

2.4. If external devices for FD7203 have to be power supplied, utilize the user's voltage 24V OUTPUT (pos.5, fig.4) (fig.7). The consumption from the terminals should be suitable with the common capacity of the supply of the input-output device.

Example: Figure 5 describes example for using the inputs and outputs of the device.

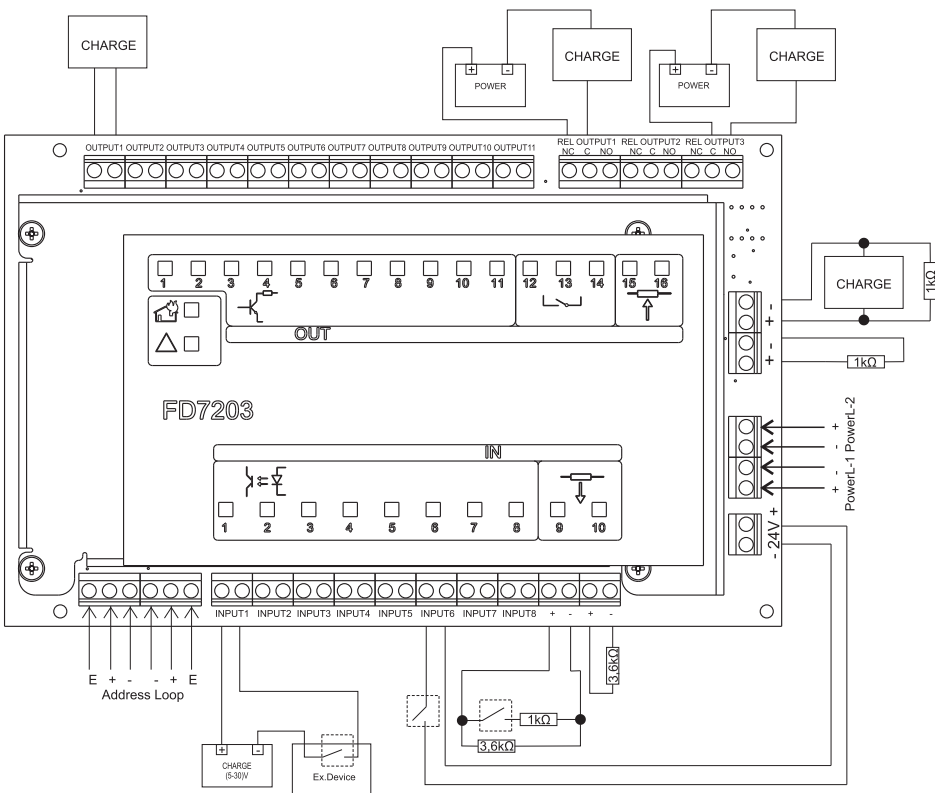


Fig.5

Setup of FD7203

The setup of input-output device FD7203 as part of system IFS7000 contents some main stages via the menu of the panel IFS7002 - menu „Setup/Loop/Loop'X'/Device parameters” („X” – loop number – 1 or 2).

Contents of delivery

Input-Output device	- 1 pc.
Instruction manual	- 1 pc.
Resistors 3,6 kΩ/0,25 W	- 2 pcs.
Resistors 1,0 kΩ/0,25 W	- 4 pcs.

Warranty

The warranty period is 18 months from the date of sale.

The manufacturer guarantees the normal operation of the fire detector providing that the requirements set herein have been observed.

The manufacturer does not bear warranty liabilities for damages caused through accidental mechanical damage, misuse, adaptation or modification after production.



Input-Output Device
type **FD7203**
10 inputs/16 outputs
Instruction Manual 05-7203-05-11



General Description

The input-output device FD7203 (fig.1) is designated to produce and send an electrical signal to various devices (lift doors, fans, etc.) in the case of an events and recording external impacts typical for a fire condition or other events. It is compatible with addressable fire control panels IFS7002, supplementing the possibilities of the address systems series IFS7000.

The input-output device is universal with 10 inputs and 16 outputs as it meets the fire service requirements for the fire control panel to include a standard unit for control by the extinguishing group.

The device is in conformity with the provisions of the European Standard EN54-17 and EN54-18.

Power supplied by the fire control panel or an external power source, the executive device is connected to a loop of the addressable system IFS7000, as the fire detectors are connected to that loop too.

There are no limits (except the limit of maximal number addressable devices in a loop) for the number of addressable devices FD7203 joined to loop in the panel.

An option is provided for end fire detecting devices and/or other ones to be connected to FD7203 as they are supplied by another power loop or autonomous power source. The maximum current consumption by the power loop is 1A.

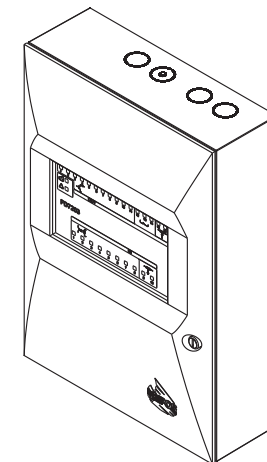


Fig.1

Technical Data

Address loop:

- supply voltage	(15+30)V DC
- current consumption in duty mode	< 350μA
- current consumption in alarm state	(3±1)mA

Power loop:

- supply voltage	(12+30)V DC
- current consumption in duty mode	< 35mA
- current consumption in alarm state	up 1A

Inputs:

• Electroplated separated programmable	10 pcs.
- activation voltage	8 pcs.
	(5+30)V DC
• Monitored inputs programmable	2 pcs.
- maximal resistance of the loop	100 Ω
- end of line element	3,6 kΩ

Outputs:

• Relay with programmable functions	16 pcs.
- type	3 pcs.
	potential free, switching
	with programmable functions
- power supply specifications	1A/30V DC; 0,5A/125V AC

- Monitored with programmable functions
 - type
 - power supply specifications
 - peak activation current
 - end of line element
 - Open collector with programmable functions
 - peak voltage at the output
 - peak activation current
- Operational temperature range
 Relative humidity resistance (no condensation)
 Dimensions
 Weight

2 pcs.
 potential
 (12÷30)V DC
 150mA
 1,0 kΩ
 11 pcs.
 30 V DC
 35 mA
 from minus 5°C to 40°C
 ≤95%
 (313x218x85) mm
 1.170 kg

Indication

LED indication is built-in in the device provide information about:

- the device status (Fault condition, Fire condition or Duty Mode);
- outputs' status;
- inputs' status.

The LED indicators are located in functional groups:

- indicator illuminated if an output or an input is activated (pos. 1, fig.2);
- indicator showing a Fault condition (pos.2, fig.2);
- indicators of the electroplated separated 1+8 and monitored inputs 9 and 10 (pos.3, fig.2);
- indicators of the outputs OK 1÷11, relay 12÷14 and monitored 15 and 16 (pos.4, fig.2).

LED indication activates upon:

- activated input – an individual LED (pos.3.fig.2) flashes with continuous green light and the red LED flashes on with discontinuous (pos1, fig.2) every 2 seconds;
- activated output – the individual LED (pos.4, fig.2) flashes on with continuous green light and red LED with (pos.1, fig.2)with continuous light;
- fault condition – break or short circuit in an input or an output -yellow LED (pos.2, fig.2) flashes on with continuous;
- an activated isolator of the power loop – yellow LED (pos.2, fig.2)with discontinuous light every 2 seconds;
- an activated osolator of the addressable loop – yellow LED flashes on (pos.2, fig.2) with discontinuous light every second.

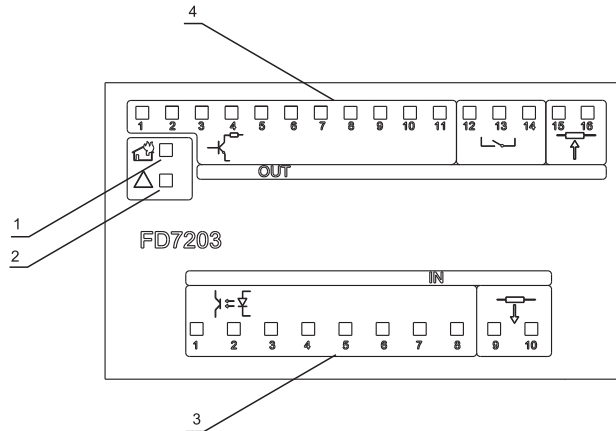


Fig.2

Installation

1. Mechanical installation

- 1.1. Unpack the input-output device.
- 1.2. Open the cover of the device. To unlock it, put a coin in the slot of the plastic lock and turn it anticlockwise at 90 degrees (pos.1, fig.3).
- 1.3. Put dowels at the place determined in advance for the installation of the device.
- 1.4. Fix the device to the dowels through the three holes on the back side of the box (pos.2, fig.3).
- 1.5. Pass the connecting cables to the signal, power loop and other devices to the terminals row of FD7203 using the holes that were freed in advance (pos.3, fig.3).

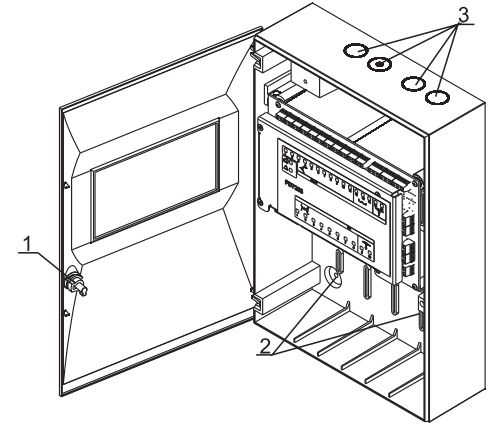


Fig.3

2. Electrical installation

Connect the device to the loop of the fire control panel by means of the terminals, installed on the PC board (fig.4)

- 2.1. Connect the signal loop from the fire control panel to terminals (+) and (-) ADDRESS LOOP (pos.7, fig.4).
- 2.2. Power supply of the device;
 - 2.2.1. If the device is power supplied from the fire control panel, connect the terminals (+) and (-) POWER LOOP (pos.4, fig.4) to the power loop of the fire control panel.
 - 2.2.2. If an autonomous power source is provided, use the terminals (+) and (-) POWER LOOP (pos.4, fig.4) to connect the device to it.

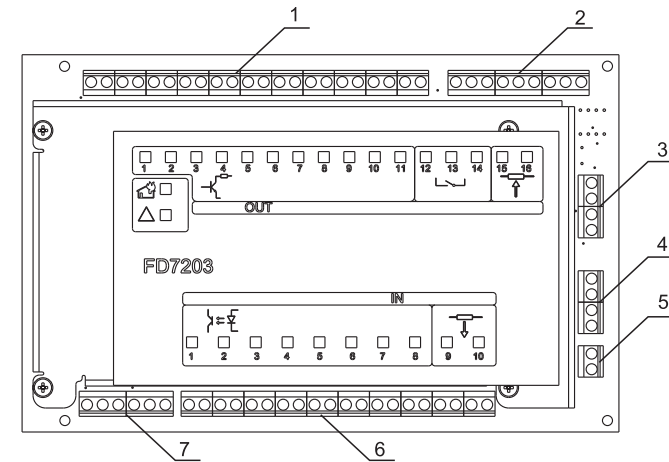


Fig.4

2.3. Connect the additional signal and/or executive devices to the input and output terminals of FD7203 according to the specific project:

- 2.3.1. Terminals of the programmable inputs INPUT1 ÷ INPUT8 (pos.6, fig.4). Activation voltage (5÷30)V DC;
- 2.3.2. Terminals of the monitored inputs C.INPUT1 and C.INPUT2 (pos.6, fig.4). The terminals at the time of delivery are terminated by resistor 3.6kΩ. If any monitored input is not used it should remain terminated by resistor. The combination switch + resistor 3,6 kΩ + resistor 1kΩ (fig.5) have to be at the end of the line.
- 2.3.3. Terminals of the programmable outputs OUTPUT 1 ÷ OUTPUT 11" (pos.1, fig.4);
- 2.3.4. Terminals of potential free relays REL OUTPUT 1 ÷ REL OUTPUT 3 (pos.2, fig.4);
- 2.3.5. Terminals of the monitored outputs C.OUTPUT1 and C.OUTPUT2 (pos.3, fig.4). The terminals at the time of delivery are terminated by resistor 1.0 kΩ. If any monitored output is not used it should remain terminated by resistor. Maximal resistance of the loop 50Ω and connected end of line element (resistor 1kΩ (fig.5)) in the line are necessary for the normal work of the outputs.