

KODOS R-03-3 uninterruptible power supply unit

Manual

Basic Item Information and Technical Data

KODOS R-03-3 uninterruptible power supply unit (hereinafter referred to as power supply unit, UPS) is the direct voltage power supply with the 12 V nominal output voltage. The uninterruptible power supply provides continuous output voltage generation when AC power circuit input voltage is available or when it is absent. In case of no power circuit voltage continuous operation is provided by means of automatically switching the uninterruptible power supply to the autonomous mode with power supplied from redundant power supply – storage battery (hereinafter referred to as SB, battery).

R-03-3 power supply units provide the checking of the unit's current status (operation mode). The delivery set includes KODOS A-07/4 address unit (hereinafter referred to as A-07/4 AU (address unit)), which transfers information on UPS status to the KODOS A-20 fire and burglar control and indicating device (hereinafter referred to as KODOS A-20 Central Panel).

The address unit is powered through the KODOS A-20 Central Panel communication line.

Table 1 – Performance Data R-03-3

Power supply voltage, V : <ul style="list-style-type: none">from 50 Hz AC power circuitfrom storage battery *	187 – 242 9.5 – 14.0
Output voltage, V : <ul style="list-style-type: none">supplied from power circuitsupplied from storage battery	12.9 – 14.0 9.5 – 14.0
Maximum load connected to the uninterruptible power supply, A , maximum	8
Maximum current of the storage battery charge, mA , maximum	1800
Time of technical availability, sec , maximum	30
Consumption current from AC mains, A , maximum	1
Voltage of output voltage ripple, mV , maximum	140
Output voltage ripple voltage class	VR3
Load cut-off voltage of the storage battery when power circuit is not available, V	9.0 – 9.5
Operating environment: ambient temperature, °C relative humidity at 25 °C, %, maximum	+5...+55 80
Overall dimensions, mm	317x302x127
Weight without package and storage battery, kg , max.	7.3

* – The item is supplied without a storage battery. The storage battery with 12 V nominal voltage should be purchased by the Customer separately.

Table 2 – Performance Data A-07/4

Voltage amplitude in communication line, V	18 .. 24
Consumption current, mA , maximum	7.0 ²⁾
Communication line length, m , maximum	1600 ¹⁾
Number of loops monitored	4
Loop leak resistance, kOhm , minimum	20
Loop resistance, Ohm , maximum	1000
Loop length, m , maximum	100
Overall dimensions, mm	136x100x27
Weight, g , maximum	120
Operating environment: ambient temperature, °C relative humidity at 25 °C, %, maximum	+5...+35 80
¹⁾ – see documentation for KODOS A-20 Central Panel. ²⁾ – these are maximum values of mean consumption current, which should be taken into account when calculating total current consumption of the system.	

Standard Equipment

- | | |
|----------------------------------------------------------------------|---------|
| 1 Uninterruptible power supply KODOS R-03-3 | – 1 pc |
| 2 KODOS A-07/4 Address Unit | – 1 pc |
| 3 220 V mains connection cable | – 1 pc |
| 4 Storage battery connection cable | – 1 pc |
| 5 Removable terminal unit – 5ESDP-02P (load connection) | – 1 pc |
| 6 Removable terminal unit – EC350V-06P (external systems connection) | – 1 pc |
| 7 Attachment set | – 1 set |
| 8 Manual | – 1 pc |
| 9 Package | – 1 pc |

Notes on Operation

1 The power supply is mounted, installed, and maintain in accordance with the following documents:


"KODOS A-20 Central Panel-Based Fire and Burglar Alarm System.

Installation Guide";

2 LEDs (Fig 1) are used to indicate the following:

the availability of input supply voltage (Power Supply );

load AC input supply (Main Power Supply );

load supply from the storage battery and wrong polarity of the storage battery connection to the power supply unit (Storage battery );

storage battery charging progress (Battery charge );

UPS's input and output parameters correspondence to the rated values (Mode, under cover).

3 The A-07/4 AU included into the delivery set sends messages on the power supply unit operation modes (status) to the KODOS A-20 Central Panel.

4 LEDs (Figure 2) are used to indicate the availability of power supply voltage in the address unit (Power) and data exchange (Line) with the KODOS A-20 device.

5 The hardware address of the address unit is detailed on the sticker on the back side of the unit body.

6 The warranty is void if the seal is broken.

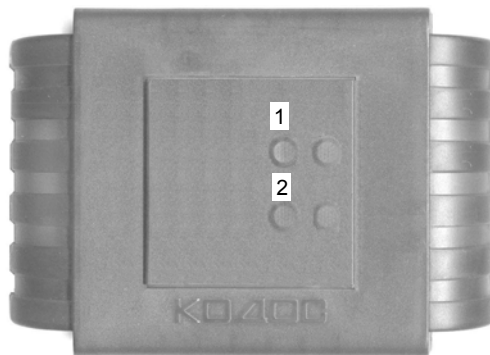
7 UPS's terminals marking and designation are produced in the table 3.

Table 3 – Marking and assignment UPS's terminals

Marking		Assignment
«АКБ»	«+»	«+» terminal of the storage battery
	«-»	«-» terminal of the storage battery
	«P»	not used
«220 В 50 Гц»	«~»	~220 V, 50 Hz mains voltage input (two terminals)
	«K»	Grounding
«выход 12 В»	«+»	«+» terminal of load (12 V output voltage)
	«-»	«-» terminal of load (12 V output voltage)



Figure 1 – Uninterruptible power supply unit (front)



1 – LED Line; 2 – LED Power

Figure 2– Address Unit (front)