MS Schippers 3409617 MS Fancontrol Touch Owner's Manual

Contents

MS Schippers 3409617 MS Fancontrol Touch

Specifications

- Model: MS Fancontrol Touch
- Manufacturer: MS Schippers
- Control Type: Touchscreen
- Programmable Settings: Yes
- Power Supply: AC 100-240V
- Operating Temperature: 0-40°C

Product Usage Instructions

Safety Instructions and General Warnings:

General Warnings:
Make sure to read and understand all warnings and instructions provided by MS Schippers before using the product. Only qualified personnel should handle the product. Avoid impacts, shocks, direct sunlight, and extreme temperatures.

Safety Warnings
Avoid wearing metal or conductive materials when working with electrical components. Always switch off the power before servicing the product. Use correct mains voltage and ensure proper cable installation with cable glands.

Introduction
The MS Fancontrol Touch offers various possibilities for controlling ventilation systems. The touchscreen interface provides easy access to settings and configurations.

Dear customer,

- This manual contains all the necessary information to quickly master the operation of the MS Fancontrol Touch.

Please read this manual carefully before starting to operate the MS Fancontrol Touch. In this way, you will learn how to operate the controller more easily.

- Keep this manual in a safe place so that you can use it as a reference at all times. With a view to its programme of continuous development and improvement, MS Schippers reserves the right to revise or change its product range without prior notice. No rights can be derived from this manual.

Safety instructions and general warnings

- Read, understand and carefully follow all warnings and instructions of MS Schippers to use our products safely. These warnings and instructions can be found on the equipment, in manuals, in brochures, on our website or by contacting us.
- The selection and application of MS Schippers products remains the responsibility of the installer or end user of the equipment. MS Schippers accepts no responsibility for the way its products are applied. All MS Schippers products must be delivered to the end user with appropriate warnings and instructions regarding safe use and operation. MS Schippers does not accept any liability for personal injury, material damage, losses or claims as a result of incorrect application of its products.

General Warnings

WARNING

- Read and understand all warnings and instructions provided by MS Schippers before installing, using or maintaining any of our products.
- All work may only be carried out by qualified personnel.
- The product may only be placed, used or stored in places that are inaccessible to children.
- Handle the product with care; impacts, shocks or falls, even from a low height, can damage the product.
- Do not expose the product to direct sunlight, high heat or cold.
- Always check all settings after installation to make sure they are working correctly.
- Do not use running water to clean your computer. The computer is splashproof, not waterproof!

Safety warnings

WARNING

- Do not wear metal or conductive materials, such as jewellery (necklaces, bracelets, rings, etc.) when installing or servicing electrical parts or components.
- Always switch off the power before opening the enclosure.
- Never remove components or wires from electronic boards when the device is turned on.
- Use the correct mains voltage.
- Make sure that all clamp screws are correctly tightened.
- Always use cable glands when installing cables in the controller.
- After installation, unused cable glands or blind holes must be sealed to prevent water, dust and other substances from entering the regulator.
- If you have reason to believe that the device can no longer be used safely, disconnect it immediately and

ensure that it is not operated inadvertently.

Wiring precautions

WARNING

- Always use a shielded cable for all low-voltage connections.
- Always use a shielded cable for all high voltage connections.
- For communication connections, always use a twisted-pair shielded cable.
- Do not connect the shielding of low-voltage connections to the earthing block (PE).
- Do not connect the shielding of communication links to the earthing block (PE).
- The maximum length of the communication link shall not exceed 1200 metres.
- Disconnect high-voltage connections from low-voltage connections and/or communication connections to prevent interference.
- If inductive loads such as magnetic switches etc. are connected to the equipment, Schippers advises to disconnect these loads by placing an RC filter (100ohm + 100nF) in parallel.

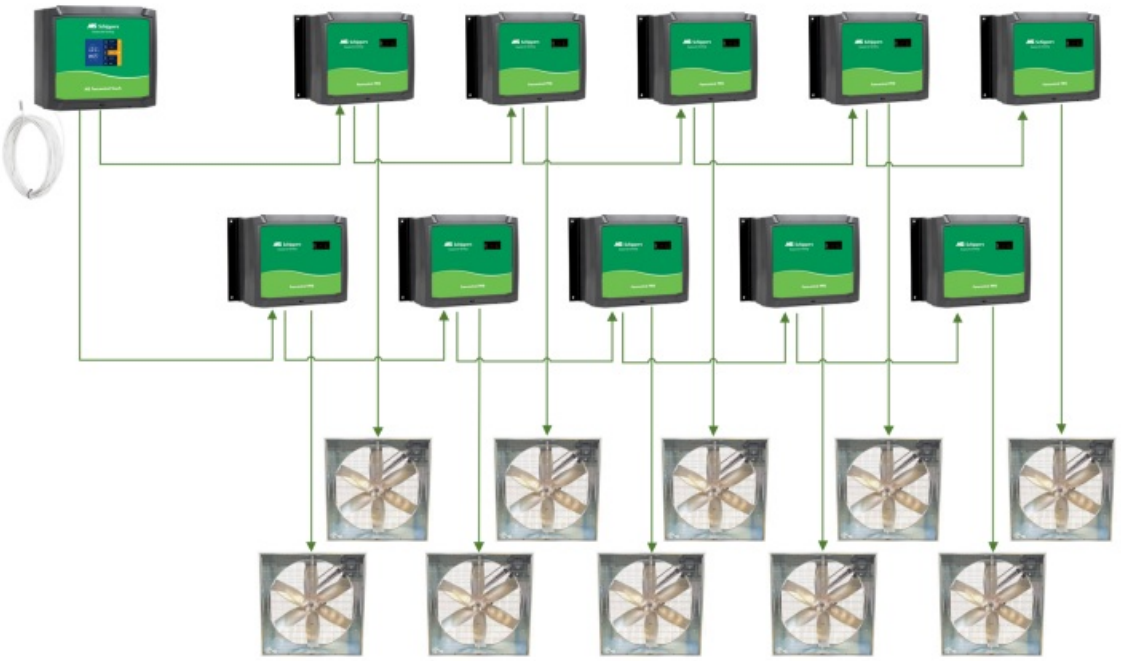
Deletion

Electronic devices are recyclable and should not be disposed of as household waste. At the end of its service life, dispose of the product in accordance with the applicable legal regulations.

Introduction

Possibilities of the MS Fancontrol Touch
The MS Fancontrol Touch is specially designed for controlling fans in a cattle shed. The controller has the following features:

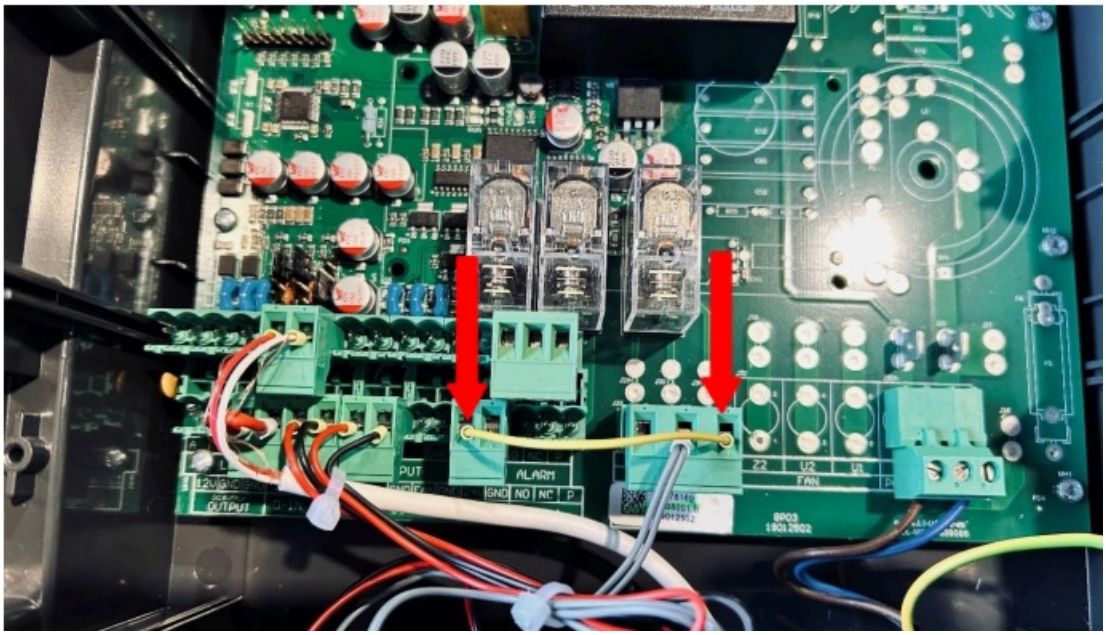
- Measurement of room temperature
- Graph with measurements of today and yesterday
- Control of 1 to a maximum of 10 ventilators (2 groups of maximum 5 ventilators per group).
- Ventilation stop below a set temperature
- Minimum and maximum temperature alarm
- Alarm on defective room sensor
- External alarm input



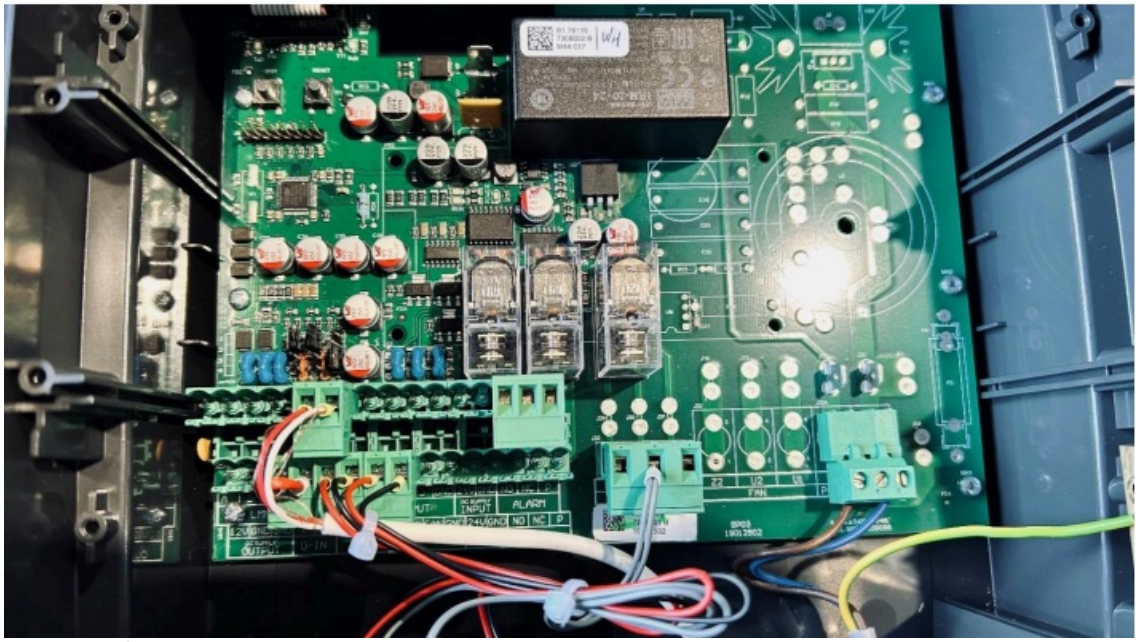
MS Stable fan energy-efficient (WA1400) i.c.w. with MS Fancontroller Touch 3.0
The MS Fancontroller Touch 3.0 is excellent for controlling the WA1400 Standard fans.
However, these fans are not equipped with a ventilation stop.
Before the fans are connected to the MS Fancontroller Touch 3.0, a cable must be removed in the control box.

- **ATTENTION!!!** This step must be carried out so as not to damage the fans.
- **ATTENTION!!!** When performing this step, the MS Fancontroller Touch 3.0 must be de-energised.

1. Open the control box.
2. Carefully disconnect the connector with the yellow and grey cable from the PCB.
3. Remove the yellow cable from this connector
4. Remove the connector with the yellow cable from the PCB (24V)

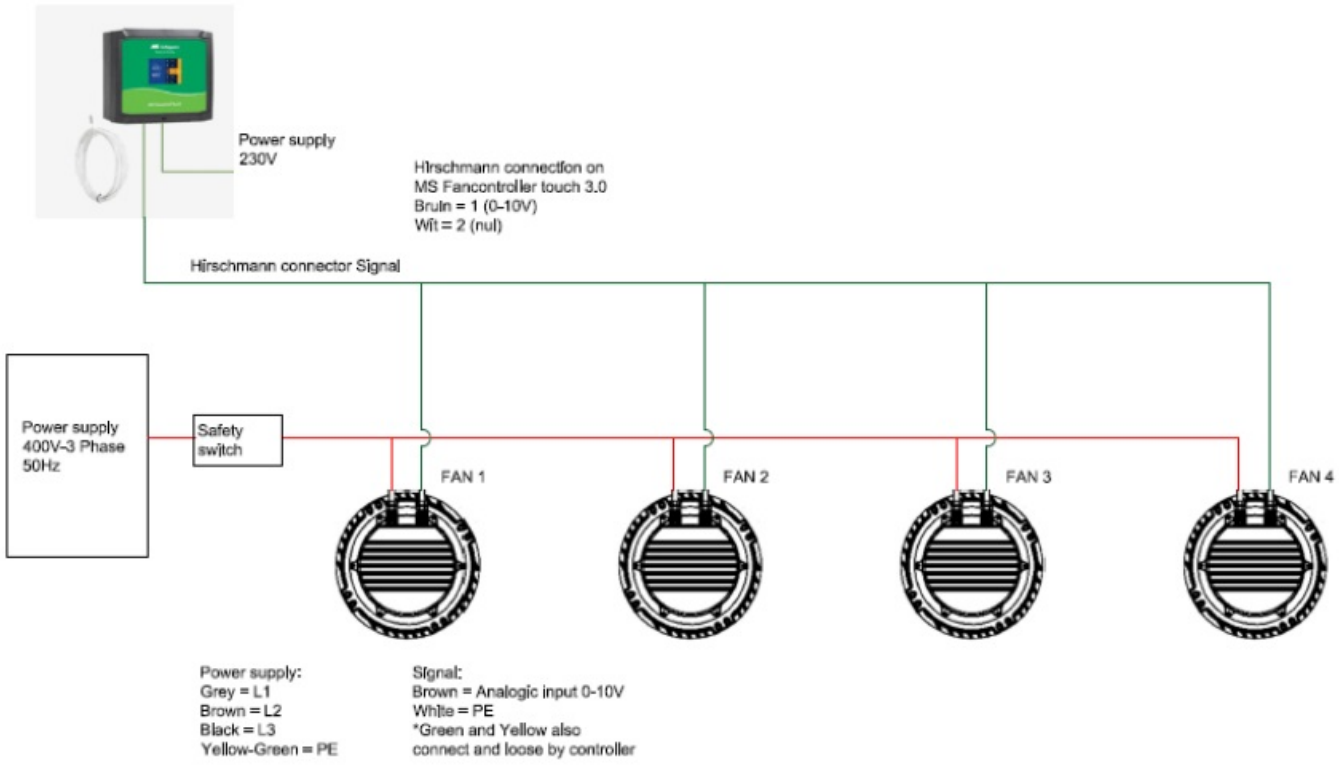


End result after cable removal



Fan stop WA1400 Standard

To prevent the WA1400 Standard from always running at minimum, it is recommended to set the minimum ventilation to 0%.



Screen overview

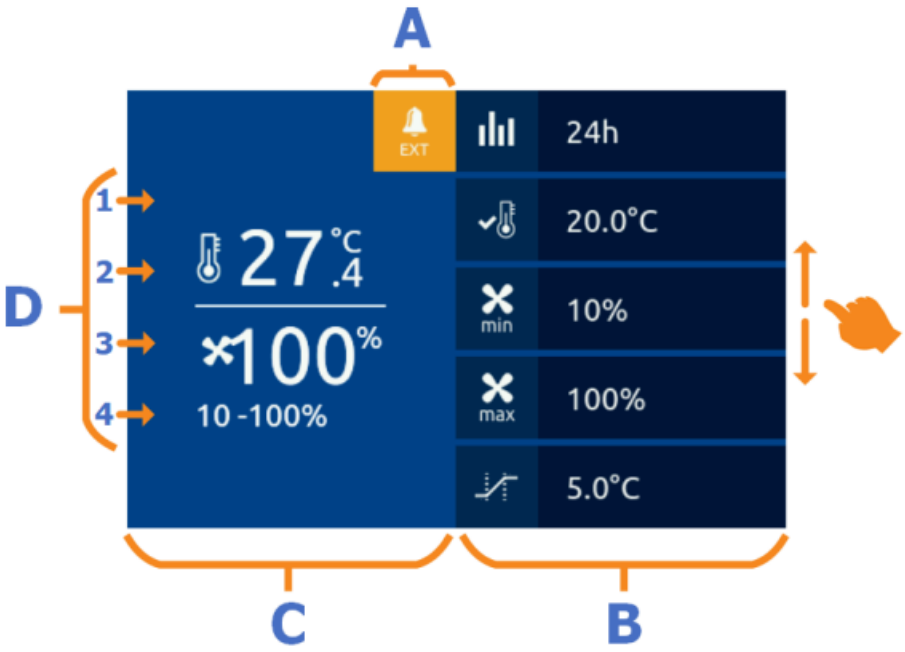


Figure 1: MS Fancontrol Touch screen layout

- A: The alarm bell icon is displayed here. If no alarm is active, this icon is gray
  - If an alarm is active, the icon turns red. The alarm bell icon is orange
  - when alarms have been silenced but not yet resolved.
- B: On the right side of the screen, you can swipe up and down through all the control icons.
  - By pressing the icon, you can enter your desired settings (see Figure 2: Change settings). The set values are displayed to the right of the corresponding icon.
- D:
  1. The set point value in °C.
  2. The measured room temperature in °C.
  3. The current state of ventilation.
  4. The minimum to maximum ventilation set.

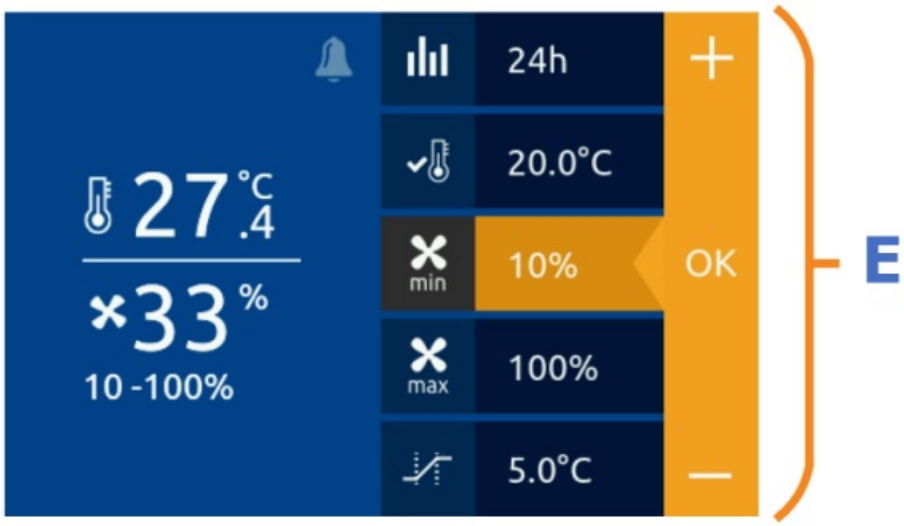


Figure 2: Adjusting settings

- E: If you press any of the control icons, the displayed settings bar will be visible. You can adjust the controls settings by pressing “+” to increase and “-” to lower. Press “OK” as soon as the desired setting is entered.

Remark: If you want to cancel a newly entered value, press the left half of the screen. The settings bar closes and

the value is reset to the previous setting.

User menus

This chapter discusses all settings in the user menu.

Target temperature

Input range: 0.0°C – 50.0°C [factory value: 20°C] .Here you can set the desired temperature for the department.

Minimum ventilation

- Input range: 0% – 100% [factory value: 10%]
- Here you can set the desired minimum ventilation. This is the ventilation rate when the room temperature is equal to or lower than the set temperature.

Maximum ventilation

- Input range: 5% – 100% [factory value: 100%]
- Here you can set the desired maximum ventilation. This is the ventilation rate when the room temperature has reached the end of the bandwidth.

Bandwidth

- Input range: 1.0°C – 20.0°C [factory value: 5.0°C]
- Here you can set the desired temperature range in which the ventilation is increased from minimum to maximum.

Ventilation stop

- Input range: -10.0°C – 10.0°C [factory value: -10.0°C]
- Temperature deviation with respect to the set temperature at which the ventilation stop is activated. The

ventilation stop activates relay 2 with a potential-free changeover contact.

Switching the controller on or off

- Input range: On or off
- When the controller is turned on, the background colour is blue. All functionality is enabled in this situation.
- When the controller is switched off, the background colour changes to orange. When switched off, the ventilation stop is active and the analogue fan signal is 0V. The alarm function remains active.

Restore factory value

This function resets all settings to their default values. If clicked, a pop-up appears to confirm this action. If the controller was switched off (see above), this function will switch the controller back on again.

System time

- Input range: 00:00 – 23:59 hrs:mm
- Here you set the current time. This time is needed to display the 24 hour graph correctly.

System info

Opens a pop-up with the system information. The version is displayed as Vxx.yy.zz where xx.yy is the main release number and zz is the revision number.

Alarm overview

This chapter discusses the alarms that the MS Fancontrol Touch can display.

No alarms are active
If no alarms are active, the alarm bell icon is grey.

One or more alarms are active
If one or more alarms are active, the alarm bell icon flashes with a red background, switching between the alarm bell icon and the alarms that are active.
Also, the alarm relay will be activated.

Resolve or stop an alarm

- To deactivate an alarm, simply press the alarm icon that is visible on the home screen.
- The alarm relay will be activated,
- When the alarm is resolved, the alarm icon will automatically appear gray. If the alarm is not resolved, the alarm bell icon turns orange, indicating that the alarm has been silenced. If the MS Fancontrol Touch detects that the alarm is still active within 5 minutes, or if a new alarm situation occurs, the display switches back to the active alarm bell icon. The alarm relay will activated.

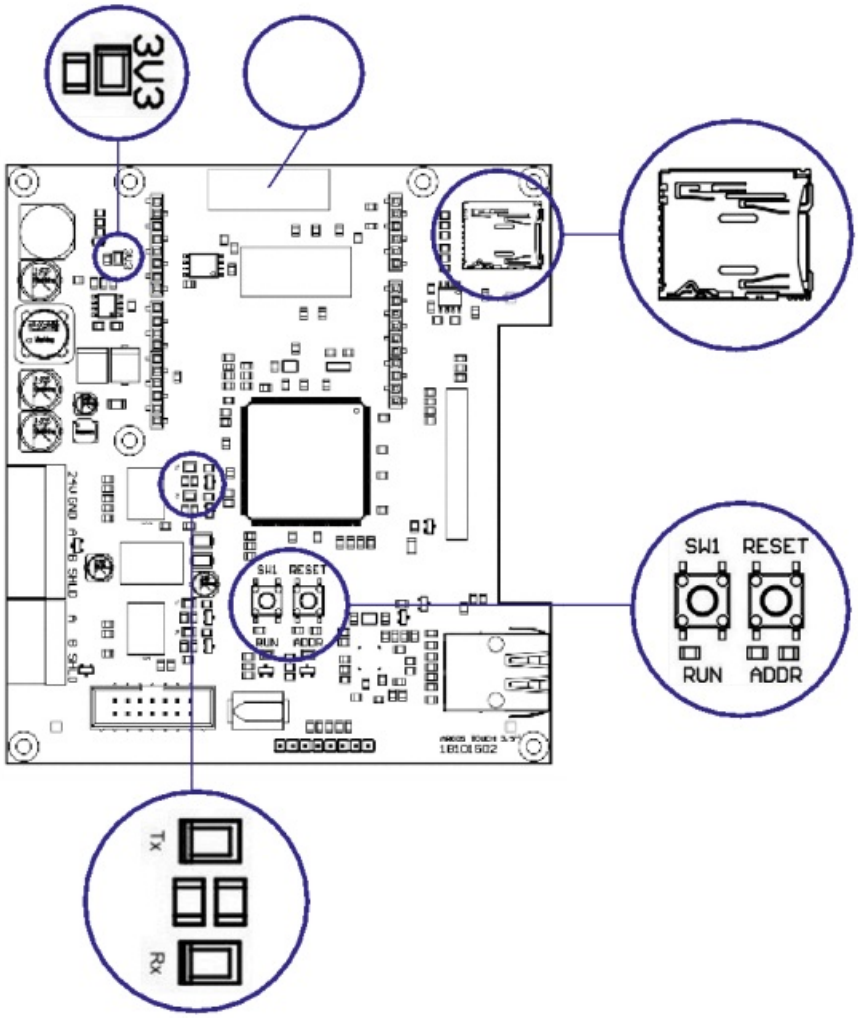
Remark: The various alarm icons can only be displayed if the corresponding control is active and an alarm occurs in relation to that control.

	**No alarms:** There are no alarms at the moment.
	**Alarm alert:** One or more alarms are active, but are suppressed for 5 minutes.
	**Alarm:** One or more alarms are active and the alarm relay has been activated.
	**Minimum temperature alarm:** The measured room temperature is equal to or below the set minimum alarm limit.
	**Maximum temperature alarm:** The measured room temperature has risen to equal to or above the set maximum alarm limit.
	**Sensor defect alarm:** The measured temperature is out of range (lower than -60°C or higher than 130°C).
IO	**IO alert:** The communication between the front pbc and the bottom pbc has been interrupted

Printed circuit board overview

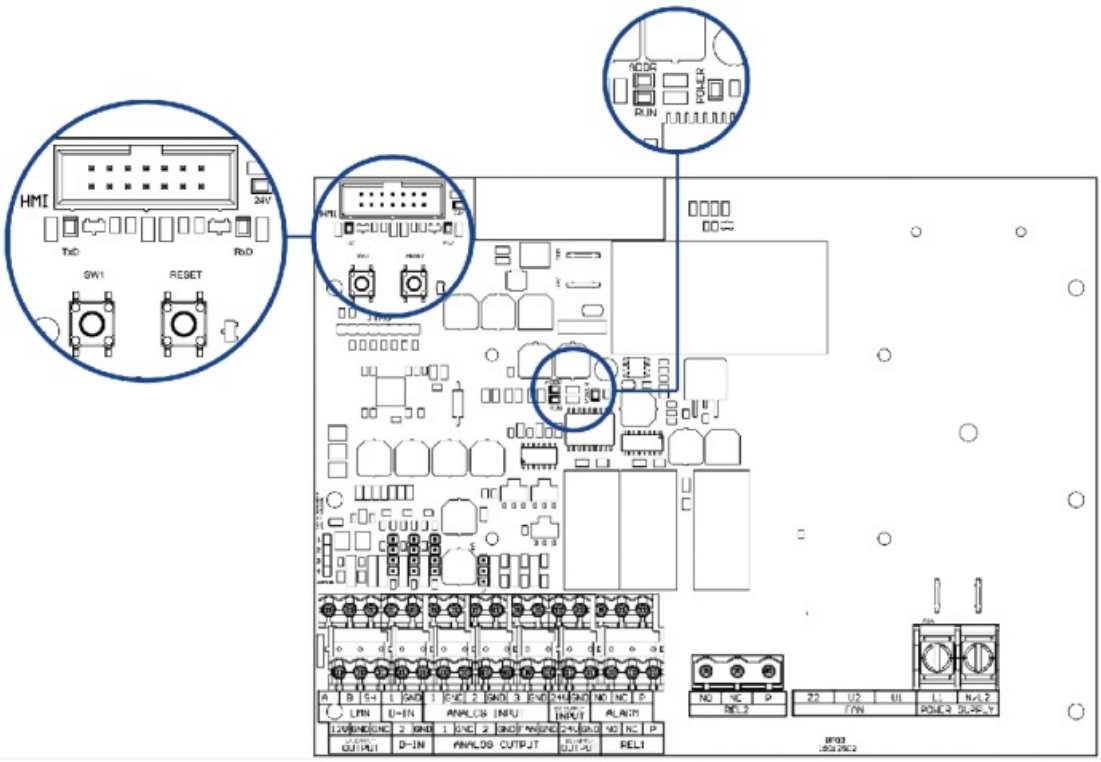
This chapter shows the print overview of the MS Fancontrol Touch.

Front pcb



Remark: The LEDs for communication at the bottom (IO) indicate the communication between the PCB on the front panel and the PCB on the bottom.

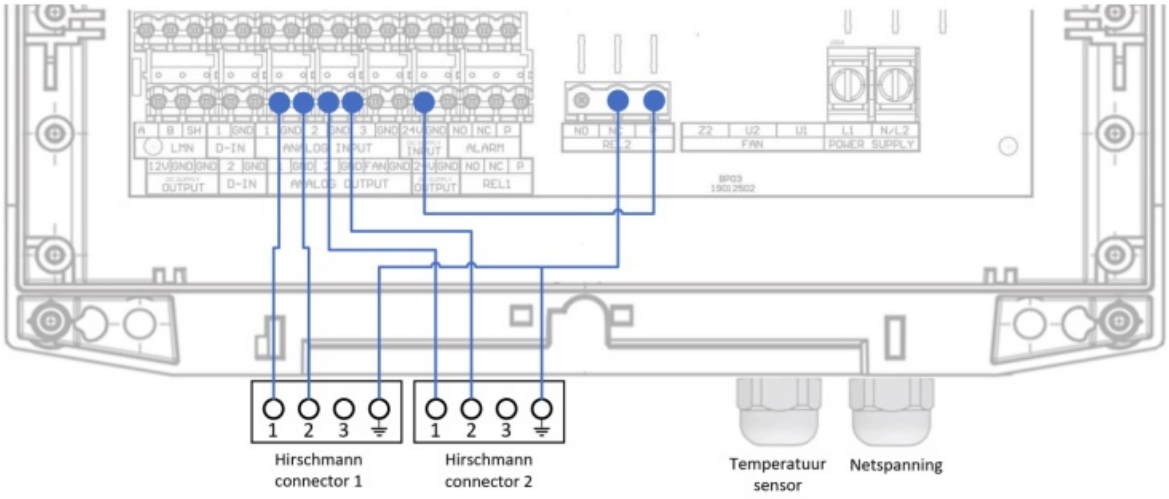
Bottom pbc



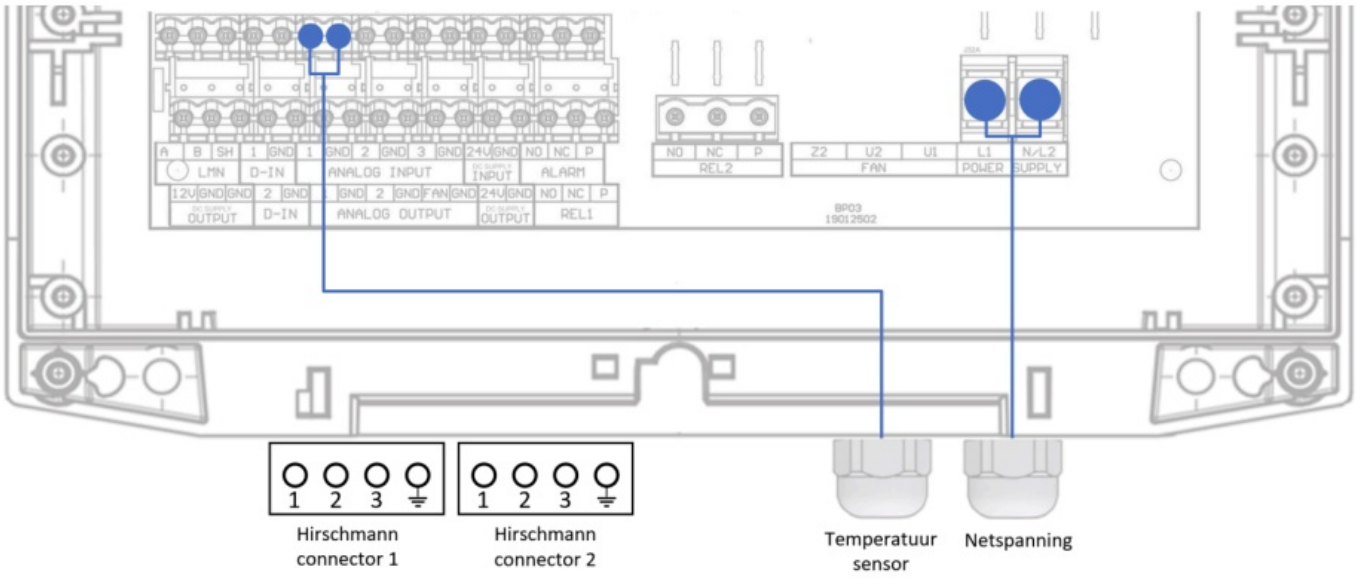
Remark: The LEDs for communication at the bottom (IO) indicate the communication between the PCB on the front panel and the PCB on the bottom.

Wiring diagram

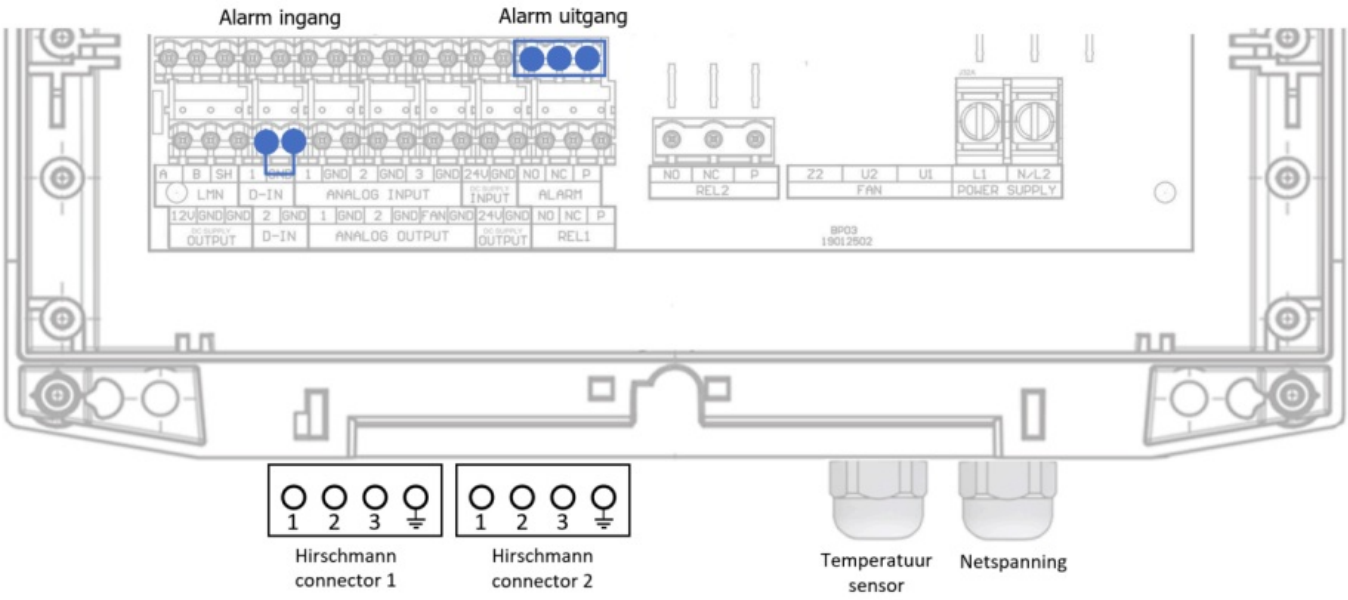
Hirschmann connectors



Temperature sensor & mains voltage



Alarms (Optional)



Important: Connect alarm input when not in use!

Technical specifications

General

- **Dimensions (external)**: 204x229x116mm (depth x width x height)
- **Enclosure:** Plastic IP54
- **Connections**: Through Hirschmann Connectors and fixed cabling
- **Ambient temperature:** 0 – 45˚C no direct sunlight or radiation from heat source
- **Supply voltage:** 110 – 240Vac
- **Mains frequency**: 50/60Hz
- **Energy consumption:** Max. 20 Watt
- **24Vdc output:** Max. 125mA
- **12Vdc output**: Max. 250mA

Analogue inputs

- **Analogue input 1** : Room temperature sensor (type: PT3000) 0-10V / 10K input impedance (1mA)
- **Analogue input 2**: No function
- **Analogue input 3**: No function
- **Measuring range temperature inputs**: -70.0˚C to 130.0˚C

Digital inputs

- **Digital input 1:** No function
- **Digital input 2:** External alarm (NC) NPN sensor / max. 250Hz; no-load voltage 24Vdc (Transfer if not used!)

Analogue Outputs

- **Analogue output 1**: No function
- **Analogue output 2:** No function

- **FAN output:** 0-10V output to frequency inverter

Relay outputs

- **Relay 1**: No function
- **Relay 2**: Ventilation stop
- **Alarm relay:** Max. 24Vac/dc 2Amp. potential free

FAQs

Q: Can the MS Fancontrol Touch be used with any ventilation system?
A: The MS Fancontrol Touch is compatible with a wide range of ventilation systems, but it’s recommended to check compatibility with your specific system.

Q: How do I reset the controller to factory settings?
A: To reset to factory settings, go to the “Restore factory value” option in the user menu and confirm the reset.

Documents / Resources

	MS Schippers 3409617 MS Fancontrol Touch [pdf] Owner's Manual 3409617 MS Fancontrol Touch, 3409617, MS Fancontrol Touch, Fancontrol Touch, Touch

References

- User Manual