RIELTA

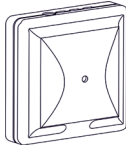## ADDRESSABLE LOOP COORDINATOR «KAS-485»

Installation Guide

1 Introduction

1.1 The addressable loop coordinator «KAS-485» (hereinafter referred to as the Coordinator) works as part of security/fire alarm control panels (hereinafter referred to as CP).

1.2 Communication with the control panel is made on the basis of the RS-485 interface in accordance with the «RIELTA ADR-485» protocol.

1.3 The Coordinator ensures operation of the addressable loop (hereinafter referred to as ADL) of terminal devices in accordance with the «Rielta-Contact-ADR» protocol. For this purpose, the Coordinator has two ADL drivers with terminals for connecting addressable terminal devices (hereinafter − TD) - «LINE 1» and «LINE 2».

1.4 The Coordinator has the ability to register up to 250 TDs, with subsequent monitoring of their availability and transmission of messages from them to the CP.

1.5 The Coordinator can work with both ring and radial ADLs.

1.6 The Coordinator must be powered from an external stabilized and backed up power source with a DC voltage of 8 to 15 V.

1.7 The Coordinator generates and transmits to the PC following types of notifications:
- «Opening» − when the Coordinator's case cover is open;
- «Power failure» − when the supply voltage drops below 7.3-0.5V;
- «Short circuit in line 1» − if there is a constant load in «LINE 1» of more than (280 ± 30) mA;
- «Norm in line 1» − if there is a constant load in «LINE 1» less than (180 ± 30) mA;
- «Short circuit in line 2» − if there is a constant load in «LINE 2» of more than (280 ± 30) mA;
- «Norm in line 2» − if there is a constant load in «LINE 2» of less than (180 ± 30) mA;
- «Loop break» − when there is a connection between one or more TDs with only one driver.

1.8 The Coordinator is designed for continuous work around the clock.

1.9 The Coordinator refers to products for a specific purpose, continuous long-term use, aging, non-repairable and serviceable.

2 Technical specification

Table 1

Technical parameters	Value
Coordinator's current consumption	50 mA
Maximum current of connected TDs per driver: - in "ring" mode, no more - in "two lines" mode, no more	100 mA 150 mA
Overall dimensions	80x80x31 mm
Weight	0,08 kg
Protection class	IP30
Average service life	10 years
Operational conditions	
Operating temperature range	-30... +55 ºC
Permissible air humidity at a temperature of +40℃ (without moisture condensation)	93 %

3 Scope of Delivery

Table 2

| Name	QNT
Addressable loop coordinator «KAS-485»	1 pc.
Screw 3-3x30.016	2 pcs.
Addressable loop coordinator «KAS-485». Installation Guide	1 copy

4 Design

The Coordinator consists of a case cover (1) and a case base (2) with an installed printed circuit board (3). The cover is fixed to the base with a latch (5). To release the cover, press the latch (Fig. 1a).

On the front side of the printed circuit board there are:
- tamper switch (4);
- terminal blocks (6);
- indicator (7);
- block of DIP switches (8).

The board is fixed in the base of the case with screws (9).

(10) − holes for mounting.
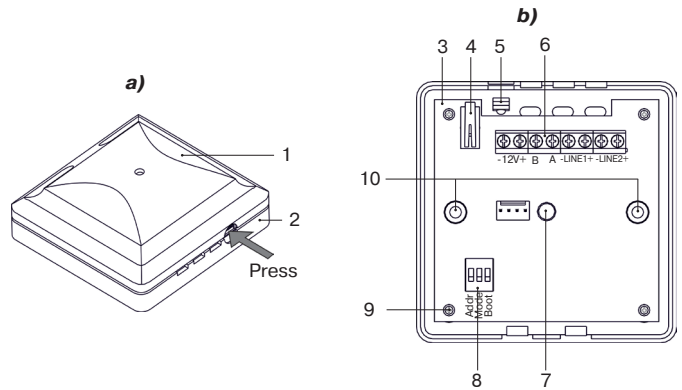
Picture 1 − «KAS-485» design

5 Installation and connection

- Remove the coordinator cover by using a screwdriver to press the cover latch through the hole in the base of the coordinator (Pic. 1a).
- Open the holes in the base necessary to enter the wires. If holes on the back wall are used, the wires must be inserted before installing the base.
- Secure the base to the mounting surface with screws through the holes (Pic. 1b), pos. 10).
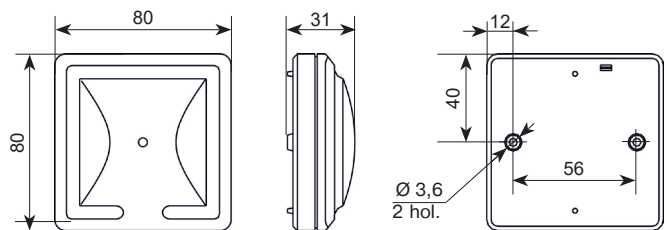- Connect the wires according to pic. 2.
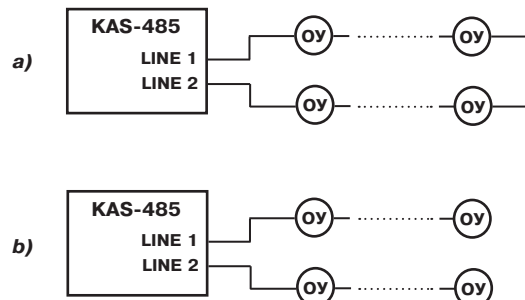- Install the cover.
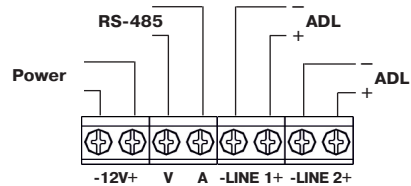
Picture 2

Dimensions, mm

Picture 3

Picture 4 − ADLs connection diagram

6 Operation mode settings

Table 3

	Switch	Switch position	
		OFF	**ON**
CP connection mode	«Addr»	coordinator works with address 1	the coordinator works with the address specified by the CP
ADL mode	«Mode»	«loop»	«two lines»*
Programming mode at startup	«Boot»	Time of staying in the mode − 2 seconds	unlimited time of staying in the mode
* In this mode, it is not allowed to connect the ADL according to the diagram in Pic. 4a)			

7 Storage and transportation

7.1 Coordinators can be transported in the manufacturer's packaging by all types of closed vehicles (in railway cars, closed cars, sealed heated compartments of aircraft, holds, etc.) over any distance. When transporting the Coordinators, it is necessary to follow by the rules and regulations in force for the relevant modes of transport.

7.2 The conditions for transporting coordinators must comply with storage conditions.

7.3 Coordinators in packaging must be stored in warehouses under storage conditions.

7.4 The storage room should be free of conductive dust, vapors of acids and alkalis, as well as gases that cause corrosion and destroy insulation.

7.5 The time the Coordinator is ready to work after transportation in conditions other than operating conditions is at least 6 hours.

8 Manufacturer's warranty

8.1 The manufacturer guarantees conformity of the Detector to the Technical Specifications requirements provided the transportation, storage, installation and operation conditions are observed.

The guaranteed shelf life is 63 months from the date of manufacture of the Coordinator.

8.2 Warranty period of operation − 60 months from the date of commissioning within the warranty period of storage.

8.3 Coordinators that, during the warranty period, subject to compliance with the operating and installation rules, are found to be non-compliant with technical requirements, shall be repaired by the manufacturer.

9 Packing Certificate

The address loop Coordinator «KAS-485» has been manufactured in compliance with the active technical documentation, classified as fit for operation and packed by «Development and Production Enterprise RIELTA» LLC.

Packing date _____
month, year