KODOS RC-102 Access controller

Manual

Basic Item Information and Technical Data

KODOS RC-102 controller (hereinafter referred to as controller) is used to control the System users' access to the guarded premises through a controlled door (doors), and to read the code carriers' codes, which are used as the System's users IDs. The controller incorporates a built-in reader and can identify code carriers of the EM-Marin standard (KODOS RC-102E version) and the HID standard (KODOS RC-102 version). The controller is used as a component of the KODOS access control system.

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

- a) storing and processing information acquired from the readers (either external or built-in);
 - b) issuing control signals to the executive devices;
 - c) receiving/transmitting data through the KODOS AD-01 communication line;
 - d) monitoring the security loops' status;
 - e) sending messages on the controller body opening to the control program;
- f) receiving and processing a code from the code carrier placed near the controller:
- g) indicating data exchange with personal computer (PC) and various statuses of the device when making a decision on granting (denving) access.

Table 1 - Performance Data

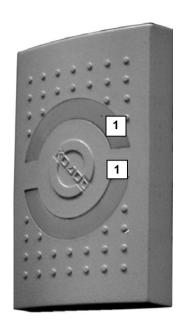
Power supply voltage, V	9.5 15.0	
Consumption current (apart from external loads), <i>mA</i> , maximum	400	
Maximum reading distance (between the code carrier and the controller with built-in reader), <i>mm</i> , minimum:		
code carriers of the EM-Marin	90	
code carriers of the HID	40	
Number of controllers on one communication line with the KODOS AD-01 adapter, <i>pcs.</i> , maximum	64	
Communication line length, <i>m</i> , maximum	1200	
Nonvolatile memory, Kb	32	
Number of access levels supported	32	
Number of time zones supported	8	
Number of controlled doors, pcs.	2	
Number of inputs	4	
Loop length, <i>m</i> , maximum	150	
Loop resistance when closed, <i>Ohm</i> , maximum	150	
Range for adjusting the maximum time for the lock to stay open, sec	1 30	
Number of readers connected, maximum	2	
Reader connection cable length, <i>m</i> , maximum	50	
Operating environment:		
ambient temperature, °C	-40+65	
relative humidity at 25 °C, %, maximum	80	
Overall dimensions, <i>mm</i>	117x78x20	
Weight, <i>g</i> , maximum	80	

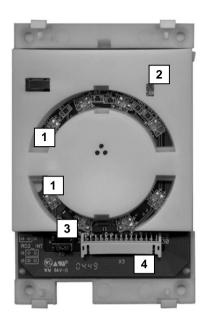
Standard Equipment

1	KODOS RC-102E (RC-102H) access controller	-	1	рс
2	Self-tapping Screw 3.5x25	-	4	pcs
3	MJ-0-6 jumper	-	2	pcs
4	Controller cable	-	1	рс
5	Plastic Nailing Plug	-	4	pcs
6	Manual	-	1	сору
7	Package	_	1	рс

Notes on Operation

- 1 Assembly, installation, and maintenance of the controller should be carried out in accordance with the document "KODOS RC series controller-based access control system. Installation Guide".
- 2 The controller's hardware address is set by switching DIP-switches 1-6, located on the back side of the unit body to a relevant position.
- 3 The setting of the controller's control outputs for operating the direct or inverse type executive devices (if necessary) can be made by switching DIP-switches 7, 8 to a relevant position.
- 4 To switch between the operation modes of the controller (with the built-in reader on or off) set the jumpers of two switches located under the removable device cover next to the X3 connector to the necessary position (Figure 1).
- 5 The controller status indication LEDs are used to indicate the controller power supply and status, LEDs Transmission and Reception indicate data exchange with the KODOS AD-01 adapter and the PC.
 - 6 The warranty is void if the seal is broken.]
- 7 The controller's connector X3 contacts and their assignment are shown in the Figure 2 and in the table 2.





1 – The controller status indication LEDs; 2 – LEDs Transmission and Reception indicate data exchange; 3 – Jumpers; 4 – Connector X3

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

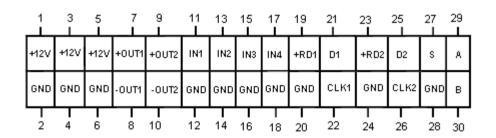


Figure2 – The controller's X3 contacts

Table 2 – Marking and assignment the controller X3 connector contacts

Nº	Contact	Assignment
1	«+12V»	«+» terminal of the controller power supply
2	«GND»	Common cable
3	«+12V»	«+» terminal of the controller power supply
4	«GND»	Common cable
5	«+12V»	«+» terminal of the controller power supply
6	«GND»	Common cable
7	«+OUT1»	«+»executive device №1 (lock)
8	«-OUT1»	«–» executive device №1 (lock)
9	«+OUT2»	«+» executive device №2 (lock or sound alarm)
10	«-OUT2»	«- » executive device №2 (lock or sound alarm)
11	«IN1»	hermetic contact 1
12	«GND»	Common cable
13	«IN2»	REX 1
14	«GND»	Common cable
15	«IN3»	hermetic contact 2
16	«GND»	Common cable
17	«IN4»	REX 2
18	«GND»	Common cable
19	«+RD1»	«+»terminal of the reader 1 power supply
20	«GND»	Common cable
21	«D1»	signal of the DATA reader 1
22	«CLK1»	signal of the CLK reader 1
23	«+RD2»	«+»terminal of the reader 2 power supply
24	«GND»	Common cable
25	«D2»	signal of the DATA reader 2
26	«CLK2»	signal of the CLK reader 2
27	«S»	Synchronization signal
28	«GND»	Common cable
29	«A»	A output of the RS-485 reception and transmission device
30	«B»	B output of the RS-485 reception and transmission device