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USER MANUAL

Buffer power supply units ZBS Series

ZBS12V1,5A-7, ZBS12V3A-7, ZBS12V3A-18, ZBS12V5A-18, ZBS24V1,5A-7, ZBS24V2,5A-7
16.02.2017

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1. Warnings and recommendations

- Please read this manual carefully before using the device.
- The device can disturb the operation of sensitive RF equipment located nearby (such as TV sets or radios).
- The device is intended for indoor use and must not be operated outdoors.
- Protect the device against direct sunlight.
- **Only trained service engineers are allowed to access the internal parts of the device.**

2. General

The ZBS buffer power supply are designed to supply equipment that requires backup power sources in the event of loss of power supply. The power supplies use maintenance-free rechargeable batteries (VRLA). Each power supply consists of a wall-mounted lockable cabinet with IP20 protection class. Each cabinet contains a microswitch for cabinet door opening signalling and the doors of some models contain LEDs for power supply mode indication.

3. Options and key specifications

Type	ZBS-12V1.5A-7	ZBS-12V3A-7	ZBS-12V3A-18	ZBS-12V5A-18	ZBS-24V1.5A-7	ZBS-24V2.5A-7
Rated output voltage	13,8V				27,6V	
Maximum output current	1,5A	3A	3A	5A	1,5A	2,5A
Battery slots	7Ah / 12V		18 Ah / 12V		2 x 7Ah / 12V	
Power of power supply	20W	42W	42W	70W	42W	70W
Output voltage range	11,5...16,2V				20,4...27,6V	
Supply voltage	195...253 Vac 47...63 Hz					
Protections	overload / short-circuit					
Efficiency	80%	70%	70%	75%	70%	80%
Operating temperature range	0...+40 °C					
Microswitch	3 contacts; NC or NO mode; current-carrying capacity 5A@250VAC					
Overall dimensions (LxDxH)	162 x 70+10 x 240mm		212 x 90+10 x 300mm			
Weight without battery	1,2 kg	1,4 kg	2 kg	2,15kg	2 kg	2,15 kg

4. Assembly and Installation

4.1. Safety

- Only trained service engineers licensed to work with 230 VAC systems may assemble and install the device.
- The device is designed for continuous operation and has no main power switch.
- **The device must be supplied from 230 VAC mains containing protective earthing (PE lead).**

4.2. Installation Sequence

- You may remove the power supply from its cabinet to facilitate cabinet installation. Remove the screw located in the top right corner of the power supply and pull out the power supply from under the other screw.
- Hang the cabinet on a wall in a dry location not exposed to direct sunlight. See the mechanical drawing for the spacing of mounting holes.
- Ensure that the power supply circuit is isolated from the mains and connect the L(ive) and N(eutral) mains leads to the mains connector and the yellow-green PE lead to the eye bolt (⊕) located next to the mains connector.
- Connect the load leads to the output terminals ensuring correct polarity.
- If you have removed the power supply, replace it by following the removal steps in reverse order.
- To use the microswitch, connect the connectors with clamped leads as appropriate (NO or NC mode) to the terminals of the microswitch and mount the whole unit on the pegs provided inside the cabinet.
- Connect the battery terminals to the power supply using black lead (negative end) and red lead (positive end) terminated with connectors. If necessary, use the enclosed reducers to fit the connectors to the battery terminals.
- Close the cabinet door and secure it with two screws.
- Turn on 230 VAC power supply and check the operation of the loads.

4.3. LED Indicators

The device contains LED indicators installed in the front section of the cabinet (not applicable to option ZBS-12V1.5A-7). The green and orange LEDs signal the availability of 230 VAC power supply and output voltage, respectively.

In addition, the power supply (placed inside the cabinet) contains a green LED for signalling the presence of voltage on output terminals and a potentiometer (+V_{ADJ}) for output voltage adjustment within the range specified in the table below.

If you want the device to report the opening of the cabinet door, install the microswitch inside the cabinet as described above. The microswitch has 3 terminals and can operate in the normally open (NO) or normally closed (NC) mode.

5. Maintenance and repairs

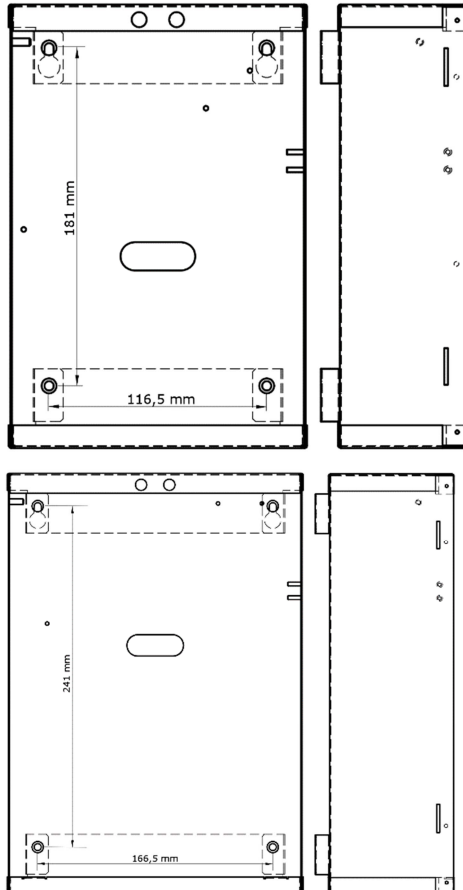
5.1. Maintenance

The device doesn't require any special maintenance activities.

5.2. Repairs

The service organization of the Supplier or its Authorized Representative perform all warranty and post-warranty repairs.

6. Mechanical drawings



Handling of the package and waste



The package of the product is made of materials which could be recycled. Unused packages should be handed over to a dust collector, after having them segregated. The used out product constitutes non-hazardous waste, not to put into the general waste container. Instead, it should be handed over to the local collector of the waste electric and electronic equipment. Professional handling of the waste electric and electronic equipment (WEEE) shall limit negative effects of improper storage and processing of this waste on human health and environment. The used out batteries should be handled according to local regulations, e.g. introduced as the implementation of the Battery Directive (Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006). They are sealed, maintenance-free, valve-regulated (equipped with a pressure relief valve) lead acid batteries. When used out they constitute hazardous waste, coded in the European Waste Catalogue as 16 06 01*.