WIRELESS WATER FLOOD DETECTOR
AFD-100

afd100_en 08/08

The AFD-100 wireless water flood detector is designed for operation as part of the ABAX two-way wireless system. It is supported by the ACU-100 controller with firmware in version 1.06 or later. Approximately 5 seconds after the water level reaches the height at which electrodes of the flood sensor are installed, the detector will start signaling flooding. A few seconds after the water level drops below the height at which electrodes of the flood sensor are installed, the flood signaling will stop.

Explanations for Fig. 1:

1 - screen.

2 - terminals for the flood sensor connection.

3 - LED indicator. It lights red in the test mode only, indicating communication with the controller (during polling), short-circuit of the flood sensor electrodes, and opening of the tamper contact.

4 - tamper contact, which responds to opening the housing and pulling it off from the surface.

5 - CR123A 3 V lithium battery which ensures operation for approx. 3-year period. The detector controls the battery status. When the voltage drops to 2.6 V, the "low battery" information is sent to the controller. The low battery signaling continues until the battery is replaced.

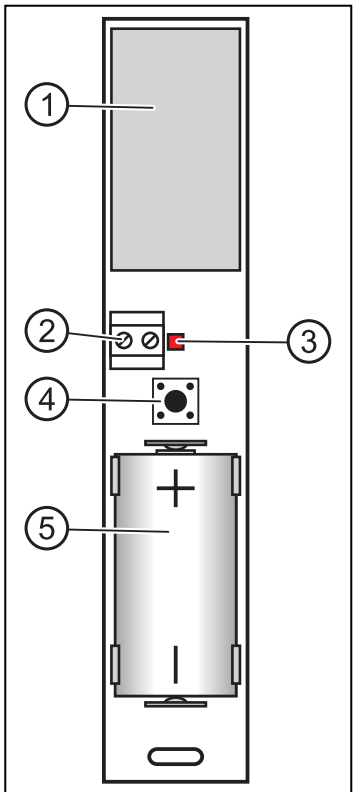

Fig. 1. View of the detector PCB

1. Installation

The detector is designed for indoor installation.

Before mounting the detector permanently, check the level of signal received from the detector by the ACU-100 controller and, if necessary, change the place of installation so as to select the optimum location in terms of communication.

Install the battery inside the detector just before registering it in the controller. If unregistered or having no communication with the controller, the detector will consume more energy, which will reduce the battery life.

1. Open the housing.
2. Install the battery and add the detector to the wireless system (see the ACU-100 controller user manual). A label with 7-digit serial number that should be entered during registration of the detector in the system is provided on the screen on the electronics board.
3. Close the detector housing.
4. Select the place where the detector is to be installed and attach it there temporarily. It is recommended that the detector be mounted as high as practicable. This will enable a better radio communication range to be achieved, while avoiding the risk of the detector being accidentally covered by personnel moving around the premises. Additionally, it should prevent the detector electronics from accidental contact with water in case of flooding.

5. Check the level of signal reaching the controller from the detector. If necessary, select another place of installation.
6. Open the housing.
7. Make a hole in the housing for the flood sensor leads.
8. Pull the flood sensor leads through the hole in the housing and screw them to the terminals on the electronics board.
9. Fasten the housing rear panel to the mounting surface.
10. Close the detector housing.
11. Configure the detector according to your requirements. For information about the configuration, see the ACU-100 controller user manual.
12. Launch remotely the test mode and carry out functional test of the detector by submerging the flood sensor in water.
13. Quit the test mode.
14. Secure the flood sensor leads and the flood sensor itself. The detector is now ready for work.

2. Technical data

Working frequency band ..... 868.0 MHz ÷ 868.6 MHz
Radio communication range ..... up to 400 m (in open area)
Power supply ..... CR123A lithium battery, 3 V
Battery life ..... approx. 3 years
Flood sensor cable length ..... 3 m
Environment class II
Working temperature range ..... -10 °C...+55 °C
Housing dimensions ..... 24 x 110 x 27 mm
Weight ..... 96 g

Batteries in the battery-supplied wireless equipment should be replaced by qualified personnel. Incorrect replacement of the battery can pose an explosion hazard.

Always use the CR123A 3V lithium batteries.

The used batteries must not be discarded, but should be disposed of in accordance with the existing rules for environment protection.

DECLARATION OF CONFORMITY

CE 1471

Product: AFD-100 – wireless flood detector for ABAX system.	***Manufacturer:*** SATEL spółka z o.o. ul. Schuberta 79 80-172 Gdańsk, POLSKA tel. (+48) 0-58 320-94-00 fax. (+48) 0-58 320-94-01

***Product description*:** Flood detector intended for use with ABAX wireless alarm system components. Operating in the 868.0MHz – 868.6MHz frequency band. Supplied from a 3 V lithium cell.

The product is in conformity with the following EU Directives:
R&TTE 1999/5/EC

The product meets the requirements of harmonized standards:
ETSI EN 300 220-1: v.2.1.1; ETSI EN 300 220-2: v.2.1.1
ETSI EN 301 489-1: v.1.6.1; EN 301 489-3: v.1.4.1
EN60950-1:2004

Notified entity participating in the conformity assessment:
Identification No.: 1471

Gdańsk, Poland 2007-11-26	*Head of Test Laboratory:* Michał Konarski

The latest EC declaration of conformity and product approval certificates are available for downloading on website **www.satel.pl**

SATEL sp. z o.o.
ul. Schuberta 79
80-172 Gdańsk
POLAND
tel. + 48 58 320 94 00
info@satel.pl
www.satel.pl