

UK-VK SWITCHING UNIT

ISO 9001

UK-VK rev.10

UK-VK rev.13

UK-VK rev.11

UK-VK rev.14

UK-VK rev.12

UK-VK rev.15



426412.002 E DATA SHEET

1 MAIN SPECIFICATIONS

1.1 General

1.1.1 This datasheet is applicable to the following switching unit revisions: UK-VK rev.10, UK-VK rev.11, UK-VK rev.12, UK-VK rev.13, UK-VK rev.14, and UK-VK rev.15.

1.1.2 The UK-VK switching unit of fire alarm systems is meant for actuating devices (lamps, sirens, video cameras, electric locks, etc.) powered from 220V/AC or from 30V/DC by closing, opening or switching contacts. When used in fire alarm systems, the unit is meant for transmitting initiation pulse to a fire control device.

1.1.3 Specifications of unit revisions:

Revision	Switching Circuits	Relay Properties
UK-VK rev.10	2	Normally open; for closing
UK-VK rev.11	1	
UK-VK rev.12	2	Normally closed; for switching
UK-VK rev.13	1	
UK-VK rev.14	2	
UK-VK rev.15	1	

1.1.4 The product is meant for 24/7 continuous operation.

1.1.5 The product is repairable, controllable, and serviceable.

1.2 Main Technical Specifications

1.2.1 Relay specifications:

Revision	Maximum Switching Voltage*, V		Maximum Switching Current*, A	
	AC	DC	AC	DC
UK-VK rev.10	250	30	5	5
UK-VK rev.11	250	30	5	5
UK-VK rev.12	250	30	10	10
UK-VK rev.13	250	30	10	10
UK-VK rev.14	250	30	10	10
UK-VK rev.15	250	30	10	10

Notes: * –for a single channel

1.2.2 Properties of controlling signal :

Revision	Control Voltage*, V	Control Current*, A
UK-VK rev.10	10 – 14	0.028 – 0.038
UK-VK rev.11		
UK-VK rev.12		
UK-VK rev.13		
UK-VK rev.14	20 – 27.6	0.014 – 0.019
UK-VK rev.15		

Notes: * – for a single channel

1.2.3 Dielectric strength between control and switching circuits is 3,000V (50 Hz).

1.2.4 Dimensions: 102×107×39 mm.

1.2.5 Weight: max 0.2 kg.

1.2.6 In terms of climate tolerance, the product complies with the moderate cold climate category, and Class III location environment according to Russian national standard GOST 15150-69, but to be operated within temperatures from 243 to 323 K (- 30 to +50 °C) with 90 % humidity at temperature 298 K (+25 °C).

1.2.7 The product is not designed to be used in aggressive, dust, explosive and fire-hazardous environments.

1.2.8 The protection class of the enclosure is IP30 according to GOST 14254-96.

1.2.9 The product provides tolerance to electromagnetic noise rated as Severity Level III according to GOST R 50009-2000.

1.2.10 The radio noise generated by the controller does not exceed the level specified in GOST R 50009-2000.

1.2.11 The content of precious materials: does not require accountability for storage, retirement and disposal.

1.2.12 The content of nonferrous metals: does not required accountability for retirement and further disposal of the product.

1.3 Standard Delivery

- | | |
|---|-----|
| 1) UK-VK | x 1 |
| 2) Data Sheet | x 1 |
| 3) Fuse: | |
| For UK-VK rev.10 and rev.11: VP2B 6.3A (or similar) | x 2 |
| For UK-VK rev.12 and rev.14: VP2B 10A (or similar) | x 2 |
| For UK-VK rev.13 and rev.15: VP2B 10A (or similar) | x 1 |
| 4) Screw 1-3×25.016 | x 3 |
| 5) Nail plug (for screw 6×30) | x 3 |
| 6) Self-threading screw 2.2×6.5 | x 1 |
| 7) Box | x 1 |

2 USAGE INSTRUCTIONS

2.1 Wiring

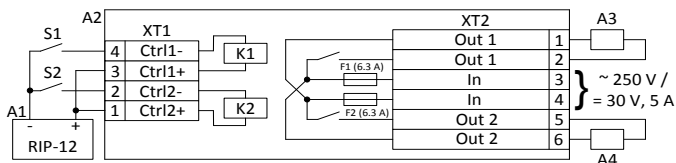


Figure 1. Wiring Diagram for UK-VK rev.10 and rev.11

- A1 – control voltage supply;
- A2 – switching unit UK-VK rev.10 (two channels) or UK-VK rev.11 (one channel);
- A3, A4 – for intrusion alarm systems: actuating devices (visual alarm devices and audible alarm devices);
- for fire alarm systems: fire control devices;
- S1, S2 – control voltage switching keys (open collector, dry contact, etc.).

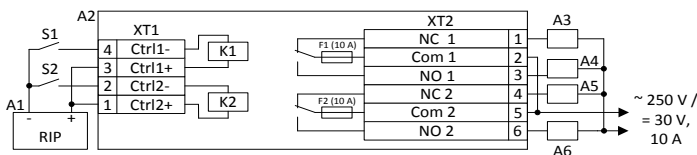


Figure 2. Wiring Diagram for UK-VK rev.12, rev.13, rev.14, and rev.15

- A1 – control voltage supply (RIP-12 or RIP-24, see Section 1.2.2);
- A2 – switching unit UK-VK rev.12, UK-VK rev.14 (two channels) or UK-VK rev.13, UK-VK rev.15 (one channel);
- A3, A4, A5, A6 – for intrusion alarm systems: actuating devices (visual alarm devices and audible alarm devices);
- for fire alarm systems: fire control devices;
- S1, S2 – control voltage switching keys (open collector, dry contact, etc.).

Warning: Please observe the polarity for control voltage supply.

2.2 Installation

2.2.1 The UK-VK unit shall be installed in mount boxes or other structures of secured premises protected from precipitations, mechanical damage, and unauthorized access.

2.2.2 The enclosure provides two mounting approaches.

Wall-mount installation. Please make sure that you are going to install the product on a solid, even, clean, and dry surface. Apply installation template to the wall (Figure 4). Drill three holes: two upper and one lower. Insert nail plugs and screw two upper screws (supplied) leaving seven millimeters between screw heads and the wall surface. Remove the unit cover. Hook up the unit on two screws. Screw the lower screw and fix the unit to the wall.

DIN rail installation. To install the product onto the DIN rail please use a specific Ω -type mount on the enclosure rear (see Figure 3).

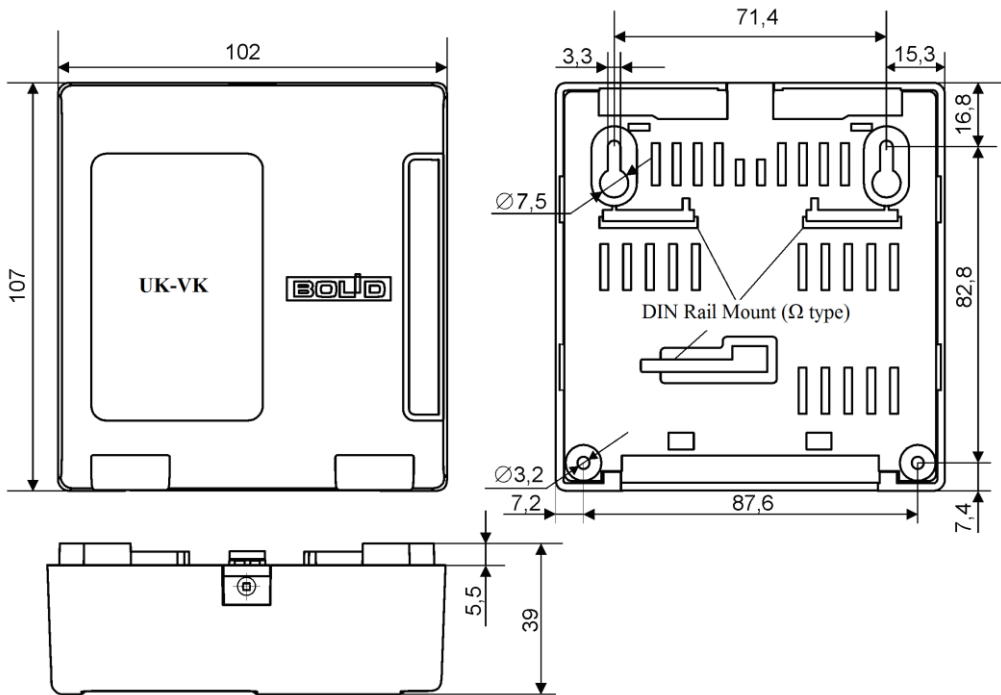


Figure 3.

2.3 Usage Instructions

The product does not require additional settings and is ready to work right after connecting it according to the wiring diagram above. (See Figure 1, Figure 2).

3 TROUBLESHOOTING

Trouble	Cause	Repair Actions
K1 or K2 relay does not operate	1) Failed wiring connected from the side of the XT1 terminal. 2) Missing contact in the XT1 terminal	1) Repair wiring malfunctioning. 2) Restore missing contact.
Relays operate but switching is not effective	1) Failed fuse F1 (F2). 2) Failed wiring connected from the XT2 side.	1) If F1/F2 is blown out, check the load for the short circuit and replace the F1/F2 fuse. 2) Repair the wiring.

4 WARRANTY

4.1 The manufacturer guarantees that this product meets with technical requirements specified in the manuals if the user follows the instructions for shipment, storage, installation, and usage.

4.2 Average lifetime is 8 years.

4.3 Warranty period is 18 months but no more than 24 months from the manufacturer's date of issue.

4.4 In case of any issue related to setting and use of the product, please contact with the technical support: +7 (495) 775-71-55 or e-mail: support@bolid.ru.

4.5 When submitting the unit for repair, it shall be accompanied with descriptions of possible fault.

The claims shall be submitted to the following address:

Bolid Company,

4, Pionerskaya Str., Korolyov, Moscow Region, 141070, Russia.

Phone/fax: +7 (495) 775-71-55 (multiline), +7 (495) 777-40-20, +7 (495) 516-93-72.

E-mail: info@bolid.ru, <http://bolid.ru>.

5 CERTIFICATION

5.1 The UK-VK complies with requirements of Technical Regulations of Customs Union TR CU 004/2011, TR CU 020/2011 and has Certificate of Conformity: EAЭC № RU Д-RU.MJI66.B.02300.

5.2 The following switching units: UK-VK rev.10, UK-VK rev.11, UK-VK rev.12, UK-VK rev.13, UK-VK rev.14, UK-VK rev.15 comply with the requirements of Technical Regulations on Fire Safety Requirements (Federal Law No. 123-FZ) and have Certificate of Conformity No. № C-RU.ЧC13.B.00717.

5.3 The units' production is certified with Certificate of Conformity to GOST R ISO 9001–2015 (ISO 9001:2015) No. POCC RU.ИK32.K00153.

6 ACCEPTANCE AND PACKAGE CERTIFICATE

<i>Product Description</i>	<i>Model</i>	<i>Serial No</i>
Switching unit	UK-VK rev.10 АЦДР.426412.002-10	
Switching unit	UK-VK rev.11 АЦДР.426412.002-11	
Switching unit	UK-VK rev.12 АЦДР.426412.002-12	
Switching unit	UK-VK rev.13 АЦДР.426412.002-13	
Switching unit	UK-VK rev.14 АЦДР.426412.002-14	
Switching unit	UK-VK rev.15 АЦДР.426412.002-15	

Is manufactured and accepted in accordance with requirements of national standards and current technical documentation; approved as ready for use and packaged by the Bolid Company.

Responsible for acceptance and packing

QCD _____

Name

Date, Month, Year



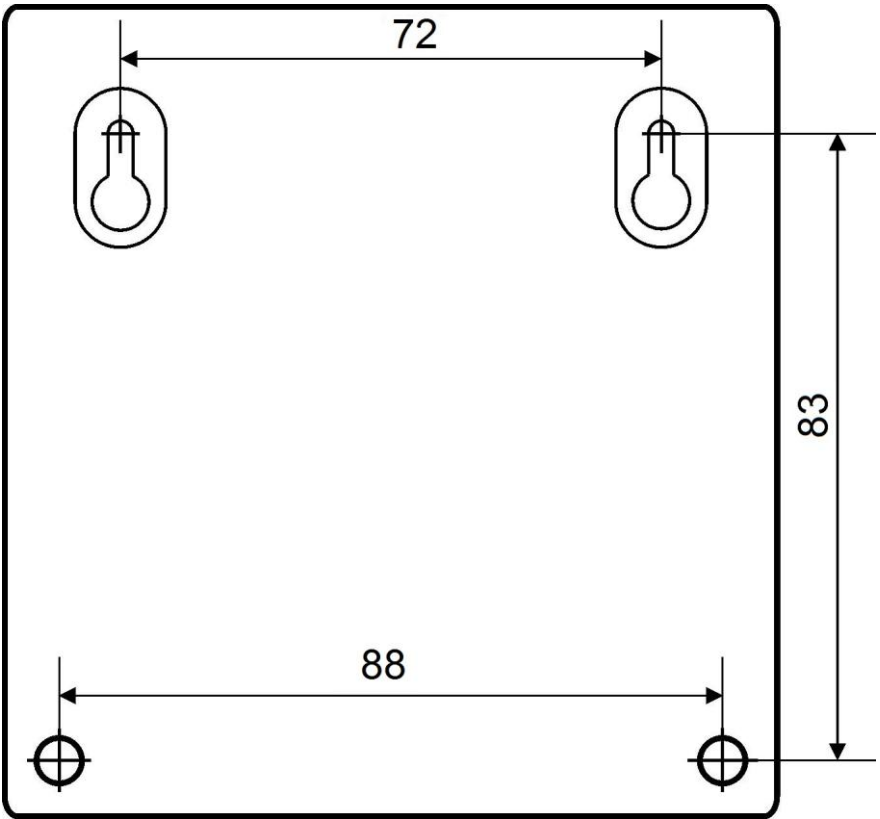


Figure 4. Mount Template (Scale 1:1)