ZUBR V3 Digital Three Phase Voltmeter User Manual

Contents

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ZUBR

Voltmeter for professionals

V3

Technical data sheet , installation and operation manual

V3 digital three-phase voltmeter (hereinafter referred to as the device) is designed to monitor the voltage of a three-phase network and the order of phase sequence.

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

IN THE BOX

Digital three-phase voltmeter ZUBR V3	1 piece
Technical data sheet and installation and operation manual and warranty card	1 piece
The packing box	1 piece

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

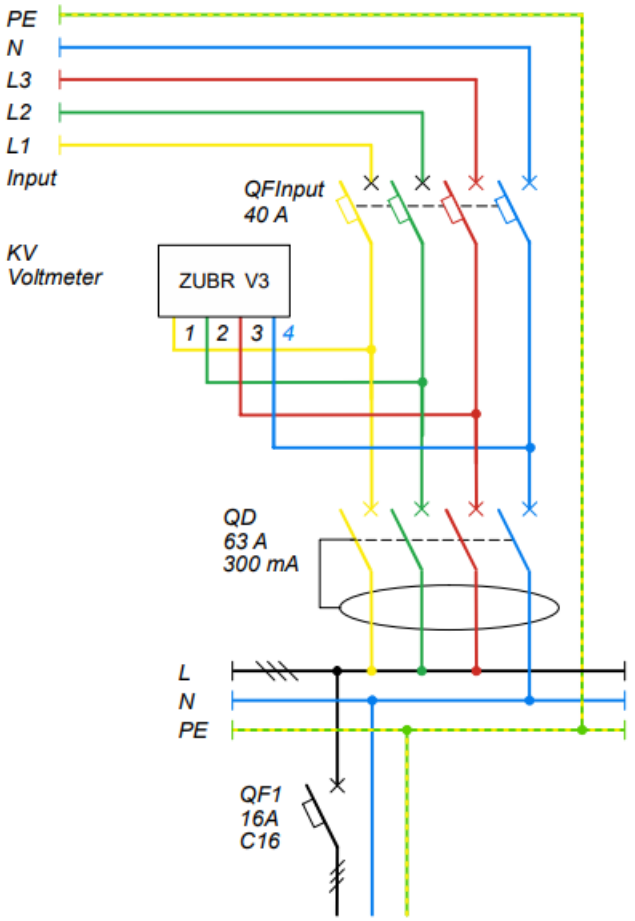
Before the installation and operation of the device, PLEASE READ BY THE END OF THIS DOCUMENT. This will help to avoid possible danger, mistakes and misunderstandings.

NON-VOLATILE STORAGE saves all settings in the event of a power outage.

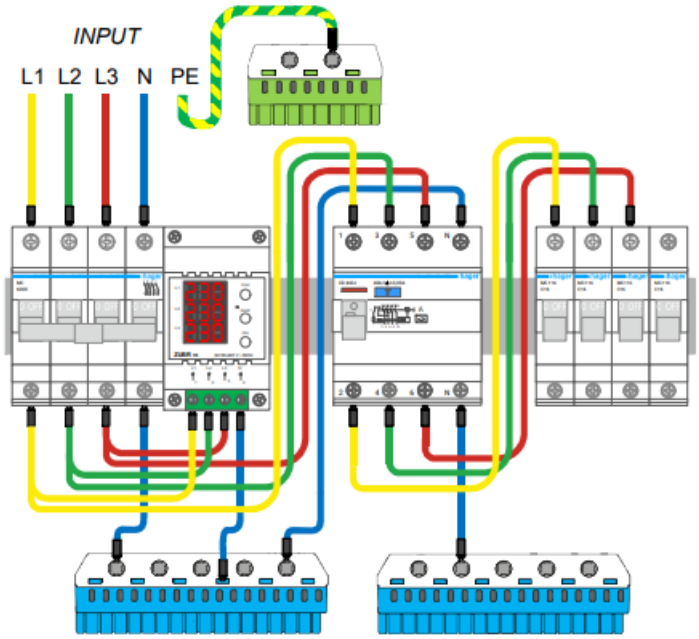
Setting the menu parameters and viewing the voltage values stored in the memory IS ACCOMPANIED BY THE RED LIGHT.

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 beequipped 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, 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.

EXPLOITATION

When switched on, the device measures and displays the effective voltage on the three phases.

Use the «≡» button to navigate through the menu(table 1). Use the «max» and «min» buttons to change the parameters. After pressing the button for the first time the parameter will flash, after pressing it for the second time the parameter will change. After 5 sec after pressing

— return to the mains voltage display.

Viewing the minimum and maximum 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 seconds.

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 that you first read the section «Possible problems». If you cannot 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 within 14 business days.

Please see the full text of the warranty and the data you need to send to your Service Center on the website https://www.ds-electronics.com.ua/en/. 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

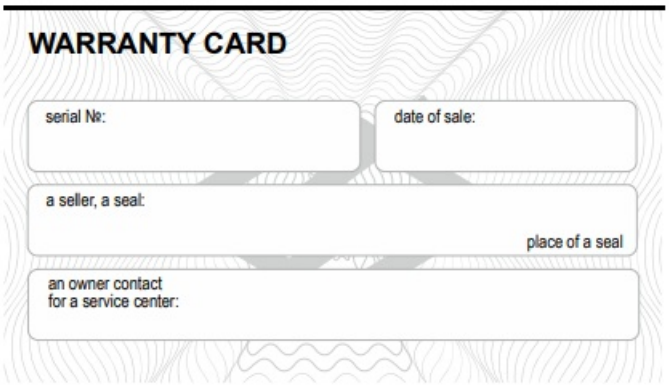
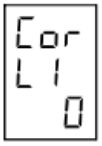
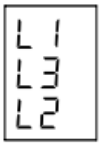


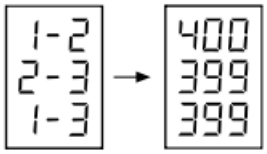
Table 1. FUNCTION MENU	Press «≡»	Screen	Notes
Reset voltage values stored in memory	1 time		To reset, press the «max» or «min» button.
Correction of voltage (factory setting 0 V, range ±20 V)	2 times		You can use correction if voltage indications on the screen of the device and your reference device differ. To switch between the corrections of each phase, press the middle button, the fourth press returns to the functional menu.  *current phase number* *correction value in volts*
Phase sequence control (factory setting «on»)	3 times		 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 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.

View of calculated line voltages

Hold the middle button for 3 seconds. 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 seconds or until the middle button is pressed. Readings can be displayed if «Phase sequence control» function is enabled (see Table 1).



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, ensuring the safety of the product.

The deive is 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 you something will not clear, call the Service centre the telephone number listed below.

SAFETY INSTRUCTIONS

Carefully read and become aware of yourself 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 or and 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.

v _2 G35 20719

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

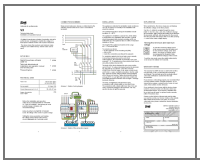
Manufacturer and vendor: DS ELECTRONICS, LTD

04136, Ukraine, Kyiv region, Kyiv, 1-3 Pivnichno-Syretska str.

+38 (091) 481-91-81, Service Center: +38 (091) 481-91-81

support@dse.com.ua www.ds-electronics.com.ua/en/

Documents / Resources

	ZUBR V3 Digital Three Phase Voltmeter [pdf] User Manual V3 Digital Three Phase Voltmeter, V3, Digital Three Phase Voltmeter, Three Phase Voltmeter, Phase Voltmeter, Voltmeter

References

- Voltage relays ZUBR and thermostats terneo
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