

SmokeESC RCP-3100 User Manual

1 Introduction

RCP-3100 is a digital remote control panel designed for use in the SmokeESC system. RCP-3100 allows for monitoring the status, starting, and blocking of control panels that are part of the SmokeESC system.

1.1 Technical parameters

PARAMETER	VALUE
Voltage supply	24 V DC \pm 15%
Current consumption	typ. 50 mA, $I_{MAX} < 110$ mA
Operating temperature	From -25°C to $+50^{\circ}\text{C}$
Storage temperature	From -25°C to $+70^{\circ}\text{C}$
Humidity	$<90\%$ RH, no condensation
Environmental class	2
Enclosure protection class	IP54
Dimensions	205 \times 140 \times 70 mm
Weight	500 g
Altitude above sea level	<2000 m AMSL

1.2 General description

The device is equipped with four LED indicators that show the status of the control board. The installed ignition switch allows for manual start-up, locking, or enabling the automatic mode. The device can be mounted near the control cabinet, as well as in rooms distant from it. Communication between the board and the RCP-3100 occurs digitally, thereby reducing the necessary cabling to a minimum.

2 Installation and start-up

Before commissioning of a device make sure it has no visible damage and the installation has been carried out in accordance with the recommendation of this manual.

2.1 Installation guidelines

Device dimensions are presented on a figure 1. To mount a device to a wall use two screws/bolt with a diameter of 4 mm and minimum length of 45 mm suiting surface to which device will be mounted on. RCP-3000 device has to be mounted no higher than 2 meters measuring from floor up to top edge of a device. After screwing down cap to the case use delivered plugs to cover mounting holes.

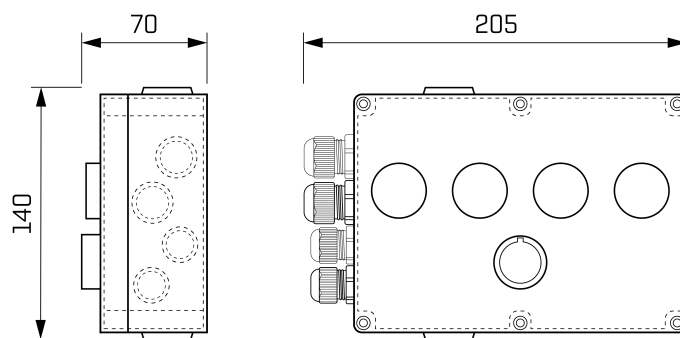


Fig. 1: Dimensions in millimeters

Notes on safety!

- Before the first startup, carefully read this user manual.
- Neglecting to observe warnings and recommendations can result in electric shock, serious bodily injury, or fire.
- All connections and changes should be made with the power disconnected on all poles.
- Ensure proper operating conditions in accordance with the technical requirements of the device. Check the supply voltage, current output of the power source, and environmental conditions.
- Incorrectly connected device may become damaged.
- Only qualified individuals (after familiarizing themselves with this user manual) are allowed to connect the device and perform wiring.
- The responsibility for proper installation lies with the installer. Ensure that all guidelines and standards applicable in the given country are met.
- The device may be installed in a location accessible only to adults.
- Any attempts to make unauthorized changes to the device or self-repairs result in warranty voidance.

2.2 Connections

2.2.1 Electrical connection

Caution!

The connection of the device must be carried out by authorized personnel. Any installations should be performed with the power turned off on all power supply poles. The device must be installed in the same building where the wiring connected to its connectors is done. All wires connected to the device must comply with the IEC 60332 standard.

Caution!

When leading cable through a grommet make sure to keep connection sealed.

Power supply connection has to be done in accordance with figure 2 using cable of type of HTKSH FE180/PH90 1x2x1 or different with similar characteristic. Power supply cable needs to be connected to inputs 1 and 2 of a device considering power supply polarization.

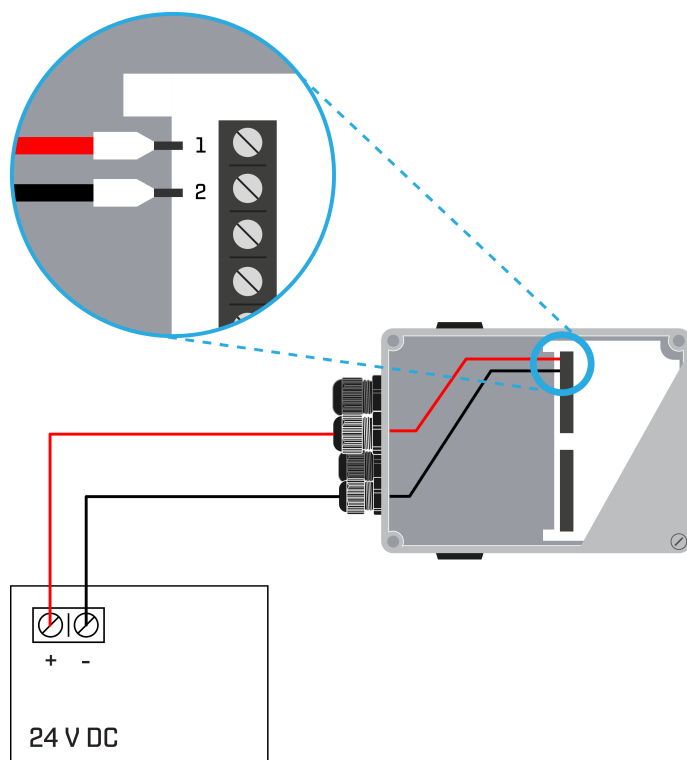


Fig. 2: Power supply connection

2.2.2 Connection of communication bus

Maximum number of RCP-3100 devices connected to a communication bus is 15. For connection use cable of type of YnTKSYekw 1x2x0.9 or one with similar characteristic. Bus needs to be connected in accordance with scheme on a figure 3 using connectors 3-4 and 6-7. Shielding of a cable need to be connected in a single spot using EMC grommet or other grounding connector in

a control cabinet. When connecting devices over a bus make sure to provide connection between shields of a cable inside devices using connectors or terminal strips. Maximal length of a bus is 350 m. Length for providing stable communication can be lesser if not using proper type of a cable or lack of shielding. Extending is possible by using REP-3100 repeater. One REP-3100 repeater extends maximum length up to 350 m. It is advised to use up to 4 REP-3100 on one bus.

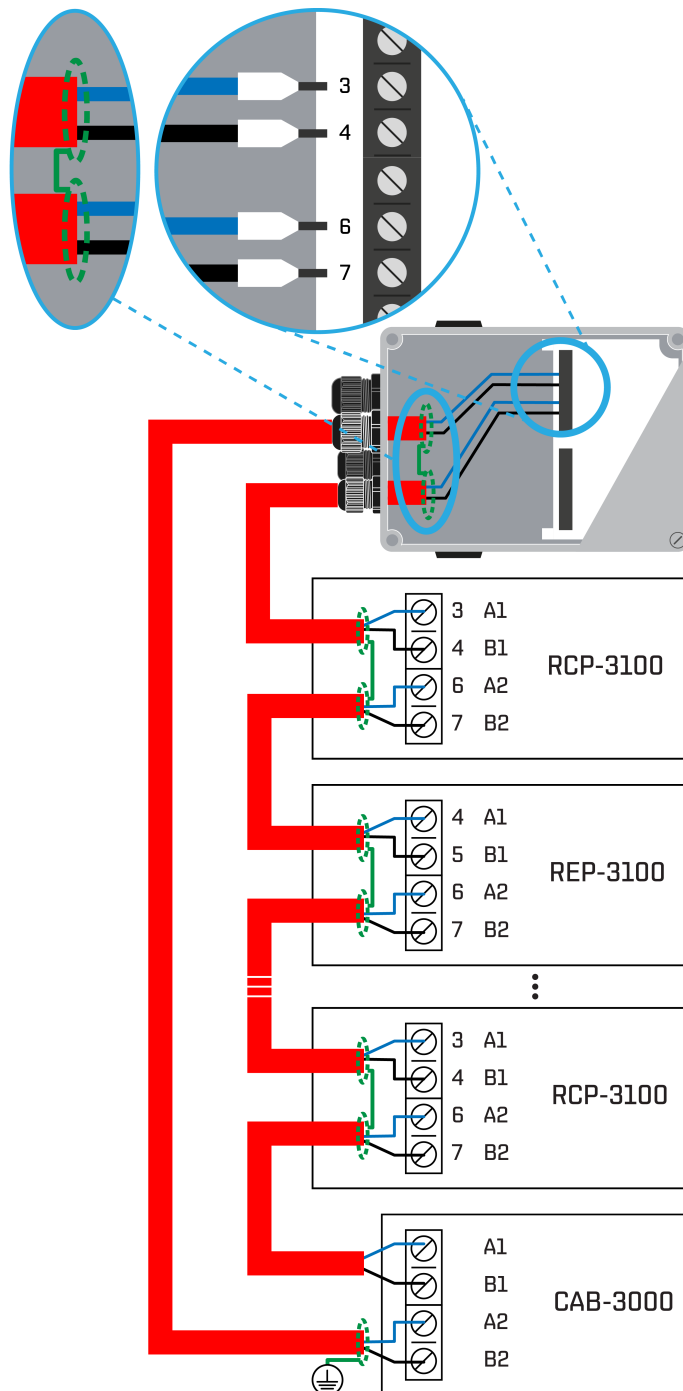


Fig. 3: Connect of communication bus

2.3 Other components

2.3.1 Launch control

The device has been equipped with an ignition switch. With its help, you can change the state of the board. Possible variants:

Position	Value
START	Start of a cabinet
AUTO	Automatic mode of a cabinet
STOP	Enable blockade of a cabinet

2.3.2 LED diodes

LED diodes	Description
POWER	On - Power is on
FAULT	Blinks - Blockade is on On - Fault
ALARM	Blinks - Alarm detected
SYSTEM OPERATION	Blinks - Fan is operating

2.3.3 Address setter

Address setter places on a PCB is used for setting address of a device for communication with FirePLC devices or other RCP-3100. Every RCP-3100 connected to single bus have to have unique address. Changing the address is acquired by changing position of a marker on setter with screwdriver.

Scan to find out more.



Technical issues?
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