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 input resistance of the receiver, *kOhm* sign-inverse signals amplitude, *V*	2000 120 24
Operating environment: ambient temperature, °C relative humidity at 25 °C, %*,* maximum	+5…+35 80
Overall dimensions, *mm*	210x160x80
Weight, *g,* maximum	660

■ Standard Equipment

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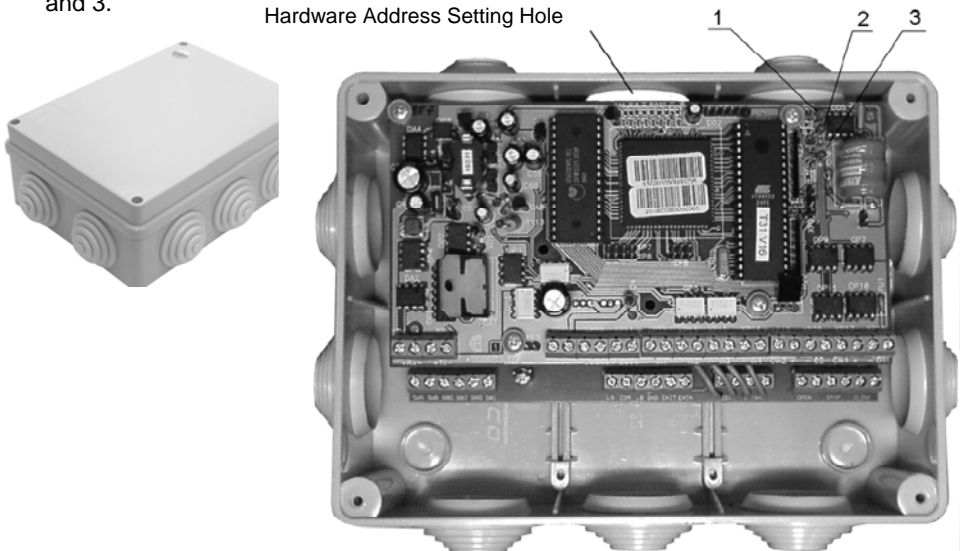
1 – LED Power; 2 – LED Transmission; 3 – LED Reception

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
«-» «In1»	"BARRIER" sensor terminals
«-»	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 1st contact of the button «OPEN»
«OPEN»	The 2nd contact of the button «OPEN»
«STOP»	The 1st contact of the button «STOP»
«STOP»	The 2nd contact of the button «STOP»
«CLOSE»	The 1st contact of the button «CLOSE»
«CLOSE»	The 2nd 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.