

Power source

**BRP 12V 1.5A**

Data sheet

Device identification number

## 1. General Information

The power source "BRP 12V 1.5A" is designed for power supply to devices with constant voltage 12V and full-load current 1.5A.

The power source operates on mains power ~220V 50 Hz and on batteries 12V. It has a built-in protection against polarity reversal.

The power source "BRP 12V 1.5A" could be installed into "Contact" enclosures manufactured by the "Ritm" company under batteries 1.2 Ah and 7 Ah or in a metal enclosure 292×290×92.

## 2. Manufacturer

**RITM Company**  
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St Petersburg, Russia  
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## 3. Package Contents

Power source "BRP 12V 1.5A"	1 pc
Toroidal transformer 671111.317	1 pc
Fuse 250 mA 250 V	1 pc
Jumper 2.54mm	1 pc
Redundant power supply cable	1 pc
Sunken screw M4×60	1 pc
Sunken screw M4×20	1 pc
Nut M4	1 pc
Grover washer D4	1 pc
Washer for transformer	2 pcs
Plastic bay kit	1 pc
Data sheet	1 pc
Package	1 pc

#### 4. Technical Specifications

Specification	Value
AC input voltage (50 Hz), V	210–240
DC input voltage of the backup battery, V	12
Max. power consumption from 220V, V·A	40
Output voltage, V	DC 12±0.5
Maximum load current, A (at ambient temperature 20 °C)	1,5 (without case); 1 (with case)
Peak load current, A	2
Average charging current	0.25
Backup power supply, V	Lead-acid battery 12
CPW terminal for main power supply monitoring	+
Battery protection from excess load current	+
Short circuit protection	+
Dimensions, mm	127×100×65
Net weight (with transformer), g	550
Operating temperature range, °C	-30... +50

## 5. Designation of Elements

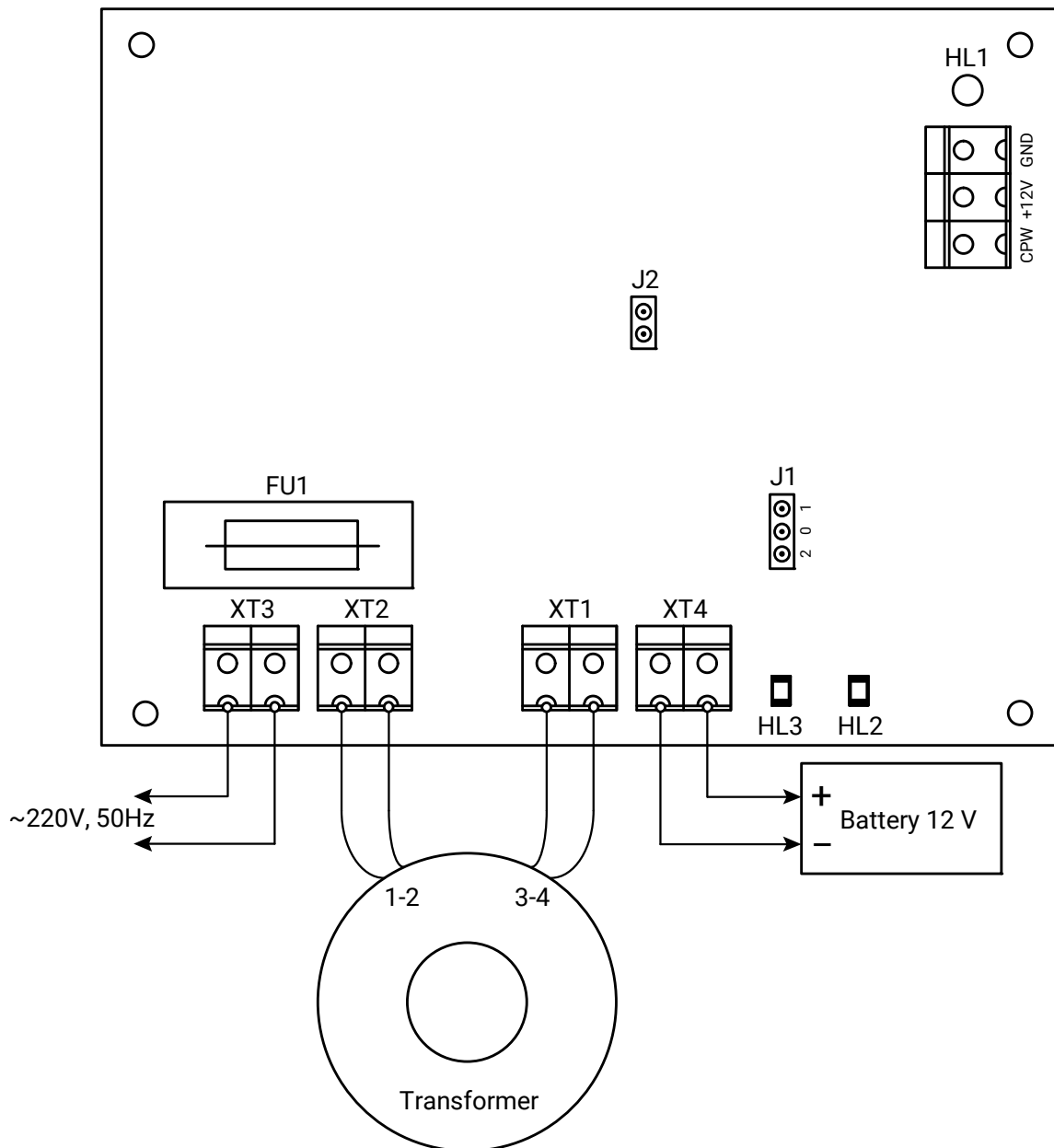


Fig. 1. Connection diagram

Element	Designation
J1	Jumper for normal operation with batteries of different capacities. Install the jumper into "1-0" position to connect the battery with capacity less than 4Ah. Install the jumper into "2-0" position to connect the battery with capacity more than 4Ah
J2	Jumper for operation directly from a battery without power supply 220V. To switch on the security panel connect the battery to the connector XT4 and the panel to the connector XT6 and close the contacts of the jumper J2 for a short moment
XT1	Connector for connection of transformer secondary winding (outputs 3 – 4)
XT2	Connector for connection of transformer primary winding (outputs 1 – 2)
XT3	Connector for connection to AC mains 220V 50Hz
XT4	Connector for battery connection
CPW, +12V, GND	12V DC output voltage connector (CPW terminal designed for connection of main power monitoring bus)

## 6. Visual Indication

LED	Designation
HL1 – ERROR (green)	Battery connection error
HL2 – “+12V” (red)	Main power (220V) availability
HL3 – “BAT” (green)	Switching to backup power supply

## 7. Placement and Installation



Switch off the device power before device setting-up and installation. To install the device choose the appropriate location most protected against atmosphere fallouts, dirt, process fluids, physical impact and free access of unauthorized persons. It is recommended to use the power source “BRP 12V 1.5A” in enclosures “Contact” under batteries 1.2Ah or 7Ah.

1. Connect the transformer to the connectors XT1 and XT2 (see fig. 1).

For the **enclosure “Contact”** (fig. 2a) install the transformer on the special spindle and fasten it with the plastic washer using the screw M4x20 and the nut M4 (provided). Install the power source board into the mounting seat over the transformer.

For the **metal enclosure** (fig. 2b) fasten the transformer with plastic washers on both sides through the enclosure hole using the screw M4x20, the Grover washer D4 and the nut M4 (provided).

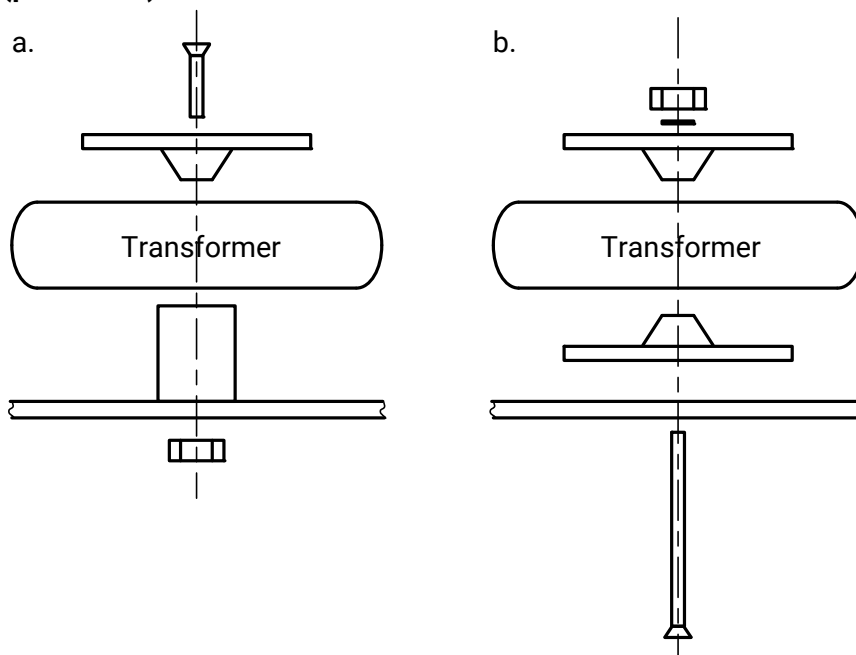


Fig. 2. Transformer fastening examples

2. Carefully connect a battery to the connector XT4 respecting the polarity. Install the jumper J1 into “2-0” position to connect the battery 7Ah. Install the jumper J1 into “1-0” position to connect the battery 1.2Ah.
3. Connect the power bus 12V to the connector XT5 (if required connect the main power control bus to the terminal CPW).
4. Connect the mains ~220V 50Hz to the connector XT3 and supply the power to the device.
5. Confirm the device normal operation using LED indicators.

## 8. Maintenance and Safety Measures

All installation and maintenance activities applied to the device should be performed by duly qualified personnel.



Under no circumstances touch the board or parts of the switched on power source. Turn off the power and wait for 2 minutes before taking any action with the power source. The capacitors may retain high voltage!

## 9. Transportation and Storage

The device should be properly packed and transported in roofed vehicles. Storage premises should be free of current-conducting dust, acid and alkaline fumes, corrosive gases and gases harmful to insulation.

## 10. Manufacturer's Warranties

The manufacturer guarantees that the device complies to requirements of the technical specifications provided to the client, ensures compliances to conditions of transportation, storage, installation and operation.

Although **the warranty period** is 12 months from the commissioning date, it may not exceed 18 months from the production date.

The **warranty storage period** is 6 months from the production date.

The manufacturer reserves the right for modification of the device in any way that does not degrade its functional characteristics without prior notice.

## 11. Information on Claims

In case of a device failure or defect during the warranty period, please fill in a malfunction report specifying the dates of issue and commissioning of the device and nature of the defect and submit it to the manufacturer.

**For notes**

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