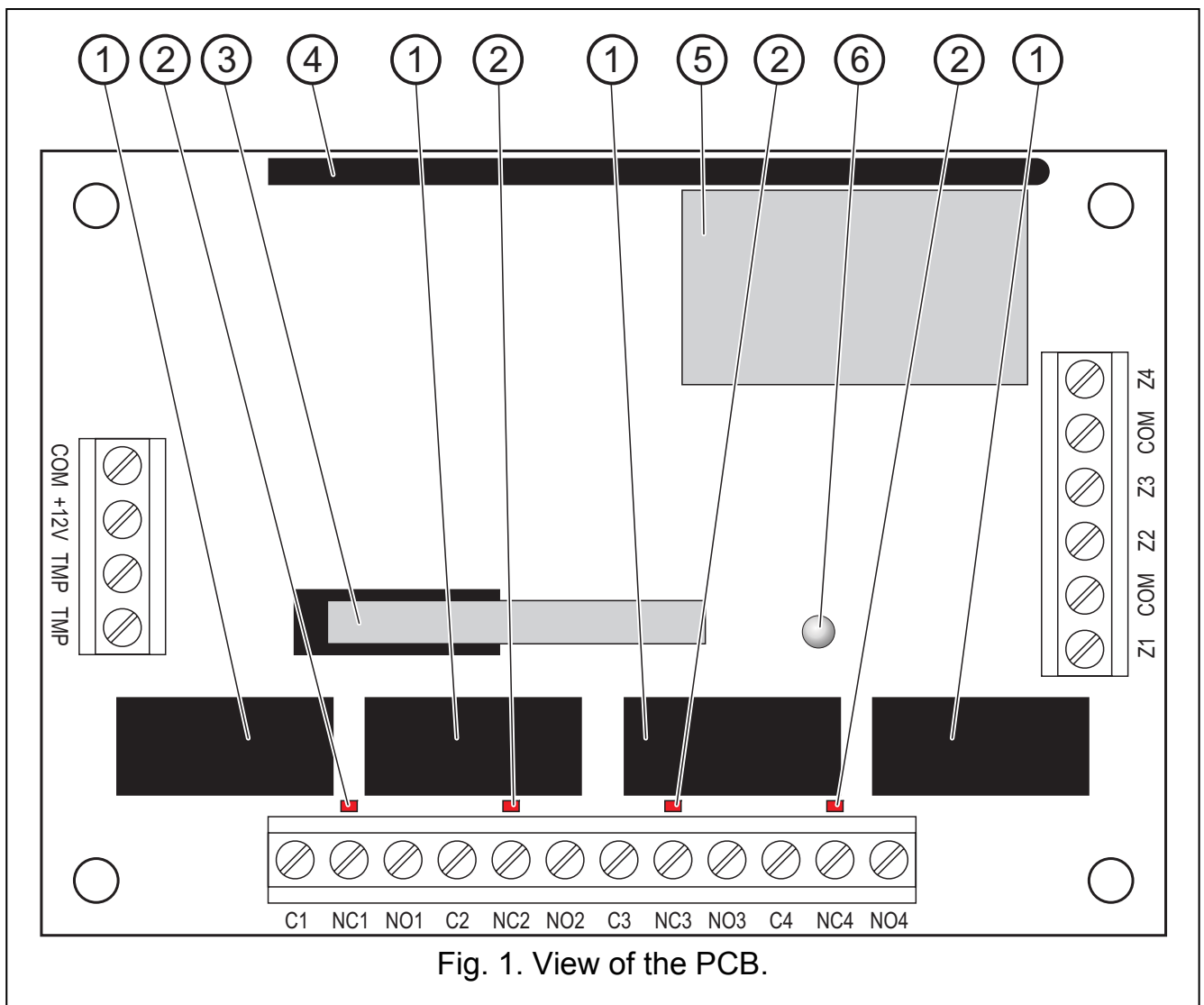


The ACX-200 expander of hardwired zones and outputs is designed to work together with the ACU-100 wireless system controller. It is supported by the ACU-100 controller with firmware version 1.05 or later. 4 zones and 4 outputs enable hardwired equipment (detectors, sirens, etc.) to be connected to the wireless system. The expander zones can be configured similarly to the hardwired ones. The expander outputs are relay type outputs. The ACX-200 expander occupies 4 positions on the list of devices which can be operated by the controller. It is supplied with direct voltage 12V ( $\pm 15\%$ ).

## 1. Description of the PCB



Explanations for Fig. 1:

- 1 – **relays**.
- 2 – **LED indicators**. Indicate the status of outputs. ON when the output is active.

- 3 – **tamper contact**. Responds to opening of the housing.
- 4 – **antenna**.
- 5 – **screen**.
- 6 – two-color **LED indicator**. The green color indicates that the expander is running. Short red flashes indicate communication with the ACU-100 controller.

Description of terminals:

- COM** - common ground.
- +12V** - supply input.
- TMP** - tamper contact terminals.
- C1...C4** - common terminal of the relay output (C1 – output 1, C2 – output 2, etc.).
- NC1...NC4** - terminal normally closed to the common terminal of the relay output (NC1 – output 1, NC2 – output 2, etc.). The terminal opens when active.
- NO1...NO4** - terminal normally isolated from the common terminal of the relay output (NO1 – output 1, NO2 – output 2, etc.). When active, the terminal is closed to the common terminal.
- Z1...Z4** - zone.

## 2. Installation

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**All electrical wiring connections may only be made with the power supply disconnected.**

**Prior to permanently mounting the expander, check the level of signal received from the expander by the ACU-100 controller and, if necessary, change the place of installation so as to select the optimum location with respect to communication.**

The ACX-200 expander of hardwired zones / outputs should be installed indoors, in spaces with normal air humidity. The electronics board is mounted inside the **OPU-1 A** plastic housing.

In order to install the ACX-200 hardwired zone / output expander in the ABAX system, follow the procedure below:

1. Open the housing.
2. Make cable inlets in the rear panel of the housing for power cables and cables connecting the expander with hardwired devices.
3. Prepare a temporary source of 12V DC power supply and add the ACX-200 expander to the wireless system (refer to the ACU-100 controller user manual). Placed on the electronics board is a sticker with the 7-digit serial number which is to be entered when registering the expander in the system.
4. Select the place where the ACX-200 expander is to be installed and attach it there temporarily. It is recommended that the expander be installed at a high position. Thus you can obtain a better range of radio communication, while avoiding the risk of the expander being accidentally covered by personnel moving around the premises.

5. Check the level of signal received by the controller from the expander. Change the place of installation, if necessary.
6. Having obtained the optimum signal level, install the expander permanently.
7. Connect the tamper contact to one of the expander zones. Program this zone as the tamper zone. You can also connect the tamper contact in series with a 2EOL configured device (detector), connected to one of the expander zones.
8. Connect the wire devices to the expander zones and outputs.


**Note:** *The cables (for power supply, connection between the expander and hardwired devices, etc.) should not be run in the immediate vicinity of the antenna, since it may cause radio interference.*

9. Close the housing.
10. Configure the expander zones as required. For information related to configuration of the ACX-200 expander, please refer to the ACU-100 controller user manual.

### **3. Technical data**

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Working frequency band.....	868.0MHz ÷ 868.6MHz
Range .....	up to 150m (in open area)
Rated supply voltage .....	12V DC ±15%
Average current consumption (depending on relay status).....	40mA ÷ 120mA
Current-carrying capacity, relay outputs.....	1A / 24V
Working temperature range.....	0°C...+55°C
Housing dimensions, OPU-1 A.....	126x158x32mm

<b>DECLARATION OF CONFORMITY</b>		<b>CE1471</b>
<b>Product:</b> ACX-200 – Hardwired zone / output expander of ABAX system.	<b>Manufacturer:</b> SATEL sp. z o.o. ul. Schuberta 79 80-172 Gdańsk, POLAND tel. (+48 58) 320-94-00 fax. (+48 58) 320-94-01	
<b>Product description:</b> Hardwired zone / output expander, designed to work together with the ABAX wireless system controller within the 868.0MHz – 868.6MHz frequency band, supplied from 12V DC power source. The device is intended to be used in burglary / panic alarm systems.		
<b>The product is in conformity with the following EU Directives:</b> R&TTE 1999/5/EC		
<b>The product meets the requirements of harmonized standards:</b> R&TTE: ETSI EN 300 220-1: v.1.3.1; ETSI EN 300 220-3: v.1.1.1 EMC: ETSI EN 301 489-1 V1.6.1; ETSI EN 301 489-3 V1.4.1 Safety: EN60950		
<b>Notified body participating in the conformity assessment:</b> Identification No.: 1471		
Gdańsk, Poland 2007-01-11	Head of Test Laboratory:  Michał Konarski	
The latest EC declaration of conformity and product approval certificates are available for downloading on website <a href="http://www.satel.pl">www.satel.pl</a>		

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