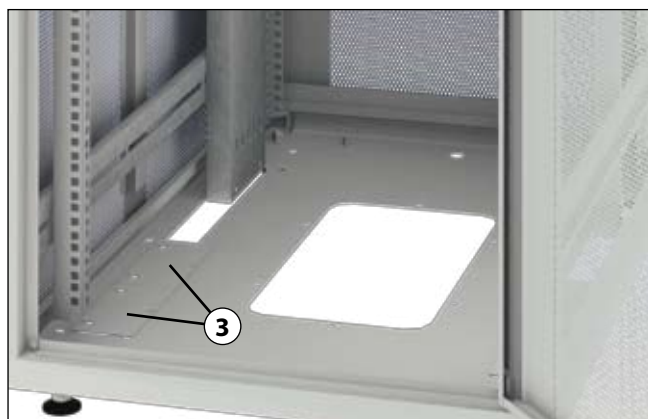
DSR cabinet with two compartments



DSR cabinet with four compartments, cable ducts lead from the bottom



Supplementary accessories: 1 - self-adhesive insert
2 - cable opening cover

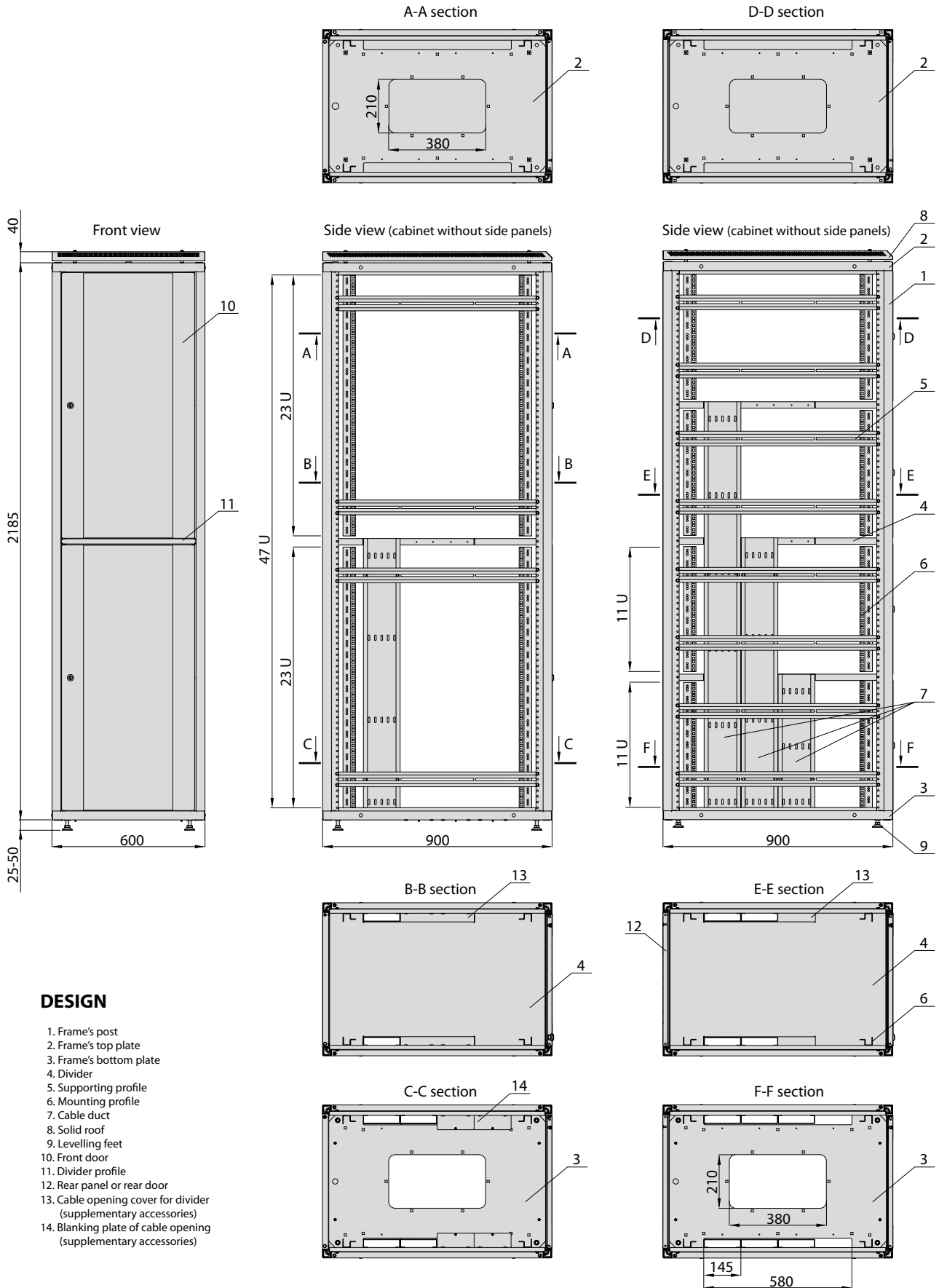


Supplementary accessories: 3 - blanking plate for cable opening



DSR cabinet with four compartments, cable ducts lead from the top, roof with cable openings

DSR 19" COLOCATION CABINET



DESIGN

- 1. Frame's post
- 2. Frame's top plate
- 3. Frame's bottom plate
- 4. Divider
- 5. Supporting profile
- 6. Mounting profile
- 7. Cable duct
- 8. Solid roof
- 9. Levelling feet
- 10. Front door
- 11. Divider profile
- 12. Rear panel or rear door
- 13. Cable opening cover for divider (supplementary accessories)
- 14. Blanking plate of cable opening (supplementary accessories)

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 :

0 no side panel
A perforated side panel

LEFT SIDE RIGHT SIDE

Type of roof:

1 solid roof
2 roof with cable openings

WZ-DSR - 00 \bar{X} - $\underline{\underline{XXXX}}$ - \underline{XX} - 011

FRONT REAR

Split of front and rear door/panel:

Perforated door Perforated side panel

1 2 3 4 5 6 A

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.
The perforated area of the front and rear doors (panels) is 20%. On individual request it is also possible to use high-ventilated doors or panels with 60% of perforated area.

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 72-73.

Ordering instruction

1. 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.
2. The next step is to specify **catalogue numbers of supplementary accessories** (such as: shelves, blanking plates, power strips, fan units etc. - see pages 71-120). Supplementary accessories are delivered in separate packaging including fixing hardware. On request it is also possible to mount supplementary accessories in the cabinet.

Supplementary accessories:

Cable opening cover for DSR divider
- page 89

Self-adhesive insert of DSR divider
- page 89

Blanking plate of cable opening
- page 89

Earthing bar
- page 88
Set of fixing/spacer bolt
- page 88

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:

Maximum weight of equipment mounted in SZU cabinet is 250 kg.

Catalogue number of SZU cabinet

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

Rodzaje belek nożnych:
1 - 19" mounting profiles
2 - 21" mounting profiles

WZ-SZU - 00 \bar{X} - \bar{XX} AA - \bar{X} 0 - 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 with high ventilation level (see page 30)



SZU 21" cabinet with metal perforated door

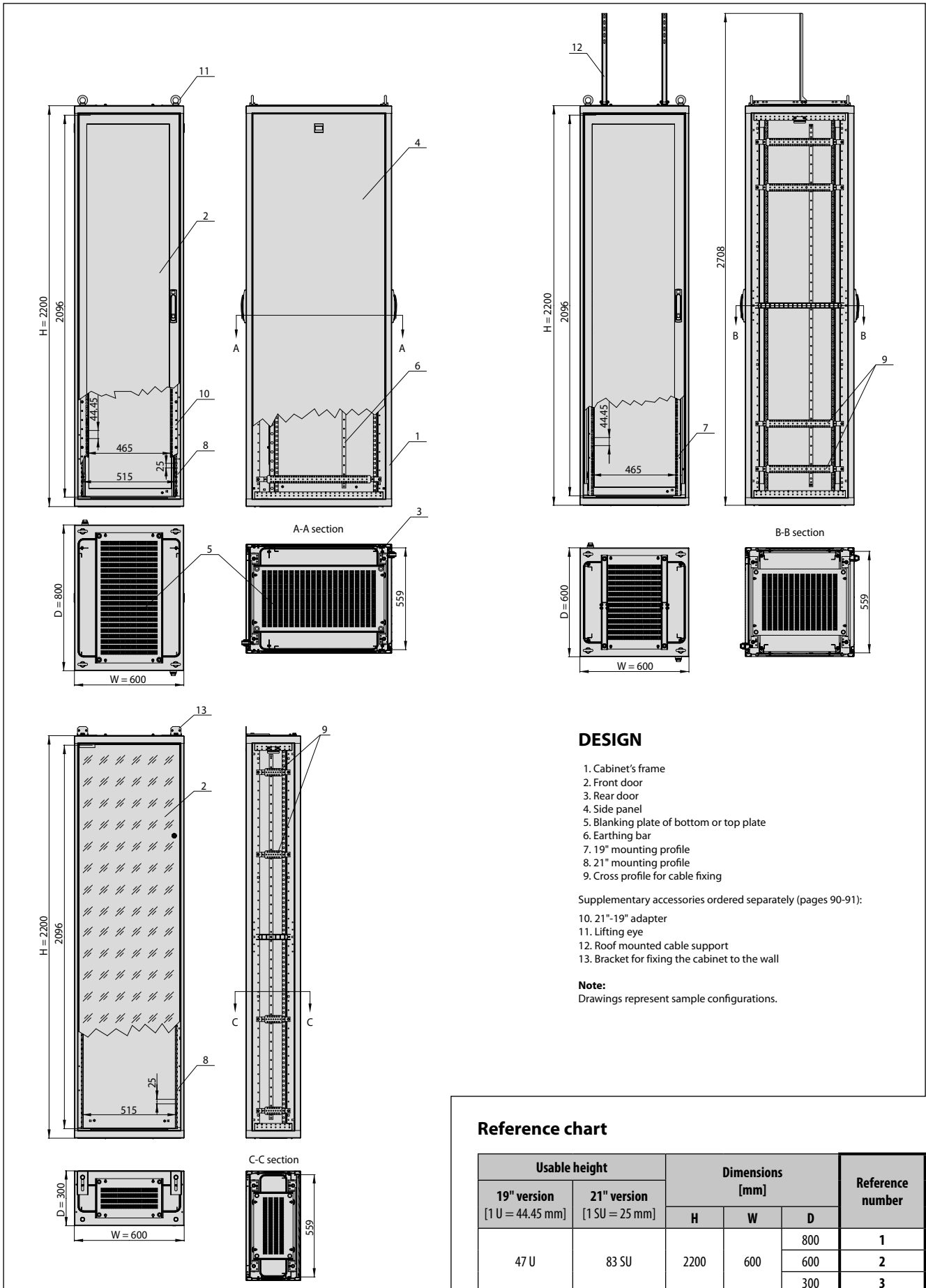
Available types of front and rear door:

- 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 90-91):

- 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

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 90-91):

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

Telecommunication 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 or 0.8 mm thick sheet steel
Mounting angles	- 1.5 mm thick sheet steel
Blanking plate for cable opening	- 1.0 mm thick sheet steel
Desktop	- MDF board, 18 mm

Protection degree:

IP 20 in accordance with PN 92/E-08106 / EN 60529 / IEC 529

Surface finishing:

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

Mounting angles and cable entry blanking plate - Al-Zn coated.

Desktop colour:

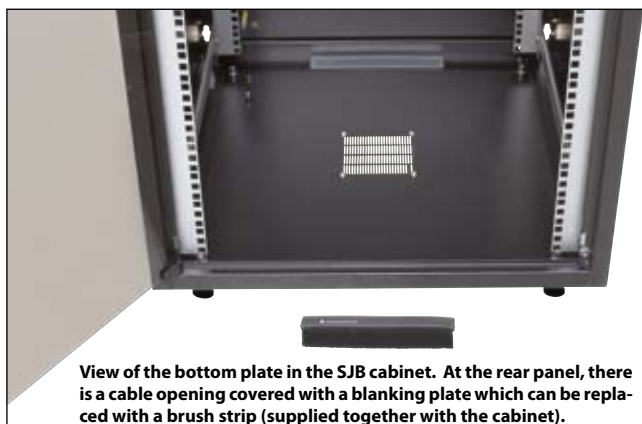
As a standard option, cabinets are supplied with desktops made of Calvados-laminated MDF board. Other desktop colours or materials are available on request.

Scope of delivery:

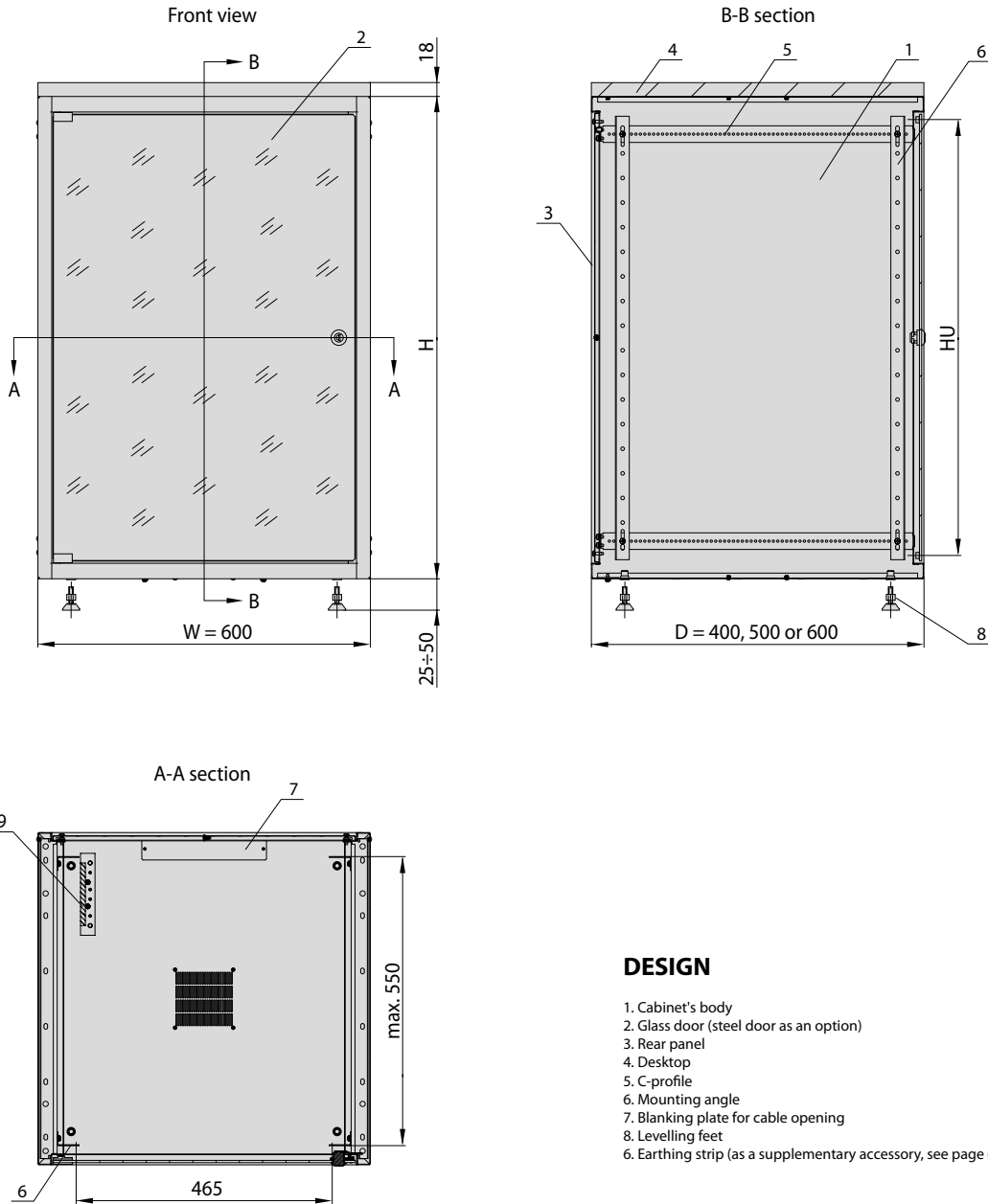
- cabinet body with safety glass door and removable rear panel,
- desktop made of furniture board,
- 2 pairs of mounting angles spaced at 19",
- blanking plate for the cable opening in the bottom plate of the cabinet body,
- brush strip for the cable opening (instead of blanking plate).

Supplementary accessories (ordered separately):

- earthing elements (page 63),
- shelves, drawers, power strips etc. (pages 71-120).



SJB 19" CABINET



DESIGN

1. Cabinet's body
2. Glass door (steel door as an option)
3. Rear panel
4. Desktop
5. C-profile
6. Mounting angle
7. Blanking plate for cable opening
8. Levelling feet
6. Earthing strip (as a supplementary accessory, see page 63)

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



**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



SU 19" CABINET

Wall-mounted cabinet with removable side panels

- Intended for indoor installations.
- Available in 6 usable heights and 3 depths (see reference chart).
- The design of the cabinet is based on dismountable 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 wall-fixing 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.

Scope of delivery

Cabinets are packed in cartons. Template for making cutouts in the wall is included in the packaging.

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
Solid blanking plate	- 1.0 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 PN 92/E-08106 / EN 60 529 / IEC 529 (does not apply to brush cable entries).



SU cabinet 12 U high with safety glass door

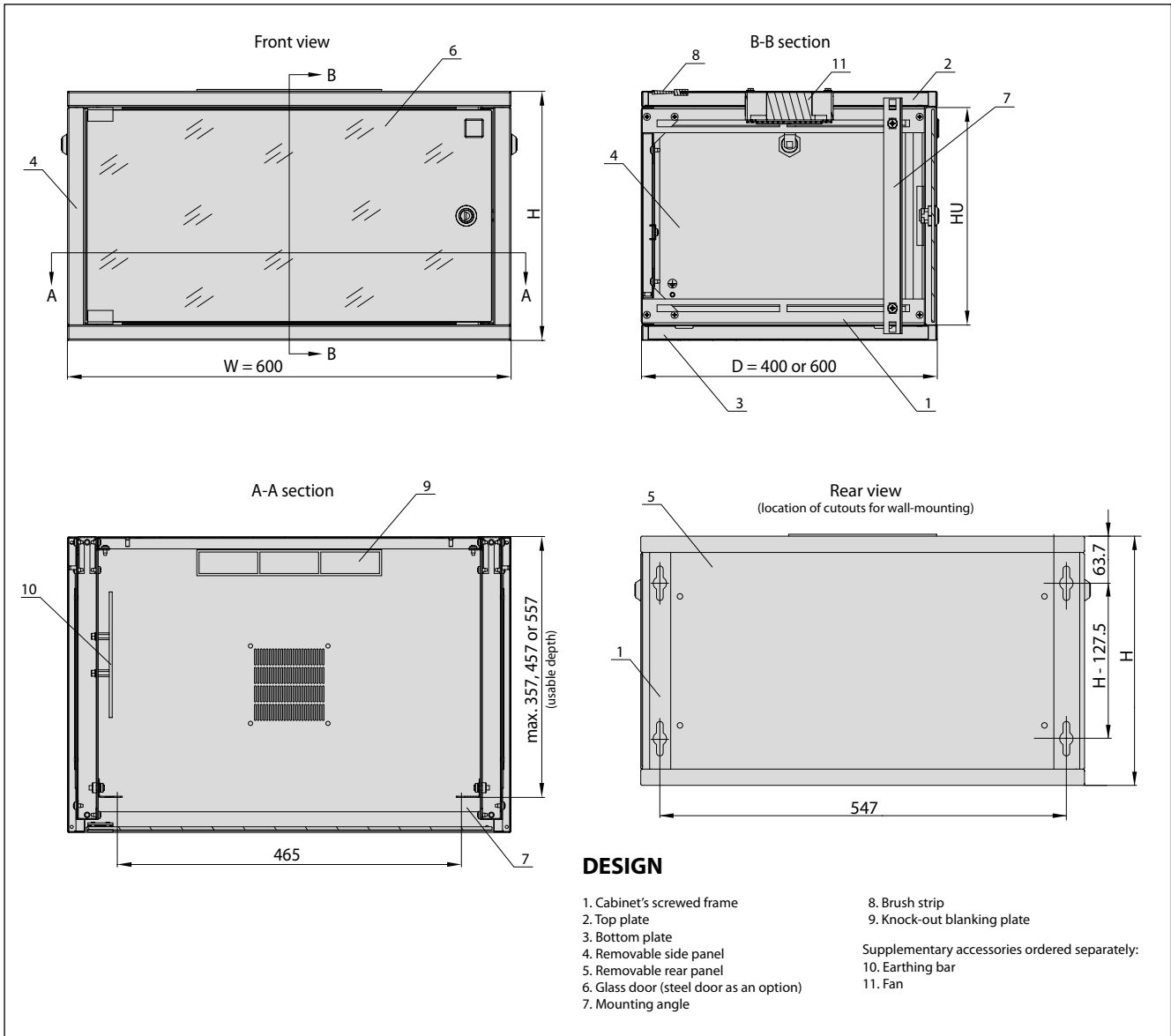


SU cabinet 6 U high - rear view



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

- Intended for indoor usage.
- 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 in 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
Door - glass	- 4.0 mm thick safety glass
- steel	- 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:

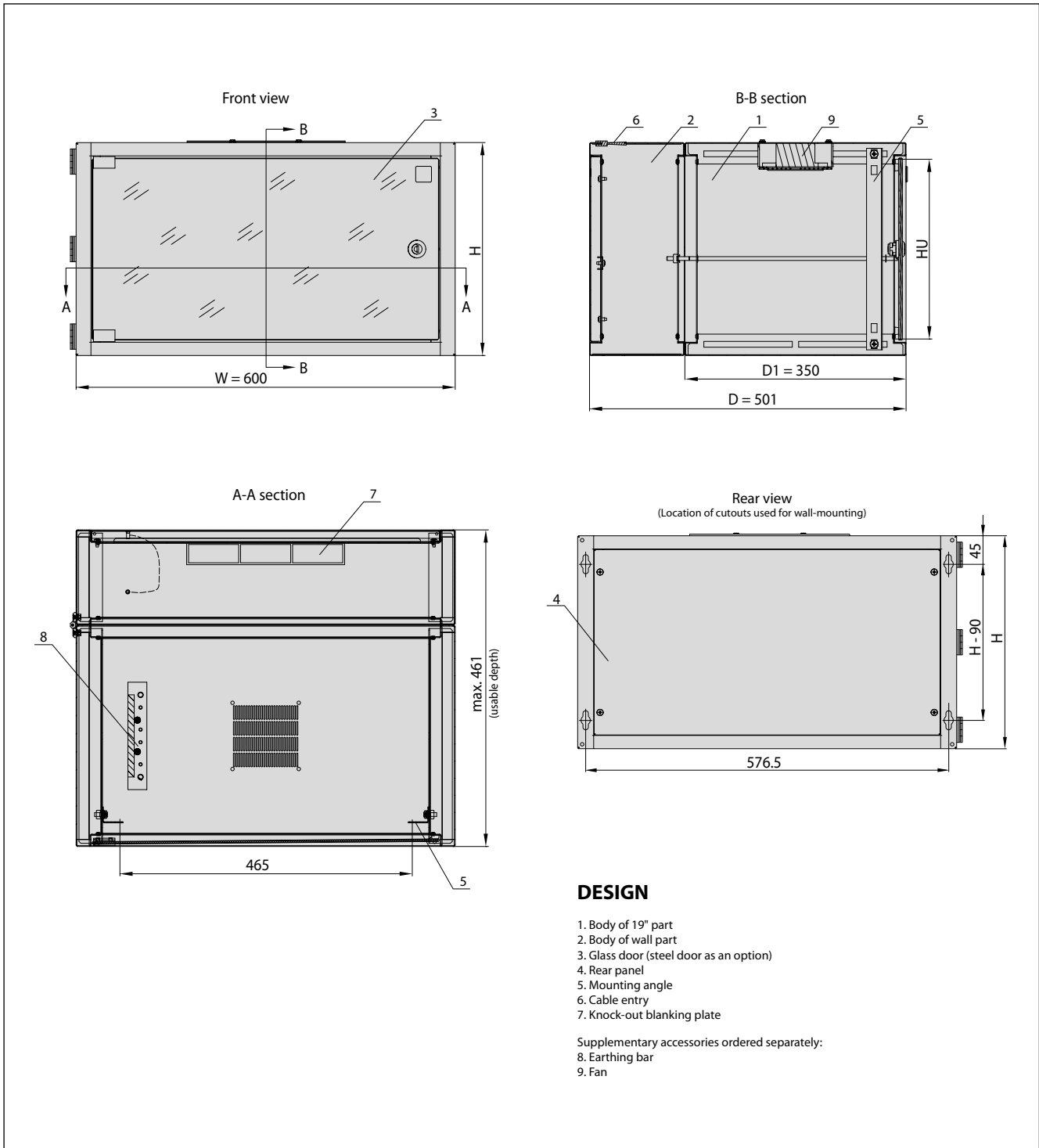
IP 20 in accordance with PN 92/E-08106 / EN 60529 / IEC 529 (does not apply to brush cable entries).

Scope of delivery

Cabinets are packed in cartons. Template for making cutouts in the wall is included in the packaging.



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

- Intended for indoor usage.
- 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 in 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
Door - glass	- 4.0 mm thick safety glass
- steel	- 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 PN 92/E-08106 / EN 60529 / IEC 529 (does not apply to brush cable entries).

Scope of delivery

Cabinets are packed in cartons. Template for making cutouts in the wall is included in the packaging.



SJ2 cabinet 12 U with safety glass door



SJ2 cabinet 18 U with safety glass door

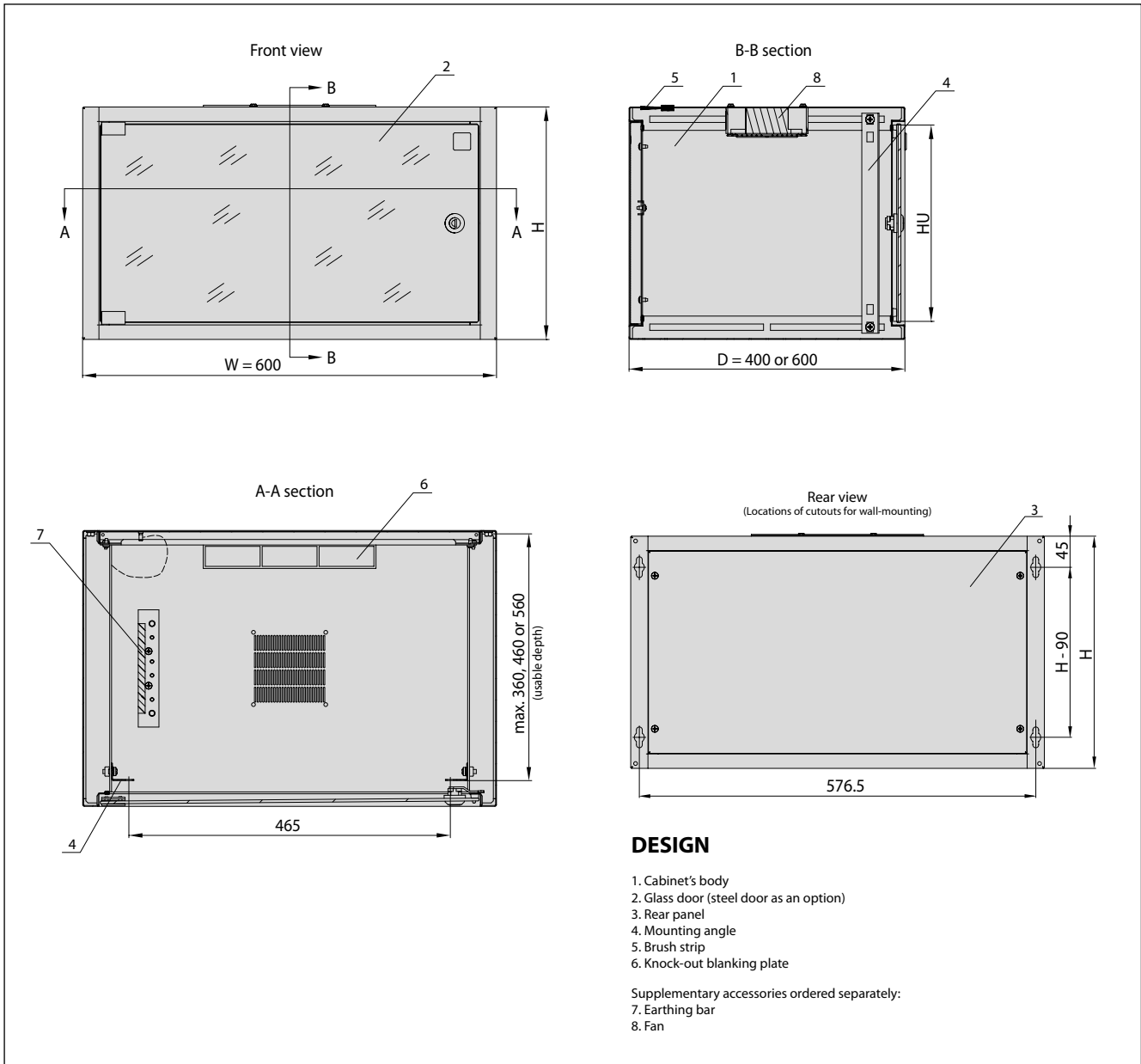


Bottom plate of SJ2



Top plate of SJ2

SJ2 19" CABINET



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

- Intended for indoor application.
- 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 PN 92/E-08106 / EN 60 529 / IEC 529

Scope of delivery

Wall boxes 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 and a glass window

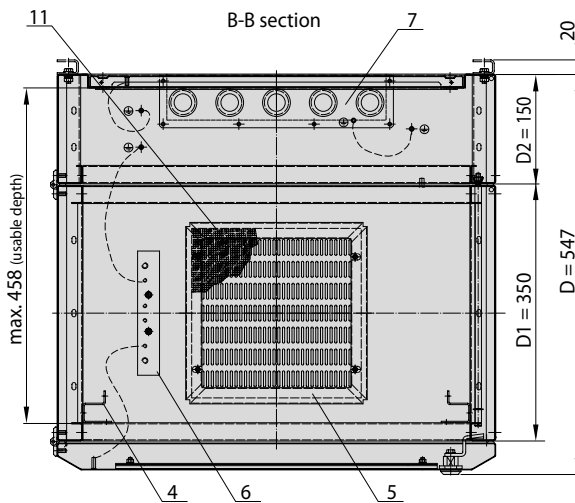
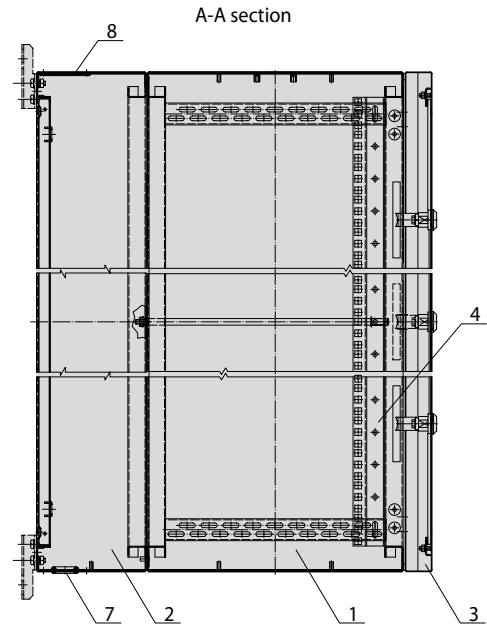
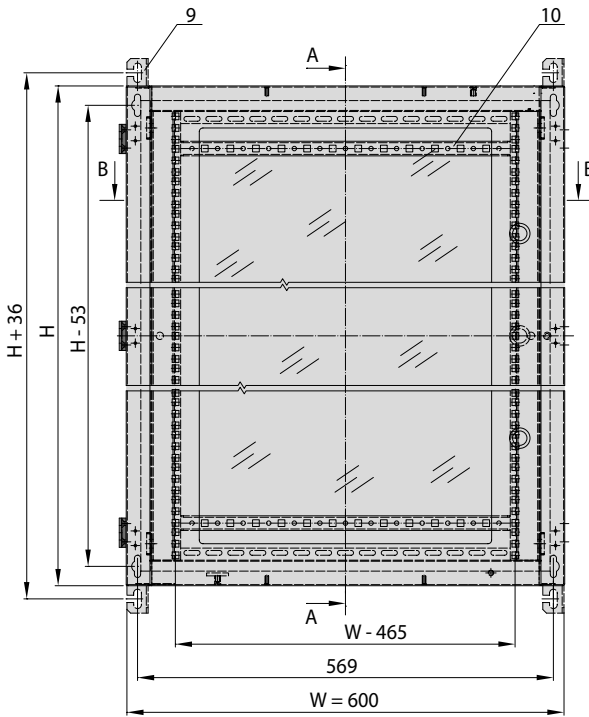


SW cabinet 10 U high with steel solid door



SW cabinet 6 U high with steel door and 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 without glass window	Cabinet with 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

- Intended for indoor application.
- 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 with PN 92/E-08106 / EN 60 529 / IEC 529

Scope of delivery

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



SWJ cabinet 10 U high with glass window

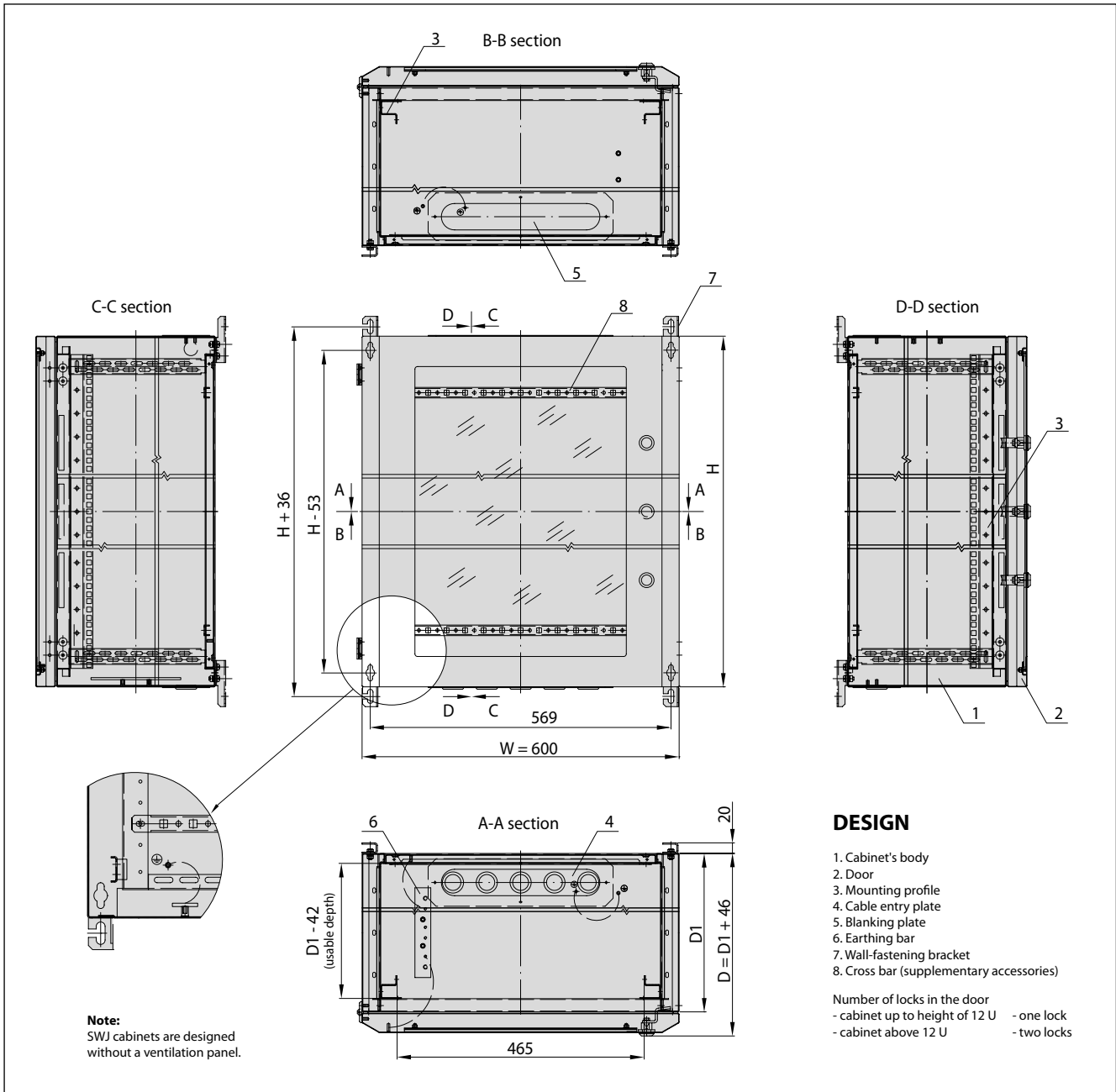


SWJ cabinet 15 U high



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 without glass window	Cabinet with 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

- Intended for small indoor networks.
- Offered at 4 U height and 300 mm depth. 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 knock-out 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:

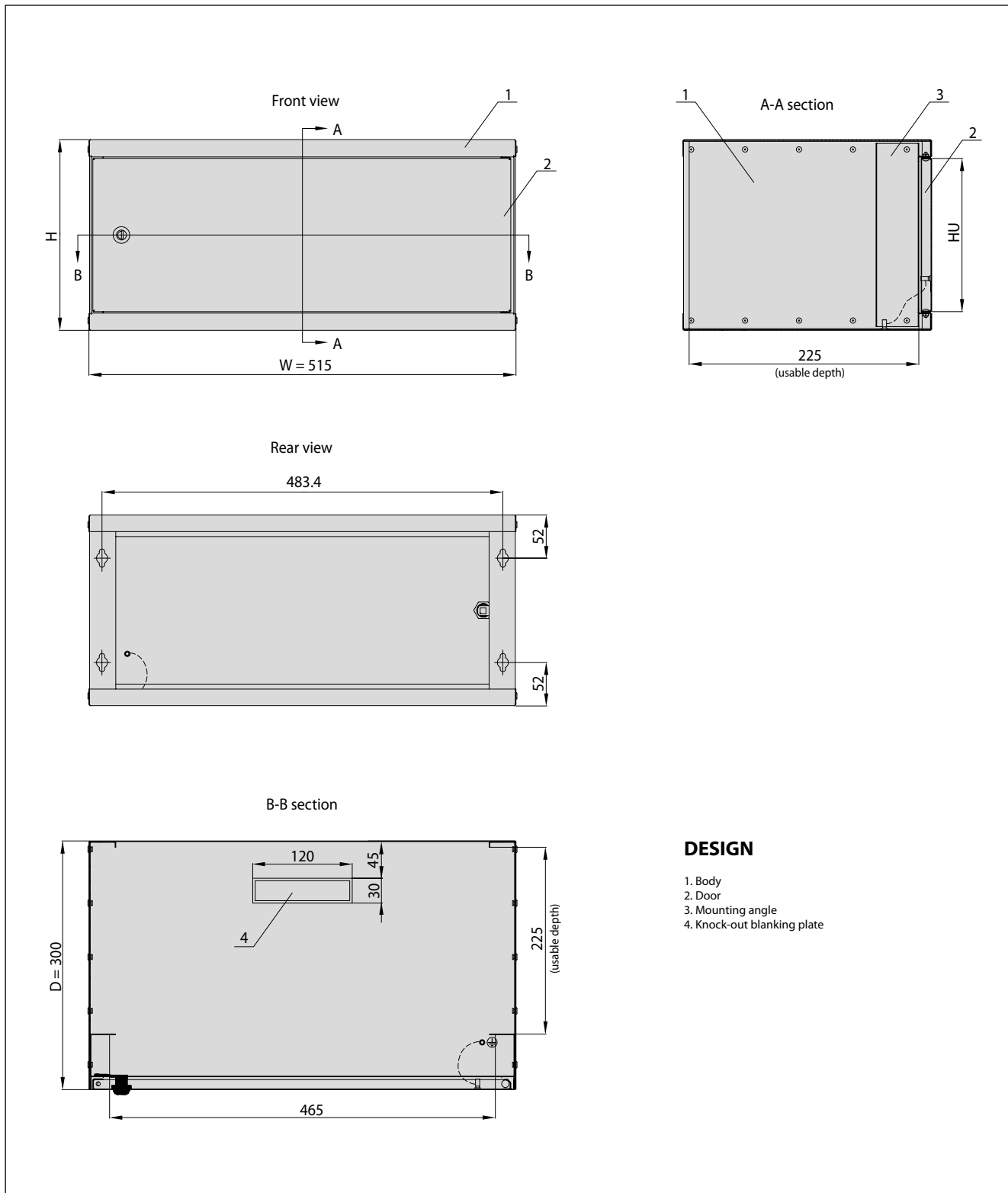
Powder painted in RAL 7035. Application of other colours on request.

Protection degree:

IP 20 (for cabinet mounted to the wall) in accordance with PN 92/E-08106 / EN 60 529 / IEC 529



SJK 19" CABINET



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]	Catalogue number
515	300	497	10 U	WZ-3684-01-02-011
		320	6 U	WZ-3684-01-01-011
		230	4 U	WZ-3684-01-00-011

SKI2 10" CABINET

Wall-mounted cabinet for small networks

- Intended 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 62).
- The cabinet does not have a rear panel.



Technical data

Material:

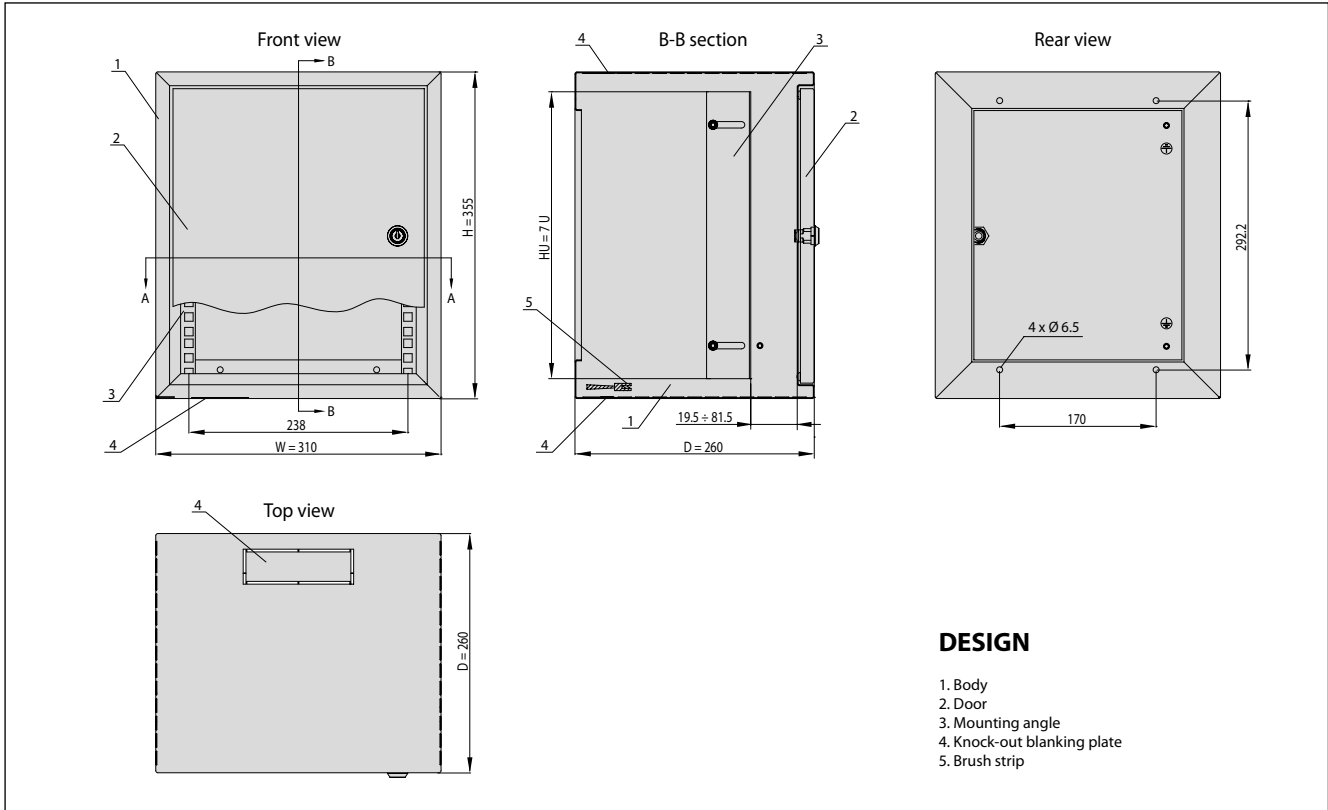
Body, door, mounting angles - 1.0 mm thick sheet steel

Surface finishing:

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



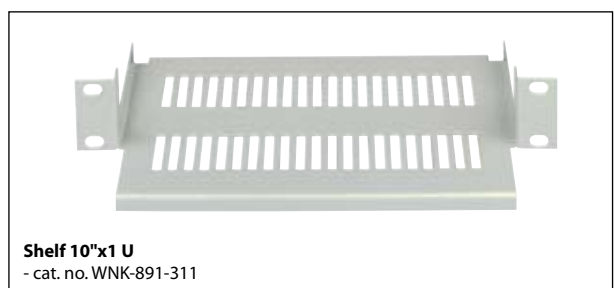
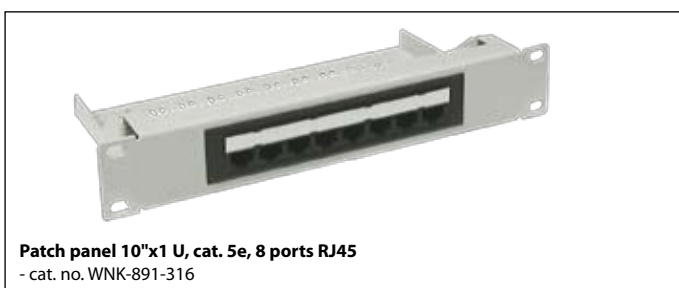
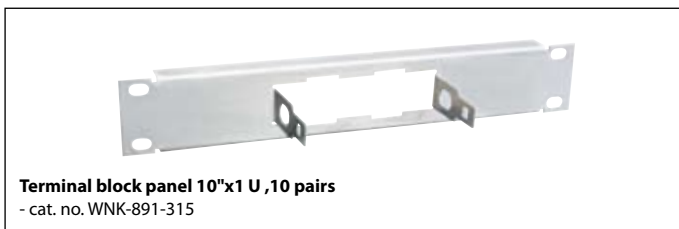
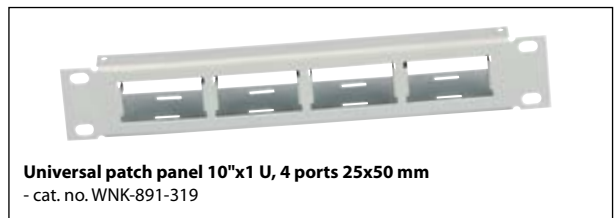
SKI2 10" CABINET



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"x1 U, 4 ports 25x50 mm	1 pc.	WNK-891-319
Terminal block panel 10"x1 U, 10 pairs	1 pc.	WNK-891-315
Patch panel 10"x1 U for keystones, 8 ports	1 pc.	WNK-891-312
Patch panel 10"x1 U, cat. 5e, 8 ports RJ45	1 pc.	WNK-891-316
Shelf 10"x1 U	1 pc.	WNK-891-311



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 78). 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.

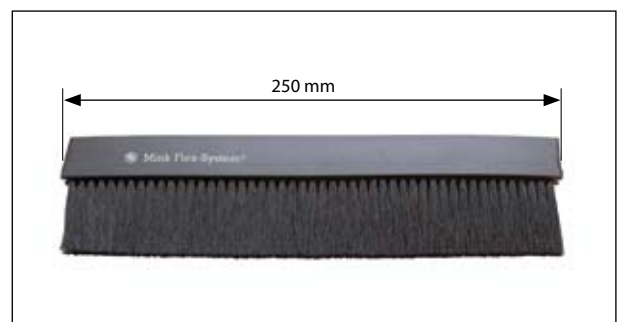
Material:

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:

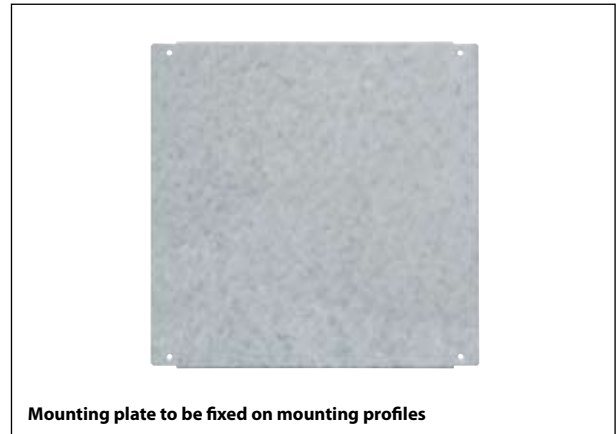
2.0 mm thick Al-Zn coated sheet steel.

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.



Mounting plate to be fixed on mounting profiles

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 30x4x170 mm

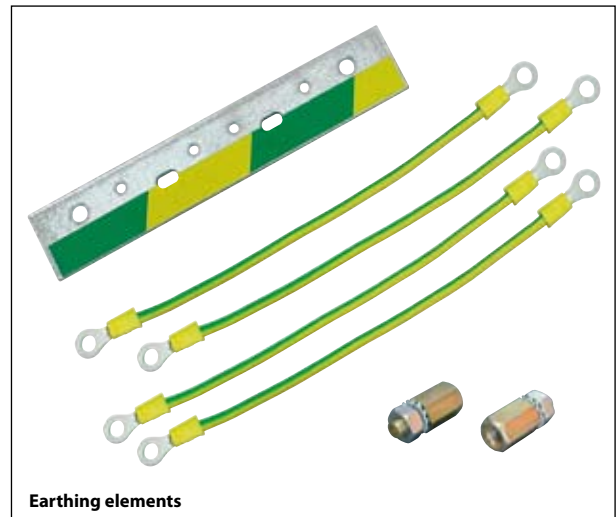
Earthing cables:

- Insulated copper cables with contact eyes for M5 screws.
- Material: copper wires, 6 mm² 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



Earthing elements

Fan kit for SU, SD2, SJ2 cabinets

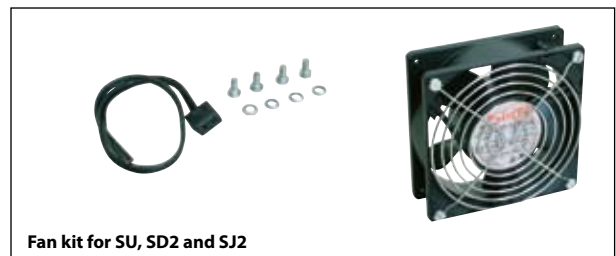
Mounted it the top or bottom plate of SU, SD2 and SJ2 cabinets.

Power supply: 230 V, 50 Hz; power: 22 W; capacity: 162 m³/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 kit for SU, SD2 and SJ2

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 m³/h

Scope of delivery:

Fan unit, power supply cable 1,5 m

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



Fan unit for SW cabinet

SUPPLEMENTARY ACCESSORIES FOR WALL-MOUNTED CABINETS

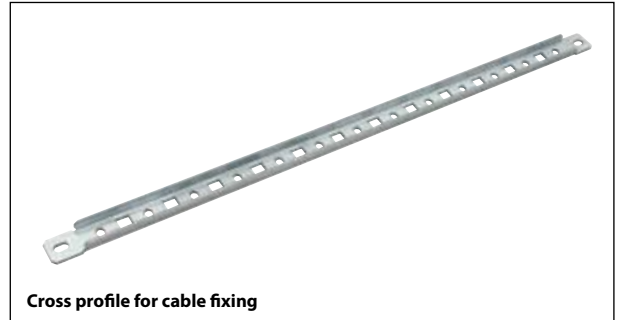
Cross profile

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



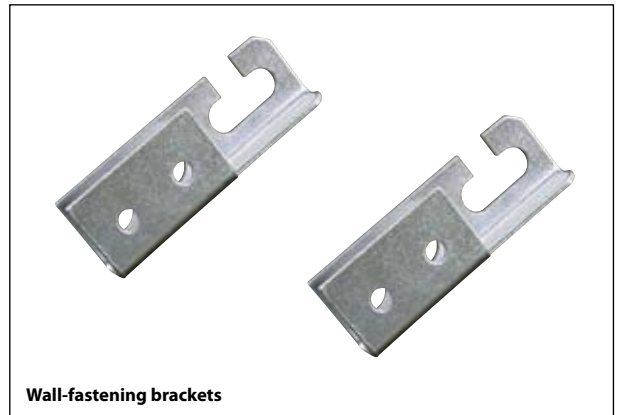
Wall-fastening brackets

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



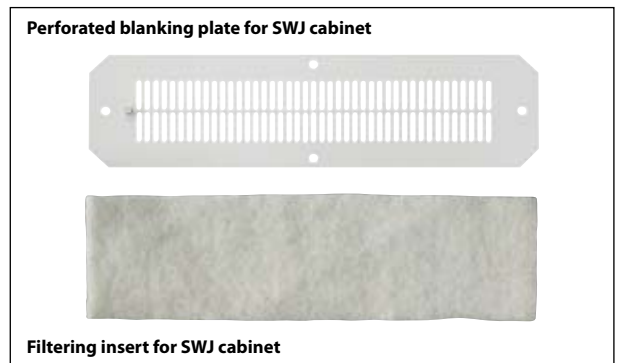
Perforated blanking plate and filtering insert for SWJ cabinet

Dimensions: 350x90 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 SW cabinet

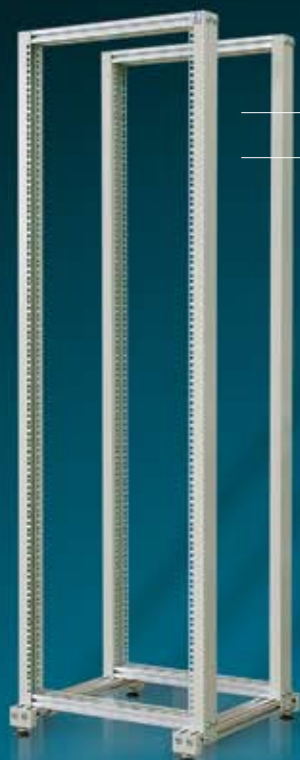
To be installed under the frame with a grid in SW cabinet.
Dimensions: 270x270 mm

Scope of delivery:
Filtering insert

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



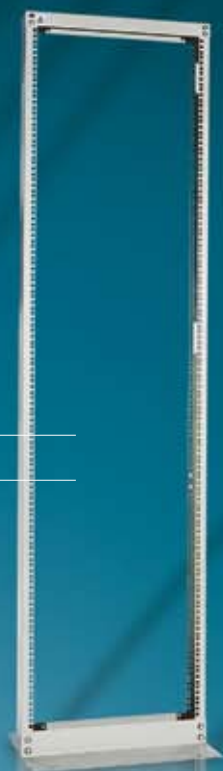
OPEN RACKS



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:

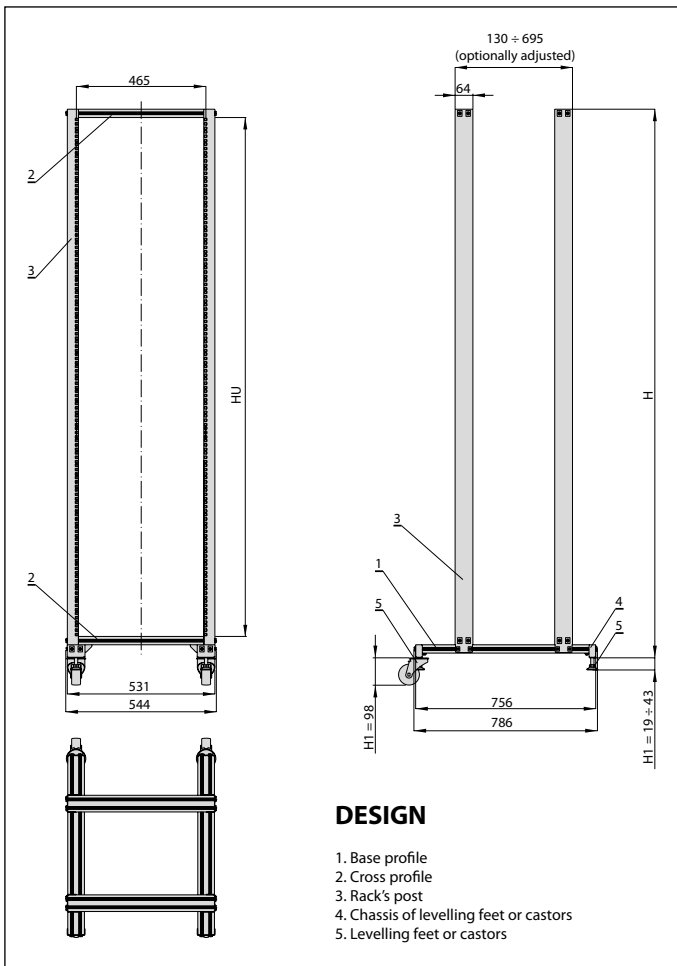
1.5 mm thick sheet steel,
aluminium profile 60x30 mm.

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	Catalogue number
24 U	1177	1	WZ-1969-01-01-011
36 U	1709	1	WZ-1969-01-02-011
42 U	1975	1	WZ-1969-01-03-011
45 U	2109	1	WZ-1969-01-04-011
24 U	1177	2	WZ-1969-01-05-011
36 U	1709	2	WZ-1969-01-06-011
42 U	1975	2	WZ-1969-01-07-011
45 U	2109	2	WZ-1969-01-08-011



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:

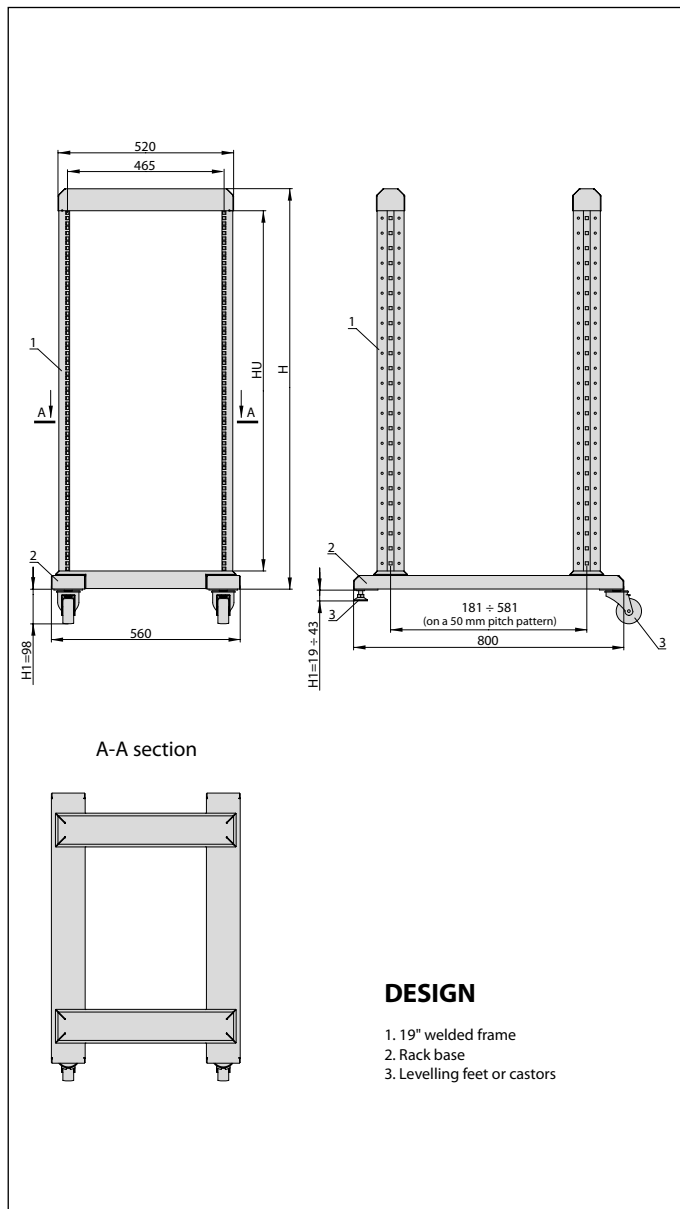
2.00 mm thick sheet steel.

Surface finishing:

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

Reference chart

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



SRC 19" OPEN RACK

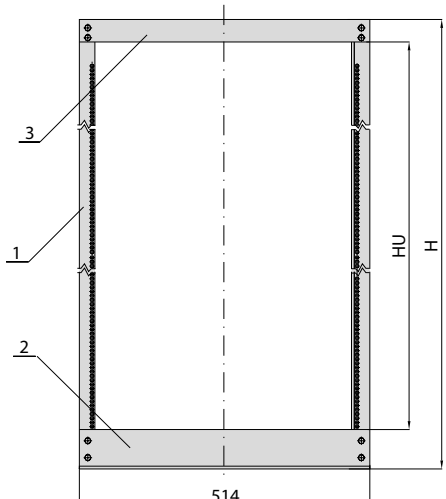
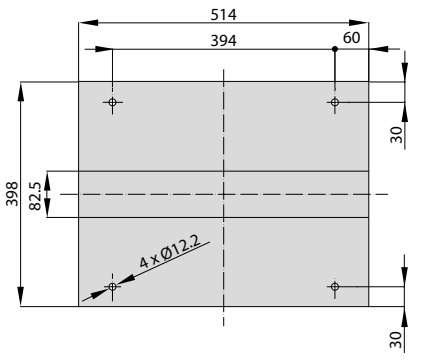
Intended for installations which do not require full housing

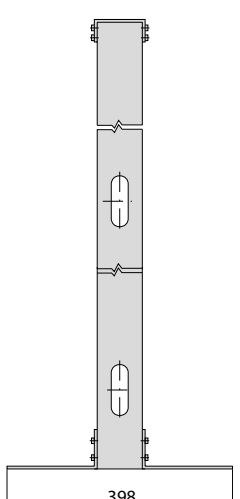
- The design is based on a single assembled 19" frame fixed by screws to two steel mounting angles forming the base.
- Chassis has openings to brace the rack to the floor.
- Optionally the rack can be equipped with wall-fastening brackets.
- Possibility to use some supplementary accessories as for data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



Reference chart

HU [U = 44.45 mm]	H [mm]	Catalogue number
31 U	1496	WZ-0008-01-01-011
41 U	1941	WZ-0008-01-02-011
45 U	2119	WZ-0008-01-03-011
54 U	2519	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.

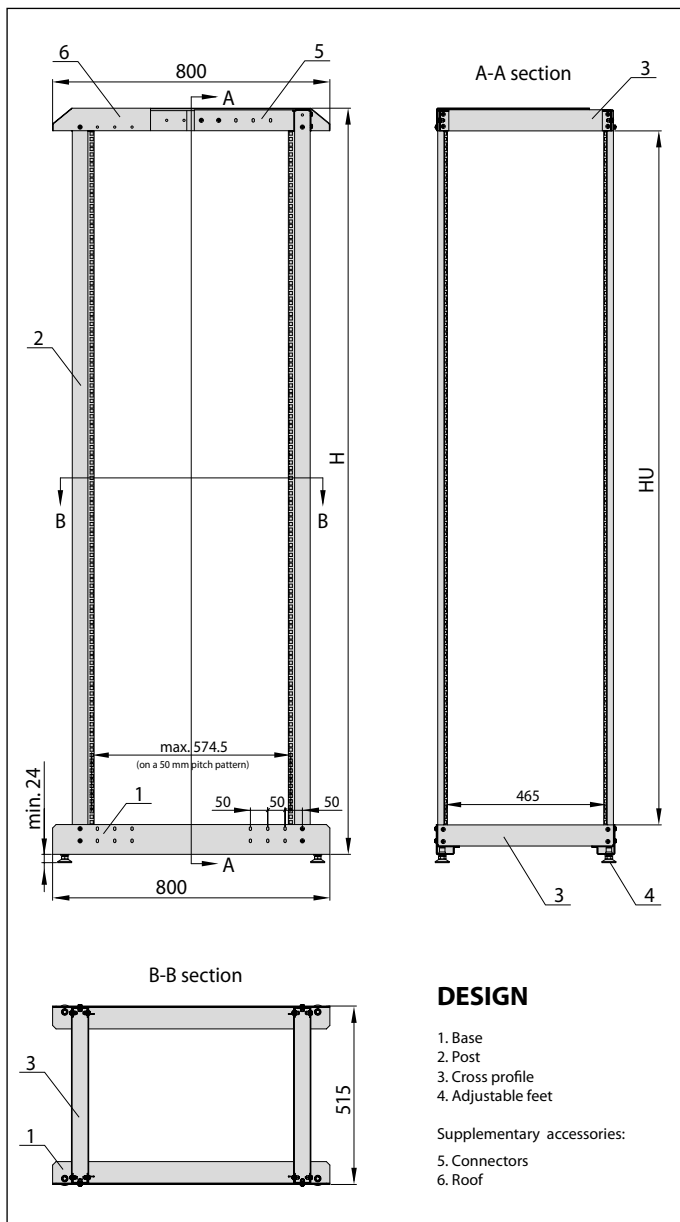
Technical data

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]	Catalogue number
24 U	1190	WZ-2378-01-24-011
36 U	1724	WZ-2378-01-36-011
42 U	1990	WZ-2378-01-42-011
45 U	2124	WZ-2378-01-45-011



SUPPLEMENTARY ACCESSORIES 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:

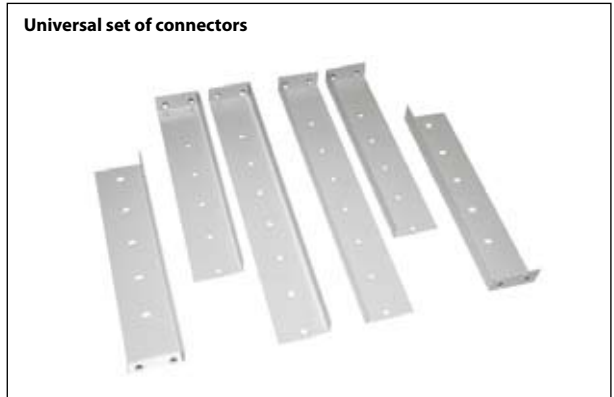
2,0 mm thick sheet steel powder painted in RAL 7035.

Scope of delivery:

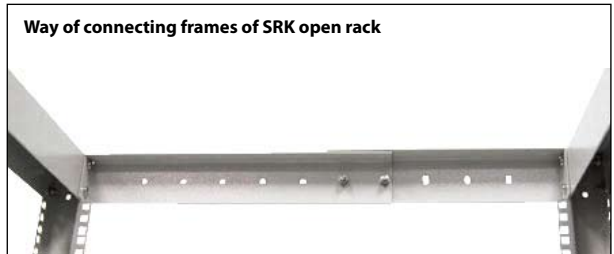
Set of 3 pairs of connectors with fixing accessories. The connectors are 283, 287 or 383 mm long.

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).



Simple plinth 200 mm high with solid cover



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

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.

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.

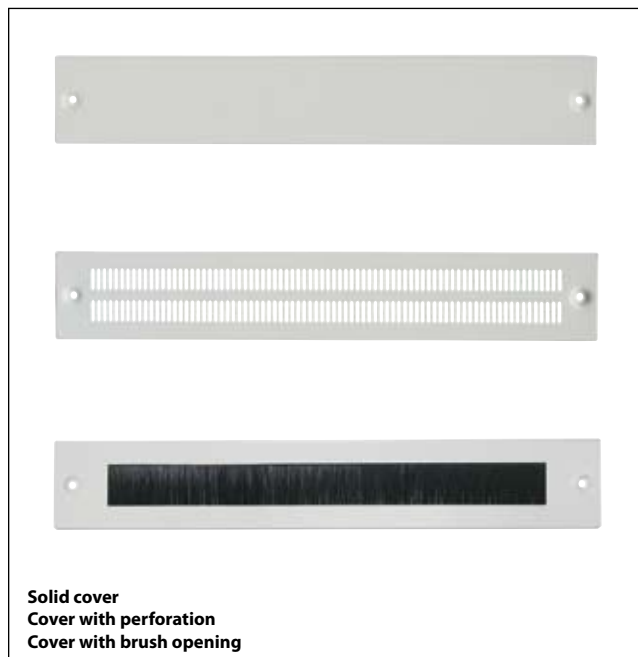
Material:

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



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:

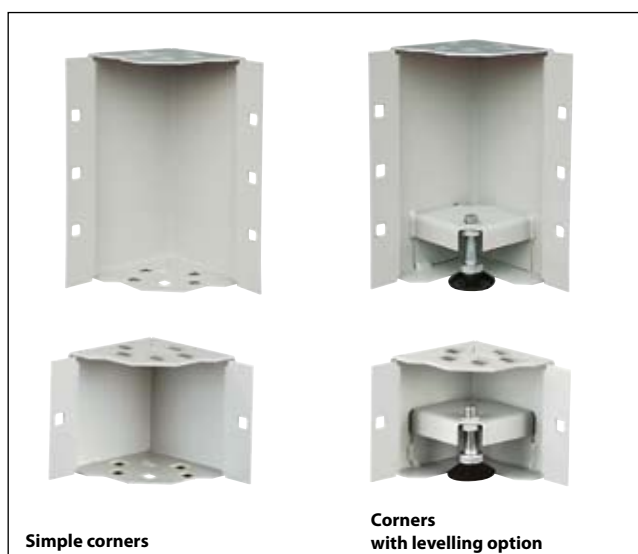
Corners: 2.5 mm thick sheet steel powder painted in light grey (RAL 7035).

Levelling feet: see page 72.

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	Cat. no.
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



Vibro-shock absorbers

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

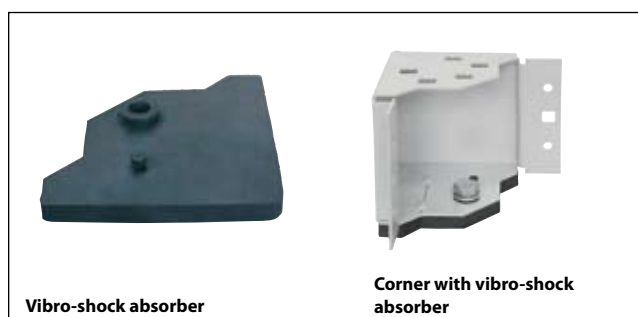
Material:

10 mm thick rubber.

Scope of delivery:

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

Package	Catalogue number
1 pc.	M1Z-00-0048



CASTORS

Castors 150

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

One cabinet or open rack requires two locking and two non-locking 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



Castors 300

For cabinets SZB, SZBk and SZB PC.

One cabinet requires two locking, two non-locking castors and two strenghtening 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:

Strenghtening 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 strenghtening 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	1 pc.	WZ-SB73-00-01-000
Non-locking castor 300	1 pc.	WZ-SB73-00-02-000
Strenghtening bar for cabinet's width	600 mm	1 pc. WZ-SB74-00-01-011
	800 mm	1 pc. WZ-SB74-00-02-011



Castors set for SZE2 PC cabinet

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

Loading capacity: 600 kg

Surface finishing:

Strenghtening bar for castors – textured powder paint light grey (RAL 7035).

Scope of delivery:

2 strenghtening 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



MODULE PANEL FOR CABLE ENTRY

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

Fixing instructions – see page 17.

Material:

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

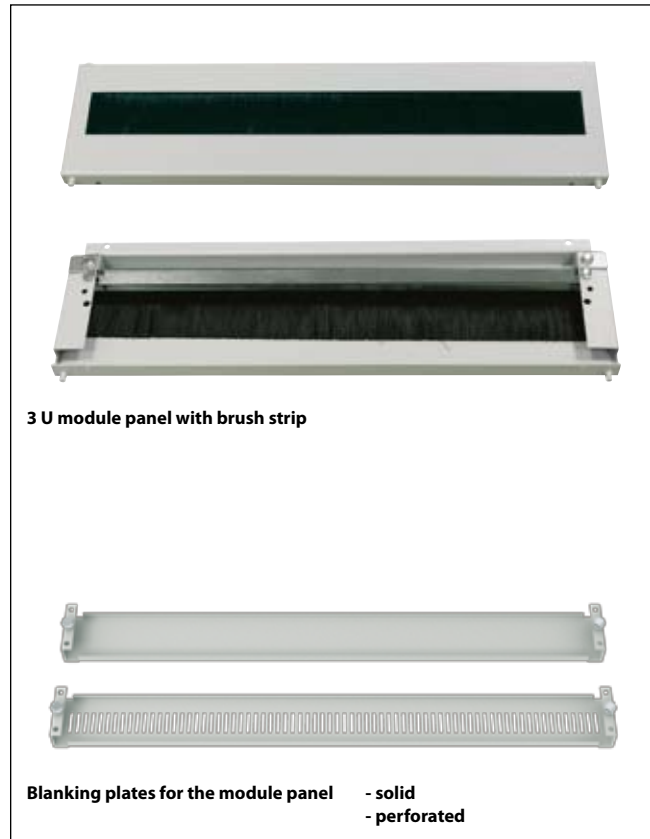
Scope of delivery:

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).

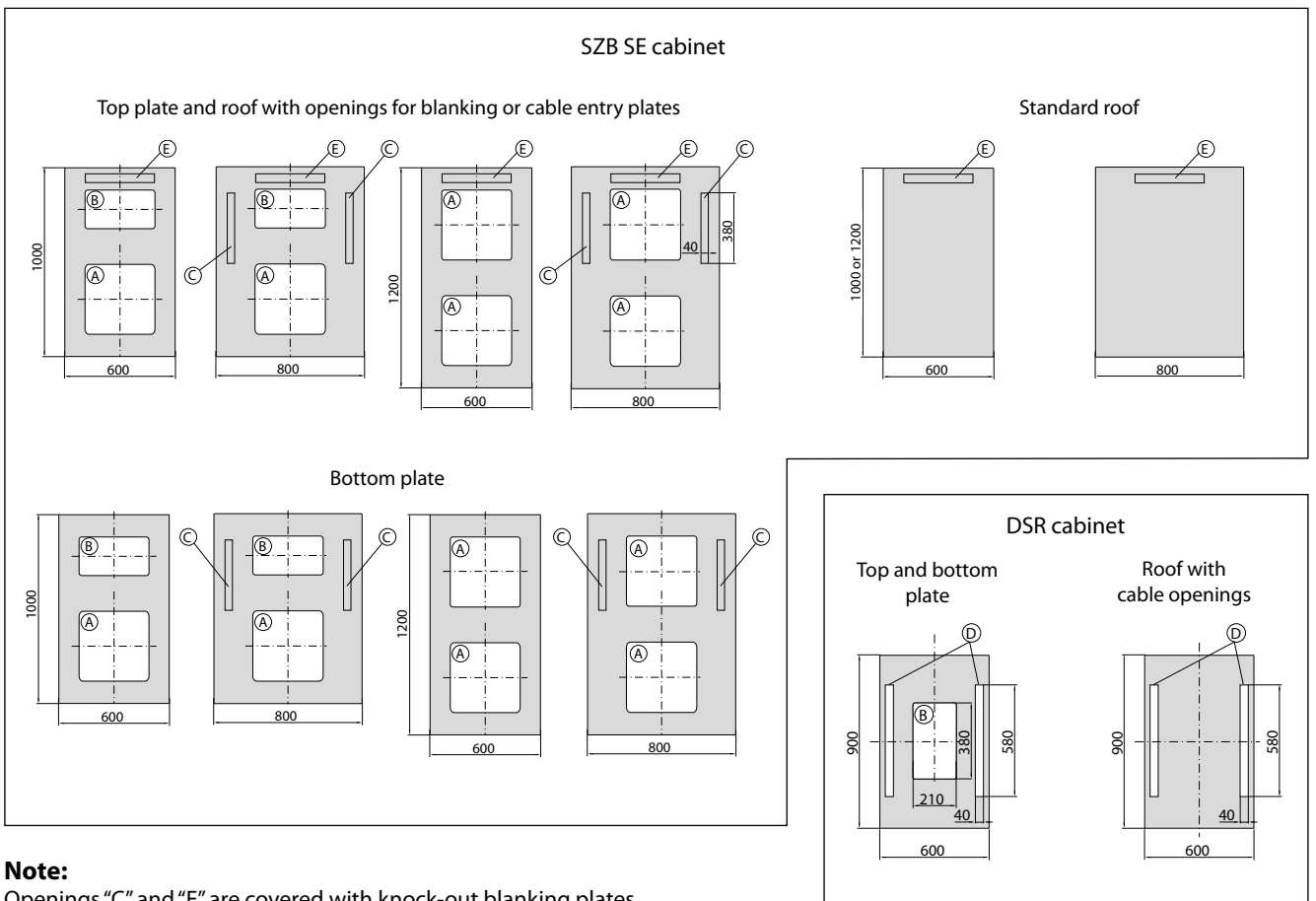
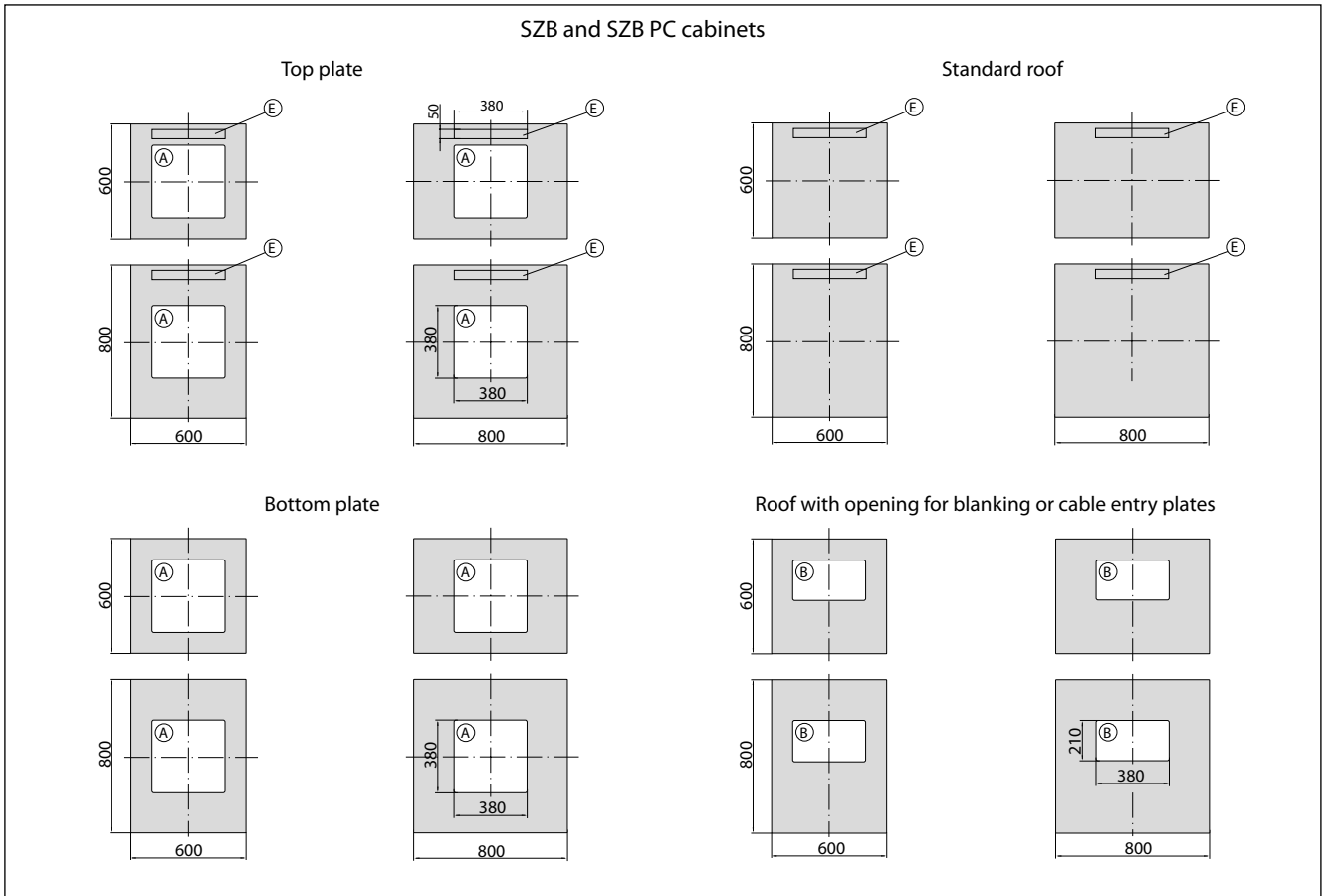
Scope of delivery:

Frame with mesh and fixing accessories.

Dimensions [mm]	Package	Catalogue number
459x245	1 pc.	WZ-SB39-00-01-011
356x350	1 pc.	WZ-SB39-00-02-011
228x222	1 pc.	WZ-SB39-00-03-011



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



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 76.

Material:

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

Scope of delivery:

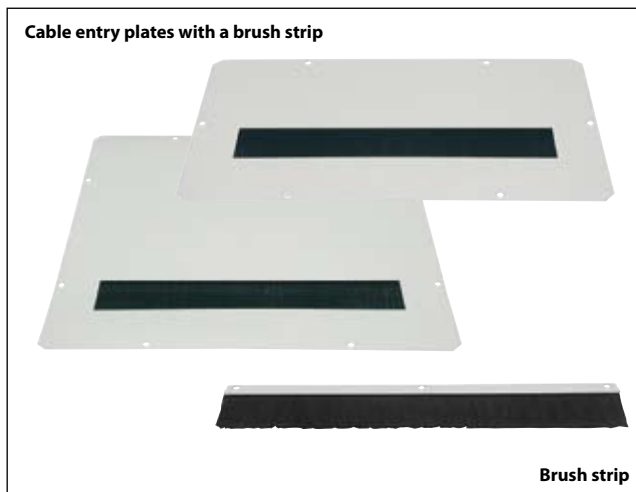
Blanking /cable entry plate or strip with fixing accessories.

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-1718-08-02-011	–
	D	WZ-1718-08-01-011	–
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.



Blanking plates with a fabric filter



Cable entry plates with a brush strip

Brush strip

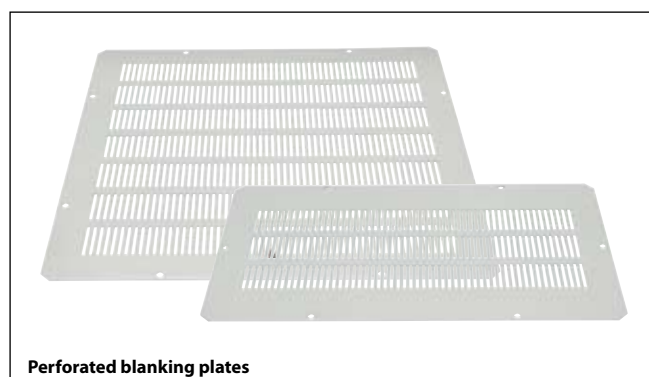


Solid blanking plates



Cable entry plates with a foam strip

Foam strip



Perforated blanking plates



Cable entry plate with a fabric filter and a brush strip

SHELVES

Shelves fixed on two 19" mounting profiles

Available in fixed and pull-out version.

19" assembly, 2 U height.

Maximum static load capacity:

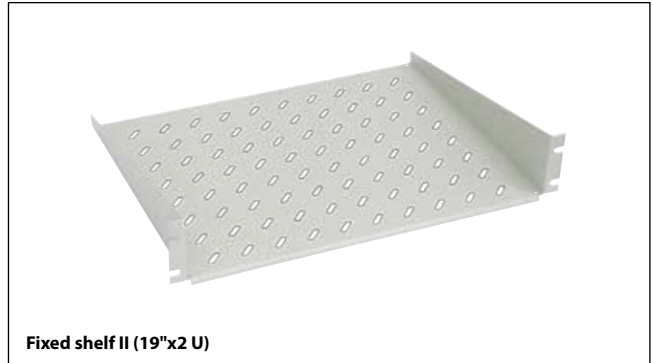
- Fixed shelf: 25 kg (superficial weight)
- Pull out shelf: 20 kg (superficial weight)

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"x2 U)



Pull out shelf II (19"x2 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:

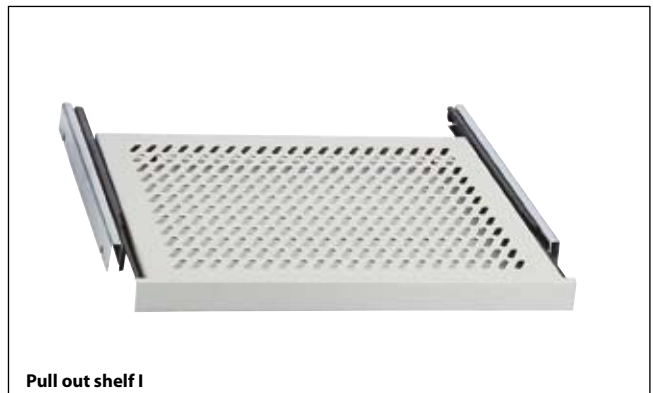
1.5 mm thick sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

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 server cabinets.

Available in fixed and telescopic versions.

Fixing on three pairs of 19" mounting profiles (to the side openings; special middle mounting bars).

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:

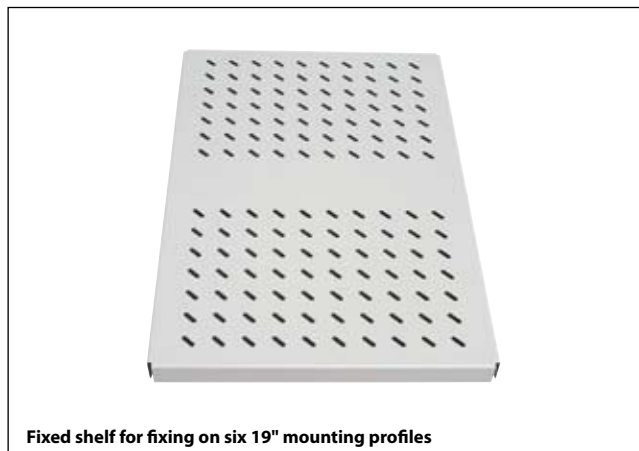
1.5 mm thick sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

Scope of delivery:

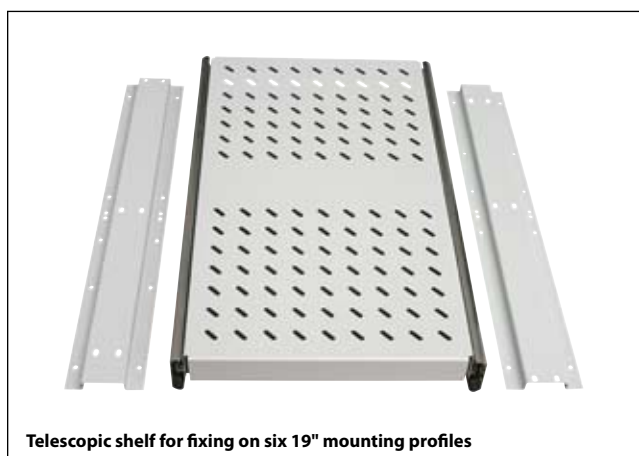
Fixed or telescopic shelf with fixing accessories for assembling into the mounting profiles.

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:

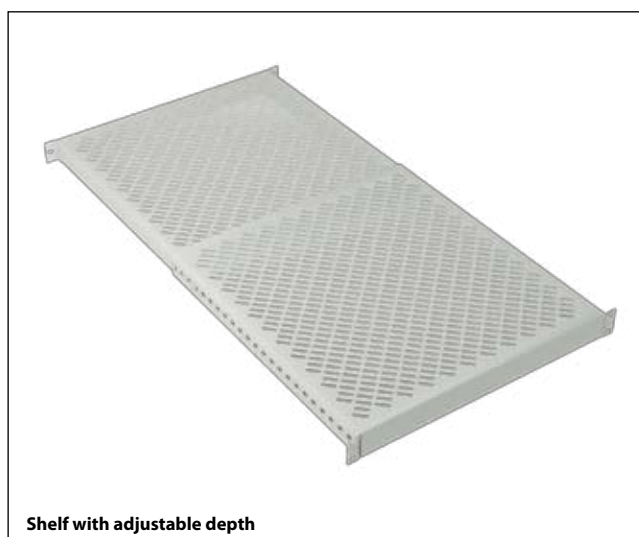
1.5 mm thick sheet steel textured powder painted in light grey (RAL 7035) or black (RAL 9005).

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"x1 Ux400 mm with compact touchpad keyboard. Drawer equipped with lock with patent 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"x1 U with touchpad keyboard

Drawer with trackball keyboard

Drawer 19"x1 Ux400 mm with compact trackball keyboard. Drawer equipped with lock with patent 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"x1 U with trackball keyboard

Drawer with keyboard without pointing device

Drawer 19"x1 Ux400 mm with compact keyboard without pointing device. Drawer equipped with lock with patent 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"x1 U with keyboard without pointing device

Universal drawer without keyboard

Drawer 19"x1 Ux400 mm without keyboard. Internal dimensions: 378x262x36 mm. Drawer equipped with lock with patent 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"x1 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: 460x413x55 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.

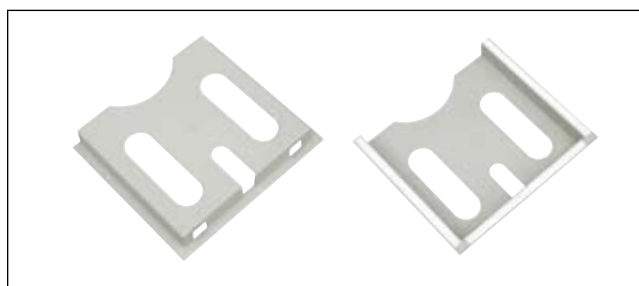
Material:

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 341x21.5 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	400	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 and SZB PC cabinet RAL 7035	Vertikal masking panels for SZB SE cabinet RAL 7035	Vertikal masking panels for SZB SE cabinet 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.



CABLE CLAMPS

Intended for fixing:

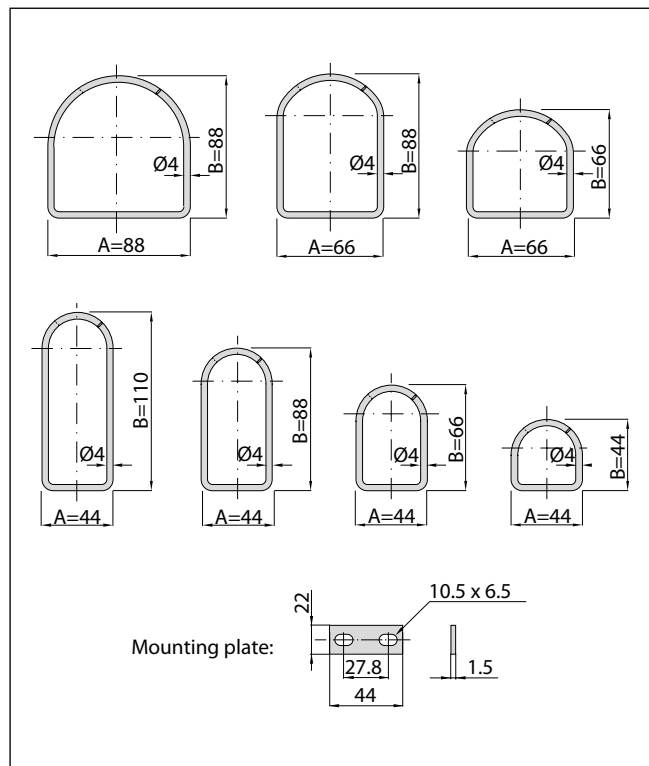
- on cable management bars (see picture below),
- on mounting profiles.

Material:

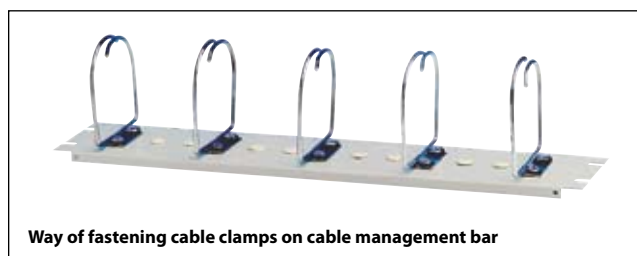
Zn coated steel.

Scope of delivery:

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



Type of cable clamp	Package	Dimensions AxB [mm]	Catalogue number
	5 pcs.	88x88	WZ-SB52-00-01-000
		66x88	WZ-SB52-00-02-000
		66x66	WZ-SB52-00-03-000
		44x110	WZ-SB52-00-04-000
		44x88	WZ-SB52-00-05-000
		44x66	WZ-SB52-00-06-000
		44x44	WZ-SB52-00-07-000
	5 pcs.	88x88	WZ-SB53-00-01-000
		66x88	WZ-SB53-00-02-000
		66x66	WZ-SB53-00-03-000
		44x110	WZ-SB53-00-04-000
		44x88	WZ-SB53-00-05-000
		44x66	WZ-SB53-00-06-000
		44x44	WZ-SB53-00-07-000
	5 pcs.	88x88	WZ-SB54-00-01-000
		66x88	WZ-SB54-00-02-000
		66x66	WZ-SB54-00-03-000
		44x110	WZ-SB54-00-04-000
		44x88	WZ-SB54-00-05-000
		44x66	WZ-SB54-00-06-000
		44x44	WZ-SB54-00-07-000



CABLE MANAGEMENT BAR

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).

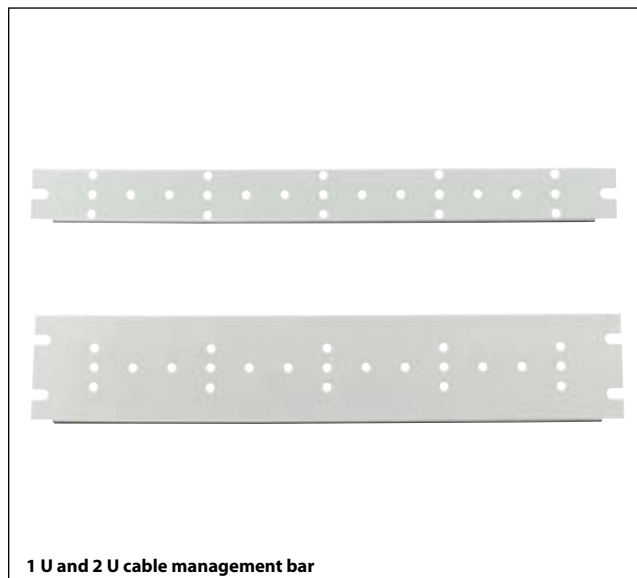
Scope of delivery:

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, SZBk, SZB PC, SZE2 PC, SZB SE 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.

Material:

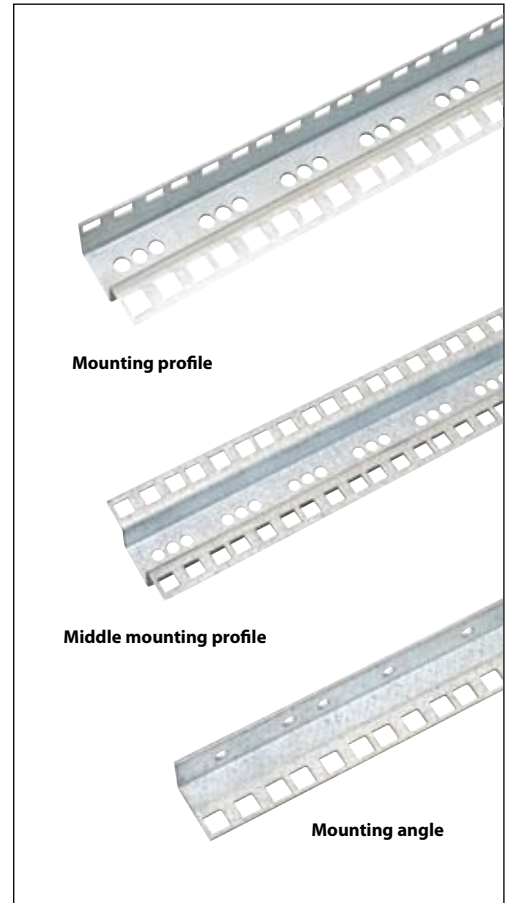
2.0 mm thick Al-Zn coated sheet steel (mounting profile, middle mounting profile, mounting angle) and 3.0 mm for reinforced mounting angle.

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.



OUTRIGGERS

For fixing mounting profiles in cabinets 800 mm wide, in order to achieve 19" or 21" spacing.

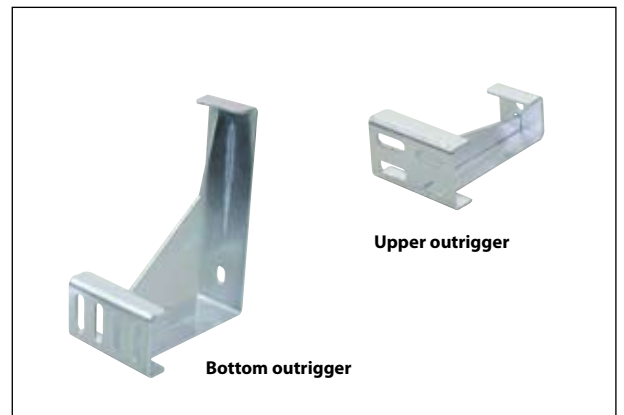
Material:

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	Type of outrigger	Package	Catalogue number
SZB, SZBk, SZB PC, SZB SE	19"	upper	1 pc.	WZ-SB24-00-00-000
		bottom	1 pc.	WZ-1610-06-00-000
	21"	upper	1 pc.	WZ-1600-25-00-000
		bottom	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	WZ-SB00-35-00-000



CROSS BAR

Fixed to the rear mounting profiles in 19" cabinets.
For installing cables or supporting appliances in the cabinet.

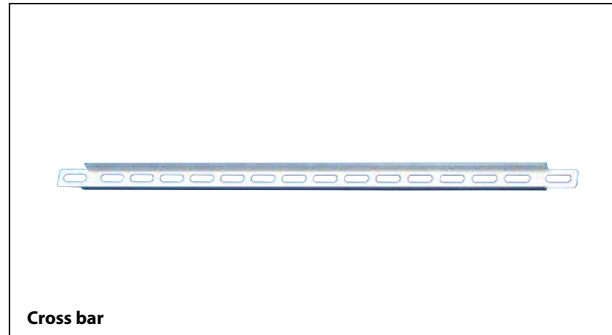
Material:

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.

Material:

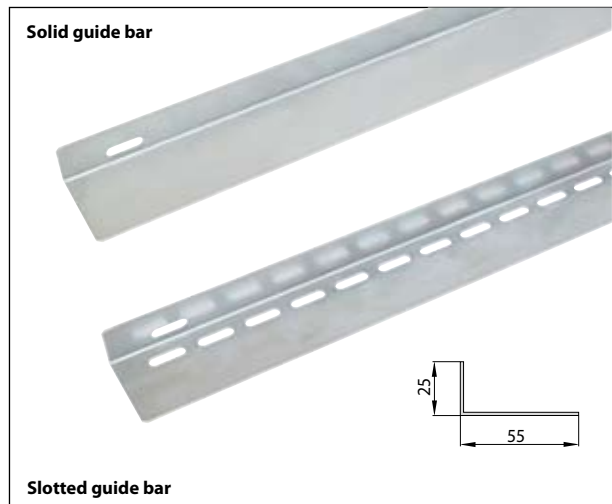
1.5 mm thick zinc coated sheet steel.

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.

Material:

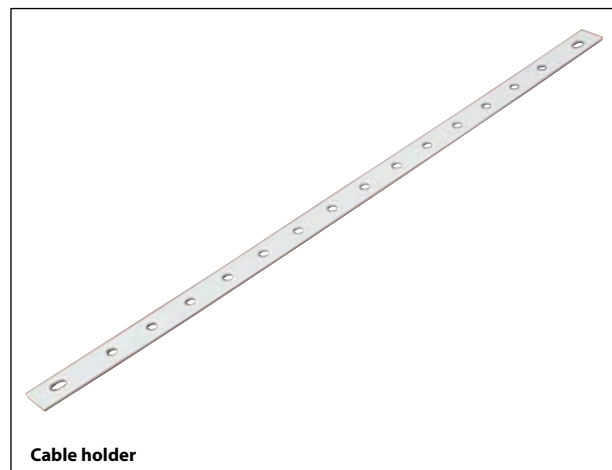
3.0 mm thick zinc coated sheet steel.

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 cabinets 800 mm wide.

Position of frame: middle.

Maximum depth of appliances mounted into the frame: 350 mm.

The standard design of SZB 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 cross-bars.

Material:

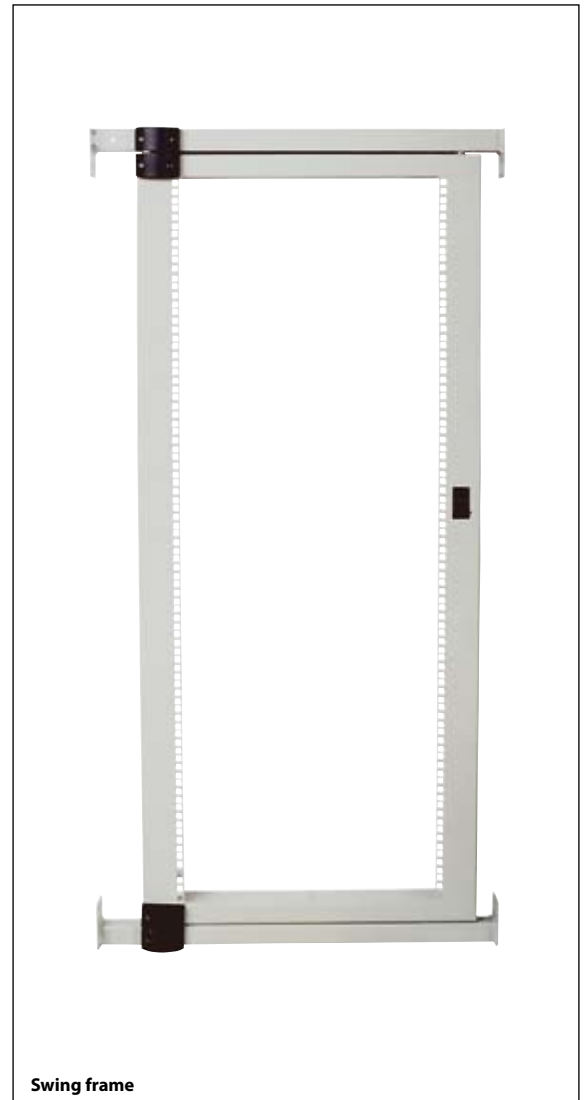
Sheet steel textured powder painted in light grey (RAL 7035).

Scope of delivery:

Swing frame set with fixing accessories.

Swing frame's height [U = 44.45 mm]	For cabinet SZB 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.



CABLE DUCTS

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

C-profile for cable ducts stiffening

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 cable duct stiffening, 60 mm wide	C-profile for 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

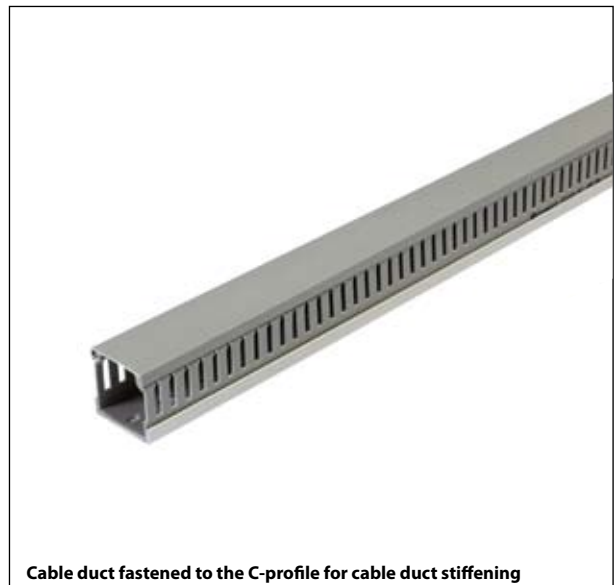
Package: 1 pc.



Cable ducts



C-profile for cable duct stiffening



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



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

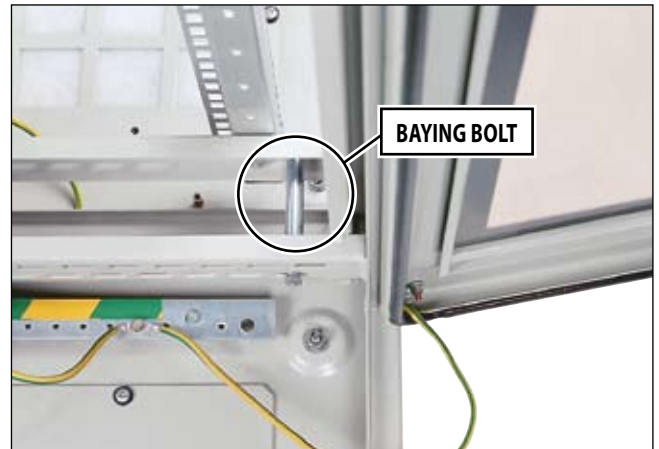
BAYING BOLT

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

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, SZBk, SZB PC and SZB SE, 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.

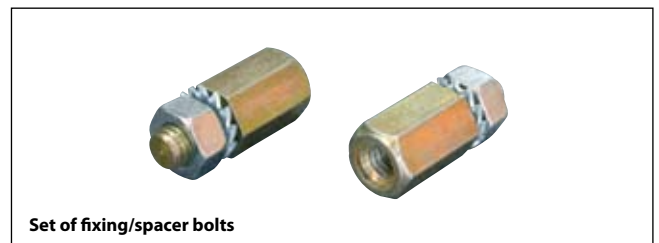
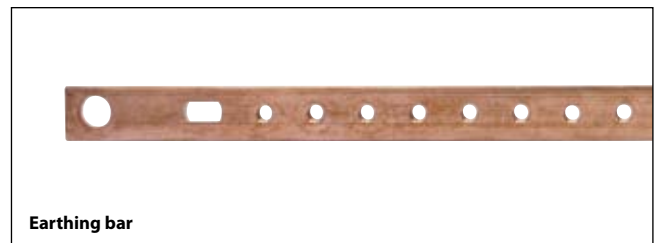
Material:

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 \varnothing 6 mm.

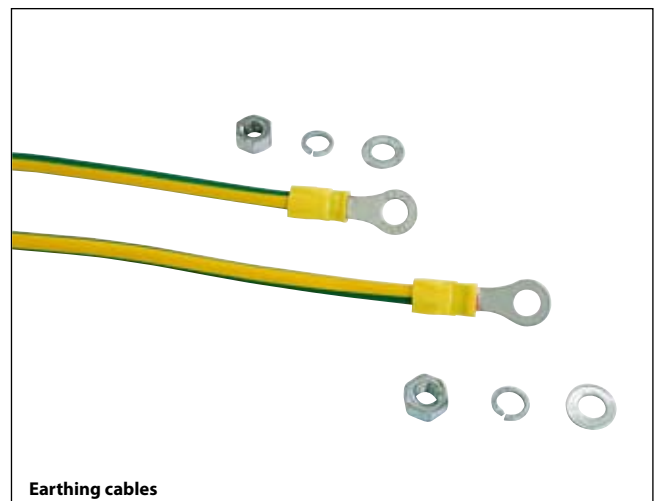
Material:

Copper cables 6 mm².

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 ACCESSORIES FOR DSR CABINETS

Blanking plate for DSR cable opening

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

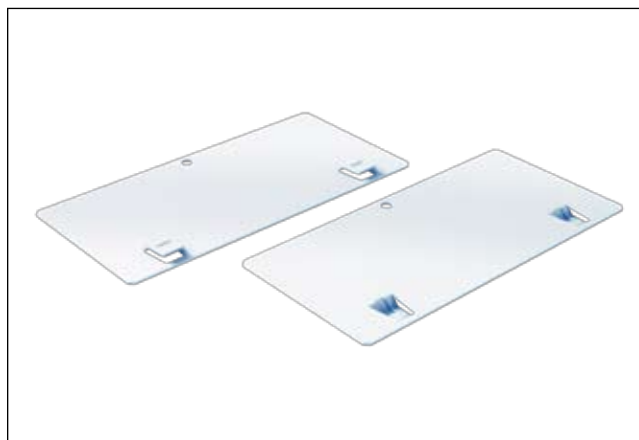
Material:

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
145x70x6	1 pc.	WZ-2645-12-01-000



Cable opening cover for DSR divider

For covering unused cable opening in the horizontal divider of DSR cabinet.

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
300x46x23	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 colocation cabinets. This prevents foreign objects passing between compartments.

Material:

Polyurethane gasket 30x30 mm.

Note:

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

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



SUPPLEMENTARY ACCESSORIES FOR SZU CABINETS

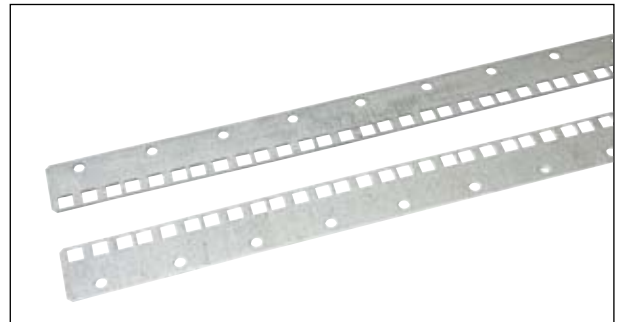
Adapters for installing 19" appliances on 21" mounting profiles

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:

Set of four FSA 12/50 B M10/121 FISCHER 68508 pins



Package	Catalogue number
4 pcs.	M1F-09-0020

SUPPLEMENTARY ACCESSORIES 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).
- Possibility of fixing the strips by different angles.
- 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).

Fixing of power strips:

- 440 mm long strips - 19" assembly or fixing in vertical position to one mounting profile (4 positions of mounting bracket by 90°).
- More than 440 mm long strips - only in vertical position (12 positions of mounting brackets by 30°).

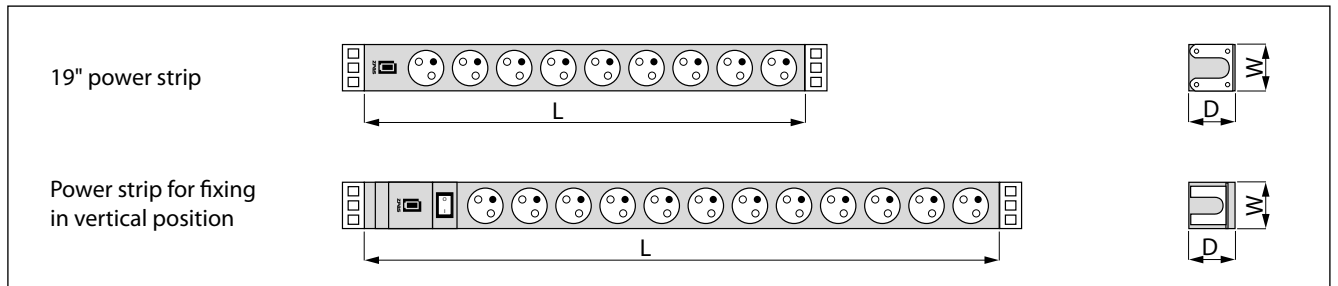
Technical data:

- Voltage rating 230 V AC
- Maximum current 16 A
- Attach power 16 A / 3600 W
- Conductor 3 m, black, 1.5 mm≤ section
- Protection system 2P+Z
- Protection degree IP 20
- Surge current 6,5 kA



Scope of delivery:

Power strip with brackets and set of fixing accessories.



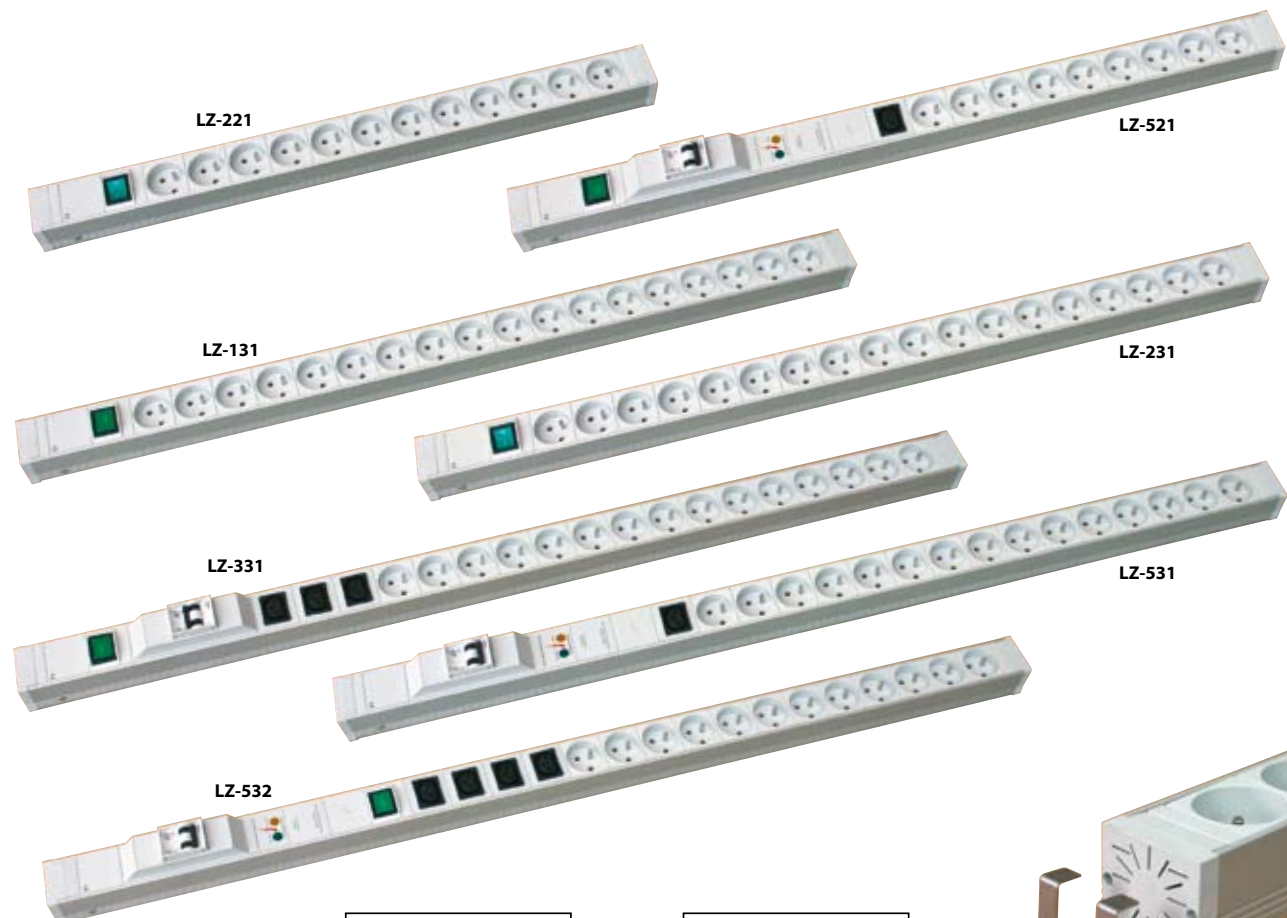
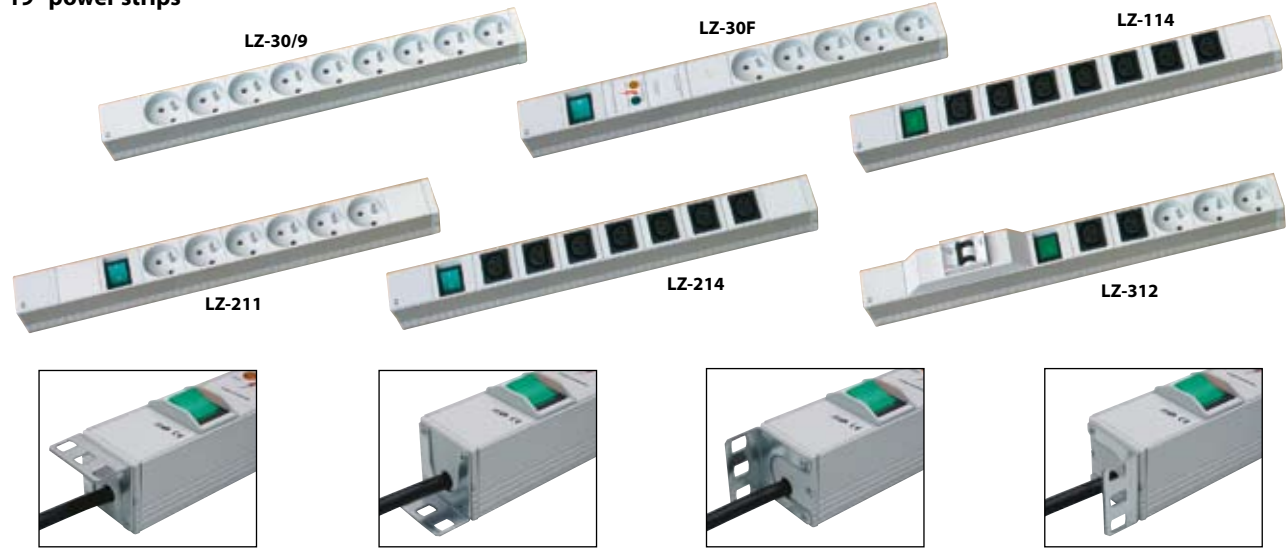
	Power strip type	Dimensions [mm]			Accessories						Catalogue number
		Lenght L [mm]	Width W [mm]	Depth D [mm]	Check lamp	Illuminated switch	Overvoltage protection with net filter	Miniature circuit breaker 2xC10	Number of plug-sockets with earth-pin 2P+Z	Number of computer sockets	
19" power strips	LZ-30/9	440	44	44					9		WZ-LZ30-09-00-000
	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.

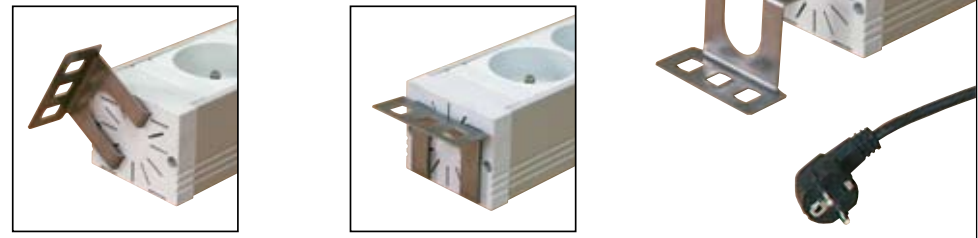
Type of sockets								
Standard sockets			Sockets available on special request					
2P+Z 230 V; 10/16 A	Computer 230 V; 10 A	Schuko 230 V; 10/16 A	Switzerland 230 V; 10 A	USA 125 V; 10 A	Denmark 230 V; 10 A	England 230 V; 13 A	Italy 230 V; 10/16 A	Australia 240 V; 10 A

POWER STRIPS

19" power strips



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; accuracy: +/-2%, +/-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	90x432x44 mm
Weight	3 kg

VOLTAGE DISTRIBUTION PANEL

Universal 19" enclosure for modular devices.
 In the standard version equipped with DIN rail and housing with 402.5x45.5 mm opening.

Dimensions:

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

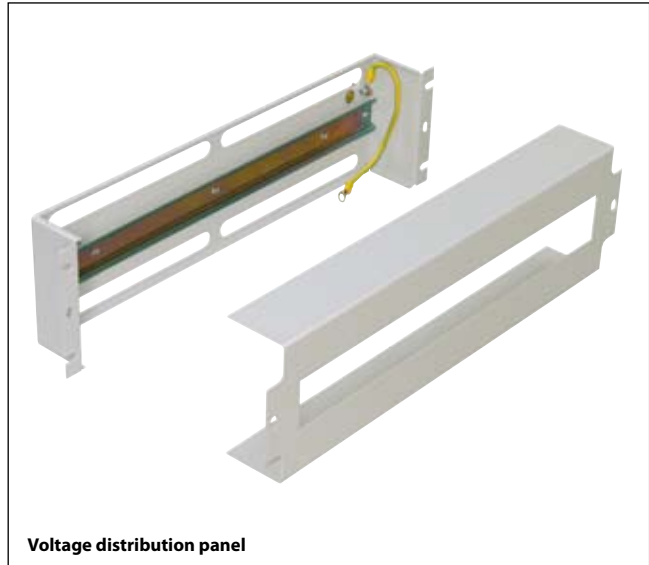
Capacity of panel - maximum number of built-in S-type modules (width of module 17.5 mm): 18 pcs.

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



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 [m ³ /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 98

**) Microprocessor panels for fan control - see pages 100-101

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 380x380 mm openings which are located in the top plates of SZB, SZB PC and SZB SE cabinets.

The PD-2W fan unit can be assembled to the 380x210 mm opening in the top plate of the SZB SE 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.



PWD-4W



PWD-2W



PD-2W

Technical data:

Parameter	Type of fan unit		
	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 [m ³ /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.

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	380x380	●	●	WN-0200-02-00-011	WN-0200-02-00-161
PWD-2W	2	380x380	●		WN-0200-01-00-011	WN-0200-01-00-161
PD-2W	2	380x210	●		WN-0200-03-00-011	WN-0200-03-00-161

Package: 1 pc.

*) Thermostat - see page 98

**) Microprocessor panels for fan control - see pages 100-101

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:
6A (1) 250V AC.
- Radio frequency interference:
N (according to VDE 0875).

Scope of delivery:

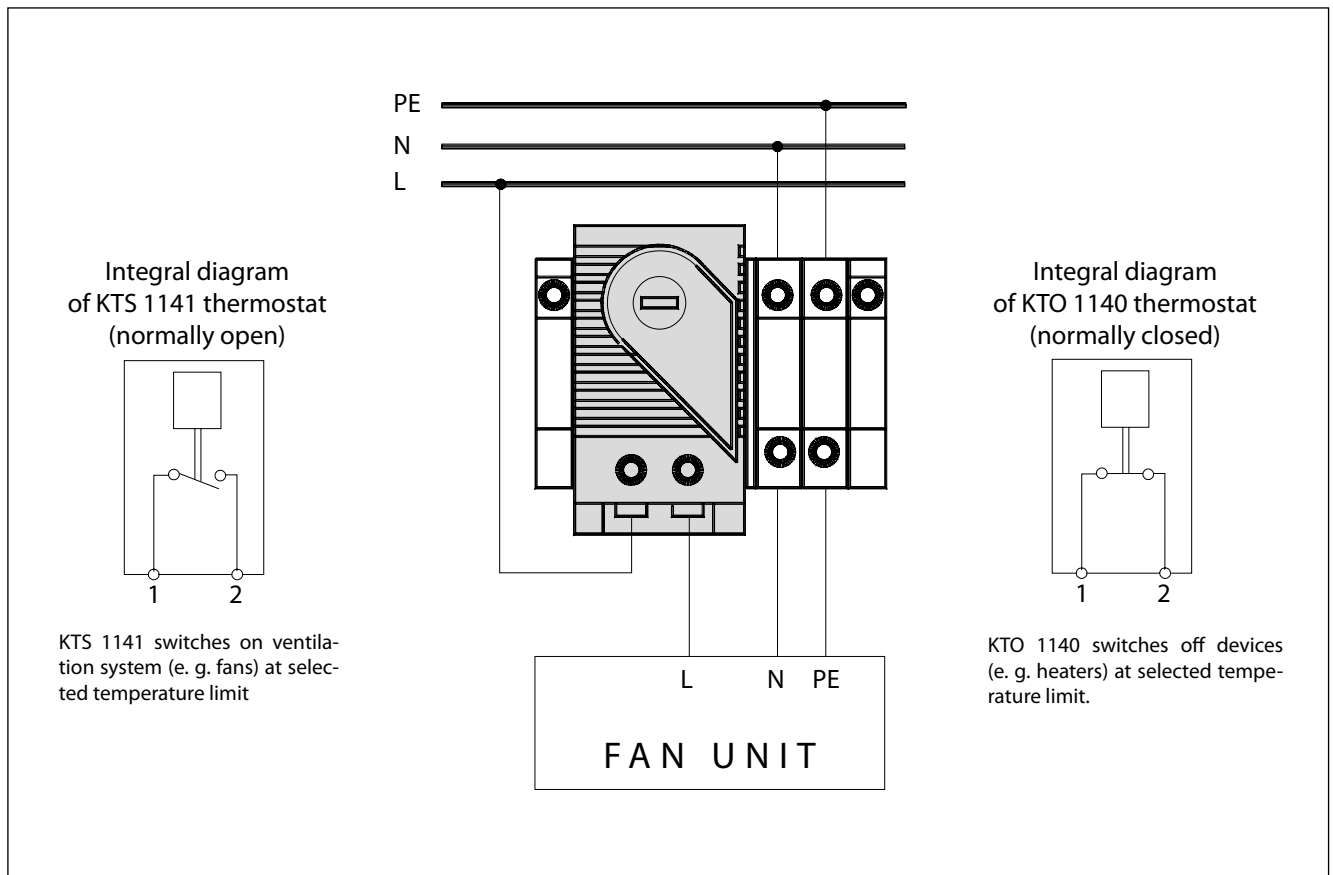
- KTS 1141 or KTO 1140 thermostat,
- DIN rail,
- two holders,
- two screw clamps.



KTS 1140 - thermostat normally open

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

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 $\cos \phi = 0.8$: 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:

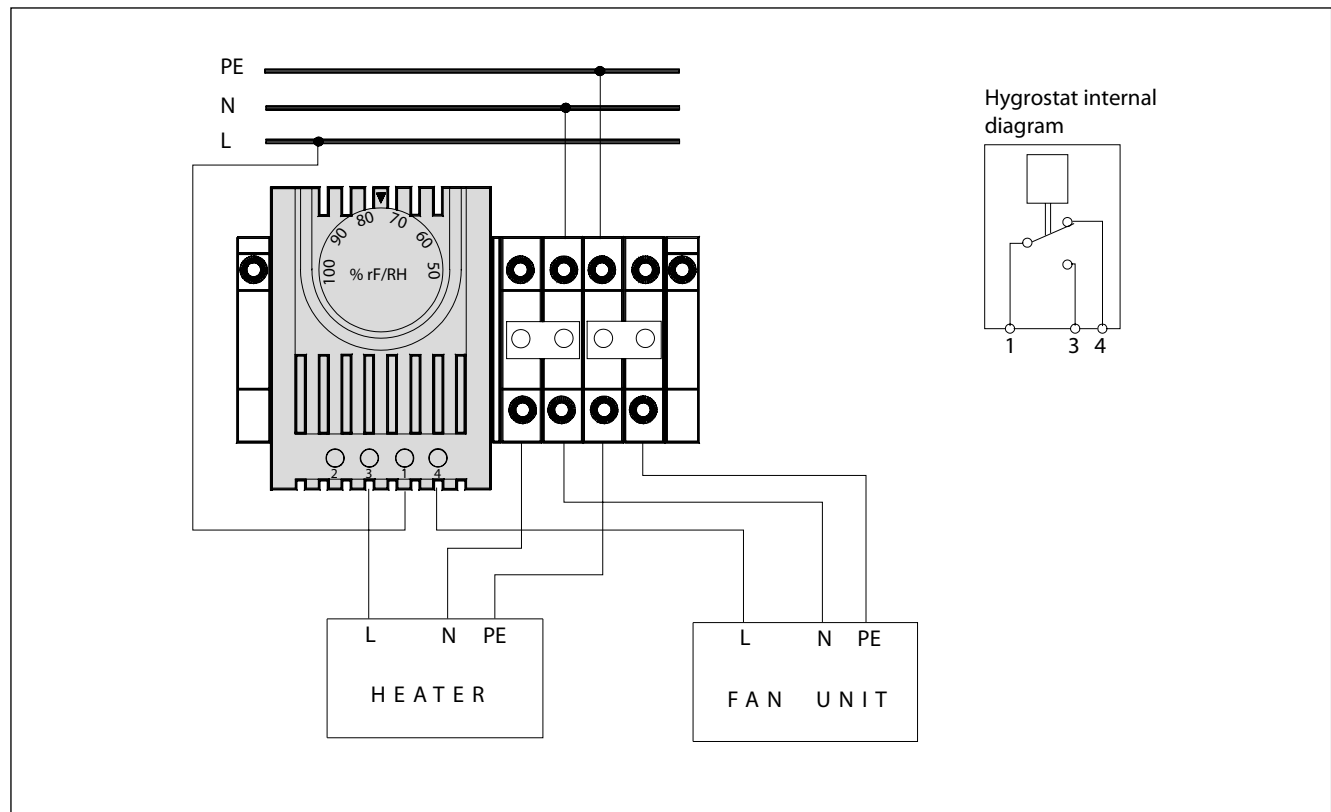
- hygrostat MFR 012i,
- DIN rail,
- two holders,
- two screw clamps.



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 conduct, fixing accessories.

Product name	Package	Colour	Catalogue number
MPSK G0 microprocessor panel for fan control with temperature sensor	1 set	RAL 7035	WN-0201-04-00-011
		RAL 9005	WN-0201-04-00-161

Software for communication with the MPSK G0 panel via a serial port can be downloaded from our web site at www.zpas.pl

Technical data:

Temperature measurement:

- measurement range from +5°C to +80°C
- indication resolution $\pm 1^\circ\text{C}$
- measuring accuracy $\pm 1^\circ\text{C}$

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

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:

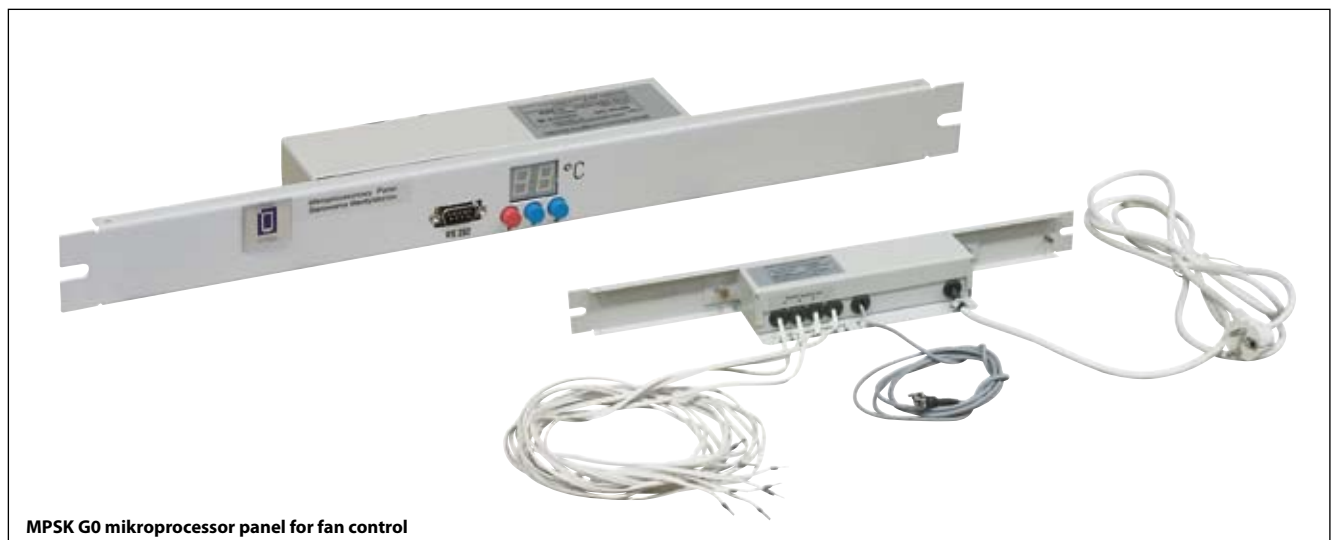
Miniature, fixed to metal structure by means of latch, flexible conductor length - 2 m

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 G0 mikroprocessor panel for fan control

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.

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.



MPSK G1 panel with connected integrated temperature and humidity sensor

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"x1 Ux150 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
		RAL 9005	WN-0201-05-00-161
Temperature sensor with 2 m wire	1 pc.	-	WN-0201-06-00-000
Integrated temperature and humidity sensor with 2 m wire	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

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 fire-extinguishing 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 (2x12 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

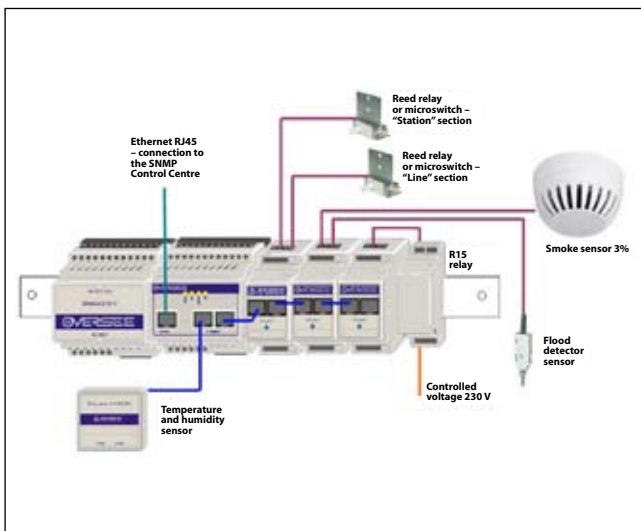
ZPAS CONTROL OVERSEE

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

Thanks to the development brought about by the expansion of telecommunications, electronics and measurement technology, it is now possible to create and use advanced solutions for managing data related to the monitoring of technical and environmental parameters of different facilities. Internet offers an opportunity to launch cheaper and simpler systems of data acquisition and safe data delivery. 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:

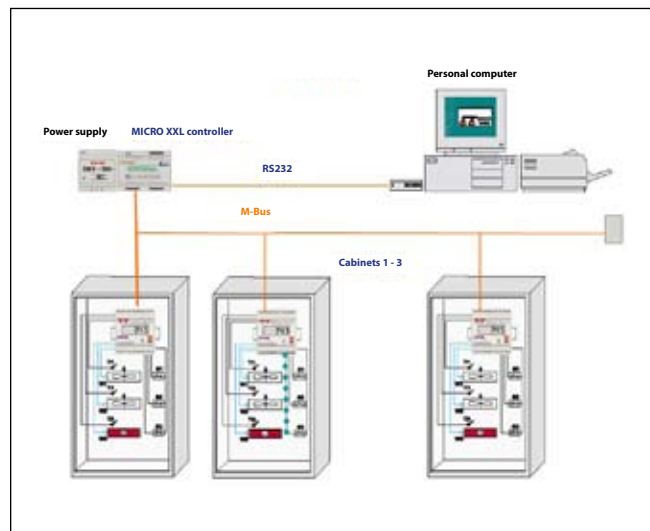
Oversee 1-Wire

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.

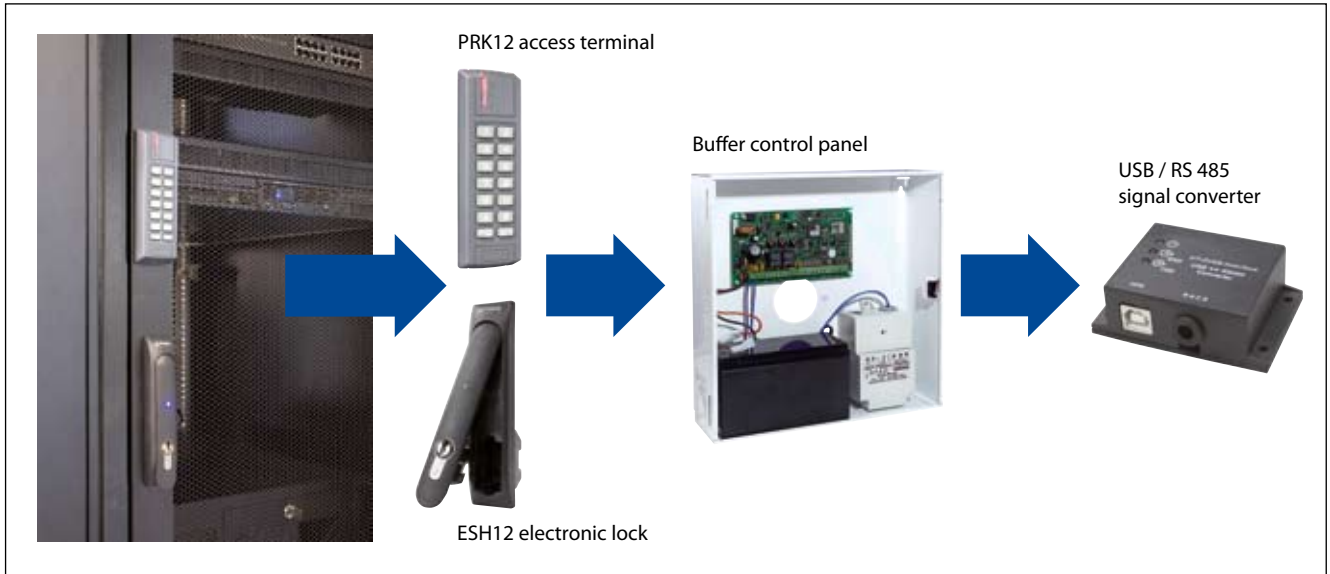


The above systems can be integrated into a single ZPAS Control Oversee platform. The solution is targeted at computer system administrators, offering them a possibility of viewing conditions in different facilities. Simple in operation and easy in implementation, the system is a perfect solution for 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 and in a separate catalogue.

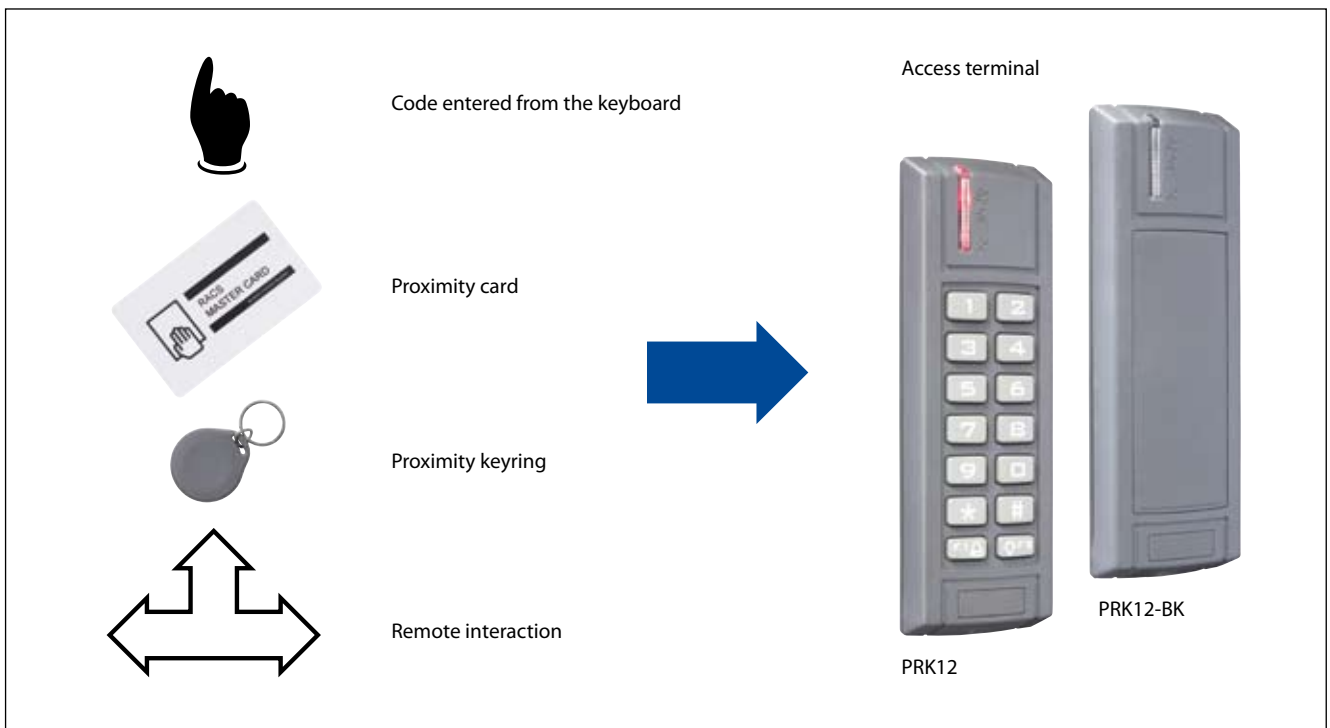
ACCESS CONTROL TO DATA COMMUNICATION CABINETS

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.



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).

ACCESS 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

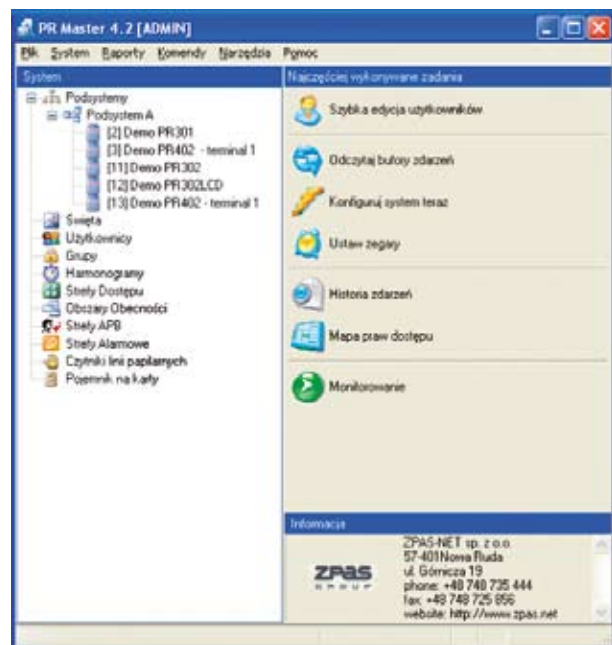
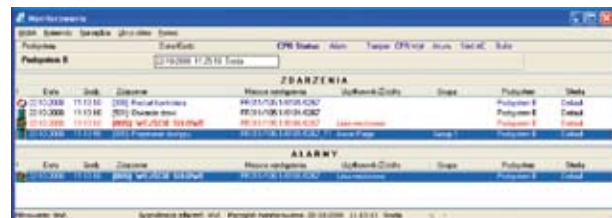
If the access control system is to enable recording events without an ongoing connection to the operator's computer, it must be provided with a buffer control panel. The panel records events and concentrates signals transmitted by 32 terminals. The buffer control panel also functions as a power supply 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.



KVM SWITCHES

KVM switches are a perfect solution for network administrators who manage multiple servers (platforms). In combination with the LCD console (see pages 110-111), the equipment makes it possible to control 8, 16 or 32 platforms, creating a user-friendly and reliable working environment. The consoles are equipped with 15", 17" or 19" LCD displays with an TFT Active Matrix, ultraslim

Switch	 MER 8D	 MER 16D	 VEN 8D
Catalogue number	T-SO-970-201	T-SO-970-202	T-SO-970-203
Usage	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
PC ports	8x HDB15(F)	16x HDB15(F)	8x HDB15(F)
Max. distance (KVM switch - Host)	5 m (depending on terminal type)	5 m (depending on terminal type)	5 m (depending on terminal type)
Types of supported PC ports (keyboard/mouse)	PS/2	PS/2	PS/2 or USB
Console ports	-	-	1 (one local) 1 IP-based remote console
Available modules of the remote console			Cat. 5 or IP
Daisy Chain Port	1x HDB15(F)	1x HDB15(F)	1x HDB15(F)
Max. PC connections	64	128	64
Max. switch connections	8 (serial)	8 (serial)	8 (serial)
Choice of the active PC port	keyboard shortcut / OSD	keyboard shortcut / OSD	keyboard shortcut / OSD
Display menu OSD	Yes	Yes	Yes
Interval of automatic scanning ports	from 5 to 99 sec.	from 5 to 99 sec.	from 5 to 99 sec.
Max. resolution (Local console)	1920x1440	1920x1440	1920x1440
Max. resolution (Remote console)	-	-	1600x1200 for cat. 5 module 150 m, 1024x768 for cat. 5 module 300 m, 1600x1200 for IP module
Cover	metal	metal	metal
Power supply	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
Dimensions	420x170x41.4 mm	420x170x41.4 mm	420x170x41.4 mm

KVM SWITCHES



keyboard and touchpad, making a user-friendly and reliable working environment. All these functionalities have been integrated within a robust structure which occupies only 1 U of space in the 19" cabinet. More than 14 modules of KVM switches with varying functionalities can be easily integrated.

			
VEN 16D	MAR 8D	MAR 16D	MAR 32D
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
5m (depending on terminal type)	150 m with the DCC-001	150 m with the DCC-001	150 m with the DCC-001
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 widening port for the module of remote console	1 widening port for the module of remote console	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)
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.
1920x1440	1600x1200	1600x1200	1600x1200
1600x1200 for cat. 5 module 150 m, 1024x768 for cat. 5 module 300 m, 1600x1200 for IP module	1600x1200 for cat. 5 module 150 m, 1024x768 for cat. 5 module 300 m, 1600x1200 for IP module	1600x1200 for cat. 5 module 150 m, 1024x768 for cat. 5 module 300 m, 1600x1200 for IP module	1600x1200 for cat. 5 module 150m, 1024x768 for cat. 5 module 300 m, 1600x1200 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, ~230V AC 50 Hz	DC power adapter 12 V DC 1 A, ~230V AC 50 Hz	DC power adapter 12 V DC 1 A, ~230 V AC 50 Hz
420x170x41.4 mm	420x170x41.4 mm	420x170x41.4 mm	420x170x41.4 mm

KVM SWITCHES


Switch	KSC-108A	KSC-108B	KSC-108E	KCC-108A
Catalogue number	T-SO-970-600	T-SO-970-602	T-SO-970-604	T-SO-970-606
Usage	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
PC ports	8x HDB15(F)	8x HDB15(F)	8x HDB15(F)	8x 8p8c(F) RJ-45
Max. distance (KVM switch - Host)	5 m (depending on terminal type)	5 m (depending on terminal type)	5 m (depending on terminal type)	150 m with Oxca DCC-001
Types of supported PC ports (keyboard/mouse)	PS/2 or USB	PS/2 or USB	PS/2 or USB	PS/2 or USB
Console ports	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
Available modules of the remote console	-	Cat. 5 or IP	Cat. 5 or IP	Cat. 5 or IP
Daisy Chain Port	1x HDB15(F)	1x HDB15(F)	1x HDB15(F)	1x HDB15(F)
Max. PC connections	64	64	64	64
Max. switch connections	8 (serial)	8 (serial)	8 (serial)	8 (serial)
Choice of the active PC port	keyboard shortcut / OSD / button	keyboard shortcut / OSD / button	keyboard shortcut / OSD / button	keyboard shortcut / OSD / button
Display of the switch number	7-sectional LED	7-sectional LED	7-sectional LED	7-sectional LED
Numbers of LED diodes of the state	16 (2 for each PC port)	16 (2 for each PC port)	16 (2 for each PC port)	16 (2 for each PC port)
Display menu OSD	Yes	Yes	Yes	Yes
Interval of automatic scanning ports	from 5 to 99 sec.	from 5 to 99 sec.	from 5 to 99 sec.	from 5 to 99 sec.
Max. resolution (local console)	1920x1440	1920x1440	1920x1440	1600x1200
Max. resolution (remote console)	-	1600x1200 for cat. 5 module 150 m, 1024x768 for cat. 5 module 300 m, 1600x1200 for IP module	1600x1200 for cat. 5 module 150 m, 1024x768 for cat. 5 module 300 m, 1600x1200 for IP module	1600x1200 for cat. 5 module 150 m, 1024x768 for module cat. 5 300 m, 1600x1200 for IP module
Cover	19", metal	19", metal	19", metal	19", metal
Power supply	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
Dimensions	470x190x44 mm	470x190x44 mm	470x190x44 mm	470x190x 44 mm

KVM SWITCHES

				
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	32 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
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.
1920x1440	1920x1440	1600x1200	1920x1440	1600x1200
-	1600x1200 for cat. 5 module 150 m, 1024x768 for cat. 5 module 300 m, 1600x1200 for IP module	1600x1200 for cat. 5 module 150 m, 1024x768 for cat. 5 module 300 m, 1600x1200 for IP module	1600x1200 for cat. 5 module 150 m, 1024x768 for cat. 5 module 300 m, 1600x1200 for IP module	1600x1200 for cat. 5 module 150 m, 1024x768 for cat. 5 module 300 m, 1600x1200 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
470x190x44 mm	470x190x44 mm	470x190x44 mm	470x190x44 mm	470x190x44 mm

KVM CONSOLES

CORN 15

CORN 17

CORN 19

Console	CORN 15	CORN 17	CORN 19
Catalogue number	T-SO-970-101	T-SO-970-102	T-SO-970-103
Usage	1 PC to 1 console	1 PC to 1 console	1 PC to 1 console
Active Matrix TFT LCD	Active TFT LCD, 15"	Active TFT LCD, 17"	Active TFT LCD, 19"
Resolution capabilities	1024x768	1280x1024	1280x1024
Pixel pitch	0.297x0.297 mm	0.264x0.264 mm	0.298x0.294 mm
Viewing angle	130° right-left view 100° up-down view	70° right-left view 60° up-down view	140° right-left view 140° up-down view
Contrast ratio	400 ÷ 1	450 ÷ 1	500 ÷ 1
Brightness	250 cd/m ²	250 cd/m ²	250 cd/m ²
Back light	2 lamps	4 lamps	4 lamps
Supported colors	16.7 milion colors	16.7 milion colors	16.7 milion colors
Response time	5 ms (rising time) 11 ms (decay time)	2 ms (rising time) 14 ms (decay time)	2 ms (rising time) 10 ms (decay time)
Slots number	1	1	1
Ports number PC	1	1	1
Synchronization	45 ÷ 80 kHz	45 ÷ 80 kHz	45 ÷ 80 kHz
Keyboard	106 buttons, PS/2 touchpad	106 buttons, PS/2 touchpad	106 buttons, PS/2 touchpad
Power consumption	16 W		
Power supply	~230 V AC	~230 V AC	~230 V AC
Temperature	0°C ÷ 50°C	0°C ÷ 50°C	0°C ÷ 50°C
Humidity	10% ÷ 90%, non-condensing	10% ÷ 90%, non-condensing	10% ÷ 90%, non-condensing
Certification	CE, FCC, UL, CUL, C-Tick, GOST	CE, FCC, UL, CUL, C-Tick, GOST	CE, FCC, UL, CUL, C-Tick, GOST

KVM CONSOLES

			
CORN 20	GEM 15	GEM 17	GEM 19
T-SO-970-104	T-SO-970-001	T-SO-970-002	T-SO-970-003
1 PC to 1 console	1 PC to 1 console	1 PC to 1 console	1 PC to 1 console
Active TFT LCD, 20.1"	Active TFT LCD, 15"	Active TFT LCD, 17"	Active TFT LCD, 19"
1600x1200	1024x768	1280x1024	1280x1024
0.255x0.255 mm	0.297x0.297 mm	0.264x0.264 mm	0.298x0.294 mm
85° right-left view 85° up-down view	130° right-left view 100° up-down view	70° right-left view 60° up-down view	140° right-left view 140° up-down view
1000 ÷ 1	400 ÷ 1	450 ÷ 1	500 ÷ 1
300 cd/m ²	250 cd/m ²	250 cd/m ²	250 cd/m ²
6 lamps	2 lamps	4 lamps	4 lamps
16.7 milion colors	16.7 milion colors	16.7 milion colors	16.7 milion colors
15 ms (rising time) 7 ms (decay time)	5 ms (rising time) 11 ms (decay time)	2 ms (rising time) 14 ms (decay time)	2 ms (rising time) 10 ms (decay time)
1	1	1	1
1	1	1	1
45 ÷ 80 kHz	45 ÷ 80 kHz	45 ÷ 80 kHz	45 ÷ 80 kHz
106 buttons, PS/2, touchpad	106 buttons, PS/2, touchpad	106 buttons, PS/2, touchpad	106 buttons, PS/2, touchpad
~230 V AC	~230 V AC	~230 V AC	~230 V AC
0°C ÷ 50°C	0°C ÷ 50°C	0°C ÷ 50°C	0°C ÷ 50°C
10% ÷ 90%, non-condensing	10% ÷ 90%, non-condensing	10% ÷ 90%, non-condensing	10% ÷ 90%, non-condensing
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

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: 437.4x436.6x44 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

SUPPLEMENTARY ACCESSORIES FOR KVM SWITCHES AND CONSOLES

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)

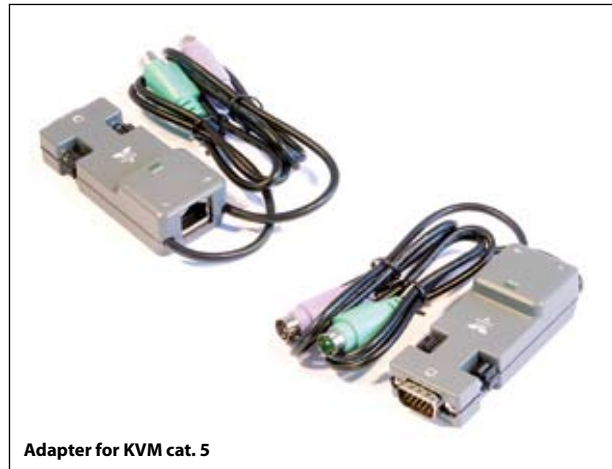
KVM port: 1x 8p8c(F) RJ-45

Numbers of LED diodes of the state: 1

Dimensions: 90x30x20 mm

Power supply:

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



Adapter for KVM cat. 5

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: 108x72x20 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: 1280x1024

Cover: desktop, metal

Dimensions: 160x70x25 mm

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



Console module KVM 1+1 with cat. 5 port

SUPPLEMENTARY ACCESSORIES FOR KVM SWITCHES AND CONSOLES

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: 108x72x20 mm

Software update: Yes



Console module KVM 1+1 with IP port

UPS BATTERY BACKUPS

Cover Partner RM

Technology:	True On-Line , Double Conversion, VFI-SS-111 (according to PN-EN 62040-3)
Power range:	1-3 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	Capacity	Backup time	Specification	Dimensions	Weight	Catalogue number
Cover Partner RM10	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	440x434x88 mm (2U)	19 kg	T-S0-910-100
Cover Partner RM22	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	440x526x88 mm (2U)	24 kg	T-S0-910-200
Cover Partner RM30	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	440x503x132 mm (3U)	33 kg	T-S0-910-300

Accessories	Catalogue number
SNMP module - see page 117	T-S0-910-400
Environmental sensor (requires SNMP module) - see page 117	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:

445x563x130 mm (3U)
 (concerns all UPS and battery modules)



Model	Capacity	Backup time	Specification	Weight	Catalogue number
Cover Partner RT50	5.0 kVA	- 12 min 30 min 50 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-S0-910-500
Cover Partner RT70	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-S0-910-700
Cover Partner RT90	9.0 kVA	- 8 min 17 min 26 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-S0-910-900
Cover Partner RT110	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-S0-910-910

Accessories	Catalogue number
SNMP module - see page 117	T-S0-910-400
Environmental sensor (requires SNMP module) - see page 117	T-S0-910-401
Wireless signal panel RAM Partner RT	T-S0-910-408
Battery module RT 7.0 kVA, 7 Ah, weight 69.5 kg	T-S0-910-409
Battery module RT 11.0 kVA, 9 Ah, weight 69.5 kg	T-S0-910-410
External wireless bypass RT (wall-mounted)	T-S0-910-411
External wireless bypass RT Rack (19" rack mount)	T-S0-910-412
Fire switch (REPO)	T-S0-910-413
Rails for 19" rack mounting	T-S0-910-407

ACCESSORIES FOR UPS BATTERY BACKUPS

SNMP card

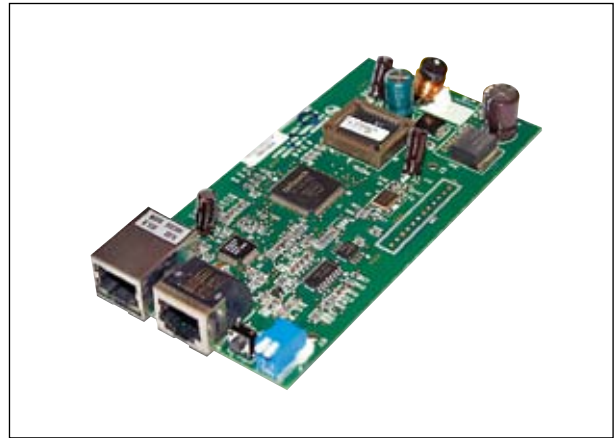
Catalogue number: T-SO-910-400

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

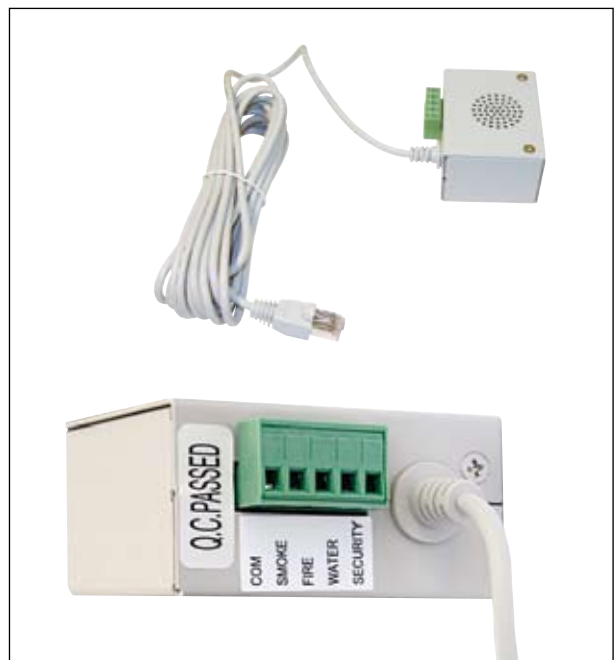
The sensor of environmental conditions makes it possible to monitor climatic conditions inside cabinets:

- 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 preset values are exceeded, an alarm is triggered.



AIR-CONDITIONING FOR SERVER CABINETS

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

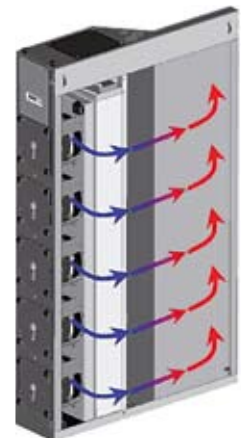
SideCooler – heat exchanger fixed to the right or left cabinet wall.

- 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.



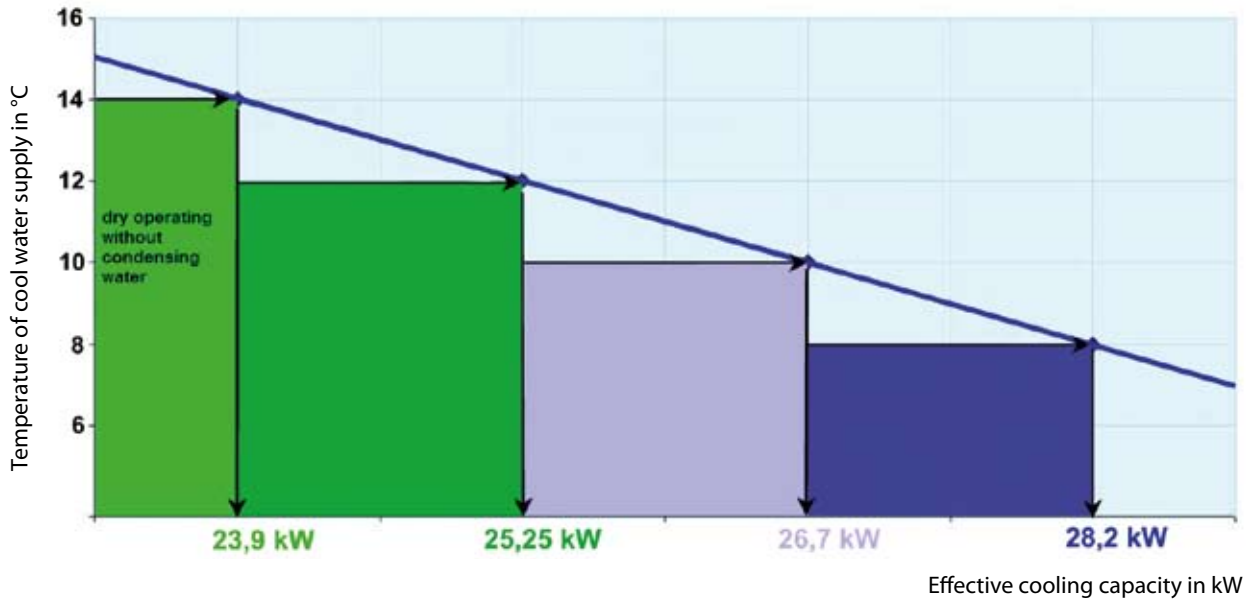
Available heat exchanger versions:

- 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).

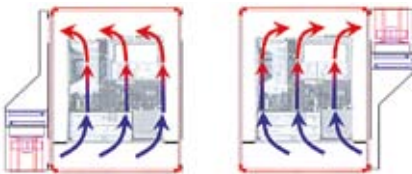


AIR-CONDITIONING FOR SERVER CABINETS

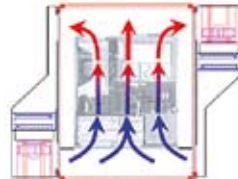
Sample effective cooling capacity in kW for SideCooler SC1200



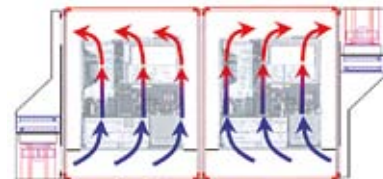
Heat exchanger location options



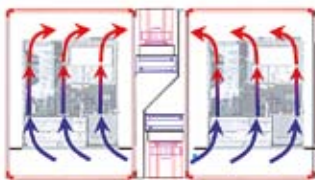
Installation on the left and right wall respectively



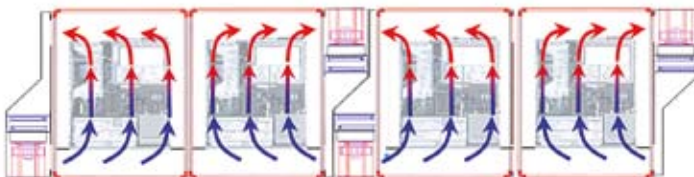
Redundant option



Partially redundant option



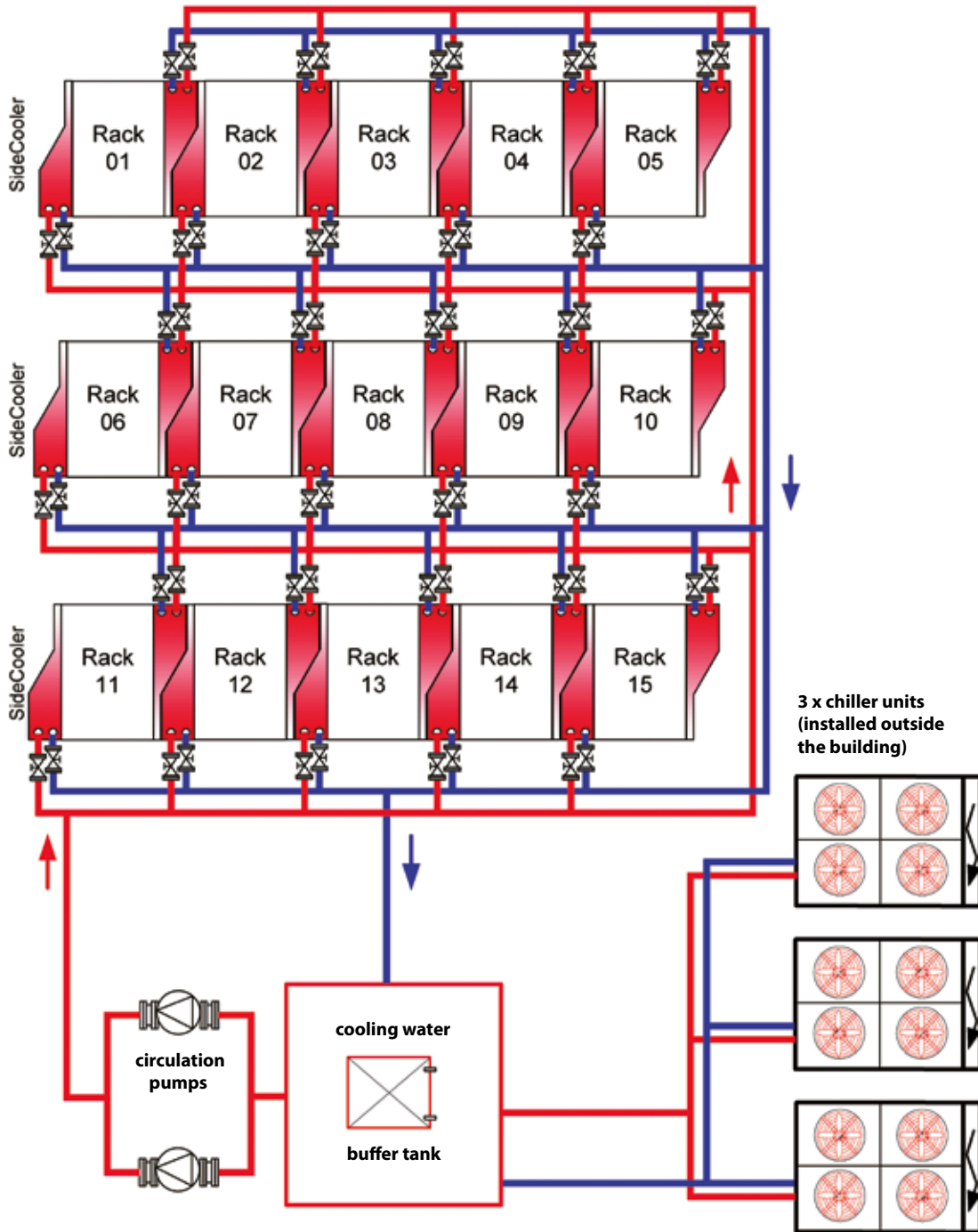
Space-saving location



Space-saving location with a partial redundancy

AIR-CONDITIONING FOR SERVER CABINETS

Sample server room air-conditioning system



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.

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 buying 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
Cabinets with double-wing door	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

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	Al-Zn coated
Mounting rails	1.5 and 2.0 mm	

Note:

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

Protection degree in accordance with PN-92/E-08106 / 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



Lock with swing handle and cylinder insert



Baying cabinets in rows by using mounting plate infill



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



Example of the rack assembled of mounting rails and shelves

- 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.

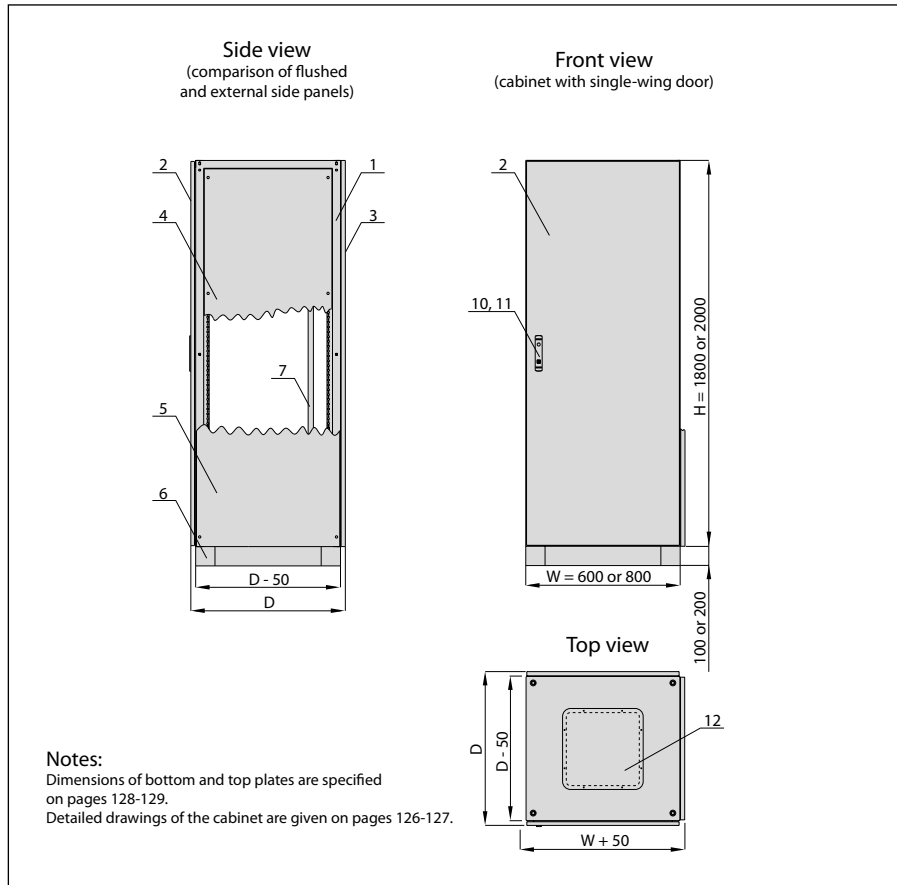
Baying cabinets in rows

- Possibility to bay cabinets in rows.
- Bayed cabinets can be additionally equipped with a partition.

DESIGN OF SZE2 CABINETS



SZE2 cabinet 1200 mm wide, without side panels, intended for baying in rows



Notes:
Dimensions of bottom and top plates are specified on pages 128-129.
Detailed drawings of the cabinet are given on pages 126-127.

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		800		1200	
		600	600	500	600	500	600
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.

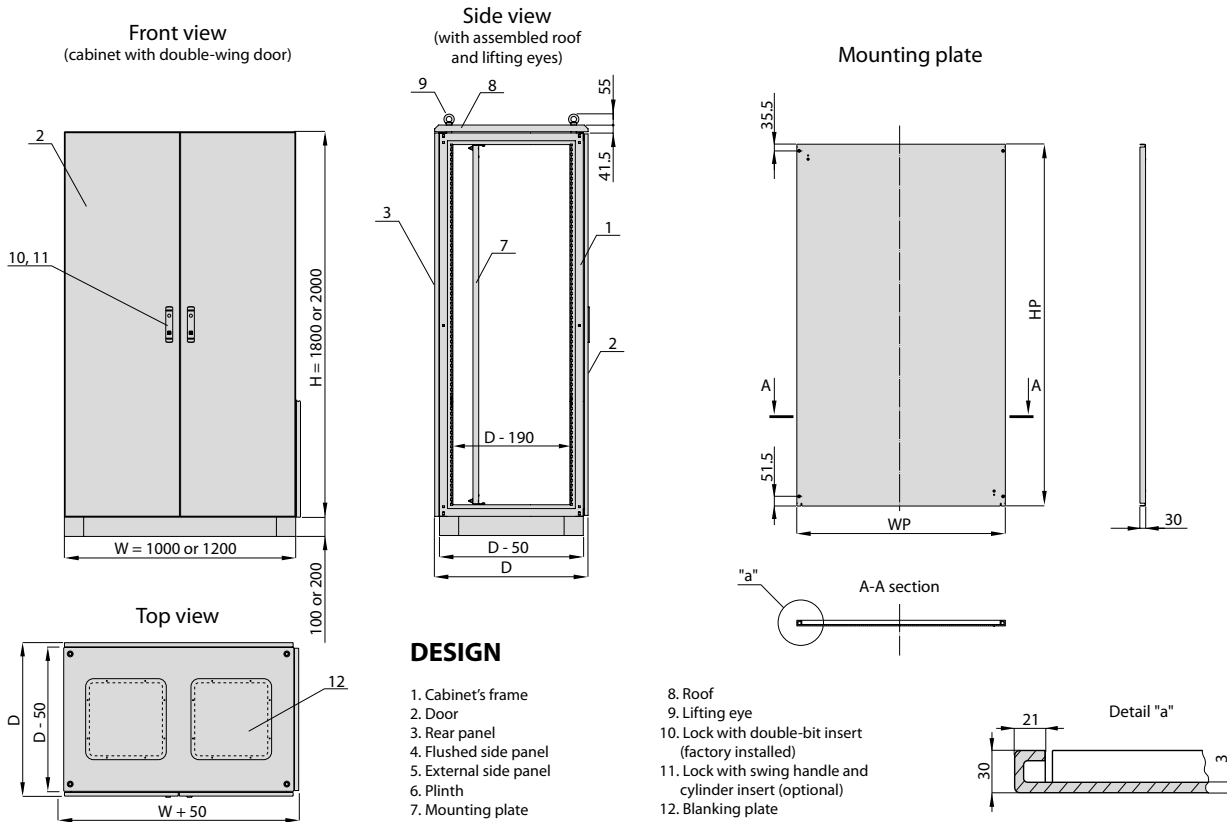
Note: side panels, plinth, roof, lifting eyes and other supplementary accessories should be ordered separately.

Material:
See page 122.

****) Detailed list of supplementary accessories:**
page 131-150.

	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	

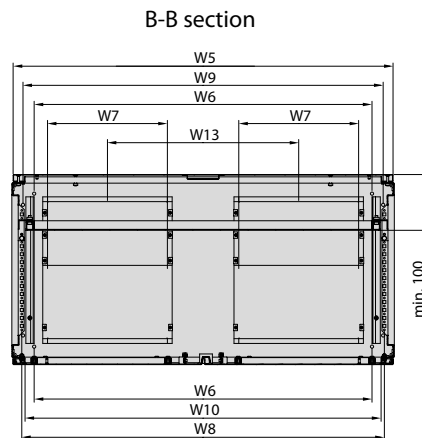
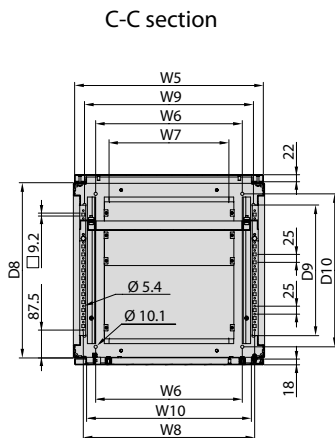
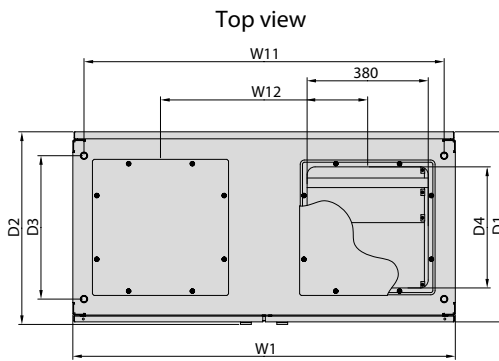
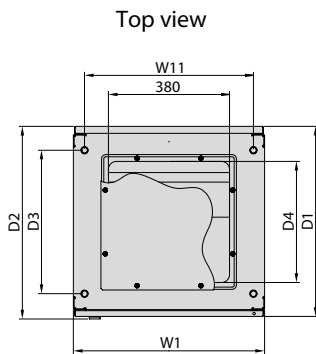
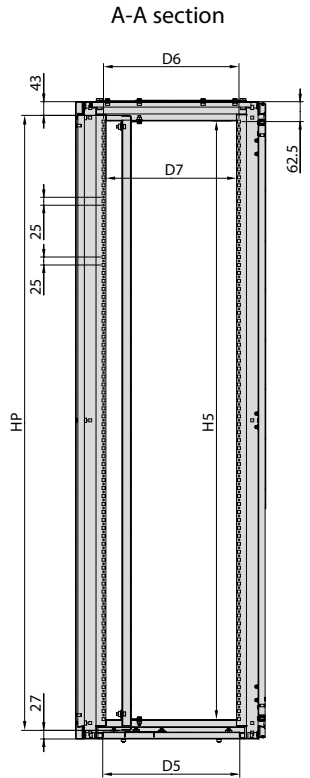
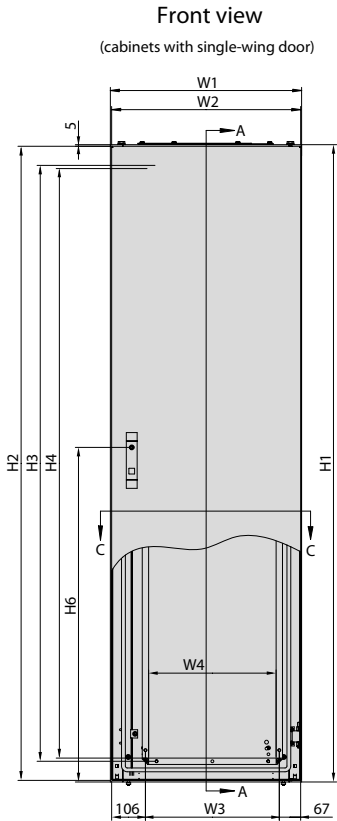
DESIGN OF SIZE2 CABINETS



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

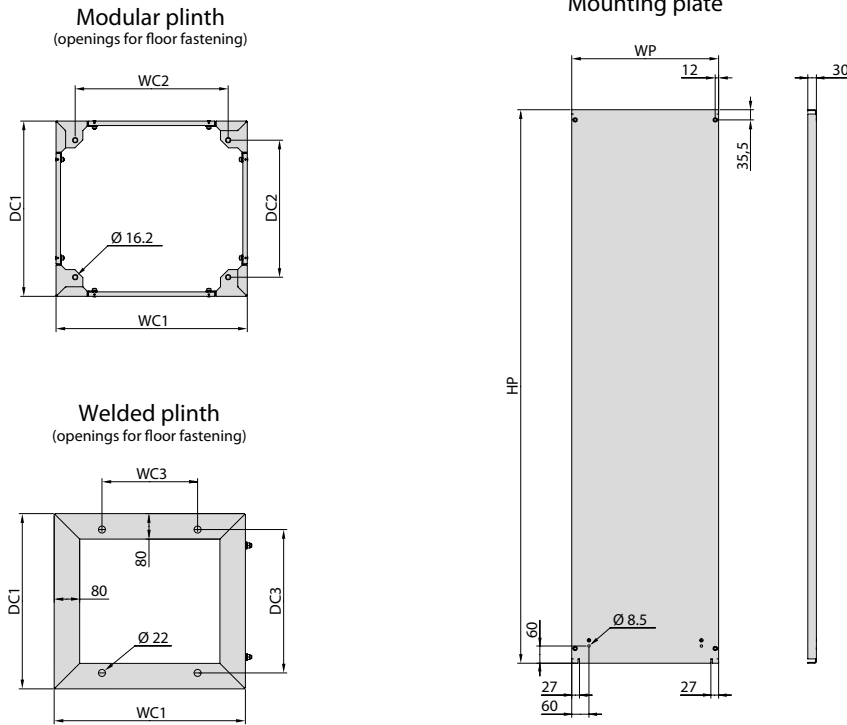
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WZ-1951-22-04-000	WZ-1951-22-04-000	WZ-1951-22-04-000	WZ-1951-22-04-000	WZ-1951-22-03-000	WZ-1951-22-03-000	WZ-1951-22-03-000	WZ-1951-22-03-000	WZ-1951-22-02-000	WZ-1951-22-02-000	WZ-1951-22-01-000	WZ-1951-22-01-000	WZ-1951-22-01-000
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DESIGN OF SZE2 CABINETS



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 SIZE2 CABINETS

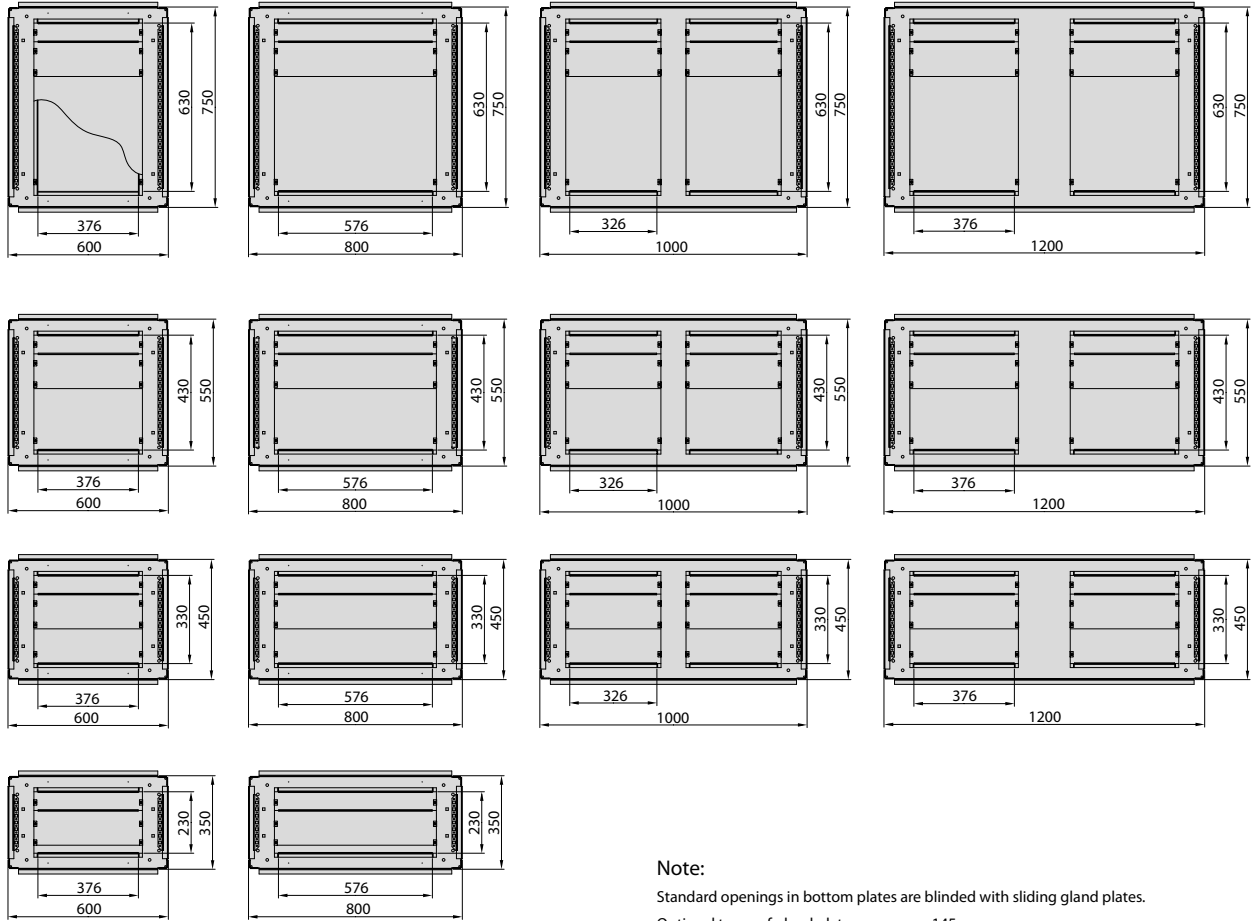


Note:
 After mounting of external side panels the cabinet expands by 25 mm on each side.
 An additional distance of 3 mm (gasket gauge) should be considered between bayed cabinets.

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 SIZE 2 CABINETS

BOTTOM PLATE TYPES



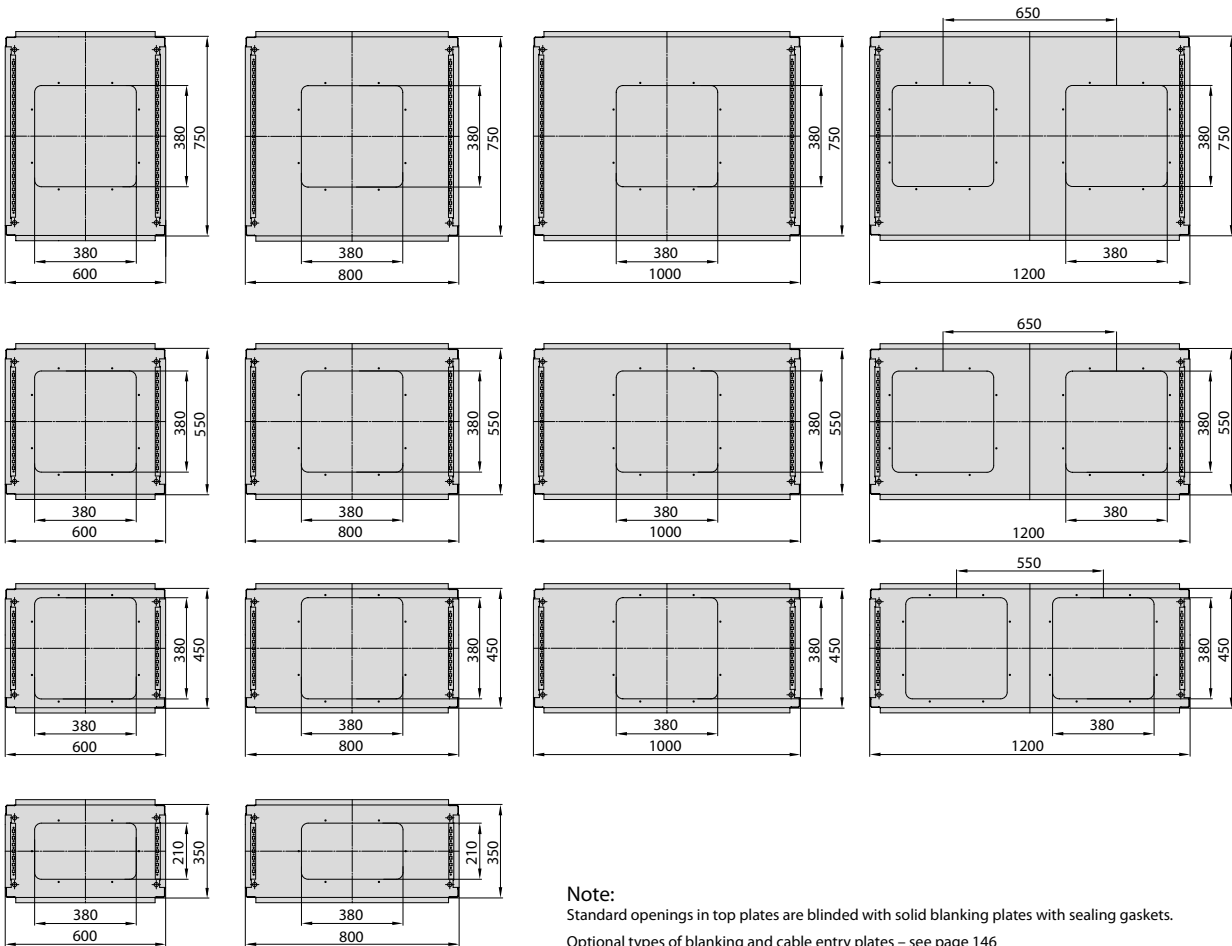
Note:

Standard openings in bottom plates are blinded with sliding gland plates.
Optional types of gland plates - see page 145.



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 146



Blanking and cable entry plates for the cabinet's top plate – see page 146

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.

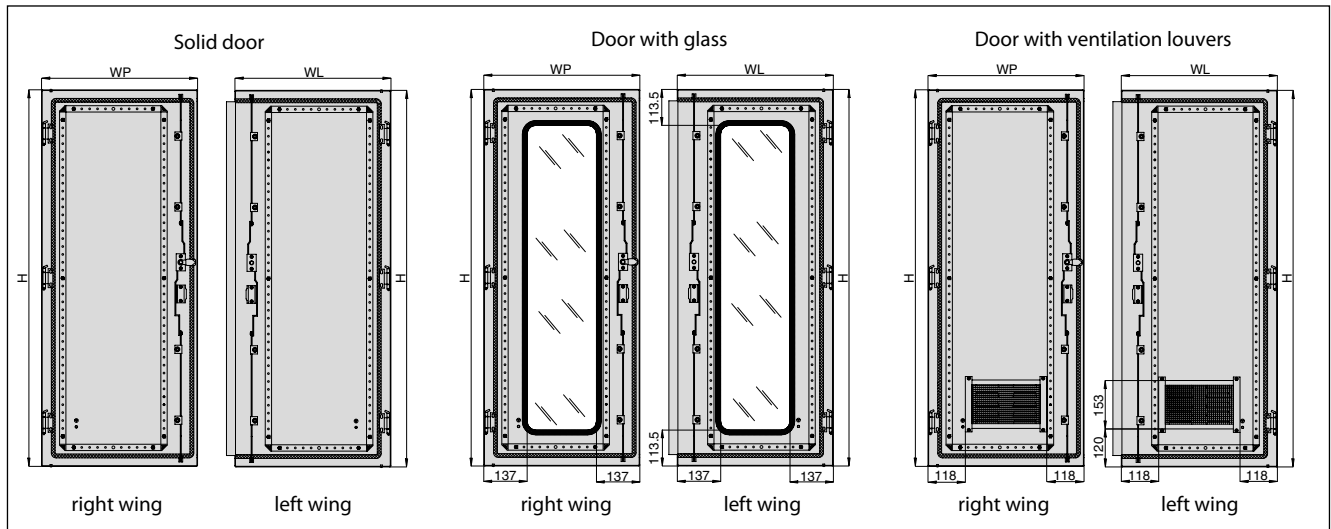
SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

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.



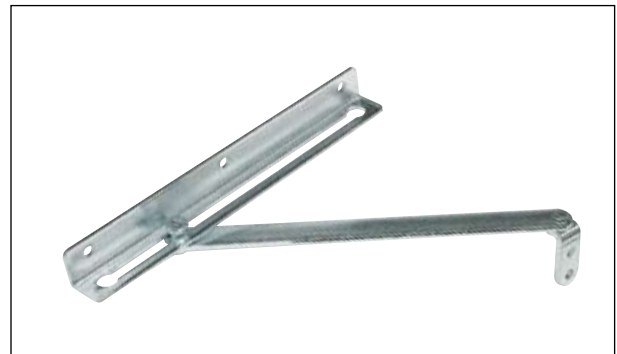
Door stop

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 149.

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 SZE2 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.

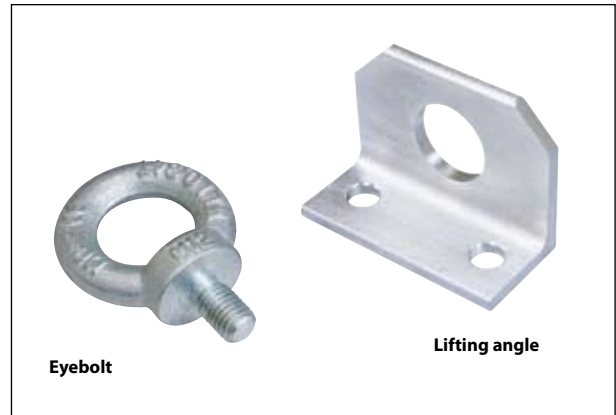
Offered in two options:

- 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)

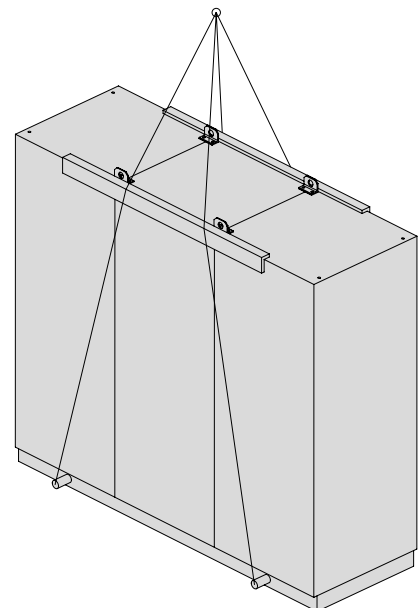
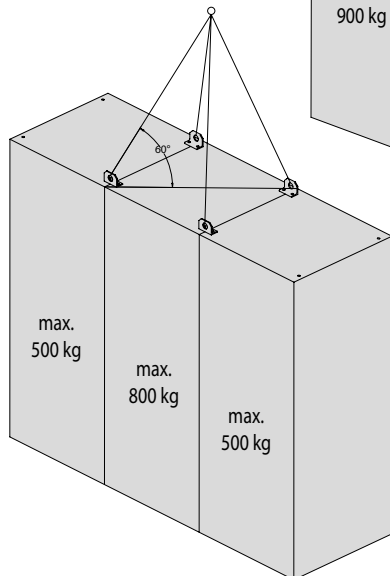
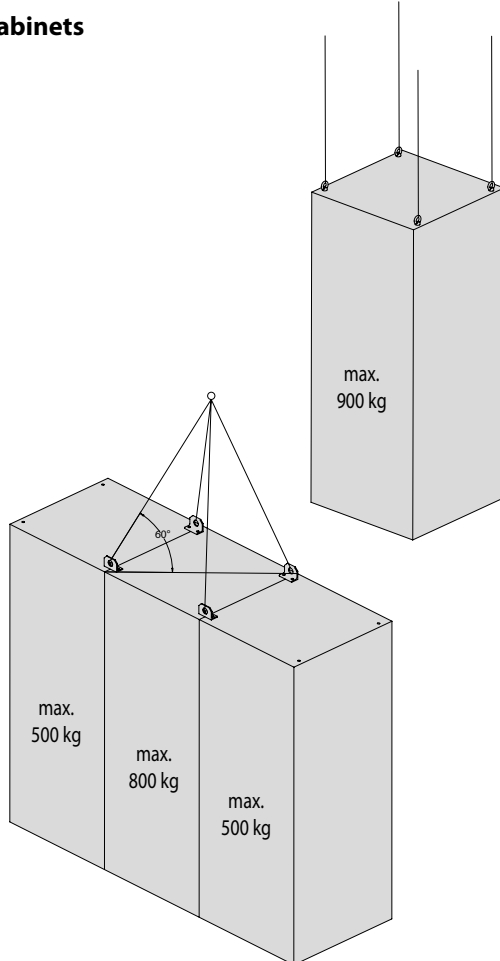
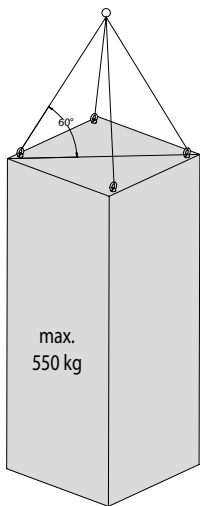
Scope of delivery:

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 SZE2 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 (co- vers) 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: 130°

Load capacity: 150 kg

Material:

Sheet steel and steel profiles powder painted in RAL 7035

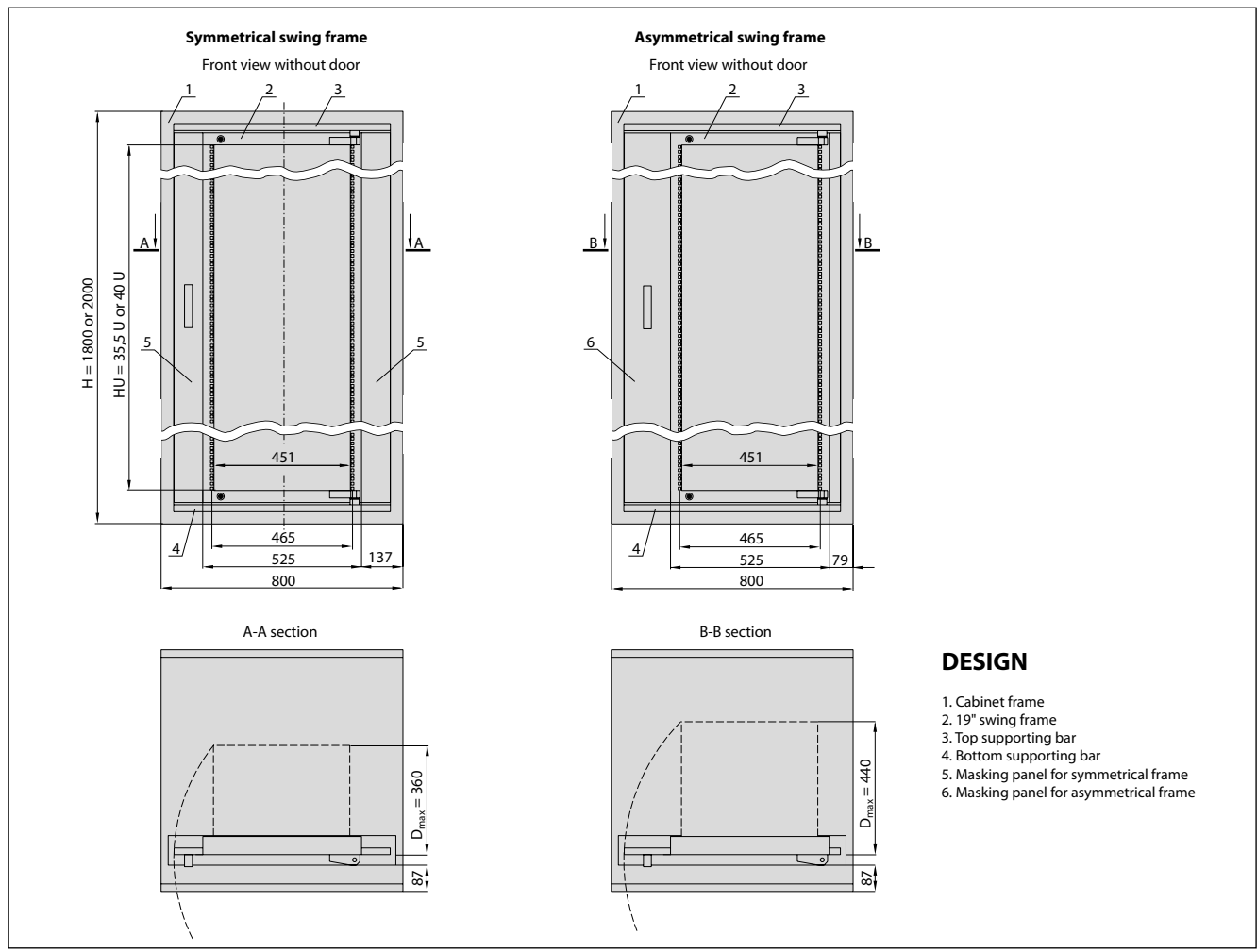
Scope of delivery:

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 _{max} [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.



SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

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:

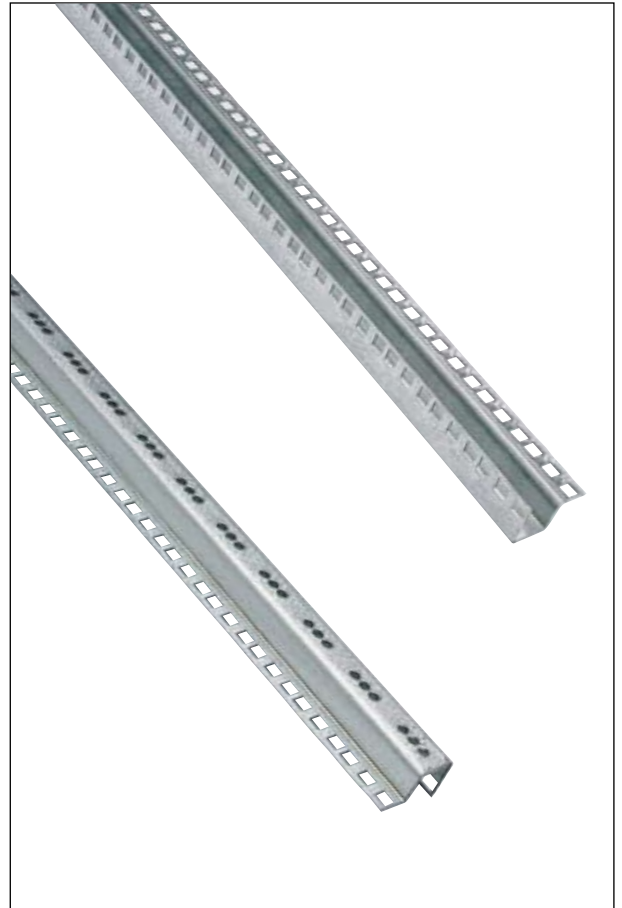
2 mm thick Al-Zn coated sheet steel

Scope of delivery:

Mounting profile without fixing accessories.

Length of mounting profile		Catalogue number
[mm]	[U = 44.45 mm]	
1867.6	42 U	WZ-SB00-01-02-000
1778.7	40 U	WZ-SB00-01-03-000
1734.25	39 U	WZ-SB00-01-13-000
1689.8	38 U	WZ-SB00-01-04-000
1600.9	36 U	WZ-SB00-01-05-000
1467.55	33 U	WZ-SB00-01-14-000
1423.1	32 U	WZ-SB00-01-06-000
1334.2	30 U	WZ-SB00-01-15-000
1245.3	28 U	WZ-SB00-01-07-000
1200.85	27U	WZ-SB00-01-16-000
1067.5	24 U	WZ-SB00-01-08-000
934.15	21U	WZ-SB00-01-17-000
800.8	18 U	WZ-SB00-01-09-000
667.45	15 U	WZ-SB00-01-10-000
534.1	12 U	WZ-SB00-01-11-000
445.2	10 U	WZ-SB00-01-12-000

Package: 1 pc.



Outrigger

For fixing mounting profile in SZE2 cabinet 800 mm wide.

Material:

2 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-SB24-00-00-000

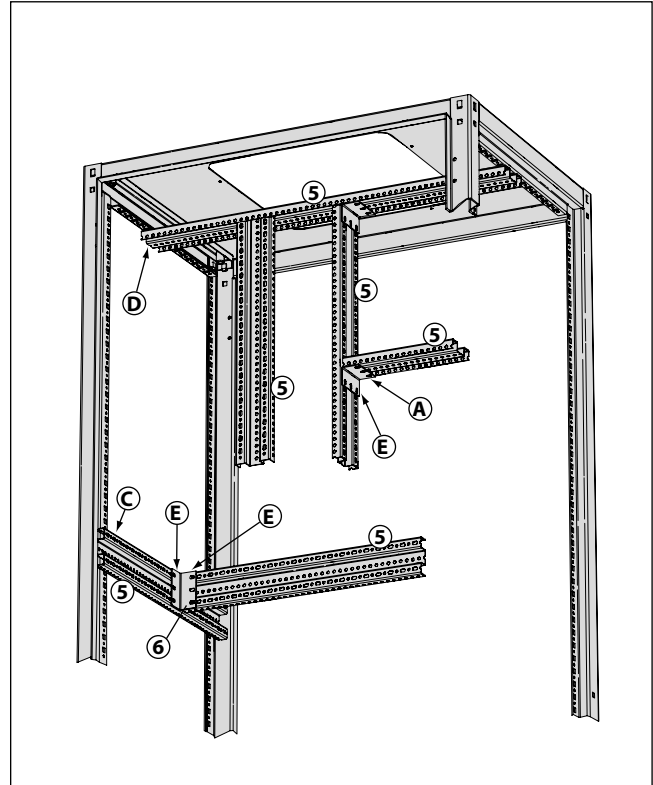
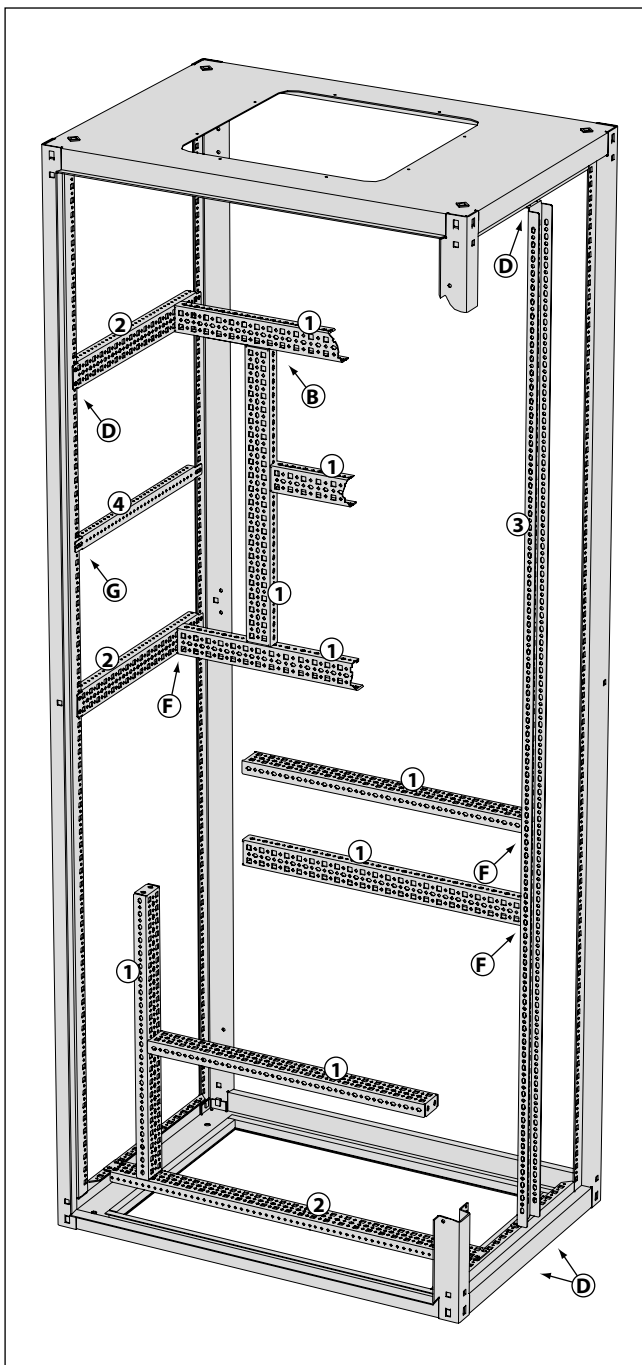


SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

Racking systems

CLASSIC system

1. Mounting bar CLASSIC (page 140)
2. Cross bar CLASSIC (page 140)
3. Vertical bar CLASSIC (page 140)
4. Transverse cable bar (page 142)



System UNI

5. Mounting bar UNI (page 141)
6. Angle-element for joining mounting bars UNI (page 141)

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 141.

SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

Mounting bar CLASSIC

Fixed to cross bars or vertical bar

Material:

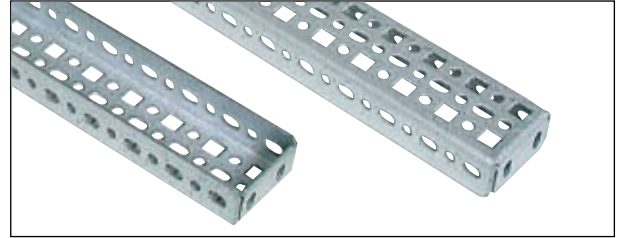
2 mm thick Al-Zn coated sheet steel

Scope of delivery:

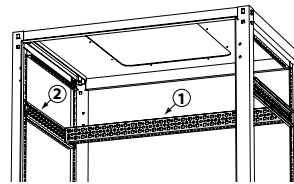
Mounting bar without fixing accessories (fixing accessories are listed on page 141).

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:

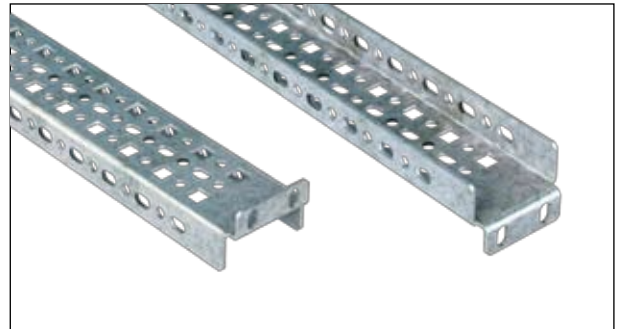
2 mm thick Al-Zn coated sheet steel

Scope of delivery:

Vertical bar without fixing accessories (fixing accessories are listed on page 141).

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 mm thick Al-Zn coated sheet steel

Scope of delivery:

Cross bar without fixing accessories (fixing accessories are listed on page 141).

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:

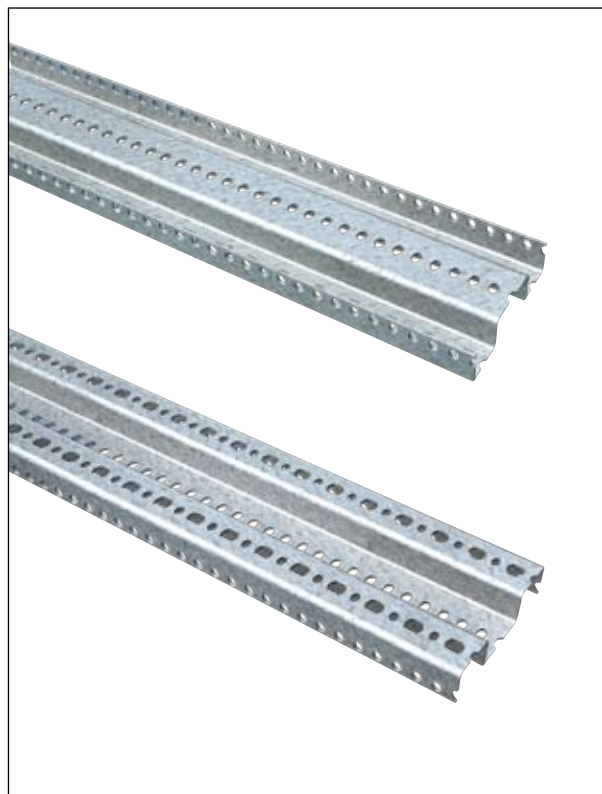
1.5 mm thick Al-Zn coated sheet steel

Scope of delivery:

Mounting bar without fixing accessories.

For cabinet			Length of mounting bar [mm]	Catalogue number
height ¹ [mm]	width ² [mm]	depth ³ [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 139):

- 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

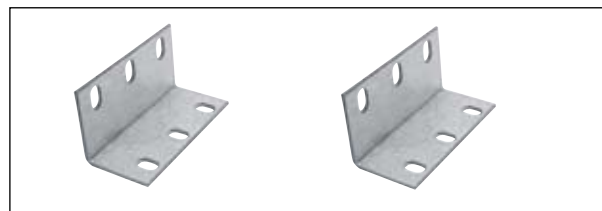
Material:

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

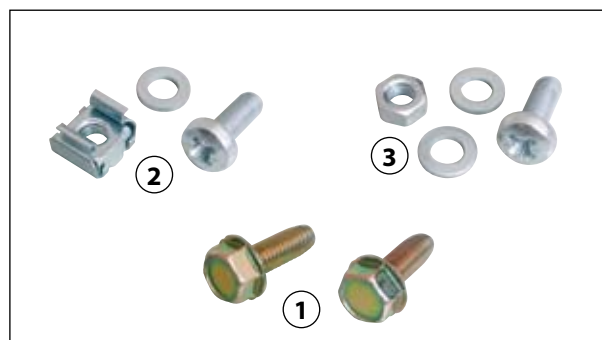


Fixing accessories for CLASSIC and UNI bars

Application in accordance with instructions on page 139.

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

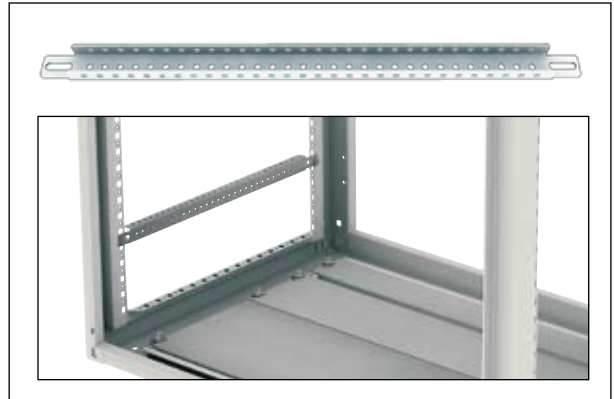
Used for cable bundle assemblies.
Fixed in the horizontal position to the side of the cabinet (to slots in the frame profiles - see drawing on page 139) or to the door frame.

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 141).

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.

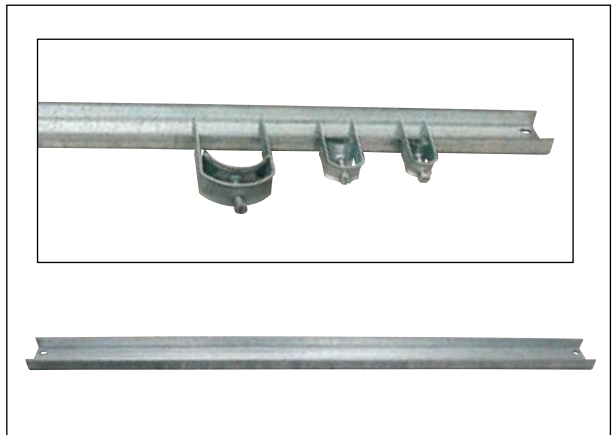
Material:
Cable bar - 2.0 mm thick Al-Zn coated sheet steel.
Cable clamps - zinc coated sheet steel.

Scope of delivery:
Cable bar sold without fixing accessories (fixing accessories are listed on page 141).
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

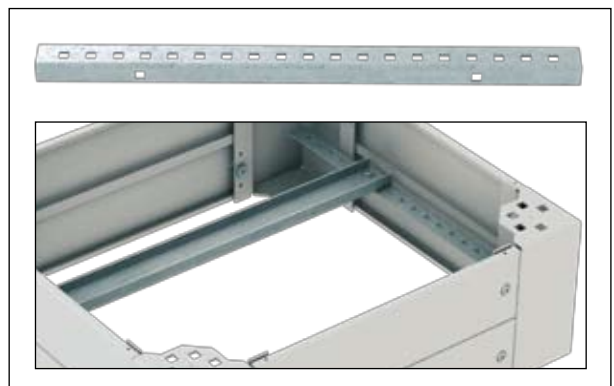
For mounting the cable bar on the 200 mm plinth. Fixed on the interior side of the plinth.

Material:
2 mm thick Al-Zn coated sheet steel.

Scope of delivery:
Support for cable bar without fixing accessories (fixing accessories are listed on page 141).

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 30x4 mm

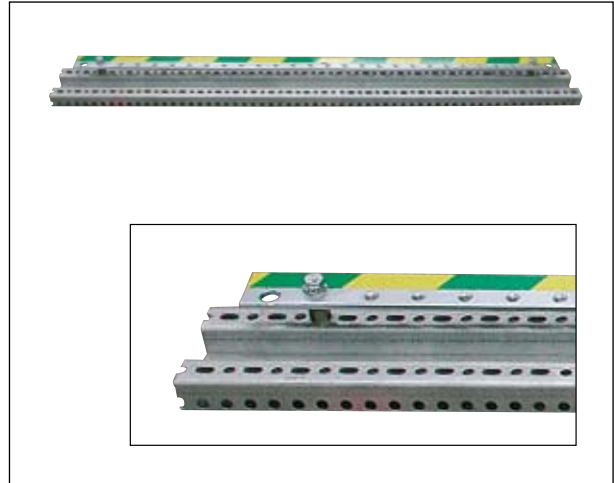
Mounting bar UNI: 1.5 mm thick Al-Zn coated sheet steel

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:

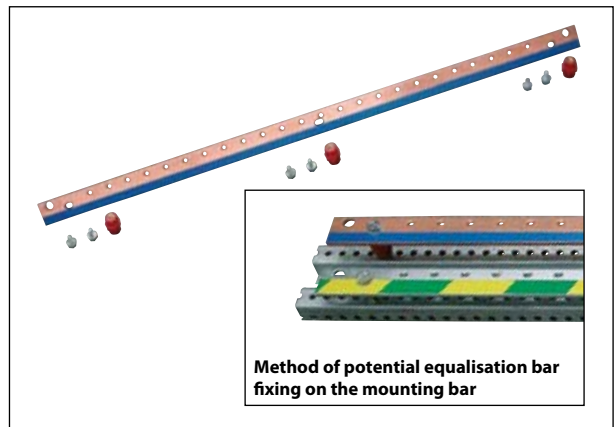
Copper bar 30x4 mm

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

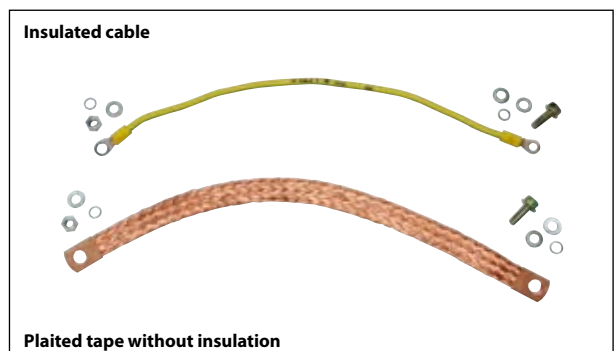
Scope of delivery:

Set: 8 insulated cables, full section 6 mm², 3 plaited tapes without insulation about 20 mm², fixing accessories.

Note:

Plaited tapes are intended for door and mounting plate earthing.

Package	Catalogue number
1 set	WZ-1951-33-00-000



SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

Kit of system lighting

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:

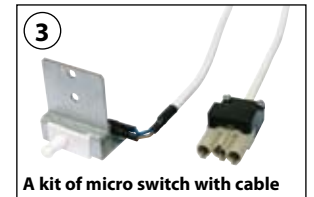
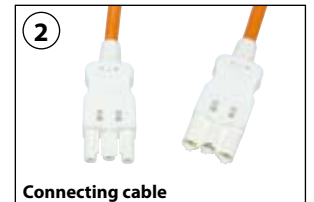
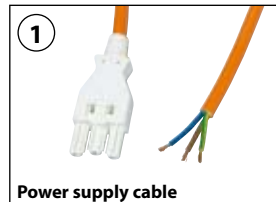
Electric light fitting – sheet steel powder painted in RAL 7035

Scope of delivery:

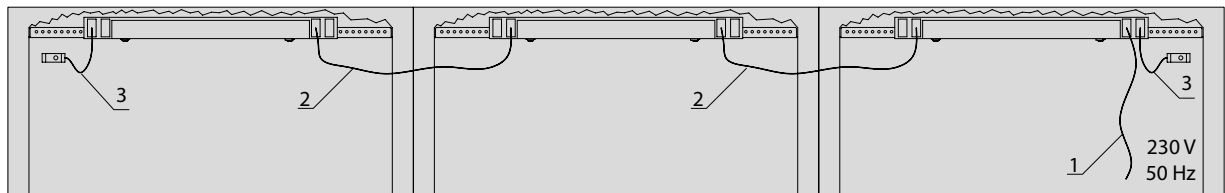
Kit contains: electric light fitting with a 14 W fluorescent lamp, a cross bar CLASSIC with adjusted length to the cabinet's width, fixing accessories. Connecting cable, power supply cable and a kit of micro switch are to be ordered separately.

Product name	For cabinet width [mm]	Catalogue number
Kit of system lighting	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
A kit of micro switch with 1.0 m cable		WZ-1951-41-01-000

Package: 1 set



Connection diagram



- 1 - power supply cable
- 2 - connecting cable
- 3 - micro switch kit

Lighting kit

Fixed into the horizontal slots in the top part of the cabinet's frame.

Material:

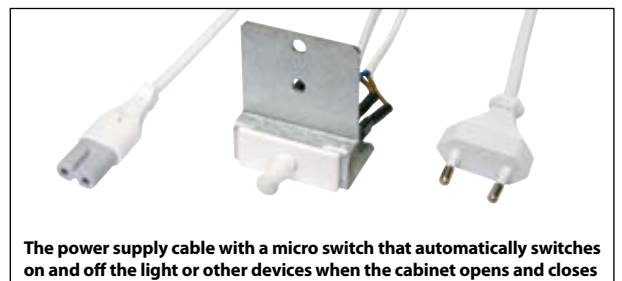
Mounting bracket - 1.5 mm thick sheet steel powder painted in RAL 7035.
 Mounting bar - 1.5 mm thick Al-Zn coated steel (only for cabinets 1000 and 1200 mm wide).

Scope of delivery:

Kit: 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 kit 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
Micro switch kit without cable		WN-1951-41-03-000

Package: 1 set



SUPPLEMENTARY ACCESSORIES FOR SIZE2 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 128.

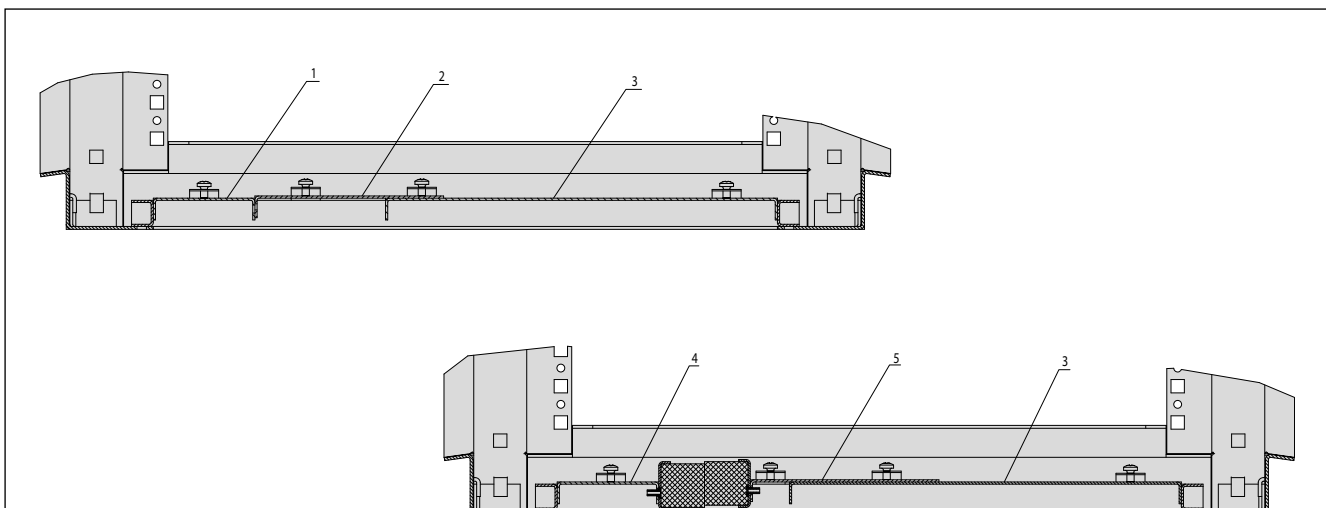
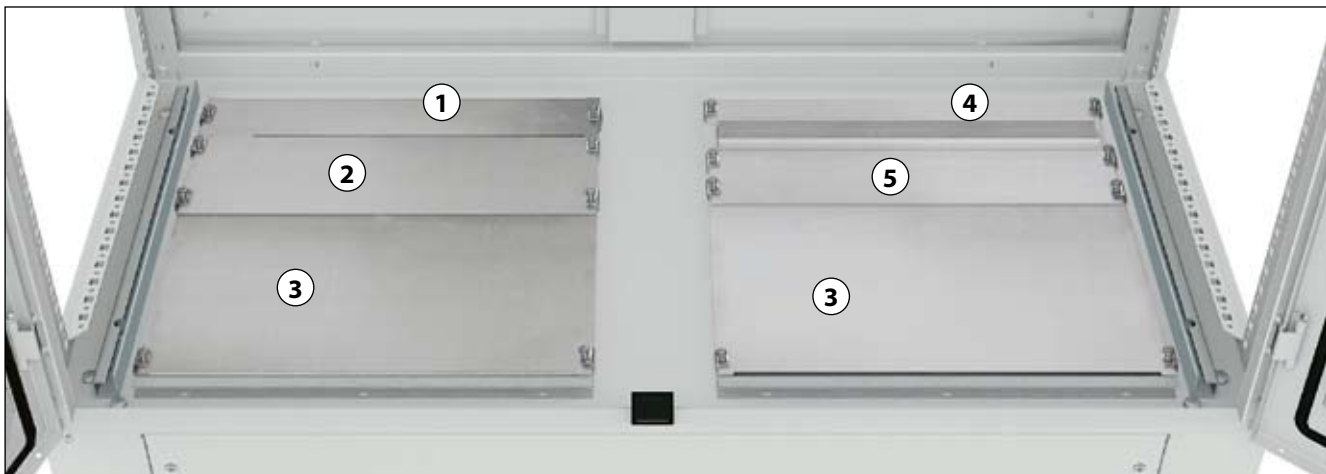
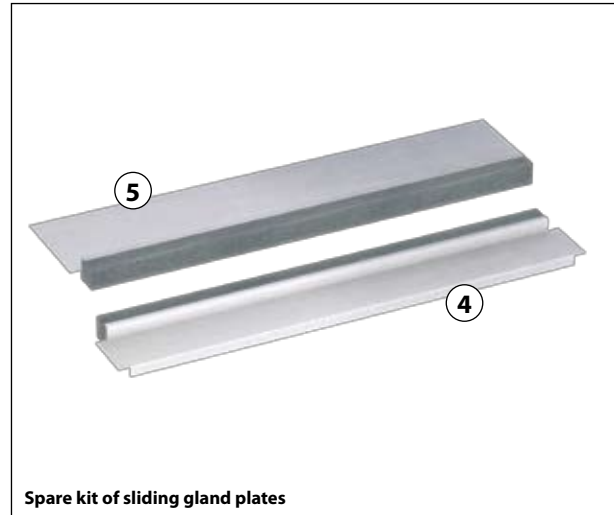
Material:

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 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 SZE2 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 129.

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
- 320x50 mm opening for cable entry
- Cable entry plates with a foam strip
- 320x50 mm opening for cable entry

Material:

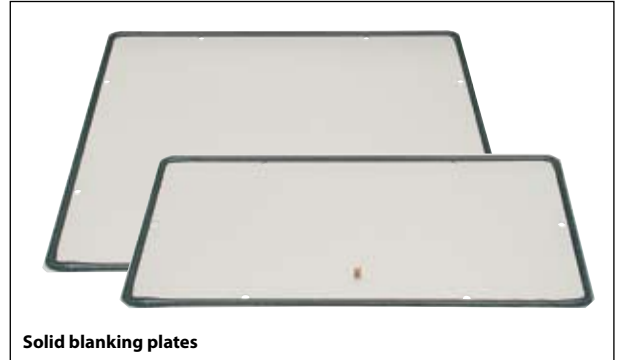
Sheet steel, 1.5 mm thick, powder painted in RAL 7035

Scope of delivery:

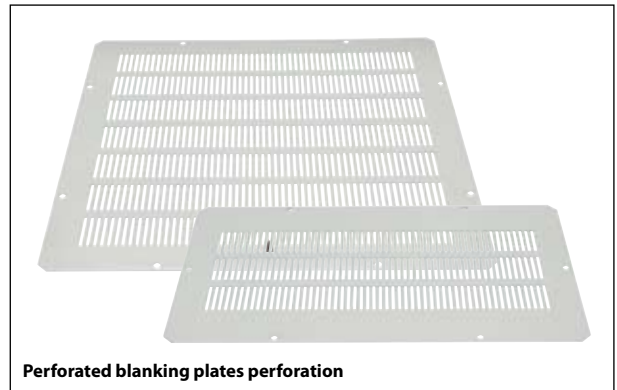
Blanking or cable entry plate with mounting elements for fixing inside the cabinet.

Type of blanking or cable entry plate	Protection degree of cabinets equipped with a blanking plate		For opening [mm]	Catalogue number
	Cabinet with a roof	Cabinet without 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

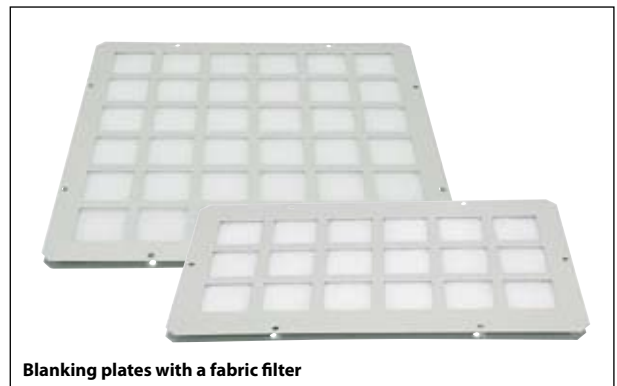
Package: 1 set



Solid blanking plates



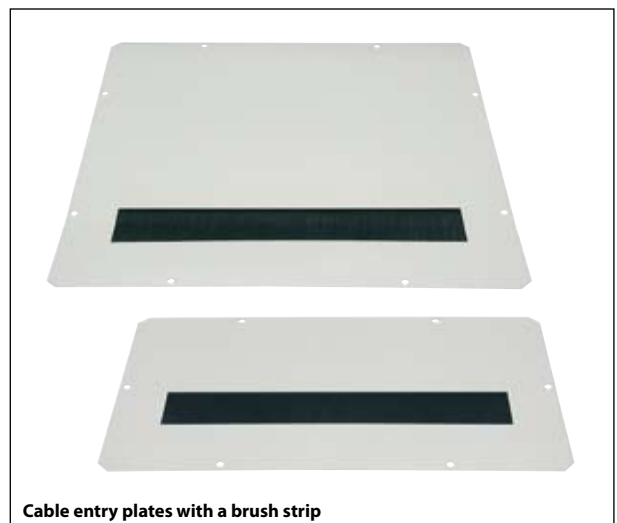
Perforated blanking plates perforation



Blanking plates with a fabric filter



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 mm thick Al-Zn 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 134).

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.



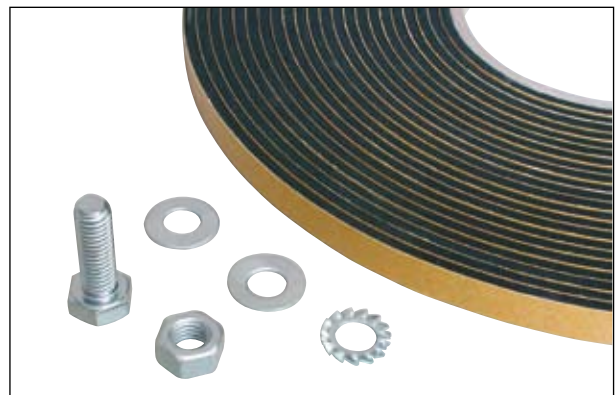
Set of elements for baying cabinets

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 heat element, bearing axial flow fan and temperature guard.

Technical data:

Supply 230 V AC, 50/60 Hz
 Heating force 400 W
 Fan capacity 108 m³ /h
 Protect class I (protective conductor)



Package	Catalogue number
1 pc.	M1U-06-0015

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:
 6A (1) 250V 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 1141 - thermostat normally open

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
KTS 1141 – normally open Switches on ventilation system (e.g. fans) at selected temperature limit.	●	1 pc.	WN-0201-02-00-000

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 switching the fan.

Capacity:

Filter fans are available in ten options with the following capacities:

- capacity: from 20 to 740 m³/h (air flow through filter fan)
- capacity with exhaust filter: from 16 to 530 m³/h (air flow through the cabinet equipped with 1 filter fan and 1 exhaust filter).

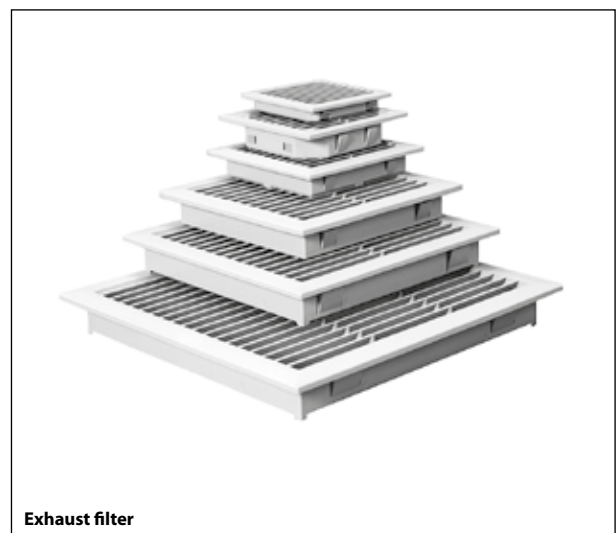
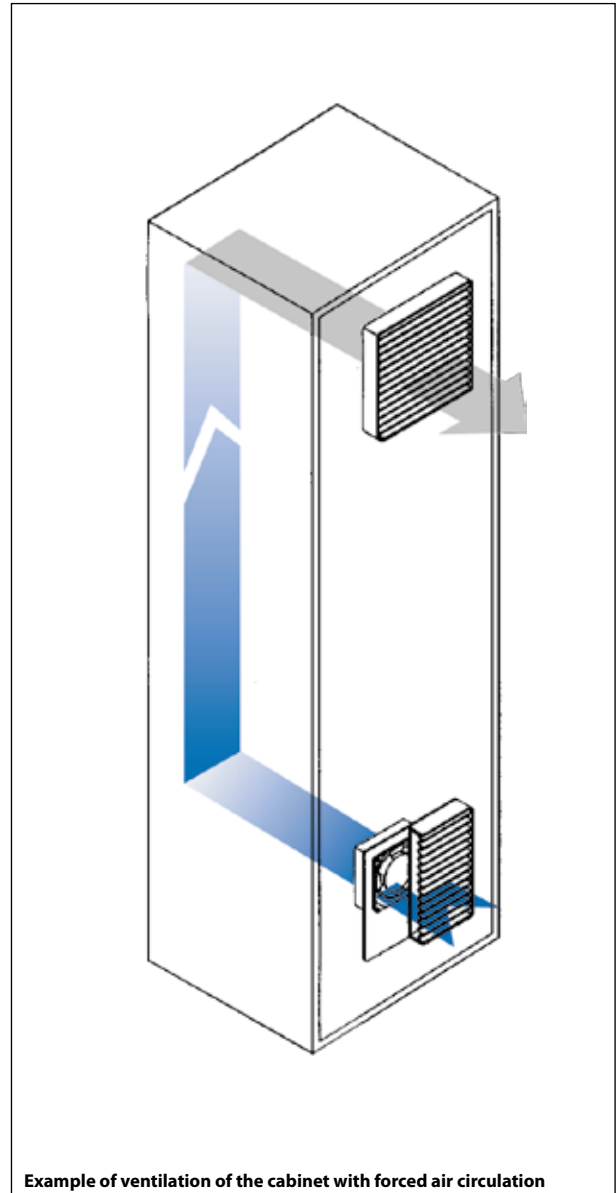
Type of fan supply:

- 230 V, 50/60 Hz,
- 115 V, 50/60 Hz,
- 24 V DC (only fans with capacity up to 250 m³/h).

Protection degree:

IP 54 in accordance with PN 92/E-08106 / EN 60 529 / IEC 529.

Selection of filter fans and exhaust filters should be consulted with ZPAS customer service.



SUPPLEMENTARY ACCESSORIES FOR SIZE2 CABINETS

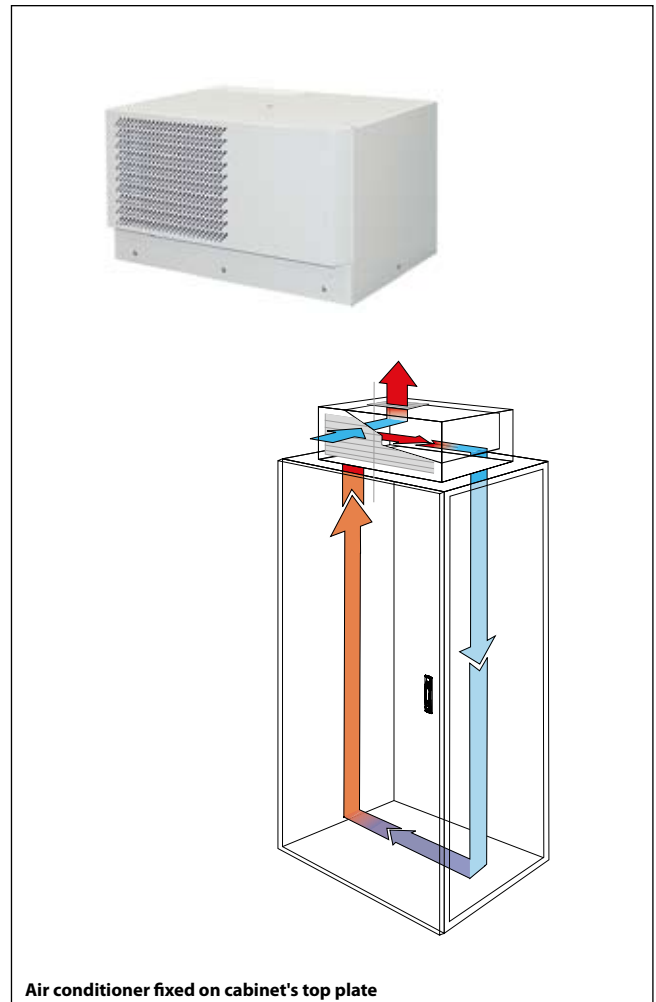
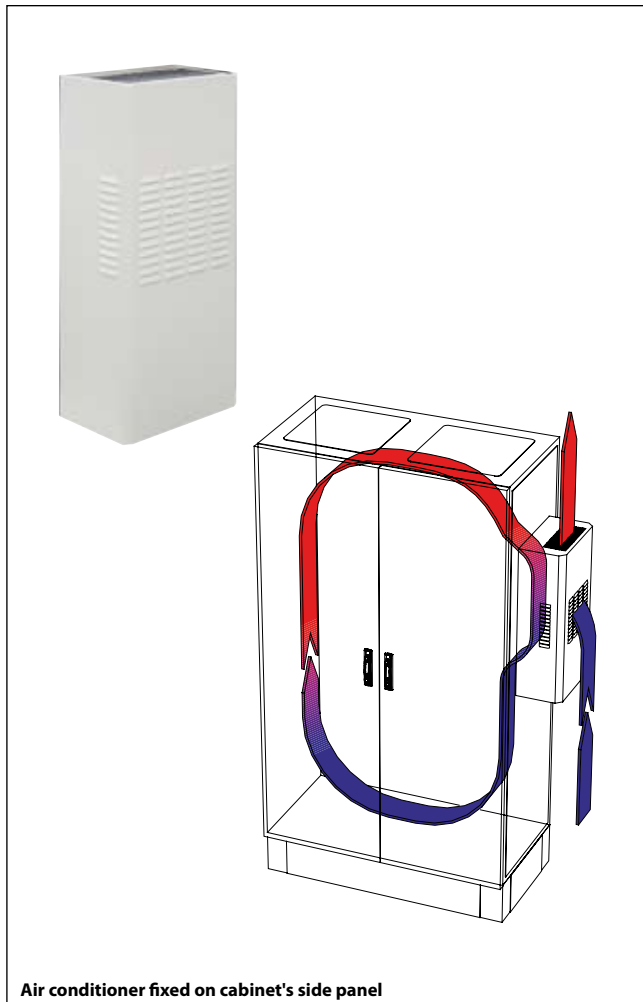
Air conditioner and heat exchanger

On customer's request, SIZE2 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. Cabinet of non-standard dimension 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	Al-Zn coated
Mounting plate	2.0 mm	

Note:

On request, the body, door and blanking plate can be made of stainless steel.

Protection degree

IP 65 in accordance with PN-92/E-08106 / 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.

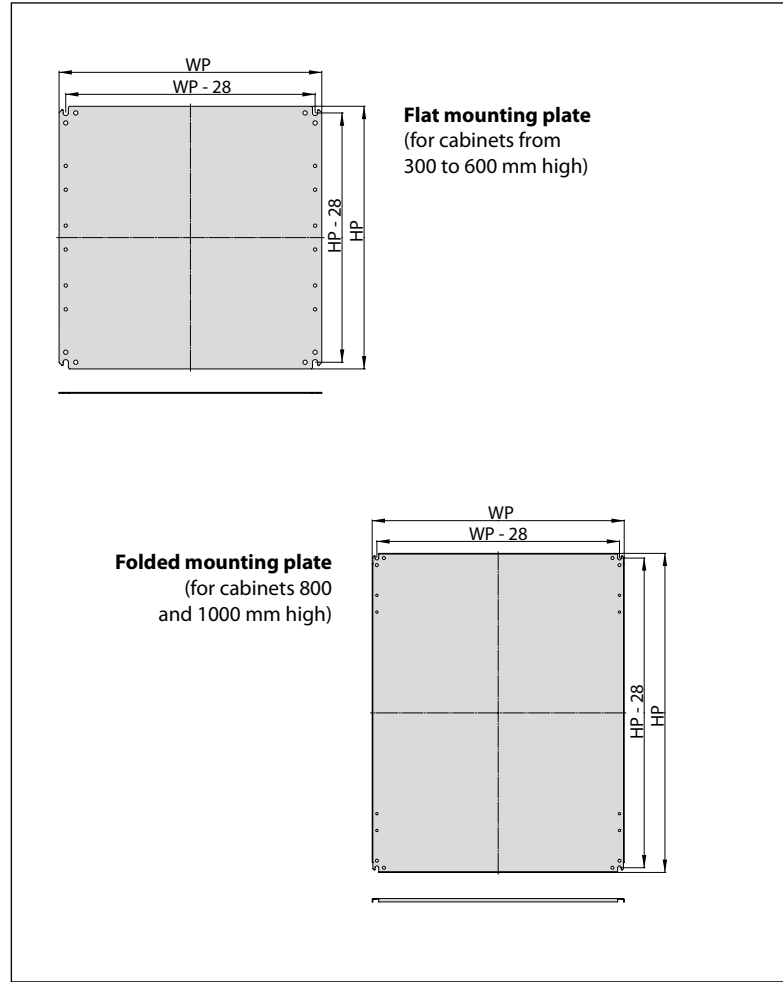
Earthing and potential equalisation

- 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



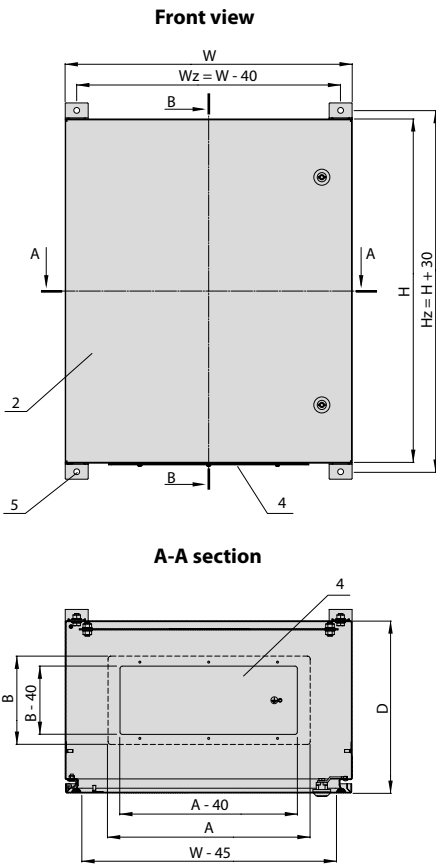
Reference chart

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							
SWN cabinet*		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 156.

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.

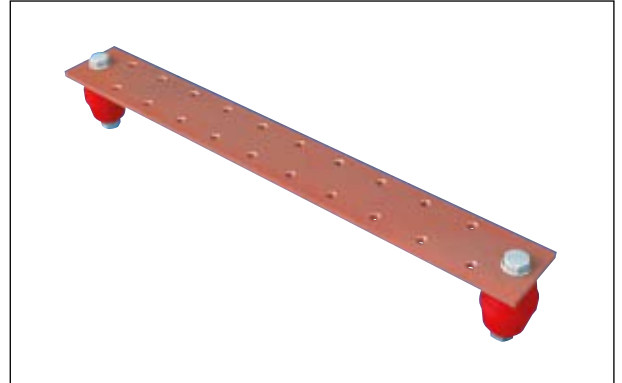
Material:

Copper bar 30x4 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.

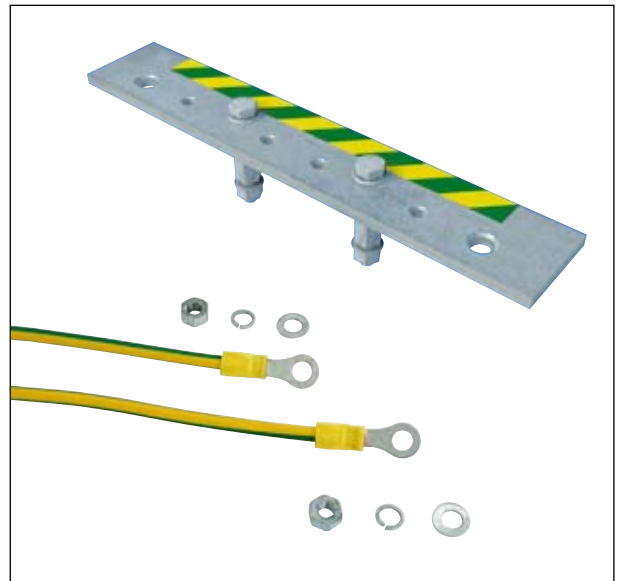
Material:

Galvanised steel rail 30x4x170 mm.
Copper cables, full section 6 mm².

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.

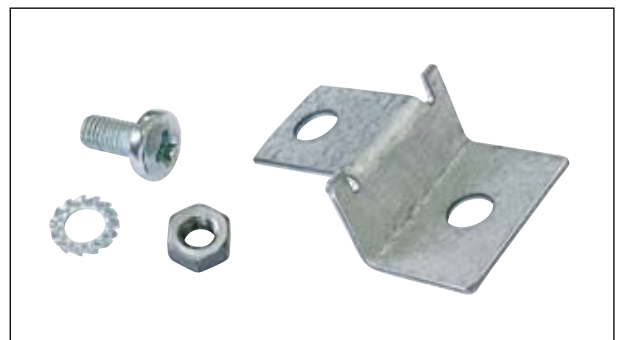
Material:

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**

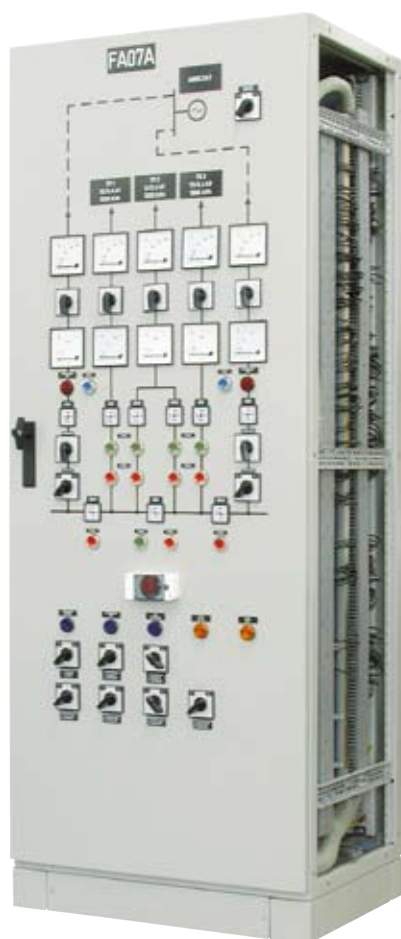
ZPAS also offers floor-standing and wall-mounted cabinets including electrical equipment and wiring:

- 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

Distribution cabinet of low voltage in Zinc Plant Galess in Świdnica

CABINETS WITH ELECTRICAL EQUIPMENT



Control and measuring cabinet

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 PN-92/E-08106 / EN 60 529 / IEC 529



TYPE I



TYPE II



TYPE III

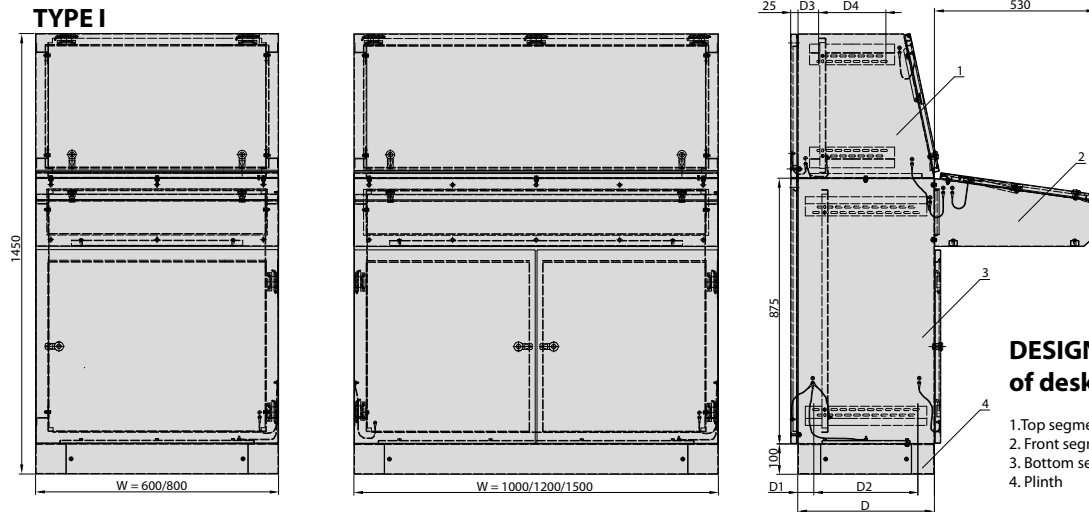


TYPE IV

PSL CONTROL DESKS

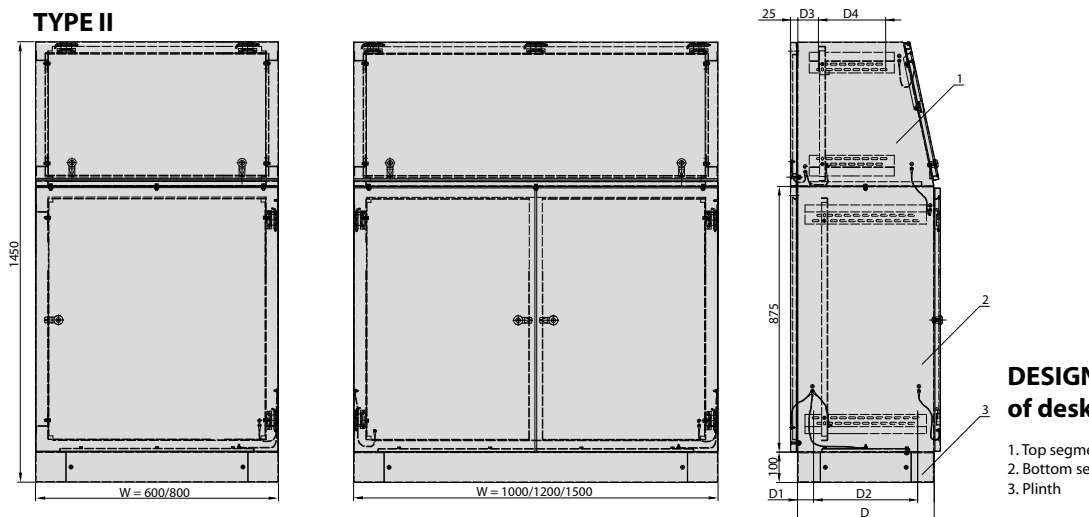


PSL CONTROL DESKS



DESIGN of desk type I

1. Top segment (higher version)
2. Front segment
3. Bottom segment
4. Plinth



DESIGN of desk type II

1. Top segment (higher version)
2. Bottom segment
3. Plinth

Reference chart

Desk dimensions [mm]	Width W	600			800			1000		
	Depth D	450	600	800	450	600	800	450	600	800

PSL Desk	Package	Catalogue numbers									
	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:

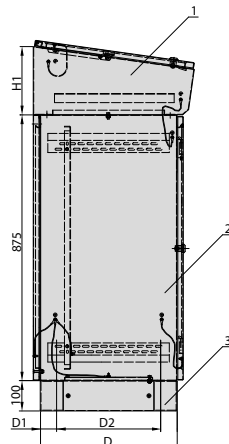
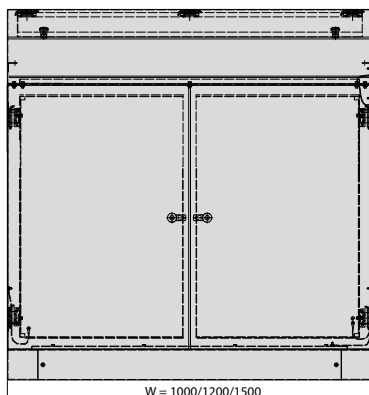
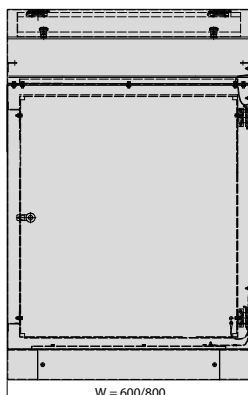
- top segment (higher version) – body, door (revolving hinge panel), rear panel, mounting plate;
- top segment (lower version) – body, doors (revolving hinge panel);
- bottom segment – body with cable entry in bottom plate blind with blanking plate, front doors, rear panel, mounting plate;
- front segment – 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

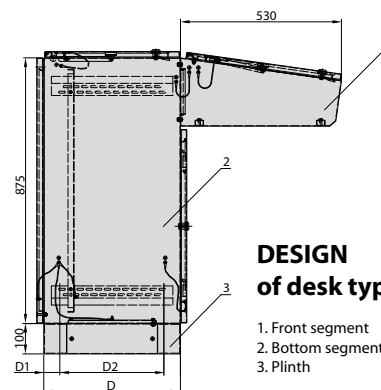
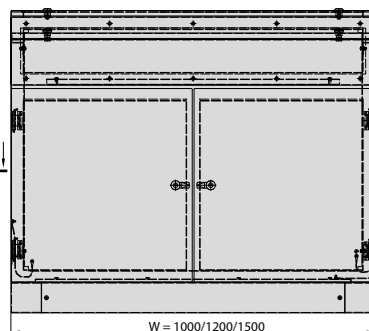
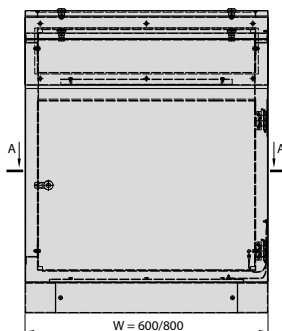
TYPE III



DESIGN of desk type III

- 1. Top segment (lower version)
- 2. Bottom segment
- 3. Plinth

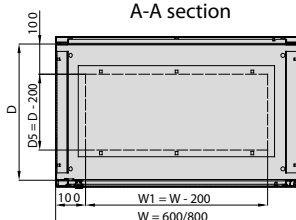
TYPE IV



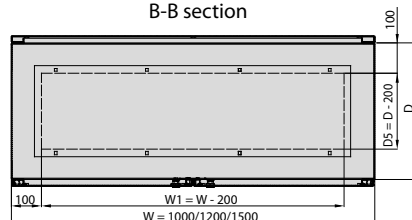
DESIGN of desk type IV

- 1. Front segment
- 2. Bottom segment
- 3. Plinth

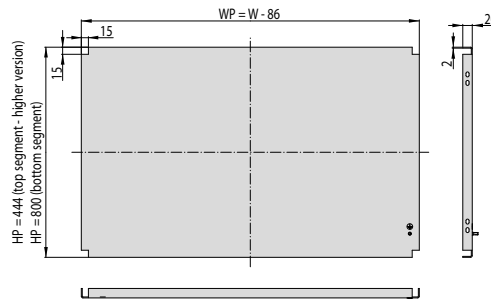
A-A section



B-B section



Mounting plate



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.

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

ZPAS MULTIMEDIA KIOSKS

ZPAS GROUP

solutions for specialists

Grupa ZPAS
Siedziba Zarządu Spółek
ZPAS / ZPAS-NEI
Przygodzice 209
57-431 Wąsosz
Tel. +48 74 672 100
Fax +48 74 672 074
info@zpas.pl

for more information

ZPAS S.A.

www.zpas.pl

Informacje prasowe

Carroll International SA
ul. Piłsudskiego 10
00-914 Warszawa
T. 22 624 11 11
F. 22 624 11 12
www.carroll.com.pl

NewsOCI

ul. Piłsudskiego 10
00-914 Warszawa
T. 22 624 11 11
F. 22 624 11 12
www.newsoci.com.pl

Data Center

ul. Piłsudskiego 10
00-914 Warszawa
T. 22 624 11 11



Newsy

Oferta

Cennik

Atrakcje

Za nami

Kontakt

Galeria

Oferty

ZPAS MULTIMEDIA KIOSKS

Info kiosk structure

The multimedia kiosks are housed in 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 unauthorised 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 design of info kiosks makes it possible for people in wheelchairs to use them.

According to standards observed in products of this type, info kiosk are operated using a touch screen. All the hardware parameters of the computer and monitor are customised 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 excellent technical parameters.

Info kiosk software

Thanks to company developed Kiosk Application software, we are able to offer possibilities not only beyond the reach of our competitors, but also reducing costs at the same time. The software makes it possible to place photos of any size in any location on the screen. Visualisation panels made by us or using our software may include elements of vector graphics and animation based on the Macromedia Flash technology. Owing to these features, visualisation screens are more interactive and thus more attractive for the user. The software makes it possible to use any number of buttons (links), navigation menus and subpages. Software for editing and displaying information is supplied free of charge and without any time limits.



Wall-mounted info kiosk



Free-standing info kiosk

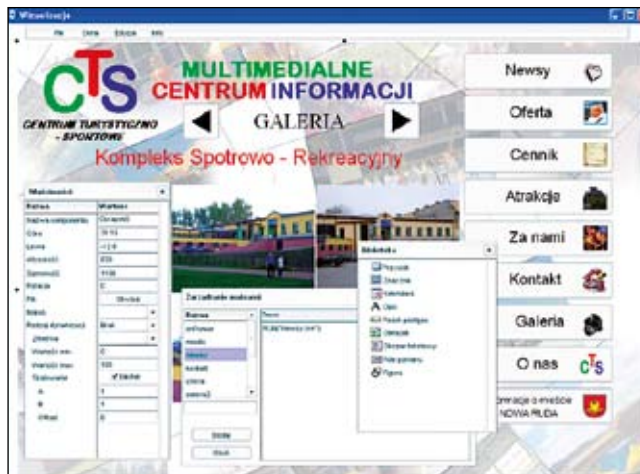


Mobile info kiosk

ZPAS MULTIMEDIA KIOSKS

Updatable software

All the visualisation screens are saved in XML files which can be created using the "Visualisation" screen editing programme. Visualisations are prepared by arranging images, animations and other components of visualisation screens by dragging and dropping.



Programme for creating visualisation screens

Technical specifications of the info kiosk

Computer parameters	
Processor	AMD Athlon 64 LE – 1600 BOX
RAM memory	DDR2 2 GB 800 MHz
Hard disc	200 GB
Communications ports:	2xUSB, 1 serial port, 1 parallel port
Graphics card	SVGA 128 MB, 1280x1024 / integrated
Audio card	built into the motherboard
Network card	10/100/1000 Mb/s, built-in
Drives	DVD 16x
Enclosure	Elements fixed into the info kiosk frame
Monitor	17" TFT LCD, 75 Hz, 300 cd/m ² , 700:1, viewing angle 160°, focal spot 0.29 mm, 1280x1024/75 Hz, 16.2 mn colours, reaction time 6 ms
Touch screen	17" SAW vandalproof touch screen integrated with the display, touch point density: 4096x4096, accuracy: +/- 2%, Mohs' hardness rating: 7, reaction time: <16 ms, transparency: 90-92%, stability: 5 mn touches without calibration, touch sensitivity: <100 g, operating temperatures: from -20°C to +50°C, relative humidity: 10-90%, degree of protection: IP 65; CE, FCC certification
Operating system	Microsoft Windows XP Home PL SP2b OEM
Software	Kiosk Application 1.0 ZPAS
Supplementary accessories	Keyboard, Mouse, CMOS USB (640x480) camera, recovery card (to ensure continuous and failproof operation of computers and complete protection against viruses; to eliminate the need of periodical reinstallation of the operating system)
Power supply parameters	
External power supply	230 V, 50 Hz
Maximum power consumption	power supply 350 W + heater with a 400 W fan
Ambient parameters	
Humidity	15-80%
Operating temperatures	from -20°C to +50°C
Overall dimensions and weight	
Wall-mounted info kiosk	height: 640 mm, width: 450 mm, depth: 201 mm, weight: 21 kg

CATALOGUE NUMBER INDEX

Catalogue number	Page
M1D-01-0004	91
M1D-01-0010	91
M1F-00-0106	91
M1F-00-0106	135
M1F-05-0003	72
M1F-09-0020	90
M1F-09-0046	84
M1H-01-0024	133
M1H-02-0028	133
M1N-02-0073	91
M1T-02-0011	144
M1T-02-0012	144
M1T-02-0016	144
M1U-06-0015	148
M1Z-00-0048	73
M1Z-00-0048	136
T1Z-00-0004	101
T1Z-00-0005	101
T1Z-01-0004	94
T-SO-910-100	115
T-SO-910-200	115
T-SO-910-300	115
T-SO-910-400	117
T-SO-910-401	117
T-SO-910-402	115
T-SO-910-403	115
T-SO-910-404	115
T-SO-910-405	115
T-SO-910-406	115
T-SO-910-407	115
T-SO-910-407	116
T-SO-910-408	116
T-SO-910-409	116
T-SO-910-410	116
T-SO-910-411	116
T-SO-910-412	116
T-SO-910-413	116
T-SO-910-500	116
T-SO-910-700	116

Catalogue number	Page
T-SO-910-900	116
T-SO-910-910	116
T-SO-970-001	111
T-SO-970-002	111
T-SO-970-003	111
T-SO-970-101	110
T-SO-970-102	110
T-SO-970-103	110
T-SO-970-104	111
T-SO-970-201	106
T-SO-970-202	106
T-SO-970-203	106
T-SO-970-204	107
T-SO-970-205	107
T-SO-970-206	107
T-SO-970-207	107
T-SO-970-301	112
T-SO-970-303	112
T-SO-970-305	112
T-SO-970-311	112
T-SO-970-313	112
T-SO-970-315	112
T-SO-970-330	114
T-SO-970-400	112
T-SO-970-401	112
T-SO-970-600	108
T-SO-970-601	109
T-SO-970-602	108
T-SO-970-603	109
T-SO-970-604	108
T-SO-970-605	109
T-SO-970-606	108
T-SO-970-607	109
T-SO-970-608	109
T-SO-970-620	113
T-SO-970-622	113
T-SO-990-150	102
T-SO-990-151	102
T-SO-990-152	102

Catalogue number	Page
T-SO-990-154	102
T-SO-990-155	102
T-SO-990-156	102
WN-0200-01-00-011	97
WN-0200-01-00-161	97
WN-0200-02-00-011	97
WN-0200-02-00-161	97
WN-0200-03-00-011	97
WN-0200-03-00-161	97
WN-0200-04-00-000	63
WN-0201-01-00-000	98
WN-0201-01-00-000	148
WN-0201-02-00-000	98
WN-0201-02-00-000	148
WN-0201-03-00-000	99
WN-0201-04-00-011	100
WN-0201-04-00-161	100
WN-0201-05-00-011	101
WN-0201-05-00-161	101
WN-0201-06-00-000	101
WN-0201-08-00-000	101
WN-0208-04-00-000	144
WN-1951-41-03-000	144
WNK-891-311	61
WNK-891-312	61
WNK-891-315	61
WNK-891-316	61
WNK-891-319	61
WZ-0008-01-01-011	68
WZ-0008-01-02-011	68
WZ-0008-01-03-011	68
WZ-0008-01-04-011	68
WZ-001C-10-45-011	136
WZ-001C-10-55-011	136
WZ-001C-12-45-011	136
WZ-001C-12-55-011	136
WZ-001C-12-75-011	136
WZ-001C-60-35-011	136
WZ-001C-60-45-011	136

CATALOGUE NUMBER INDEX

Catalogue number	Page
WZ-001C-60-55-011	136
WZ-001C-60-60-011	72
WZ-001C-60-75-011	136
WZ-001C-60-90-011	72
WZ-001C-80-35-011	136
WZ-001C-80-45-011	136
WZ-001C-80-55-011	136
WZ-001C-80-60-011	72
WZ-001C-80-60-011	72
WZ-001C-80-75-011	136
WZ-001C-80-80-011	72
WZ-002C-10-45-011	136
WZ-002C-10-55-011	136
WZ-002C-12-45-011	136
WZ-002C-12-55-011	136
WZ-002C-12-75-011	136
WZ-002C-60-35-011	136
WZ-002C-60-45-011	136
WZ-002C-60-55-011	136
WZ-002C-60-60-011	72
WZ-002C-60-75-011	136
WZ-002C-60-90-011	72
WZ-002C-80-35-011	136
WZ-002C-80-45-011	136
WZ-002C-80-55-011	136
WZ-002C-80-60-011	72
WZ-002C-80-60-011	72
WZ-002C-80-75-011	136
WZ-002C-80-80-011	72
WZ-01CP-60-60-011	72
WZ-01CP-60-90-011	72
WZ-01CP-80-60-011	72
WZ-01CP-80-60-011	72
WZ-01CP-80-80-011	72
WZ-02CP-60-60-011	72
WZ-02CP-60-90-011	72
WZ-02CP-80-60-011	72
WZ-02CP-80-60-011	72
WZ-02CP-80-80-011	72

Catalogue number	Page
WZ-0405-11-00-000	64
WZ-0405-50-00-011	63
WZ-0405-M1-01-011	54
WZ-0405-M1-02-011	54
WZ-0405-M1-03-011	54
WZ-0405-M1-04-011	54
WZ-0405-M1-05-011	54
WZ-0405-S1-01-011	54
WZ-0405-S1-02-011	54
WZ-0405-S1-03-011	54
WZ-0405-S1-04-011	54
WZ-0405-S1-05-011	54
WZ-0429-06-00-011	64
WZ-0429-06-01-000	64
WZ-0573-12-01-000	139
WZ-0573-12-02-000	140
WZ-0573-12-03-000	140
WZ-0573-12-04-000	140
WZ-0573-12-05-000	140
WZ-0573-12-06-000	140
WZ-0573-12-07-000	140
WZ-0573-12-08-000	140
WZ-0573-12-09-000	140
WZ-0573-12-10-000	140
WZ-0573-12-11-000	140
WZ-0573-12-12-000	140
WZ-0573-12-13-000	140
WZ-0573-12-14-000	140
WZ-0573-12-15-000	140
WZ-0573-12-16-000	140
WZ-0573-12-17-000	140
WZ-0573-12-18-000	140
WZ-0573-12-19-000	140
WZ-0573-12-20-000	140
WZ-0573-12-21-000	140
WZ-0573-12-22-000	140
WZ-0573-12-23-000	140
WZ-0573-12-24-000	140
WZ-0573-12-25-000	140

Catalogue number	Page
WZ-0750-09-01-000	62
WZ-0750-09-02-000	62
WZ-0750-09-03-000	62
WZ-0750-09-04-000	62
WZ-0750-09-05-000	62
WZ-0750-09-06-000	62
WZ-0750-10-01-000	63
WZ-0750-10-02-000	63
WZ-0750-10-03-000	63
WZ-0750-10-04-000	63
WZ-0750-10-05-000	63
WZ-0750-10-06-000	63
WZ-0750-24-01-000	62
WZ-0750-24-02-000	62
WZ-0750-24-03-000	62
WZ-0750-24-04-000	62
WZ-0750-24-05-000	62
WZ-0750-24-06-000	62
WZ-0750-M1-01-011	56
WZ-0750-M1-02-011	56
WZ-0750-M1-03-011	56
WZ-0750-M1-04-011	56
WZ-0750-M1-05-011	56
WZ-0750-M1-06-011	56
WZ-0750-M1-07-011	56
WZ-0750-M1-08-011	56
WZ-0750-M1-09-011	56
WZ-0750-M1-10-011	56
WZ-0750-M1-11-011	56
WZ-0750-M1-12-011	56
WZ-0750-S1-01-011	56
WZ-0750-S1-02-011	56
WZ-0750-S1-03-011	56
WZ-0750-S1-04-011	56
WZ-0750-S1-05-011	56
WZ-0750-S1-06-011	56
WZ-0750-S1-07-011	56
WZ-0750-S1-08-011	56
WZ-0750-S1-09-011	56

CATALOGUE NUMBER INDEX

Catalogue number	Page
WZ-0750-S1-10-011	56
WZ-0750-S1-11-011	56
WZ-0750-S1-12-011	56
WZ-0795-01-01-011	20
WZ-0795-01-02-011	20
WZ-0795-01-03-011	20
WZ-0795-01-04-011	20
WZ-0795-01-05-011	20
WZ-0795-01-06-011	20
WZ-0795-01-07-011	20
WZ-0795-01-08-011	20
WZ-0795-01-09-011	20
WZ-0795-01-10-011	20
WZ-0795-01-11-011	20
WZ-0795-01-12-011	20
WZ-0795-01-13-011	20
WZ-0795-01-14-011	20
WZ-0795-01-15-011	20
WZ-0795-01-16-011	20
WZ-0795-01-17-011	20
WZ-0795-01-18-011	20
WZ-0795-01-19-011	20
WZ-0795-01-20-011	20
WZ-0795-01-21-011	20
WZ-0795-01-22-011	20
WZ-0795-01-23-011	20
WZ-0795-01-24-011	20
WZ-0950-01-01-011	162
WZ-0950-01-02-011	162
WZ-0950-01-03-011	162
WZ-0950-01-04-011	162
WZ-0950-01-05-011	162
WZ-0950-01-06-011	162
WZ-0950-01-07-011	162
WZ-0950-01-08-011	162
WZ-0950-01-09-011	162
WZ-0950-01-10-011	162
WZ-0950-01-11-011	162
WZ-0950-01-12-011	162

Catalogue number	Page
WZ-0950-01-13-011	162
WZ-0950-01-14-011	162
WZ-0950-01-15-011	162
WZ-0950-01-16-011	162
WZ-0950-01-17-011	162
WZ-0950-01-18-011	162
WZ-0950-01-19-011	162
WZ-0950-01-20-011	162
WZ-0950-01-21-011	162
WZ-0950-01-22-011	162
WZ-0950-01-23-011	162
WZ-0950-01-24-011	162
WZ-0950-01-25-011	162
WZ-0950-01-26-011	162
WZ-0950-01-27-011	162
WZ-0950-01-28-011	162
WZ-0950-01-29-011	162
WZ-0950-01-30-011	162
WZ-0950-01-31-011	162
WZ-0950-01-32-011	162
WZ-0950-01-33-011	162
WZ-0950-01-34-011	162
WZ-0950-01-35-011	162
WZ-0950-01-36-011	162
WZ-0950-01-37-011	162
WZ-0950-01-38-011	162
WZ-0950-01-39-011	162
WZ-0950-01-40-011	162
WZ-0950-01-41-011	162
WZ-0950-01-42-011	162
WZ-0950-01-43-011	162
WZ-0950-01-44-011	162
WZ-0950-01-45-011	162
WZ-0950-01-46-011	162
WZ-0950-01-47-011	162
WZ-0950-01-48-011	162
WZ-0950-01-49-011	162
WZ-0950-01-50-011	162
WZ-0950-01-51-011	162

Catalogue number	Page
WZ-0950-01-52-011	162
WZ-0950-01-53-011	162
WZ-0950-01-54-011	162
WZ-0950-01-55-011	162
WZ-0950-01-56-011	162
WZ-0950-01-57-011	162
WZ-0950-01-58-011	162
WZ-0950-01-59-011	162
WZ-0950-01-60-011	162
WZ-1391-04-01-000	84
WZ-1441-35-03-011	146
WZ-1600-25-00-000	84
WZ-1600-27-00-000	84
WZ-1600-30-01-000	84
WZ-1600-30-02-000	84
WZ-1600-30-03-000	84
WZ-1600-30-04-000	84
WZ-1600-30-05-000	84
WZ-1600-30-06-000	84
WZ-1600-30-07-000	84
WZ-1600-30-08-000	84
WZ-1600-30-09-000	84
WZ-1600-30-10-000	84
WZ-1600-30-11-000	84
WZ-1600-30-12-000	84
WZ-1600-30-13-000	84
WZ-1600-30-14-000	84
WZ-1600-30-15-000	84
WZ-1600-30-16-000	84
WZ-1600-30-17-000	84
WZ-1600-30-18-000	84
WZ-1610-06-00-000	84
WZ-1718-07-01-011	77
WZ-1718-07-02-011	77
WZ-1718-08-01-000	77
WZ-1718-08-02-000	77
WZ-1718-09-01-011	77
WZ-1718-09-02-011	77
WZ-1718-31-00-011	79

CATALOGUE NUMBER INDEX

Catalogue number	Page
WZ-1718-31-00-161	79
WZ-1718-37-01-011	77
WZ-1718-37-01-011	146
WZ-1718-37-01-161	77
WZ-1718-37-02-011	77
WZ-1718-37-02-011	146
WZ-1718-37-02-161	77
WZ-1718-38-01-011	77
WZ-1718-38-01-161	77
WZ-1718-38-02-011	77
WZ-1718-38-02-161	77
WZ-1718-39-01-011	77
WZ-1718-39-01-011	146
WZ-1718-39-01-161	77
WZ-1718-39-02-011	77
WZ-1718-39-02-011	146
WZ-1718-39-02-161	77
WZ-1718-40-01-011	77
WZ-1718-40-01-011	146
WZ-1718-40-02-011	77
WZ-1718-40-02-011	146
WZ-1718-42-01-011	77
WZ-1718-42-01-011	146
WZ-1718-42-01-161	77
WZ-1718-42-02-011	77
WZ-1718-42-02-011	146
WZ-1718-42-02-161	77
WZ-1718-51-00-011	79
WZ-1718-51-00-161	79
WZ-1718-59-01-011	82
WZ-1718-59-01-161	82
WZ-1718-59-02-011	82
WZ-1718-59-02-161	82
WZ-1718-59-03-011	82
WZ-1718-59-03-161	82
WZ-1718-59-05-011	82
WZ-1718-59-07-011	82
WZ-1951-01-01-011	122
WZ-1951-01-02-011	122

Catalogue number	Page
WZ-1951-01-03-011	122
WZ-1951-01-05-011	122
WZ-1951-01-06-011	122
WZ-1951-01-07-011	122
WZ-1951-01-08-011	122
WZ-1951-01-09-011	122
WZ-1951-01-10-011	122
WZ-1951-01-11-011	122
WZ-1951-01-12-011	122
WZ-1951-01-14-011	122
WZ-1951-01-15-011	122
WZ-1951-01-20-011	122
WZ-1951-01-21-011	122
WZ-1951-01-23-011	122
WZ-1951-01-24-011	122
WZ-1951-01-49-011	122
WZ-1951-01-50-011	122
WZ-1951-07-05-011	134
WZ-1951-07-06-011	134
WZ-1951-07-07-011	134
WZ-1951-07-13-011	134
WZ-1951-07-14-011	134
WZ-1951-07-29-011	134
WZ-1951-09-01-011	134
WZ-1951-09-02-011	134
WZ-1951-09-03-011	134
WZ-1951-09-05-011	134
WZ-1951-09-06-011	134
WZ-1951-09-13-011	134
WZ-1951-10-01-011	132
WZ-1951-10-02-011	132
WZ-1951-10-03-011	132
WZ-1951-10-04-011	132
WZ-1951-13-01-011	133
WZ-1951-13-02-011	133
WZ-1951-13-03-011	133
WZ-1951-15-01-011	133
WZ-1951-15-02-011	133
WZ-1951-15-03-011	133

Catalogue number	Page
WZ-1951-17-01-011	132
WZ-1951-17-02-011	132
WZ-1951-17-03-011	132
WZ-1951-17-04-011	132
WZ-1951-19-01-000	141
WZ-1951-19-02-000	141
WZ-1951-19-03-000	141
WZ-1951-19-04-000	141
WZ-1951-19-05-000	141
WZ-1951-19-06-000	141
WZ-1951-19-07-000	141
WZ-1951-19-08-000	141
WZ-1951-19-09-000	141
WZ-1951-19-10-000	141
WZ-1951-19-11-000	141
WZ-1951-19-12-000	141
WZ-1951-20-01-011	137
WZ-1951-20-02-011	137
WZ-1951-21-00-000	141
WZ-1951-22-01-000	142
WZ-1951-22-02-000	142
WZ-1951-22-03-000	142
WZ-1951-22-04-000	142
WZ-1951-24-01-000	143
WZ-1951-24-02-000	143
WZ-1951-24-03-000	143
WZ-1951-24-04-000	143
WZ-1951-25-01-000	143
WZ-1951-25-02-000	143
WZ-1951-25-03-000	143
WZ-1951-25-04-000	143
WZ-1951-26-00-011	146
WZ-1951-27-01-011	134
WZ-1951-27-02-011	134
WZ-1951-27-03-011	134
WZ-1951-27-05-011	134
WZ-1951-27-06-011	134
WZ-1951-27-07-011	134
WZ-1951-27-08-011	134

CATALOGUE NUMBER INDEX

Catalogue number	Page
WZ-1951-27-09-011	134
WZ-1951-27-10-011	134
WZ-1951-27-11-011	134
WZ-1951-27-12-011	134
WZ-1951-27-13-011	134
WZ-1951-27-14-011	134
WZ-1951-28-01-011	134
WZ-1951-28-02-011	134
WZ-1951-28-03-011	134
WZ-1951-28-05-011	134
WZ-1951-28-06-011	134
WZ-1951-28-07-011	134
WZ-1951-28-08-011	134
WZ-1951-28-09-011	134
WZ-1951-28-10-011	134
WZ-1951-28-11-011	134
WZ-1951-28-12-011	134
WZ-1951-28-13-011	134
WZ-1951-28-14-011	134
WZ-1951-29-01-011	137
WZ-1951-29-02-011	137
WZ-1951-31-01-000	147
WZ-1951-31-02-000	147
WZ-1951-31-03-000	147
WZ-1951-31-05-000	147
WZ-1951-31-06-000	147
WZ-1951-31-13-000	147
WZ-1951-32-00-000	133
WZ-1951-33-00-000	143
WZ-1951-36-01-011	132
WZ-1951-36-02-011	132
WZ-1951-36-03-011	132
WZ-1951-36-04-011	132
WZ-1951-36-09-011	132
WZ-1951-36-10-011	132
WZ-1951-36-11-011	132
WZ-1951-36-12-011	132
WZ-1951-38-01-011	144
WZ-1951-38-02-011	144

Catalogue number	Page
WZ-1951-38-03-011	144
WZ-1951-38-04-011	144
WZ-1951-40-01-011	132
WZ-1951-40-02-011	132
WZ-1951-40-03-011	132
WZ-1951-40-04-011	132
WZ-1951-40-09-011	132
WZ-1951-40-10-011	132
WZ-1951-40-11-011	132
WZ-1951-40-12-011	132
WZ-1951-41-01-000	144
WZ-1951-44-01-000	141
WZ-1951-44-02-000	141
WZ-1951-44-03-000	141
WZ-1951-45-00-000	147
WZ-1951-46-01-000	140
WZ-1951-46-02-000	140
WZ-1951-46-03-000	140
WZ-1951-46-04-000	140
WZ-1951-46-05-000	140
WZ-1951-46-06-000	140
WZ-1951-46-07-000	140
WZ-1951-46-08-000	140
WZ-1951-47-01-000	147
WZ-1951-47-02-000	147
WZ-1951-48-01-000	140
WZ-1951-48-02-000	140
WZ-1951-52-01-011	133
WZ-1951-52-02-011	133
WZ-1951-52-03-011	133
WZ-1951-54-01-011	133
WZ-1951-54-02-011	133
WZ-1951-54-03-011	133
WZ-1951-57-01-011	133
WZ-1951-57-02-011	133
WZ-1951-57-03-011	133
WZ-1951-59-01-011	133
WZ-1951-59-02-011	133
WZ-1951-59-03-011	133

Catalogue number	Page
WZ-1951-65-01-000	142
WZ-1951-65-02-000	142
WZ-1951-65-03-000	142
WZ-1951-65-04-000	142
WZ-1951-66-01-000	142
WZ-1951-66-02-000	142
WZ-1951-66-03-000	142
WZ-1951-66-04-000	142
WZ-1951-68-00-000	135
WZ-1951-71-01-011	136
WZ-1951-71-02-011	136
WZ-1951-71-03-011	136
WZ-1951-71-05-011	136
WZ-1951-71-06-011	136
WZ-1951-71-07-011	136
WZ-1951-71-08-011	136
WZ-1951-71-09-011	136
WZ-1951-71-10-011	136
WZ-1951-71-11-011	136
WZ-1951-71-12-011	136
WZ-1951-71-13-011	136
WZ-1951-71-14-011	136
WZ-1951-74-01-011	136
WZ-1951-74-02-011	136
WZ-1951-74-03-011	136
WZ-1951-74-05-011	136
WZ-1951-74-06-011	136
WZ-1951-74-07-011	136
WZ-1951-74-08-011	136
WZ-1951-74-09-011	136
WZ-1951-74-10-011	136
WZ-1951-74-11-011	136
WZ-1951-74-12-011	136
WZ-1951-74-13-011	136
WZ-1951-74-14-011	136
WZ-1951-80-01-011	144
WZ-1951-80-02-011	144
WZ-1951-80-03-011	144
WZ-1951-80-04-011	144

CATALOGUE NUMBER INDEX

Catalogue number	Page
WZ-1951-81-01-000	145
WZ-1951-81-02-000	145
WZ-1951-81-03-000	145
WZ-1969-01-01-011	66
WZ-1969-01-02-011	66
WZ-1969-01-03-011	66
WZ-1969-01-04-011	66
WZ-1969-01-05-011	66
WZ-1969-01-06-011	66
WZ-1969-01-07-011	66
WZ-1969-01-08-011	66
WZ-1982-03-05-011	73
WZ-1982-03-07-011	73
WZ-1982-03-08-011	73
WZ-1982-04-05-011	73
WZ-1982-04-05-161	73
WZ-1982-04-07-011	73
WZ-1982-04-07-161	73
WZ-1982-04-08-011	73
WZ-1982-04-08-161	73
WZ-1982-05-05-011	73
WZ-1982-05-05-161	73
WZ-1982-05-07-011	73
WZ-1982-05-07-161	73
WZ-1982-05-08-011	73
WZ-1982-05-08-161	73
WZ-1982-08-02-011	73
WZ-2048-24-01-000	64
WZ-2048-50-01-000	64
WZ-2048-50-02-000	64
WZ-2174-05-02-011	73
WZ-2285-01-01-011	152
WZ-2285-01-02-011	152
WZ-2285-01-03-011	152
WZ-2285-01-04-011	152
WZ-2285-01-05-011	152
WZ-2285-01-06-011	152
WZ-2285-01-07-011	152
WZ-2285-01-08-011	152

Catalogue number	Page
WZ-2285-01-09-011	152
WZ-2285-01-10-011	152
WZ-2285-01-11-011	152
WZ-2285-01-12-011	152
WZ-2285-01-13-011	152
WZ-2285-01-14-011	152
WZ-2285-01-15-011	152
WZ-2285-01-16-011	152
WZ-2285-01-17-011	152
WZ-2285-01-18-011	152
WZ-2285-01-19-011	152
WZ-2285-01-20-011	152
WZ-2285-10-01-000	156
WZ-2285-10-02-000	156
WZ-2285-13-00-000	156
WZ-2285-14-00-000	156
WZ-2378-01-24-011	69
WZ-2378-01-36-011	69
WZ-2378-01-42-011	69
WZ-2378-01-45-011	69
WZ-2378-07-00-011	70
WZ-2378-19-00-011	70
WZ-2401-05-02-011	73
WZ-2402-05-02-011	73
WZ-2493-01-01-011	67
WZ-2493-01-02-011	67
WZ-2493-01-04-011	67
WZ-2493-01-05-011	67
WZ-2645-09-00-000	89
WZ-2645-11-01-011	89
WZ-2645-12-01-000	89
WZ-2645-15-00-000	88
WZ-2733-01-M1-011	48
WZ-2733-01-M2-011	48
WZ-2733-01-M3-011	48
WZ-2733-01-M4-011	48
WZ-2733-01-M5-011	48
WZ-2733-01-M6-011	48
WZ-2733-01-S1-011	48

Catalogue number	Page
WZ-2733-01-S2-011	48
WZ-2733-01-S3-011	48
WZ-2733-01-S4-011	48
WZ-2733-01-S5-011	48
WZ-2733-01-S6-011	48
WZ-2733-13-00-000	63
WZ-2899-40-02-000	90
WZ-3004-00-01-011	25
WZ-3004-00-02-011	25
WZ-3004-00-03-011	25
WZ-3004-00-04-011	25
WZ-3004-00-05-011	25
WZ-3004-00-06-011	25
WZ-3004-11-00-011	74
WZ-3034-15-00-000	90
WZ-3074-64-00-011	91
WZ-3074-64-00-161	91
WZ-3074-83-00-011	79
WZ-3074-83-00-161	79
WZ-3196-10-00-000	90
WZ-3196-27-00-000	90
WZ-3196-28-00-011	90
WZ-3259-08-00-011	81
WZ-3259-08-00-161	81
WZ-3286-01-M1-011	48
WZ-3286-01-M2-011	48
WZ-3286-01-M3-011	48
WZ-3286-01-M4-011	48
WZ-3286-01-M5-011	48
WZ-3286-01-M6-011	48
WZ-3286-01-S1-011	48
WZ-3286-01-S2-011	48
WZ-3286-01-S3-011	48
WZ-3286-01-S4-011	48
WZ-3286-01-S5-011	48
WZ-3286-01-S6-011	48
WZ-3393-11-00-000	88
WZ-3393-20-00-011	79
WZ-3477-11-00-011	91

CATALOGUE NUMBER INDEX

Catalogue number	Page
WZ-3477-11-00-161	91
WZ-3504-01-01-011	52
WZ-3504-01-02-011	52
WZ-3504-01-03-011	52
WZ-3504-01-04-011	52
WZ-3504-01-05-011	52
WZ-3504-01-M1-011	52
WZ-3504-01-M2-011	52
WZ-3504-01-M3-011	52
WZ-3504-01-M4-011	52
WZ-3504-01-M5-011	52
WZ-3504-14-01-000	62
WZ-3504-14-02-000	62
WZ-3504-14-03-000	62
WZ-3504-14-04-000	62
WZ-3504-14-05-000	62
WZ-3504-15-01-000	62
WZ-3504-15-02-000	62
WZ-3504-15-03-000	62
WZ-3504-15-04-000	62
WZ-3504-15-05-000	62
WZ-3504-16-00-000	63
WZ-3504-22-00-000	62
WZ-3505-01-01-011	50
WZ-3505-01-02-011	50
WZ-3505-01-03-011	50
WZ-3505-01-04-011	50
WZ-3505-01-05-011	50
WZ-3505-01-M1-011	50
WZ-3505-01-M2-011	50
WZ-3505-01-M3-011	50
WZ-3505-01-M4-011	50
WZ-3505-01-M5-011	50
WZ-3615-01-M1-011	48
WZ-3615-01-M2-011	48
WZ-3615-01-M3-011	48
WZ-3615-01-M4-011	48
WZ-3615-01-M5-011	48
WZ-3615-01-M6-011	48

Catalogue number	Page
WZ-3615-01-S1-011	48
WZ-3615-01-S2-011	48
WZ-3615-01-S3-011	48
WZ-3615-01-S4-011	48
WZ-3615-01-S5-011	48
WZ-3615-01-S6-011	48
WZ-3661-01-01-011	60
WZ-3661-01-02-011	60
WZ-3684-01-00-011	58
WZ-3684-01-01-011	58
WZ-3684-01-02-011	58
WZ-3715-01-01-011	52
WZ-3715-01-02-011	52
WZ-3715-01-03-011	52
WZ-3715-01-04-011	52
WZ-3715-01-05-011	52
WZ-3715-01-06-011	52
WZ-3715-01-07-011	52
WZ-3715-01-08-011	52
WZ-3715-01-09-011	52
WZ-3715-01-10-011	52
WZ-3839-01-01-011	52
WZ-3839-01-M1-011	52
WZ-3839-14-01-000	62
WZ-3839-15-01-000	62
WZ-3984-01-01-011	52
WZ-3984-01-02-011	52
WZ-3984-01-03-011	52
WZ-3984-01-04-011	52
WZ-3984-01-05-011	52
WZ-3984-01-M1-011	52
WZ-3984-01-M2-011	52
WZ-3984-01-M3-011	52
WZ-3984-01-M4-011	52
WZ-3984-01-M5-011	52
WZ-3987-01-01-011	44
WZ-3987-01-01-161	44
WZ-3987-01-02-011	44
WZ-3987-01-02-161	44

Catalogue number	Page
WZ-3987-01-03-011	44
WZ-3987-01-03-161	44
WZ-3987-01-04-011	44
WZ-3987-01-04-161	44
WZ-4317-01-01-011	44
WZ-4317-01-01-161	44
WZ-4317-01-02-011	44
WZ-4317-01-02-161	44
WZ-4317-01-03-011	44
WZ-4317-01-03-161	44
WZ-4317-01-04-011	44
WZ-4317-01-04-161	44
WZ-4318-01-01-011	44
WZ-4318-01-01-161	44
WZ-4318-01-02-011	44
WZ-4318-01-02-161	44
WZ-4318-01-03-011	44
WZ-4318-01-03-161	44
WZ-4318-01-04-011	44
WZ-4318-01-04-161	44
WZ-K12U-00-00-000	142
WZ-K16U-00-00-000	142
WZ-K20U-00-00-000	142
WZ-K24U-00-00-000	142
WZ-K28U-00-00-000	142
WZ-K32U-00-00-000	142
WZ-K36U-00-00-000	142
WZ-K40U-00-00-000	142
WZ-K44U-00-00-000	142
WZ-K48U-00-00-000	142
WZ-K56U-00-00-000	142
WZ-LZ11-40-00-000	92
WZ-LZ13-10-00-000	92
WZ-LZ21-10-00-000	92
WZ-LZ21-40-00-000	92
WZ-LZ22-10-00-000	92
WZ-LZ23-10-00-000	92
WZ-LZ30-09-00-000	92
WZ-LZ30-F0-00-000	92

CATALOGUE NUMBER INDEX

Catalogue number	Page
WZ-LZ31-20-00-000	92
WZ-LZ33-10-00-000	92
WZ-LZ52-10-00-000	92
WZ-LZ53-10-00-000	92
WZ-LZ53-20-00-000	92
WZ-PS3U-00-00-011	95
WZ-PS3U-00-00-161	95
WZ-PW12-00-00-011	96
WZ-PW12-00-00-161	96
WZ-PW13-00-00-011	96
WZ-PW13-00-00-161	96
WZ-PW24-A0-00-011	96
WZ-PW24-A0-00-161	96
WZ-PW26-00-00-011	96
WZ-PW26-00-00-161	96
WZ-PW34-00-00-011	96
WZ-PW34-00-00-161	96
WZ-PW36-00-00-011	96
WZ-PW36-00-00-161	96
WZ-SB00-01-01-000	84
WZ-SB00-01-02-000	84
WZ-SB00-01-02-000	138
WZ-SB00-01-03-000	84
WZ-SB00-01-03-000	138
WZ-SB00-01-04-000	84
WZ-SB00-01-04-000	138
WZ-SB00-01-05-000	84
WZ-SB00-01-05-000	138
WZ-SB00-01-06-000	84
WZ-SB00-01-06-000	138
WZ-SB00-01-07-000	84
WZ-SB00-01-07-000	138
WZ-SB00-01-08-000	84
WZ-SB00-01-08-000	138
WZ-SB00-01-09-000	84
WZ-SB00-01-09-000	138
WZ-SB00-01-10-000	84
WZ-SB00-01-10-000	138
WZ-SB00-01-11-000	84

Catalogue number	Page
WZ-SB00-01-11-000	138
WZ-SB00-01-12-000	84
WZ-SB00-01-12-000	138
WZ-SB00-01-13-000	84
WZ-SB00-01-13-000	138
WZ-SB00-01-14-000	84
WZ-SB00-01-14-000	138
WZ-SB00-01-15-000	84
WZ-SB00-01-15-000	138
WZ-SB00-01-16-000	84
WZ-SB00-01-16-000	138
WZ-SB00-01-17-000	84
WZ-SB00-01-17-000	138
WZ-SB00-26-01-000	85
WZ-SB00-26-02-000	85
WZ-SB00-26-03-000	85
WZ-SB00-26-04-000	85
WZ-SB00-26-05-000	85
WZ-SB00-27-01-000	85
WZ-SB00-27-02-000	85
WZ-SB00-27-03-000	85
WZ-SB00-27-04-000	85
WZ-SB00-27-05-000	85
WZ-SB00-28-01-000	85
WZ-SB00-28-02-000	85
WZ-SB00-29-01-000	85
WZ-SB00-29-02-000	85
WZ-SB00-29-03-000	85
WZ-SB00-29-04-000	85
WZ-SB00-29-05-000	85
WZ-SB00-30-01-000	84
WZ-SB00-30-02-000	84
WZ-SB00-30-03-000	84
WZ-SB00-30-04-000	84
WZ-SB00-30-05-000	84
WZ-SB00-30-06-000	84
WZ-SB00-30-07-000	84
WZ-SB00-30-08-000	84
WZ-SB00-30-09-000	84

Catalogue number	Page
WZ-SB00-30-10-000	84
WZ-SB00-30-11-000	84
WZ-SB00-30-12-000	84
WZ-SB00-30-13-000	84
WZ-SB00-30-14-000	84
WZ-SB00-30-15-000	84
WZ-SB00-30-16-000	84
WZ-SB00-30-17-000	84
WZ-SB00-30-18-000	84
WZ-SB00-31-01-011	87
WZ-SB00-31-02-011	87
WZ-SB00-31-03-011	87
WZ-SB00-31-04-011	87
WZ-SB00-31-05-011	87
WZ-SB00-31-06-011	87
WZ-SB00-31-07-011	87
WZ-SB00-31-08-011	87
WZ-SB00-31-09-011	87
WZ-SB00-31-10-011	87
WZ-SB00-31-13-011	87
WZ-SB00-31-14-011	87
WZ-SB00-31-15-011	87
WZ-SB00-31-16-011	87
WZ-SB00-31-17-011	87
WZ-SB00-31-18-011	87
WZ-SB00-31-19-011	87
WZ-SB00-31-20-011	87
WZ-SB00-31-21-011	87
WZ-SB00-31-22-011	87
WZ-SB00-31-25-011	87
WZ-SB00-31-26-011	87
WZ-SB00-31-27-011	87
WZ-SB00-31-28-011	87
WZ-SB00-31-29-011	87
WZ-SB00-31-30-011	87
WZ-SB00-31-31-011	87
WZ-SB00-31-32-011	87
WZ-SB00-31-33-011	87
WZ-SB00-31-34-011	87

CATALOGUE NUMBER INDEX

Catalogue number	Page
WZ-SB00-31-35-011	87
WZ-SB00-31-36-011	87
WZ-SB00-32-01-011	82
WZ-SB00-32-02-011	82
WZ-SB00-32-03-011	82
WZ-SB00-32-04-011	82
WZ-SB00-32-05-011	82
WZ-SB00-32-06-011	82
WZ-SB00-32-15-011	82
WZ-SB00-33-01-011	82
WZ-SB00-33-01-161	82
WZ-SB00-33-02-011	82
WZ-SB00-33-02-161	82
WZ-SB00-33-03-011	82
WZ-SB00-33-03-161	82
WZ-SB00-33-04-011	82
WZ-SB00-33-04-161	82
WZ-SB00-33-05-011	82
WZ-SB00-33-05-161	82
WZ-SB00-33-06-011	82
WZ-SB00-33-06-161	82
WZ-SB00-33-15-011	82
WZ-SB00-33-15-161	82
WZ-SB00-40-00-011	81
WZ-SB00-40-00-161	81
WZ-SB00-48-01-011	78
WZ-SB00-48-01-161	78
WZ-SB00-48-02-011	78
WZ-SB00-48-02-161	78
WZ-SB00-48-03-011	78
WZ-SB00-48-03-161	78
WZ-SB00-48-04-011	78
WZ-SB00-48-04-161	78
WZ-SB00-48-05-011	78
WZ-SB00-48-05-161	78
WZ-SB00-49-01-011	78
WZ-SB00-49-01-161	78
WZ-SB00-49-02-011	78
WZ-SB00-49-02-161	78

Catalogue number	Page
WZ-SB00-49-03-011	78
WZ-SB00-49-03-161	78
WZ-SB00-49-04-011	78
WZ-SB00-49-04-161	78
WZ-SB00-49-05-011	78
WZ-SB00-49-05-161	78
WZ-SB00-53-01-000	84
WZ-SB00-53-02-000	84
WZ-SB00-53-03-000	84
WZ-SB00-53-04-000	84
WZ-SB00-53-05-000	84
WZ-SB00-53-06-000	84
WZ-SB00-53-07-000	84
WZ-SB00-53-08-000	84
WZ-SB00-53-09-000	84
WZ-SB00-53-10-000	84
WZ-SB00-53-11-000	84
WZ-SB00-53-12-000	84
WZ-SB00-53-13-000	84
WZ-SB00-53-14-000	84
WZ-SB00-53-15-000	84
WZ-SB09-01-01-011	75
WZ-SB09-01-02-011	75
WZ-SB09-02-01-011	75
WZ-SB09-02-02-011	75
WZ-SB12-00-01-000	88
WZ-SB12-00-02-000	88
WZ-SB19-00-01-011	82
WZ-SB19-00-02-011	82
WZ-SB19-00-05-011	82
WZ-SB19-00-08-011	82
WZ-SB19-00-09-011	82
WZ-SB19-00-10-011	82
WZ-SB19-00-13-011	82
WZ-SB19-00-14-011	82
WZ-SB19-00-15-011	82
WZ-SB19-00-16-011	82
WZ-SB23-00-03-011	86
WZ-SB23-00-04-011	86

Catalogue number	Page
WZ-SB23-00-05-011	86
WZ-SB23-00-06-011	86
WZ-SB23-00-07-011	86
WZ-SB23-00-08-011	86
WZ-SB23-00-09-011	86
WZ-SB23-00-10-011	86
WZ-SB23-00-11-011	86
WZ-SB23-00-12-011	86
WZ-SB23-00-13-011	86
WZ-SB23-00-14-011	86
WZ-SB23-00-15-011	86
WZ-SB23-00-16-011	86
WZ-SB23-00-17-011	86
WZ-SB23-00-18-011	86
WZ-SB24-00-00-000	84
WZ-SB24-00-00-000	138
WZ-SB25-00-00-000	88
WZ-SB27-00-01-011	78
WZ-SB27-00-01-161	78
WZ-SB27-00-02-011	78
WZ-SB27-00-02-161	78
WZ-SB27-00-03-011	78
WZ-SB27-00-03-161	78
WZ-SB27-00-04-011	78
WZ-SB27-00-04-161	78
WZ-SB28-00-01-011	78
WZ-SB28-00-01-161	78
WZ-SB28-00-02-011	78
WZ-SB28-00-02-161	78
WZ-SB28-00-03-011	78
WZ-SB28-00-03-161	78
WZ-SB28-00-04-011	78
WZ-SB28-00-04-161	78
WZ-SB39-00-01-011	75
WZ-SB39-00-02-011	75
WZ-SB39-00-03-011	75
WZ-SB50-00-02-011	75
WZ-SB50-00-04-011	75
WZ-SB52-00-01-000	83

CATALOGUE NUMBER INDEX

Catalogue number	Page
WZ-SB52-00-02-000	83
WZ-SB52-00-03-000	83
WZ-SB52-00-04-000	83
WZ-SB52-00-05-000	83
WZ-SB52-00-06-000	83
WZ-SB52-00-07-000	83
WZ-SB53-00-01-000	83
WZ-SB53-00-02-000	83
WZ-SB53-00-03-000	83
WZ-SB53-00-04-000	83
WZ-SB53-00-05-000	83
WZ-SB53-00-06-000	83
WZ-SB53-00-07-000	83
WZ-SB54-00-01-000	83
WZ-SB54-00-02-000	83
WZ-SB54-00-03-000	83
WZ-SB54-00-04-000	83
WZ-SB54-00-05-000	83
WZ-SB54-00-06-000	83
WZ-SB54-00-07-000	83
WZ-SB55-00-00-011	83
WZ-SB55-00-00-161	83
WZ-SB56-00-00-011	83
WZ-SB56-00-00-161	83
WZ-SB63-00-01-011	81
WZ-SB63-00-01-161	81
WZ-SB63-00-02-011	81
WZ-SB63-00-02-161	81
WZ-SB67-00-00-011	81
WZ-SB67-00-00-161	81
WZ-SB72-00-01-000	74
WZ-SB72-00-02-000	74
WZ-SB73-00-01-000	74
WZ-SB73-00-02-000	74
WZ-SB74-00-01-011	74
WZ-SB74-00-02-011	74
WZ-SB76-00-00-011	77
WZ-SB76-00-00-161	77
WZ-SB78-00-01-011	80

Catalogue number	Page
WZ-SB78-00-01-161	80
WZ-SB78-00-02-011	80
WZ-SB78-00-02-161	80
WZ-SB78-00-03-011	80
WZ-SB78-00-03-161	80
WZ-SB78-00-04-011	80
WZ-SB78-00-04-161	80
WZ-SZB-005-17AA-11-0000-011	12
WZ-SZB-009-17AA-11-0000-011	12
WZ-SZB-010-17AA-11-0000-011	12
WZ-SZB-017-17AA-11-0000-011	12
WZ-SZB-018-17AA-11-0000-011	12
WZ-SZB-021-17AA-11-0000-011	12
WZ-SZB-022-17AA-11-0000-011	12
WZ-SZB-093-17AA-11-0000-011	12
WZ-SZB-094-17AA-11-0000-011	12
WZ-SZB-151-17AA-11-0000-011	12
WZ-SZB-152-17AA-11-0000-011	12
WZ-SZBSE-001-5711-13-7111-1-011	28
WZ-SZBSE-001-5711-13-7111-1-161	28
WZ-SZBSE-002-5711-13-7111-1-011	28
WZ-SZBSE-002-5711-13-7111-1-161	28
WZ-SZBSE-003-5711-13-7111-1-011	28
WZ-SZBSE-003-5711-13-7111-1-161	28
WZ-SZBSE-004-5711-13-7111-1-011	28
WZ-SZBSE-004-5711-13-7111-1-161	28
WZ-SZBSE-005-5711-13-7111-1-011	28
WZ-SZBSE-005-5711-13-7111-1-161	28
WZ-SZBSE-006-5711-13-7111-1-011	28
WZ-SZBSE-006-5711-13-7111-1-161	28

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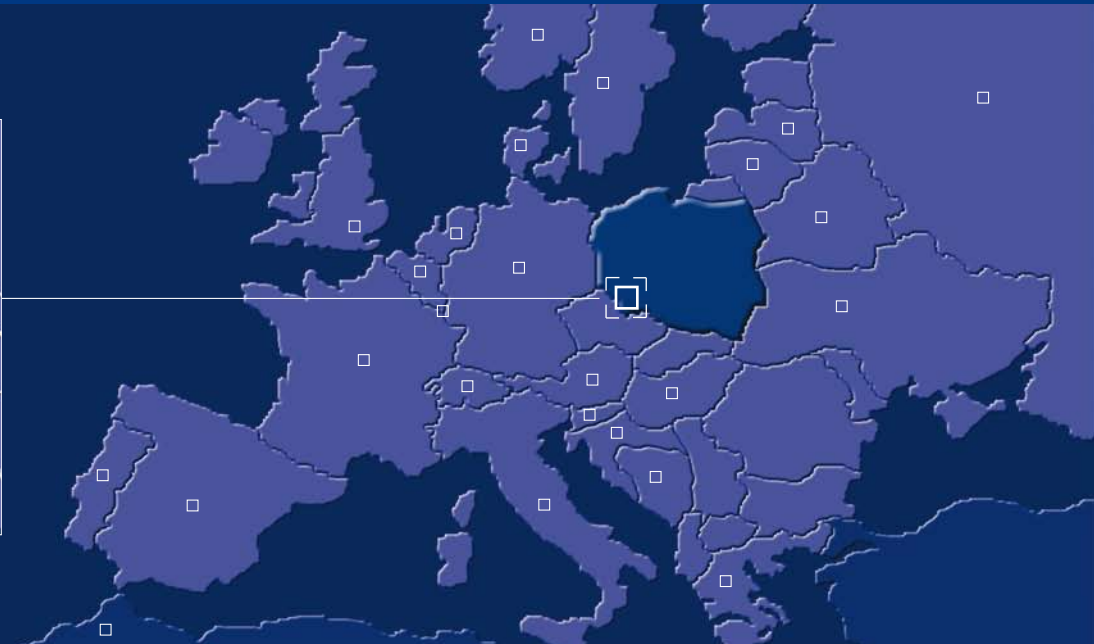
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Zakład Produkcji Automatyki Sieciowej S.A.

Przygórze 209 · 57-431 Wolibórz · Poland

Phone +48 [0] 74 872 01 00

Fax +48 [0] 74 872 40 74

info@zpas.com · www.zpas.com

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