



1. Safety rules	1
2. General information	2
2.1. Main separator sub-assemblies	2
2.2. Separator connection diagram	4
2.3. Pneumatic lines connection diagram	5
2.3.1 Tongs with a pneumatic press button - connection diagram	6
2.3.2 Compressed air reducer	6
2.4 Control connection diagram	7
2.4.1 Tongs with an electric triggering press button - connection diagram	8
2.5 Discharge flap connection diagram	9
2.5.1 Wired remote, manual mode	9
2.5.2 Wired remote, manual and automatic mode	9
2.6 Diagram of RELAY 7-PIN socket outlets controlling the discharge flap	10
3. Installation	11
4. Operating rule	11
5. Operation	11
5.1 Operating test	11
5.2 Waste handling requirements	11
6. Electric diagram	12

1. Safety rules

	<p>In order to familiarise with the correct use of the equipment, it is necessary to READ THE USER'S MANUAL. The User is obliged to follow all the recommendations provided in the Safety Manual.</p> <p>Warnings, comments and instructions concerning the use of devices and undertaking specific actions are included in the documentation below. It is necessary to ensure whether this Manual and any other documentation is available for personnel dealing with the equipment operation and servicing.</p>
---	---

	<p>THE MAXIMUM AIR PRESSURE can reach 10 bar. Excessive inlet air pressure may damage the equipment.</p>
---	--

2. General information

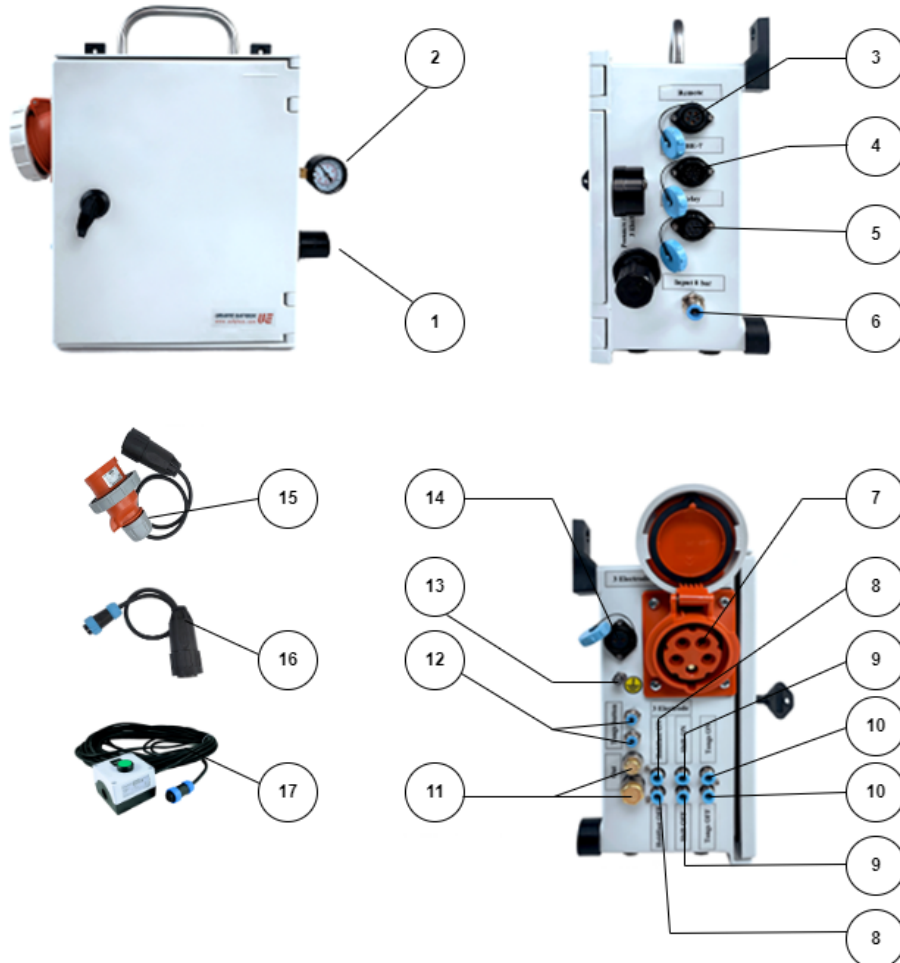
General description:

The pneumatic “separator” controller is a component of the AU system of the VBE-7 device. The separator controls the actuators of the 3 electrode and tongs by means of the electronic control system; it sends pneumatic activation signals to the bidirectional actuators.

The manual pressure regulator is used for setting the working pressure of the actuators of the 3 electrode.

This appendix includes the information on the installation and connection of the entire installation system and parts.

2.1. Main separator sub-assemblies



APPENDIX G Pneumatic separator / AU system

DESCRIPTION	ITEMS
1. Compressed air reducer	1
2.Manometer	1
3.Wired remote socket (manual cage opening)	1
4.Socket for VBE 7 connection	1
5.Cage opening signal socket	1
6.Working pressure supply, min. 8 bar and max. 10 bar	1
7.Tongs socket	1
8.Pneumatic joint - actuator - holdfast of the 3 electrode – ON/OFF	2
9.Pneumatic joint - actuator - shift – ON/OFF	2
10.Pneumatic joint - tongs actuator – ON/OFF	2
11.Venting	2
12.Pneumatic joint - press button - (tongs) triggering	2
13.Grounding point	1
14.Socket - outlet - 3 electrode	1
15.Tongs adapter	1
16.Adapter - 3 electrode	1
17.Wired remote	1

2.2. Separator connection diagram

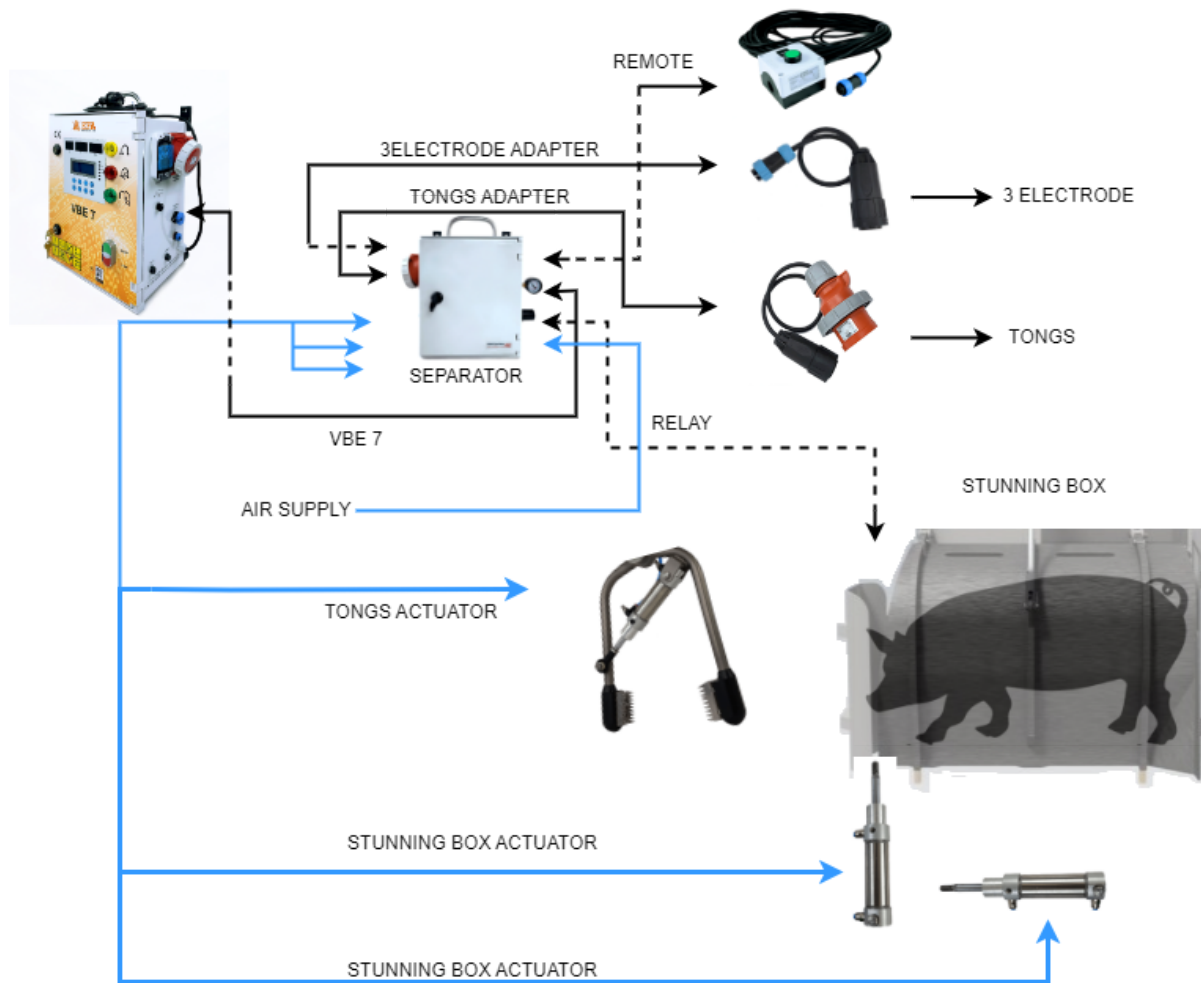


Fig.1 Separator connection diagram

2.3. Pneumatic lines connection diagram



CAUTION!

Connecting the pneumatic lines to the correct sockets must be carried out with caution. Incorrect connection results in incorrect operation.

Inputs and outputs are marked to ensure easy matching.

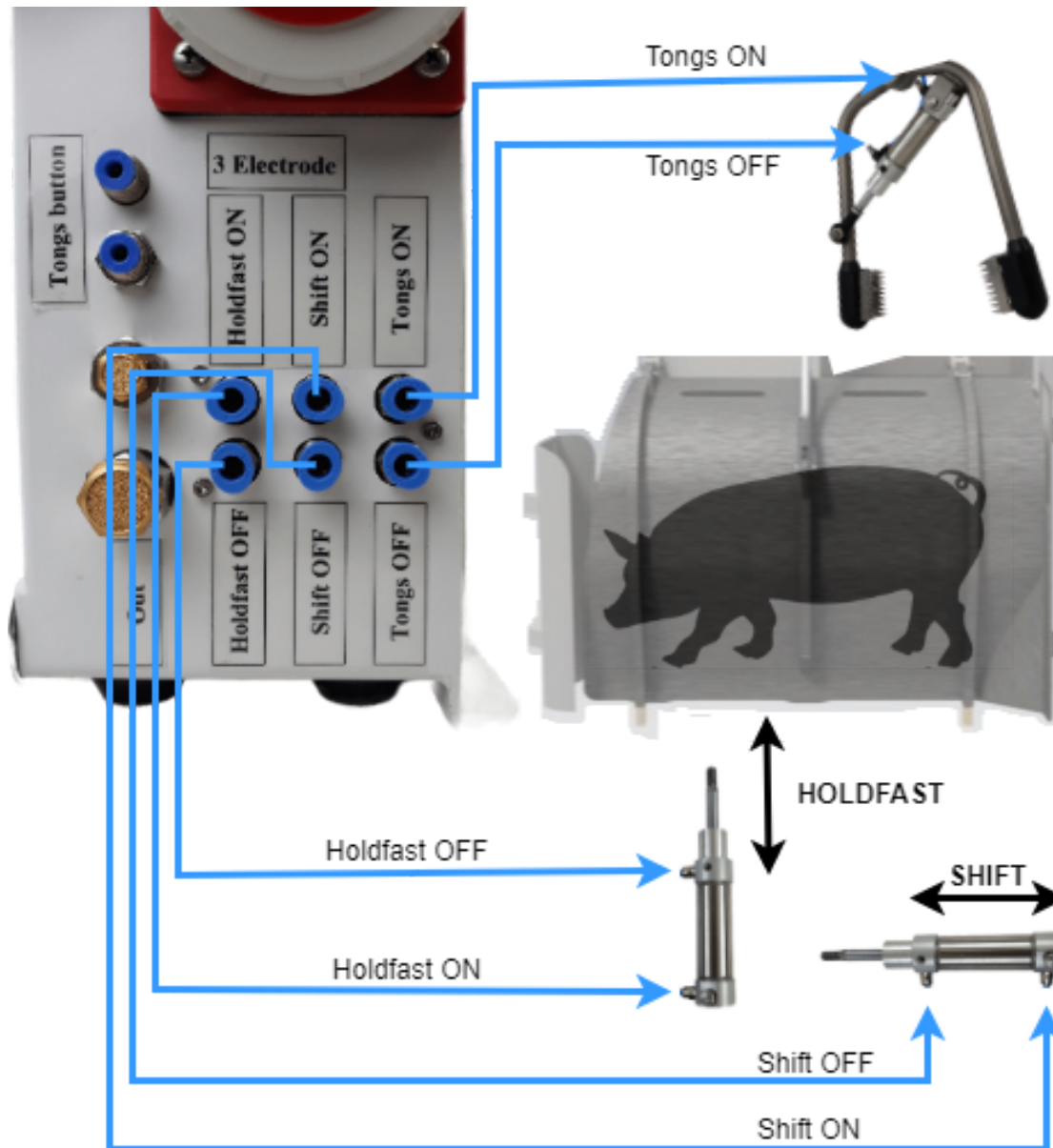


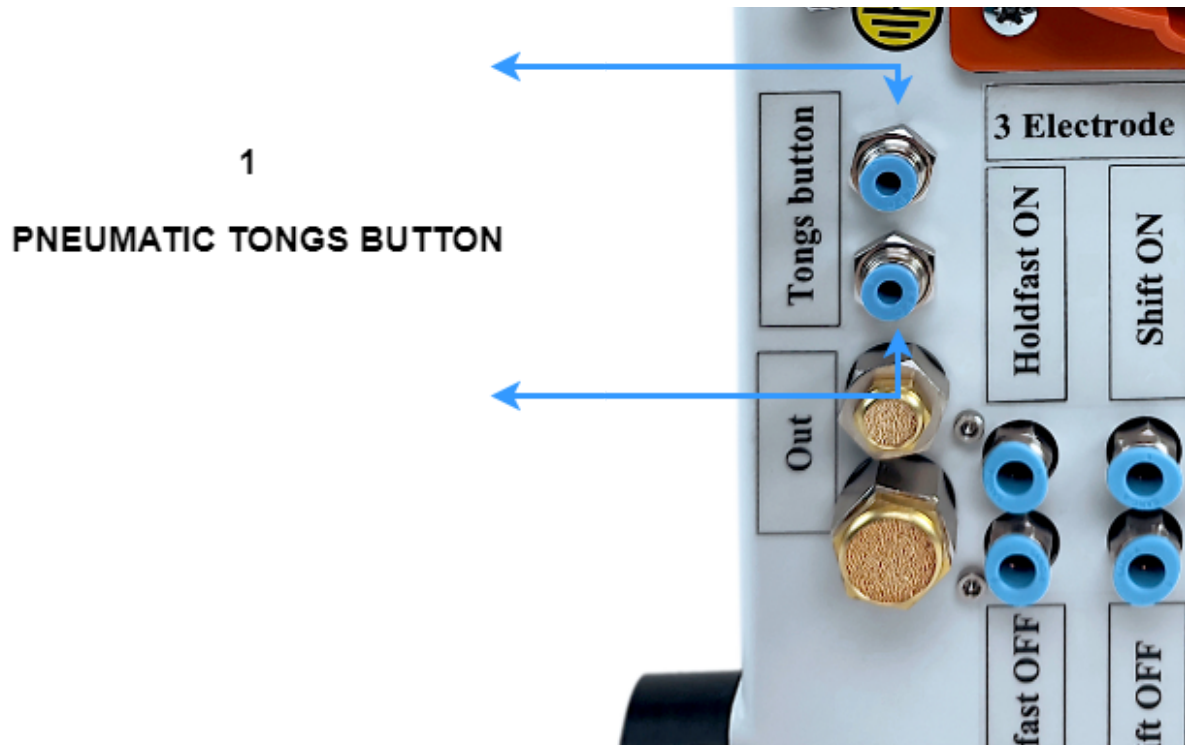
Fig.2 Pneumatic line connection



IMPORTANT!

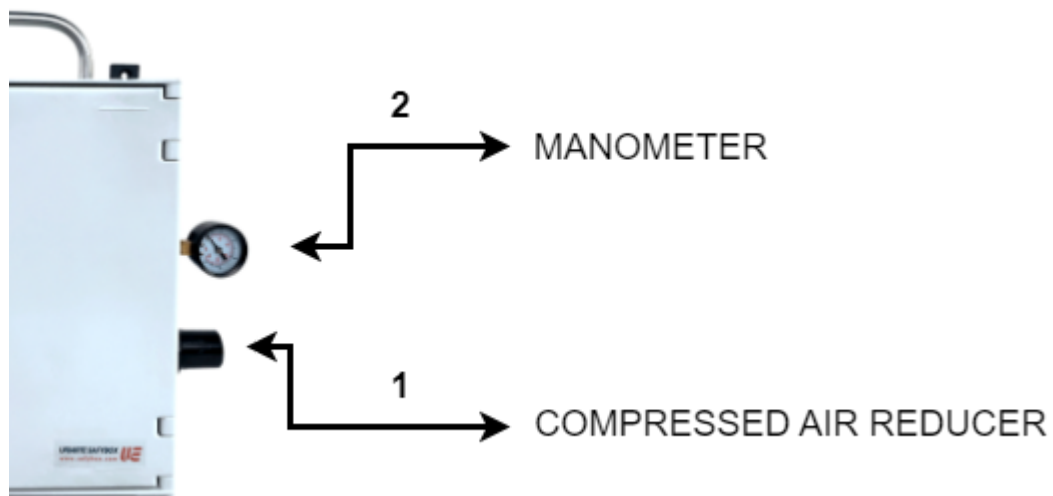
It is required to use a conditioner for compressed air. Improperly purified and dried air or lack of a lubricating agent may cause a failure.

2.3.1 Tongs with a pneumatic press button - connection diagram



1. The **TONGS BUTTON** pneumatic joints operate the tongs for the pneumatic triggering of the stunning process.

2.3.2 Compressed air reducer



1. The compressed air reducer adjusts the working pressure only for the actuators, **HOLDFAST** and **SHIFT**, regardless of the higher input pressure changes.
2. The manometer indicates the working pressure only for the **HOLDFAST** and **SHIFT** actuators.

2.4 Control connection diagram



The sockets are marked to ensure easy matching. A standard socket of stunning tongs allows to operate the process triggering with an electric press button or a pneumatic press button by means of the adapter.

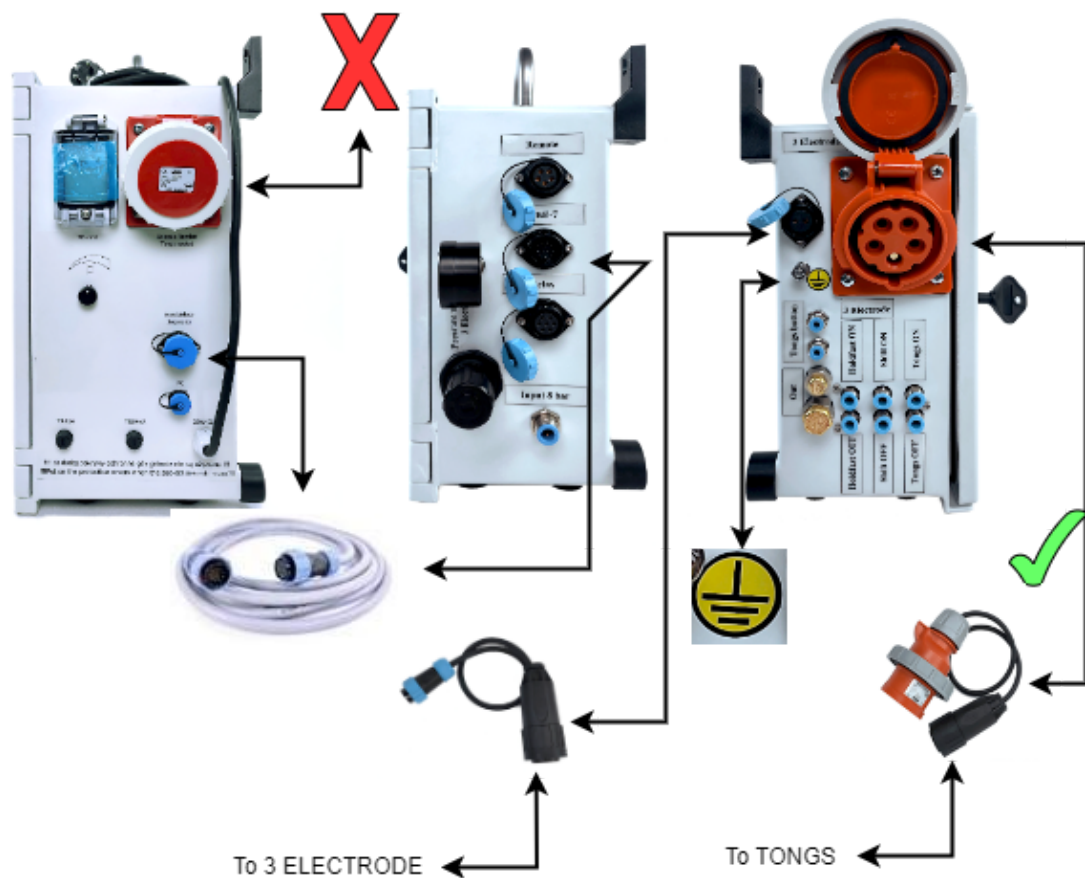


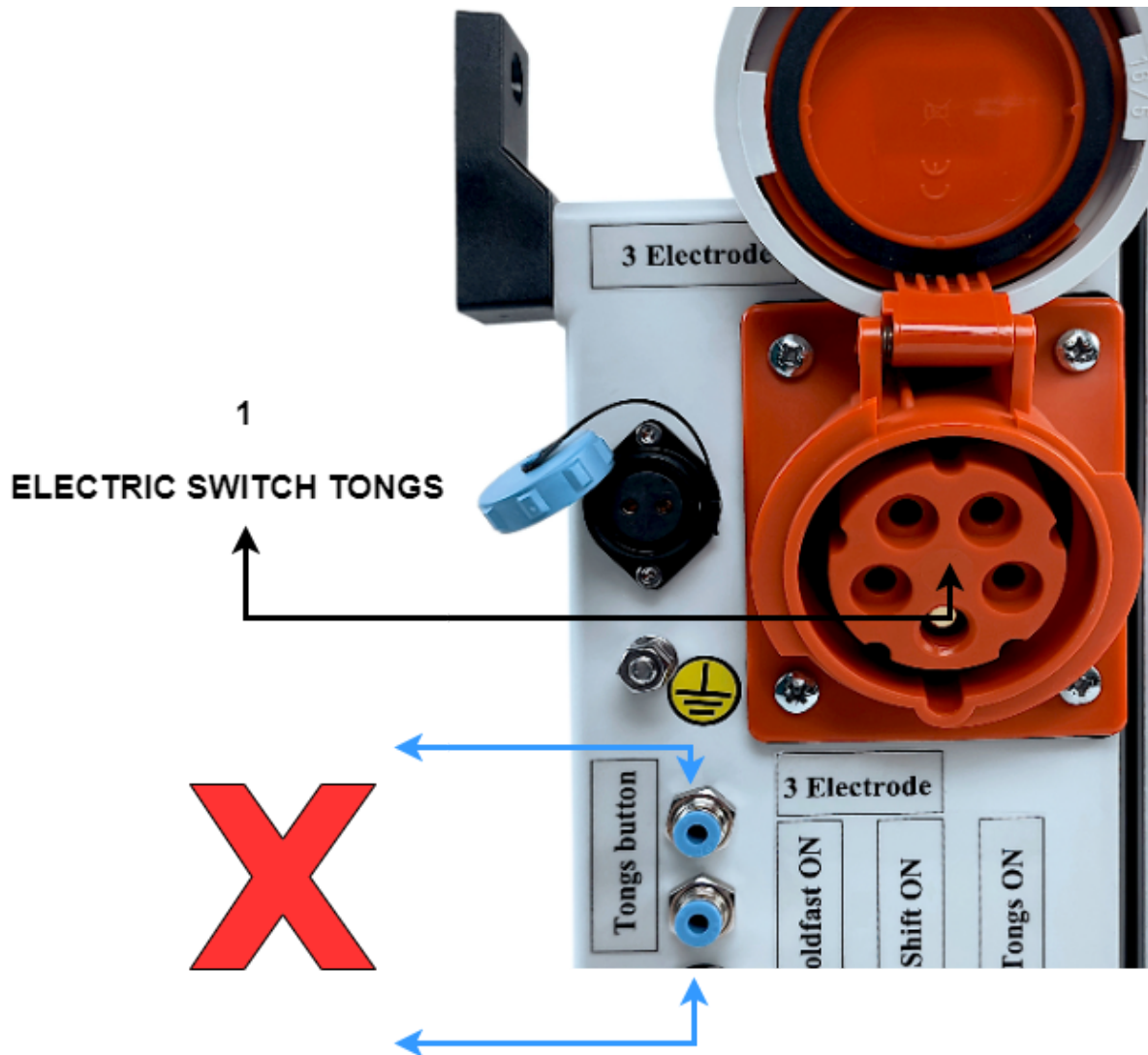
Fig.3 Control wires connection diagram

The pneumatic separator must be connected to the **socket** located on the side wall of the **VBE-7** device by means of the **PM00249** wire. The automatic connection deactivates the main tongs socket.

The adapters must be connected according to the Manual.

The **M0120** adapter is used for connecting the tongs with the **EM0661** plug. In the event of tongs with the **EM0505** end - the adapter is not needed.

2.4.1 Tongs with an electric triggering press button - connection diagram



1. The tongs socket may also operate the pneumatic tongs equipped with a stunning triggering electric press button. The use of the **M0120** adapter is not needed. The pneumatic joints, **TONGS BUTTON**, are not used and they must be plugged.

2.5 Discharge flap connection diagram

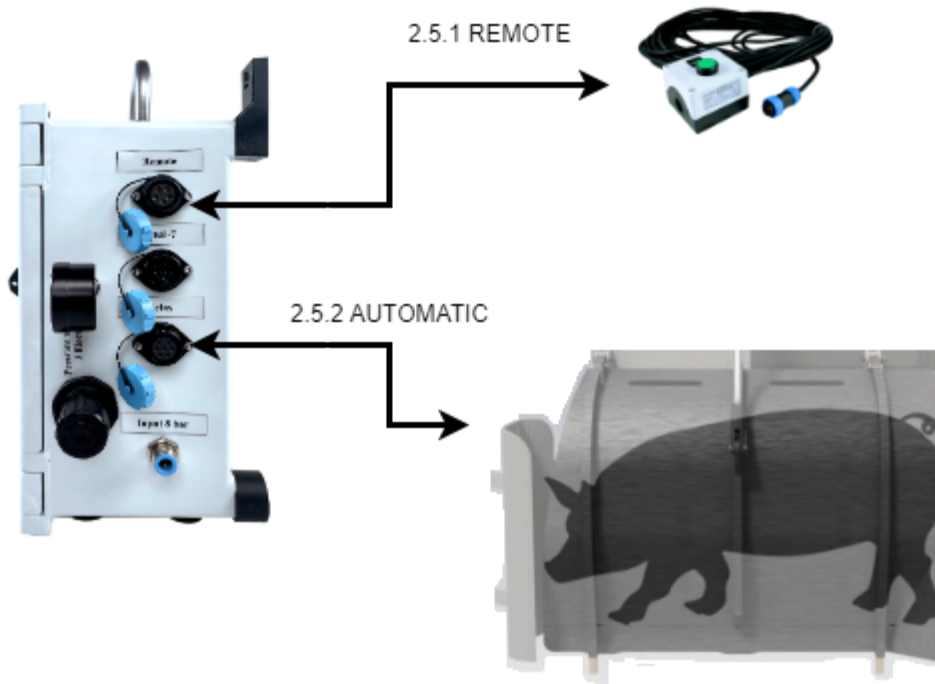


Fig.4 Manual and automatic mode connection

2.5.1 Wired remote, manual mode

The wired remote must be connected to the **REMOTE** socket on the side wall of the separator. The stunning cage equipped with the pneumatic discharge flap may be opened by the operator when the stunning process is finished by pressing the button. The output of the signal controlling the discharge flap is operated by the **RELAY** socket. The description of the **RELAY** socket outputs - see the diagram of 7-PIN socket outputs.

2.5.2 Wired remote, manual and automatic mode

The mode of the automatic opening of the pneumatic discharge flap is controlled by the VBE-7 device which, after satisfying all the stunning process conditions, sends a signal through the **RELAY** socket for opening the pneumatic discharge flap. The connected wire remote fulfils a role of the manual emergency opening of the discharge flap.

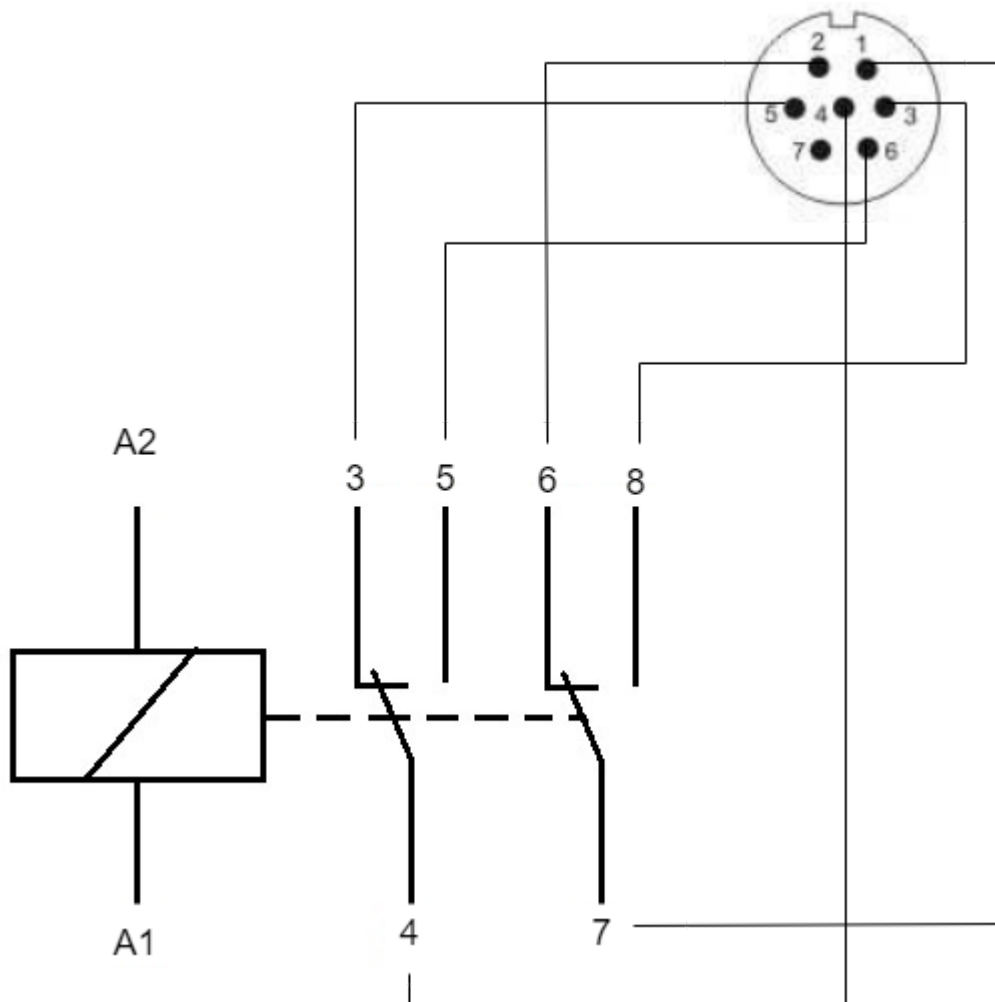
The description of the **RELAY** socket outputs - see the diagram of 7-PIN socket outputs.



IMPORTANT!

All the connections must be correct.

2.6 Diagram of RELAY 7-PIN socket outlets controlling the discharge flap



3. Installation

1. The box should be installed only indoor.
2. The box must be installed in locations without direct exposure to water.
3. A distance from the device depends on the control wire length which, in a standard version, is 5 metres.
4. The box must be mounted on the wall by means of holders or on a flat and robust base, satisfying the housing protection level of IP 55.

4. Operating rule

The operating rule of the pneumatic separator consists in the control of the pneumatic solenoid valves which direct the flow of compressed air to the actuators. After pressing the button on the tongs, the electrodes will be closed on the animal head and the device will switch to the stunning mode. The stunning process will start.

The VBE7 device will send a signal to the electronic timer control of the solenoid valves at specific time to deliver compressed air to the proper actuator chamber, implementing the extending and retracting movement. The timer used, in the event of the **SHIFT** actuator, after the time set, is released in the stunning process. When the stunning process is finished, the cage equipped with the pneumatic discharge flap may be opened in two modes. In the manual mode, by means of the wired remote or automatically by means of the VBE7 device, after satisfying all the conditions in the stunning process.

5. Operation

5.1 Operating test

After performing the installation activities, it is necessary to perform the operating test in order to verify the correctness of the connections.

5.2 Waste handling requirements

Waste disposal must take place in accordance with proper local and national regulations.

The pneumatic separator is subject to recycling, that is the selective collection of electric and electronic equipment.



6. Electric diagram

