ZUBR | Technical data sheet, installation and operation manual

V3

Overvoltage protection for professionals

Digital three-phase voltmeter ZUBR V3 (hereinafter referred to as the device) is designed to monitor three-phase network voltage and phase rotation order. The voltmeter is an indicator; it does not protect against voltage surges, but only measures and displays.

The device stores the maximum and minimum mains voltage in non-volatile memory. Stored values can be reset.

Non-volatile voltmeter storage saves all settings in the event of a power outage.

Before the installation and operation of the device, please read by the end of this document. This will help to avoid possible danger, mistakes and misunderstandings.

TECHNICAL DATA

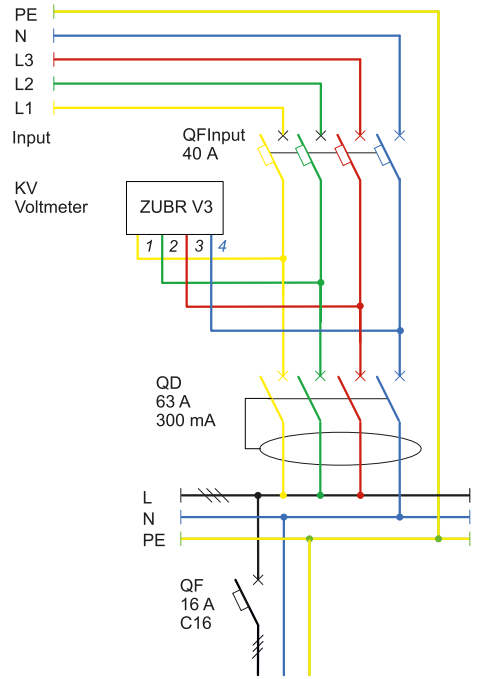
Power Volt	not less than 100 V not more than 420 V
Device weight	0,14 kg ±10 %
Overall dimensions (w × h × d)	52 x 90 x 67 mm
Degree of protection GOST14254	IP20

IN THE BOX

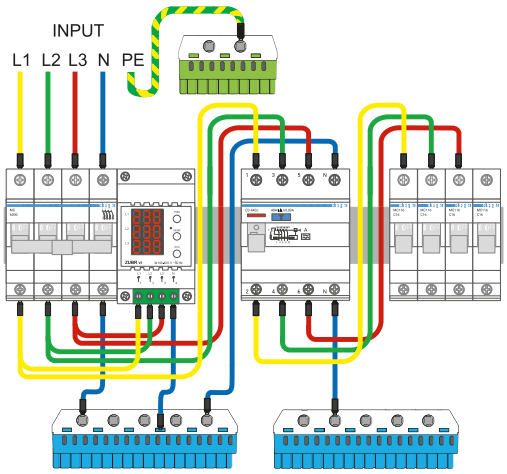
Digital three-phase voltmeter	1 piece
Technical data sheet, installation and operation manual, warranty card	1 piece
The packing box	1 piece

CONNECTION SCHEMES

Measurement and power phases are determined by the indicator and fed to the device. Zero is connected to terminal 4.



Scheme 1. Option of wiring diagram



Scheme 2. Option of the connection diagram

INSTALLATION

The appliance is intended for installation inside residences The risk of moisture or humidity in the installation site should be minimal.

The ambient temperature during the installation should be within –5...+45 °C.

The appliance is installed in a special box, which allows to conduct the easy installation and operation. Cabinet should be equipped with standard mounting rail 35 mm width (DIN rail). The appliance takes in width of 3 standard module on 18 mm.

The height of the appliance should be in the range 0,5...1,7 m from the floor.

To connect your device:

- fix the appliance on the mounting rail (DIN);
- take a wire;
- make the connection according to the passport.

For protection against short circuit and excess capacity in circuit load necessarily need to set in front of the appliance, the automatic circuit-breaker (QF), see schemes 1 and 2. To protect person from electric shock leak is set safety shutdown device (QD).

Terminals of the device designed for wire cross section up to 2,5 mm². To reduce mechanical load on the terminals it is desirable to use soft wire. Clean the end wires of 8 ±0,5 mm. If end is longer, it can cause a short circuit, and if short — cause unreliable connection. Use the cable lugs.

Undo the screws of the terminals and insert tipped end of the wire in terminal. Tighten terminal with derived average 0,5 H·m. Low tight may lead to low contact and overheating terminals and wires and over tight — damage terminals and wires.

The wires are tightened in the terminals using a screwdriver with a blade width no more than 3 mm. The screwdriver with a blade width more than 3 mm can cause mechanical damage to the terminals. This may result in the loss of right for warranty.

WARRANTY TERMS

The warranty for ZUBR devices is valid for 60 months from the date of sale, provided that the instructions are followed. The warranty period for products without a warranty certificate is counted from the date of production.

If your device is not working properly, we recommend you to read the section “Possible problems” firstly. If you can not find an answer, contact Service Center. In most cases, these actions resolve all issues.

If you continue to have issues with the device, please send it to a Service Center or to the store where you purchased the device. If your device is defective due to our fault, we will repair or replace it under warranty terms within 14 business days.

Please look through the full text of the warranty and the data you need to send to your Service Center on the website https://www.ds-electronics.company. If you have a warranty case, please, contact the General distributor in your area.

ZUBR

SERVICE CENTER CONTACT:
+38 (091) 481-91-81
Viber WhatsApp Telegram
support@dse.com.ua

WARRANTY CARD

serial №:

date of sale:

a seller, a seal:

place of a seal

an owner contact
for a service center:

EXPLOITATION

The voltmeter starts to display the voltage values on the digital screen immediately after switching on. By means of the screen, it is possible to detect phase sticking and violation of sequence.

The voltmeter is operated by three buttons. The upper button displays the maximum and the lower button displays the minimum voltage value.since the last reset.

Setting the menu parameters and viewing the voltage values stored in the memory is accompanied by the red light.

Menu

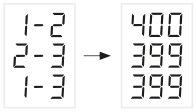
Press the “≡” button to navigate.

Use the “max” and “min” buttons to change the parameters. After pressing the button for the first time the parameter will flash, after second pressing the parameter will change. After 5 sec after pressing — return to the mains voltage display.

Viewing the min and max voltage

To view the maximum voltage stored in the memory, press the top button and to view minimum voltage, press lower button. The display of voltage values is accompanied by the glow of dots in the rightmost category of the screens. To exit the view mode, press the middle button briefly or do not use the buttons for 5 sec.

View of calculated line voltages



Hold the “≡” for 3 sec. The respective screens will display the phase numbers between which the line voltages are calculated. When released, the screens will display the calculated line voltages with an accuracy of 2-3 V for 30 sec or until the middle button is pressed. Readings can be displayed if “Phase sequence control” function is enabled (see Table).

Menu parameters	Screen	Notes
Reset voltage values stored in memory		To reset, press the “max” or “min” button.
Correction of voltage (factory setting 0 V, range ±20 V)	 	You can use correction if voltage indications on the screen of the device and your reference device differ. To switch between the corrections of each phase, press the middle button, the fourth press returns to the functional menu. • parametr correction • current phase number • correction value in volts
Phase sequence control (factory setting “on”)		In case of violation of phase order, the current phase order and the voltage on them will alternate on the screen. The order of the phases is always determined relative to phase L1.

Viewing of firmware version

Hold the “≡” for 12 sec. The manufacturer reserves the right to modify the firmware to enhance the device technical characteristics.

Reset to factory settings

Hold the three buttons at the same time for more than 4 sec. The “L1” indicator will display “dEF”. After release, reset to factory settings and reboot will take place.

POSSIBLE PROBLEMS, CAUSES AND WAYS TO OVERCOME THEM

At turning on neither indicator nor screen do not shine

Possible cause: There is no power supply voltage.

It is necessary to: Ensure supply voltage presence.

ADDITIONAL INFORMATION

Do not fire and do not throw away the device with the household waste.

After the end of its service life, the product must be disposed of in accordance with applicable law.

Transportation of goods carried in the package ensures the safety of the product.

The device can be transported by any kind of transport (rail, sea, motor, air transportation).

Date of manufacture is on the back side of device. Application time is unlimited.

The device does not contain harmful substances.

If you have any questions or something is not clear, call the Service Centre, the telephone number is listed below.

Technical Support Chat

If you haven't found the answer, please contact our technical support engineer

dselectronics_bot

zubr_rbuz_official

SAFETY INSTRUCTIONS

Carefully read and become aware of these instructions.

Connection of the device must be done by a qualified electrician.

Before the installation (dismantling) and connection (disconnection) of the device, turn off voltage supply and also act according to the “Rules of an arrangement of electric installations”.

Turning on and off, configure the device should be with dry hands.

Do not connect the device to the network disassembled.

Avoid hitting of water or moisture to the device.

Do not expose the device to extreme temperatures (higher than 40 ºC or below –5 °C) and high humidity.

Never clean the device with the use of chemicals such as benzene, solvents.

Do not store the device and do not use it in areas with the dust.

Do not attempt to disassemble and repair the device.

Do not exceed the landmarks value adaptor and power.

To protect against overvoltage caused by lightning discharges, use a lightning protector.

Protect the children from games with the working device, it is dangerous.

version: G35

EMC Directive 2014/30/EU
Low Voltage Directive 2014/35/EU

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