

KODOS ES-602 Access controllers

Manual

Basic Item Information and Technical Data

KODOS EC-602 controller (hereinafter referred to as controller) is used to control the System users' access to the guarded territory through the controlled barrier.

The controller is used as a component of KODOS access monitoring and control systems.

The functions executed in the course of operation are as follows:

- a) monitoring the drive-in/ drive-out sensors status;
- b) storing and processing information acquired from the readers;
- c) issuing control signals for the barrier and drive-in/ drive-out light boards;
- d) receiving/transmitting data to a computer (PC) through the KODOS SK-E or KODOS SK-232 network controller communication line.

Table 1 – Performance Data

Power supply voltage, V	9.5 ... 15.0
Consumption current (apart from external loads), mA , maximum	400
Nonvolatile memory, Kb	64
Number of barriers under control	1
Resistance of the barrier's control panel connection cable, Ohm , maximum	2
Number of the barrier's reserve control buttons	3
Commutation voltage when emulation the barrier control buttons (OPEN, STOP, CLOSE), B , maximum	30
Commutated current when emulation the barrier control buttons (OPEN, STOP, CLOSE), A , maximum	0.5
Number of the controlled lamps in the drive-in/ drive-out light boards	2x2
Commutation voltage at the LA and LB terminals, B , maximum	30
Commutation current at the LA and LB terminals, A , maximum	0.5
Number of controlled drive-in/ drive-out sensors	3
Length of the sensor connection cable, m , maximum	25
Resistance of the sensor connection cable with the sensor closed, Ohm , maximum	150
Adjustment range of the gate kept opened maximum time, s	1 ... 30
Number of readers connected, maximum	2
Reader connection cable length, m , maximum	15
Characteristics of the network controller communication line: communication line length, m , maximum	2000
input resistance of the receiver, kOhm	120
sign-inverse signals amplitude, V	24
Operating environment: ambient temperature, °C	+5...+35
relative humidity at 25 °C, %, maximum	80
Overall dimensions, mm	210x160x80
Weight, g , maximum	660

Standard Equipment

1	KODOS ES-602 access controller	- 1 pc
2	Self-tapping Screw 3.5x25	- 4 pcs
3	Plastic Nailing Plug	- 4 pcs
4	Manual	- 1 copy
5	Package	- 1 pc

Notes on Operation

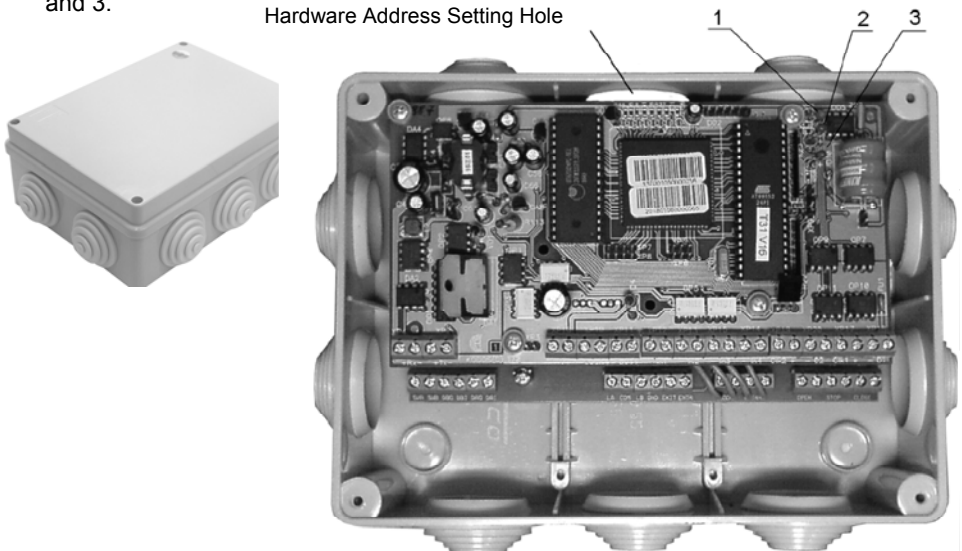
1 Assembly, installation, and maintenance of the controller should be carried out in accordance with the document "KODOS ES series controller-based access control system. Installation Guide".

2 The hardware address of the controller is set by switching DIP-switches located on the back side of the controller bottom board. The DIP-switch unit can be accessed through the hole in the body closed by a rubber plug (Figure 1).

3 The LEDs (Figure 1) are used to indicate the access controller power supply (Power) and data exchange with the network controller (Reception, Transmission).

4 Controller terminals marking and assigning are produced in the tables 2 and 3.

Hardware Address Setting Hole



1 – LED Power; 2 – LED Transmission; 3 – LED Reception

Figure 1 – Access controller (front) and view of the Controller with Body Cover Removed

Table 2 – Marking and assignment KODOS ES-602 controller's board (top board) terminals

Terminals	Assignment
«+Rx»	«+» network controller reception line
«-Rx»	«-» network controller reception line
«+Tx»	«+» network controller transmission line
«-Tx»	«-» network controller transmission line
«-V»	«- » 12 V power supply
«+V»	«+» 12 V power supply
«-LOCK»	used for internal connections
«+LOCK»	used for internal connections
«-»	"BARRIER" sensor terminals
«In1»	
«-»	not used
«In2»	not used
«-»	not used
«In3»	not used
«-»	not used
«In4»	not used
«Clk2»	reader №2 («Entrance ») control signal
«+»	«+» terminal of the reader№2 («Entrance ») power supply *
«-»	«- » terminal of the reader№2 («Entrance ») power supply
«D2»	reader №2 («Entrance ») data signal
«Clk1»	reader №1 («Exit») control signal
«+»	«+» terminal of the reader№1 («Exit »)power supply *
«-»	«- » terminal of the reader№1 («Exit ») power supply
«D1»	reader №1 («Exit ») data signal
* – not used for RD-60-type readers.	

Table 3 – Marking and assignment KODOS ES-602 Adapter’s board (bottom board) terminals

Terminals	Assignment
«SWA»	Reader №2 («Entrance ») switching on signal
«SWB»	Reader №1 («EXIT») switching on signal
«DBO»	not used
«DBI»	not used
«DAO»	not used
«DAI»	not used
«LA»	Illuminated indicator panels’ lamps switching on signal “ATTENTION” – at the entry, “BACK” – at the exit
«COM»	Common contact of lamps
«LB»	Illuminated indicator panels’ lamps switching on signal “ATTENTION” – at the exit, “BACK” – at the entry
«GND»	Common contact of sensors « Entrance » and «EXIT»
«EXIT»	Sensor signal «EXIT»
«ENTR»	Sensor signal « Entrance »
«-LOCK»	used for internal connections
«+LOCK»	used for internal connections
«-IN»	used for internal connections
«+IN»	used for internal connections
«OPEN»	The 1 st contact of the button «OPEN»
«OPEN»	The 2 nd contact of the button «OPEN»
«STOP»	The 1 st contact of the button «STOP»
«STOP»	The 2 nd contact of the button «STOP»
«CLOSE»	The 1 st contact of the button «CLOSE»
«CLOSE»	The 2 nd contact of the button «CLOSE»

Attention! “OPEN”, “STOP”, and “CLOSE” buttons are designed for the barrier manual control and duplicate the device control loops from the controller.