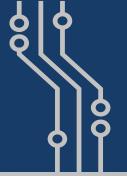
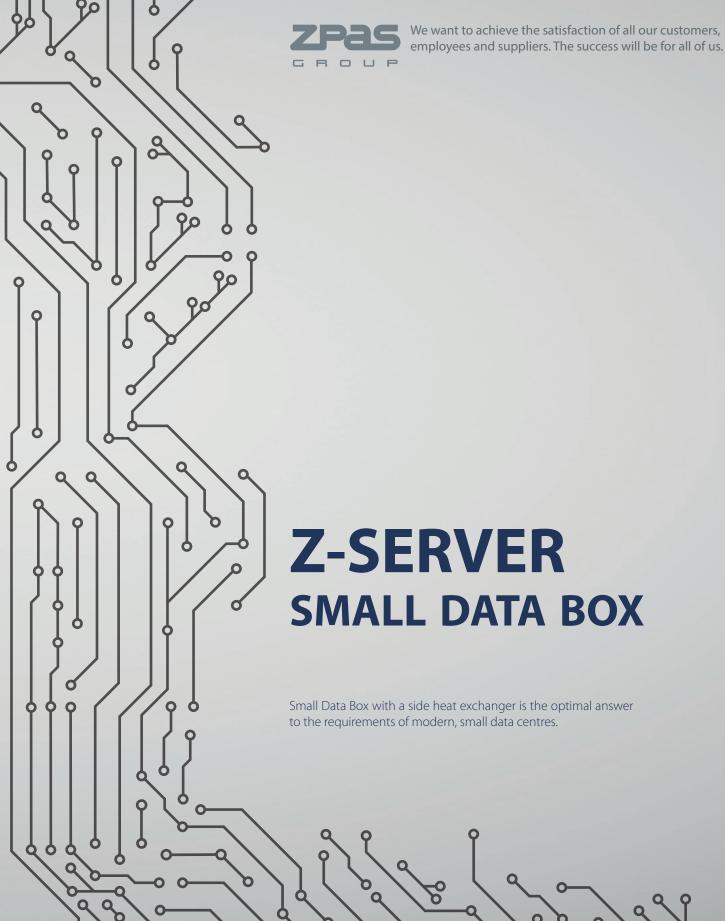
### **INFORMATION BROCHURE**

We are innovative company that offers to our customers comprehensive solutions in IT, ITC, power and automation sectors. Recently, we launched modern production facility dedicated to electrical engineering solutions like prefabrication and wiring as well as production of unique AHP air heat pumps.









Small Data Box is a reliable and modern system designed for building modular server rooms. The solution is characterized by optimal dimensions, versatility and easy expansion.



### **STUDY DESIGN**

Bolted cabinet's frame allows for a static load of the 19" rack up to 1500 kg.

## **MULTIPURPOSE**

Smooth tool-free adjustment of 19" mounting profiles. The width can be changed from 19" to 21" with no need to use additional mounting elements. The frame includes holes for mounting accessories and many elements for cabling organization.

## **SECURITY**

The door is equipped with a swing handle and a 5-point locking system. It is possible to use access control with an electronic swing handle or an automatic opening system in the event of excessive temperature increase. Autonomous extinguishing system within the cabinet and heat exchanger.

### **PERFORMANCE**

Optimization of the cold air flow provided by the cold and hot aisle separation elements at the rack level. A wide range of cooling capacity of the offered heat exchangers.



7Pac

### AIR CONDITIONING SYSTEM

Our team of specialists, on the basis of the submitted specifications of the installed devices, selects the optimal cooling system, which guarantees the cooling performance corresponding to the actual needs of the customer.

#### **ADVANTAGES OF SIDE HEAT EXCHANGERS**

- Even distribution of cold air over the entire height of the exchanger.
- Optimal adjustment of the fans' operation significantly reduces the energy consumption.
- The Hot Swap system enables maintenance operations during continuous operation of the device. Connecting the fans to the multiswitch strip allows for independent switching off of the serviced fan.
- Monitoring of air conditioner operating conditions via Ethernet.
- Double power supply.
- The solution guarantees automatic activation of the emergency line in case of power failure.

#### **CHILLED WATER**

The Chilled Water system features the use of chilled water supplied by an internal or external chiller. In the case of a Free Cooling chiller, the outside air cools the water through a heat exchanger. In this case, the energy consumption is as short as possible. The cooling capacity of the heat exchangers ranges from 12.3 to 37.7 kW.

#### **DIRECT EXPANSION**

The heat load absorbed by the refrigerant is released to the outside environment by modular condensing units with a cooling capacity of 4.4 kW to 22.3 kW.



## **PRSENTED SOLUTION**



#### **Z-SERVER CABINET**

- Dimensions: 42 U, 800 x 1200 x 2000 mm + plinth 100 mm
- Acceptable static load: 1500 kg.
- Single-leaf front door with glass
- Single-leaf solid rear door
- Door with access control system
- The possibility of remote opening of the cabinet
- Smooth and tool-free adjustment of 19" profiles
- Easier installation by marking the profiles with U unit numbers
- Possibility to change the width from 19 "to 21" without additional mounting elements
- Elements separating the zone of hot and cold air
- Elements of cabling organization
- Automatic door opening system

#### **HEAT EXCHANGER**

- Side heat exchanger BWC-DX2, outdoor condenser SDX3
- 11.2 kW cooling capacity
- 5 AC fans
- Dimensions: 42 U, 300 x 1200 x 2000 mm + plinth 100 mm
- Front and rear single-leaf solid doors with a 5-point lock and a swing handle

#### **PDU POWER STRIPS**

- Power supply: three-phase 400 V, 16 A
- Load: 11040 W
- Sockets: 21XC13, 3XC19
- Functionality: managed with monitoring on input and sockets
- Protocols: HTTP (S); SSH; RS-232 (serial); power IQ; SNMP v1 / v2 / v3; SMTP, Modbus

#### **GAS EXTINGUISHING SYSTEM**

- Extinguishing agent: NOVEC 1230
- Dimensions: 1 U, 19"

#### MONITORING OF ENVIRONMENTAL CONDITIONS

- Measurements: temperature, humidity
- Detection: smoke, no voltage, line flooding, door opening
- Signaling: status lamp
- Notification: e-mail, SMS



Z-SERVER cabinet						
Height	42 U (2000 mm)	45 U (2100 mm) 47 U (2200 mm)		200 mm)		
Width	600 mm / 800 mm					
Depth	1200 mm					
Precision air conditioning system						
Туре	Side heat exchanger					
Technology	CW - Chilled Water					
Model	BWC-CW1	BWC-CW2		BWC-CW3		
The cooling capacity [kW]	22.6	31		37.7		
Number of fans	3	5 5			5	
Technology	DX - Direct Expansion					
Refrigerant	R410A					
Model	BWC-DX1	BWC-DX1	BWC-DX2	BWC-DX2	BWC-DX2	
The cooling capacity [kW]	4.5 - 8.4 11.2 - 22.3					
Number of fans	3	3	5	5	5	
Condenser (outdoor unit)	SDX1	SDX2	SDX3	SDX4	SDX5	
The cooling capacity [kW]	4.5	8.4	11.2	14	22.3	
Power strips						
Available functionalities	Basic / Monitored Entry / Monitored Entry and Exit / Managed / Managed and Monitored Entry and Exit					
Rated phase voltage [V]	230					
Maximum current [A]	16	32	3x16	3x32		
Maximum load [kW]	3.6	7.2	11.1	2	2.1	
Available sockets		C13,	C19, Schuko,	co, UTE		
Monitoring of environmental conditions						
Measurement	Temperature / humidity / air flow					
Detection	Smoke / no voltage / spot or line flooding / door opening / movement / vibration					
Signaling	LCD display / status lamp / alarm siren with strobe					
Notification	Trapy SNMP / e-mail / SMS					
Fire detection and extinguishing system						
Extinguishing substance	Novec 1230					











