

MultiPlexBox ECO Controller

Part No: 90001253

Manual on the correct usage, maintenance, and installation of the MultiPlexBox ECO controller

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1. General Information

To ensure complete and effective operation, and for your own safety, all the following instructions should be read carefully and observed. The relevant national standards, safety regulations, instructions and actions required by law as well as the technical connection conditions of the energy supply company must be observed and applied. Keep the Installation and Operating Instructions as a reference. After the final assembly, the document must be handed out to the operator (tenant/owner).

1.1 Warning: Safety instructions will be presented in a box such as this. All information must be followed and adhered to. To not do so will or could result in a dangerous situation.

1.2 Warranty and Liability claims

To safeguard the guarantee and liability claims of the customer, the following must be observed: Implementation according to "unit" Installation and Operating Instructions. The use of accessories, which are not approved, recommended, or offered by Airflow Developments, is not permissible. Any damages are excluded from the guarantee. If these instructions are not observed, all warranty claims are excluded. This also applies to any liability claims extended to the manufacturer.

1.3 Regulations - Guideline

If the product is installed correctly and used to its intended purpose, it conforms to all applicable regulations including UKCA and CE guidelines at its date of manufacture.

1.4 Receipt

Please check delivery immediately on receipt for accuracy and damage. If damaged, please notify the carrier immediately. In case of delayed notification, any possible claim may be void.

1.5 Storage

When storing for a prolonged time, the following steps are to be taken to avoid damaging influences: Protection by dry, air-dustproof packing (plastic bags with drying agent and moisture indicators). The storage place must be waterproof, vibration-free, and free of temperature variations. Damages due to improper transportation, storage or commissioning must be verified and are not liable for warranty.

1.6 Intended use

The control element is intended for controlling the MultiPlexBox. It is not a ready-to-use product and it may only be operated once the ventilation system has been properly installed and connected. The controller is designed for flush mounting in an empty socket with a diameter of 68mm. **Any use other than the intended use is prohibited.**

1.7 Disposal

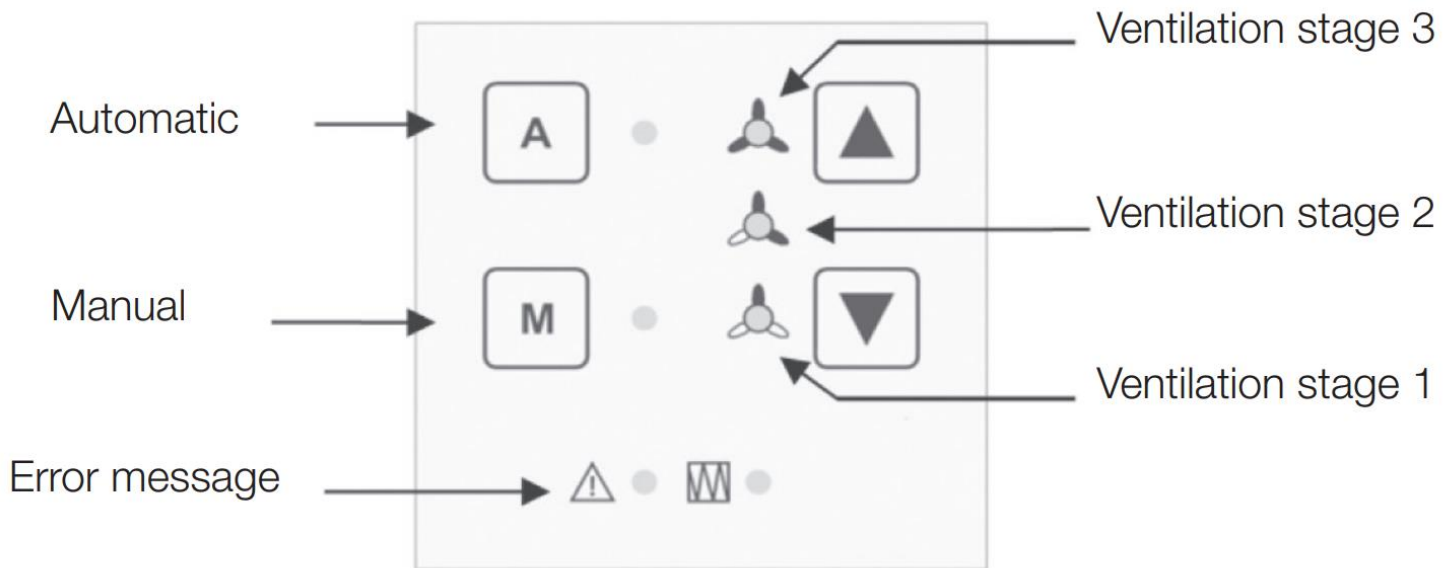
An authorised specialist waste processing company must dispose of the unit or the individual components. The appointed contractor must ensure that:

- The components are separated according to material types.
- The used operating materials are sorted and separated according to their respective properties.

1.8 Functions

The following functions of the unit can be set using the control element:

- Automatic Operation
- Manual Operation
- Ventilation Stage 1-3
- Basic Ventilation
- Off



Automatic Operation (Only possible with optional sensors)

When the A button is pressed, automatic operation of the unit is activated and displayed by the lit-up LED next to the A button. The ventilation stages are automatically controlled based on the air quality.

The ventilation stages LEDs display the selected ventilation level setting (level 1, level 2, level 3). This can be manipulated by pressing the up and down arrow buttons. After a short time of inactivity, the LEDs are turned off. Display them again by briefly pressing the arrow buttons.

Manual Operation

Manual operation is activated by pressing the M button and displayed by the LED next to the button. The ventilation unit is in manual operation now. The individual ventilation levels can be changed and set with the arrow buttons on the right of the LEDs. The LEDs display the selected ventilation level. If ventilation level 1 is flashing, basic ventilation is selected. If the down button is pressed until none of the three LEDs are lit up or flashing, the unit is deactivated (only possible when basic ventilation is deactivated).

Basic ventilation

If ventilation level 1 is flashing, basic ventilation is active. Basic ventilation ensures a minimum air flow which serves as moisture protection.

OFF (only possible when basic ventilation is deactivated)

When "Off" mode is selected, the unit's dampers will be closed and the air discharge/supply to the service unit will be interrupted.

Error Message

The error message shall be displayed in case of a unit operating error by lighting up the LED. If an error message is displayed, promptly inform the relevant persons or seek advice from your point of sale contact.

Error List

The errors you may encounter are listed below:

Error Number	Flash Code	Description
0	-	No Error
1	2x flashing, pause	Error system memory. Unable to load Parameter data.
3	6x flashing, pause	Error communication internal sensor. Unable to set up communication with configured sensor
4	8x flashing, pause	Error communication. Unable to set up communication between MultiPlexBox and ECO controller.

2. Installation

2.0 Technical Data

ECO controller for flush-mounted installation

Voltage: 12 V

Operating stages: 4 (ventilation level 1-3, basic ventilation/off)

Control line: J-Y(St) 2 x 2 x 0.6

Protection rating: IP20

Dim. (W x H x D) mm: 80 x 80 x 10

Ambient temperature / humidity: 0-55°C <95% RH (none condensing)

Weight: 54g

2.1 Wiring Diagram

Connect the controller following the below wiring diagram 1. The location of connection is on the Box.

Warning! Danger to life due to electric shock, the electrical connection and maintenance, as well as installation work, must only be carried out by a qualified electrician with proper legal authorisation to do so.

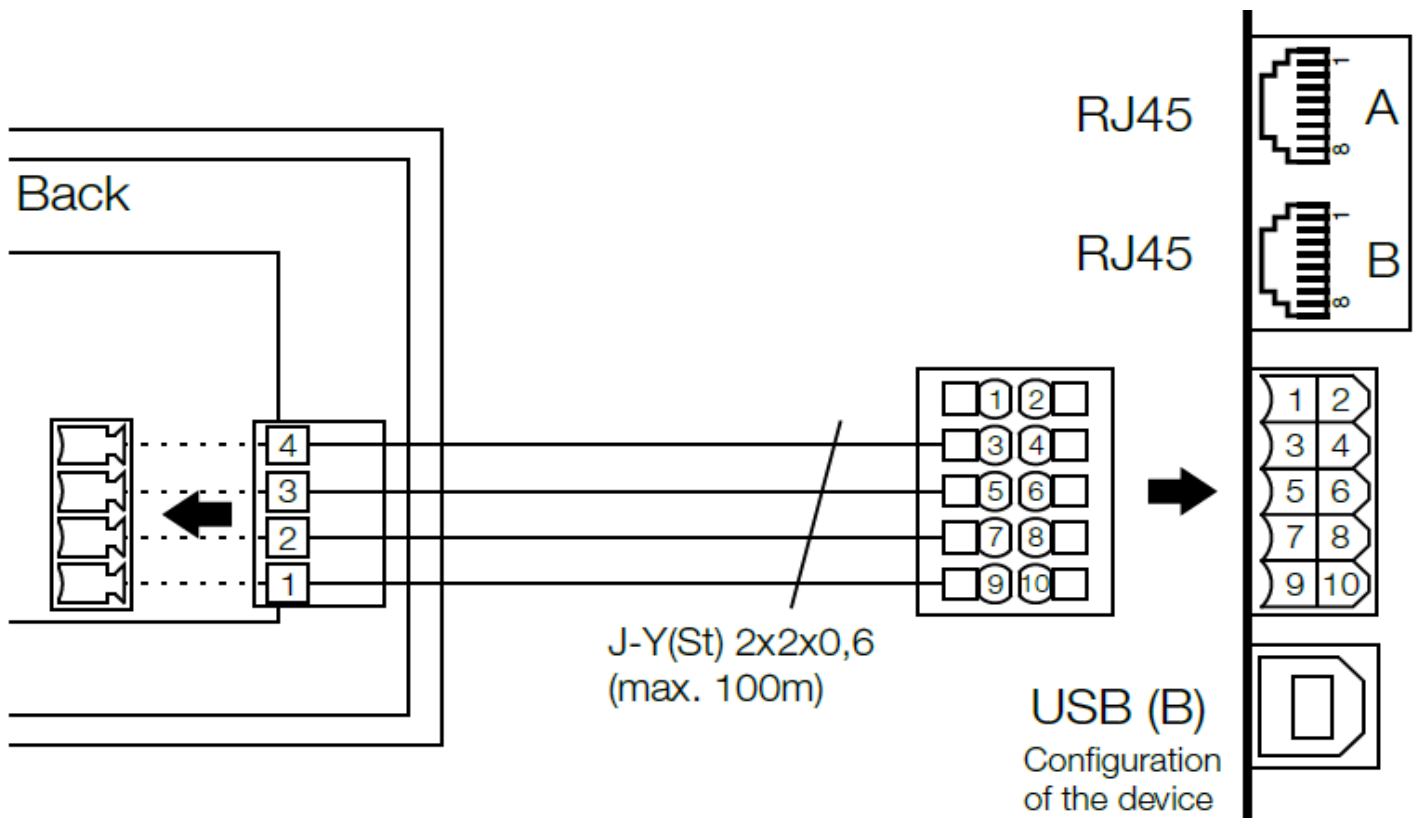


Diagram 1: Wiring of ECO controller

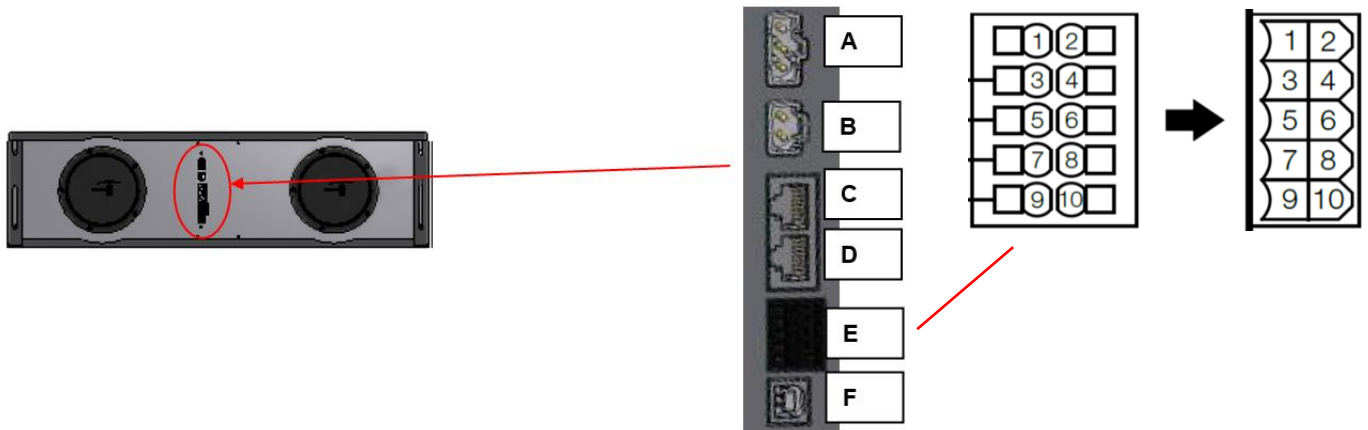


Diagram 2: Location of connection on the MultiPlexBox

Location reference

Use this diagram to refer to what port to use and where it is located on the box if you have difficulty finding it.

- A. Mains Voltage (230 V AC)
- B. Switching contact (potential-free max. 5 A)
- C. Modbus A
- D. Modbus B
- E. Control unit**
- F. USB (PC connection)



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