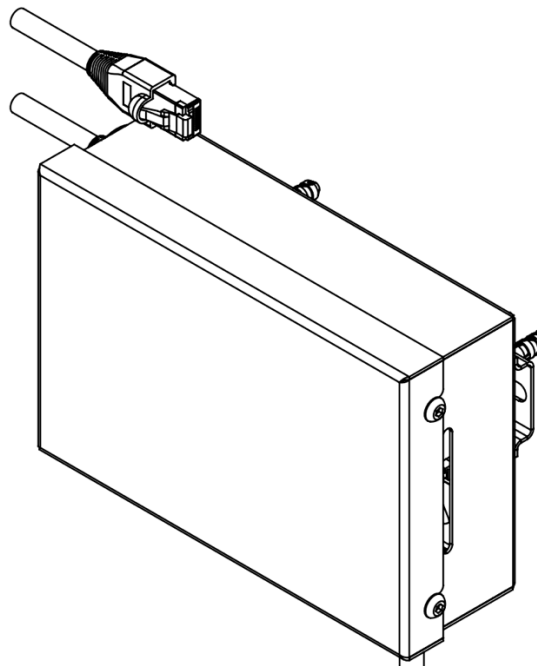




Installation instructions

Airobot Room Controller Extension Module

module A-HC-EXTC



Introduction

The A-HC-EXTC module extends the capabilities of Airobot Room Controllers by enabling control of cooling fans or actuators through 0–10 V analog outputs and potential-free relay outputs. Designed for modern HVAC systems, it offers four independent control channels for flexible and reliable operation.

The module is intended for installation near the room controller and connects via a standard CAT5 cable for seamless integration.

Applications:

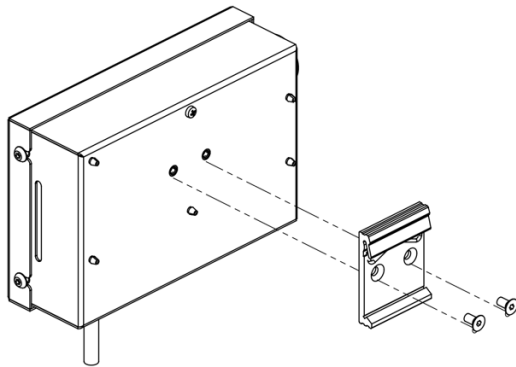
1. Water-Based Fan Coil (0–10 V Control)
 - Ideal for hydronic fan coils that support 0–10 V input.
 - 0–10 V output: Controls EC fan speed
 - Relay output: Optional on/off control for valve

2. Indoor cooling unit of an heat pump or DX fan coil (Dry Contact Control)
 - Compatible with units that support dry contact inputs.
 - Relay output: Connects to the unit's window open or external start/stop input
 - Relay open: Unit runs
 - Relay closed: Unit stops or enters standby
 - For such fan coils, speed control is typically managed by an external cooling system (e.g. outdoor VRF/VRV unit) and cannot be adjusted directly through the extension module.
 - However, if the unit supports 0–10V input, fan speed can also be controlled via the extension module's 0–10V output.

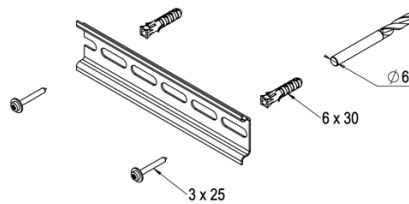
Installation

The extension module is installed next to the room controller (maximum distance < 1 m), attached to a DIN rail and can be installed both vertically and horizontally. Make sure that the room controller is not exposed to liquids, high humidity, or heat sources. To attach the DIN rail to the wall, select the appropriate fastening tools according to the type of wall, they are not included.

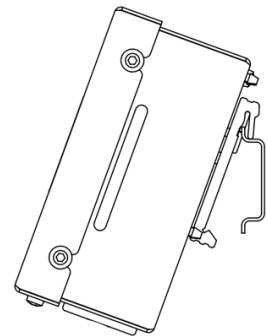
Step 1: Attach the DIN bracket included in the package to the extension module with 2 screws



Step 2: Attach the DIN strip to the wall with a suitable fastener (not included)



Step 3: Place the extension module on the DIN rail and press the top of the extension module onto the rail with a little force until it locks.



Connect

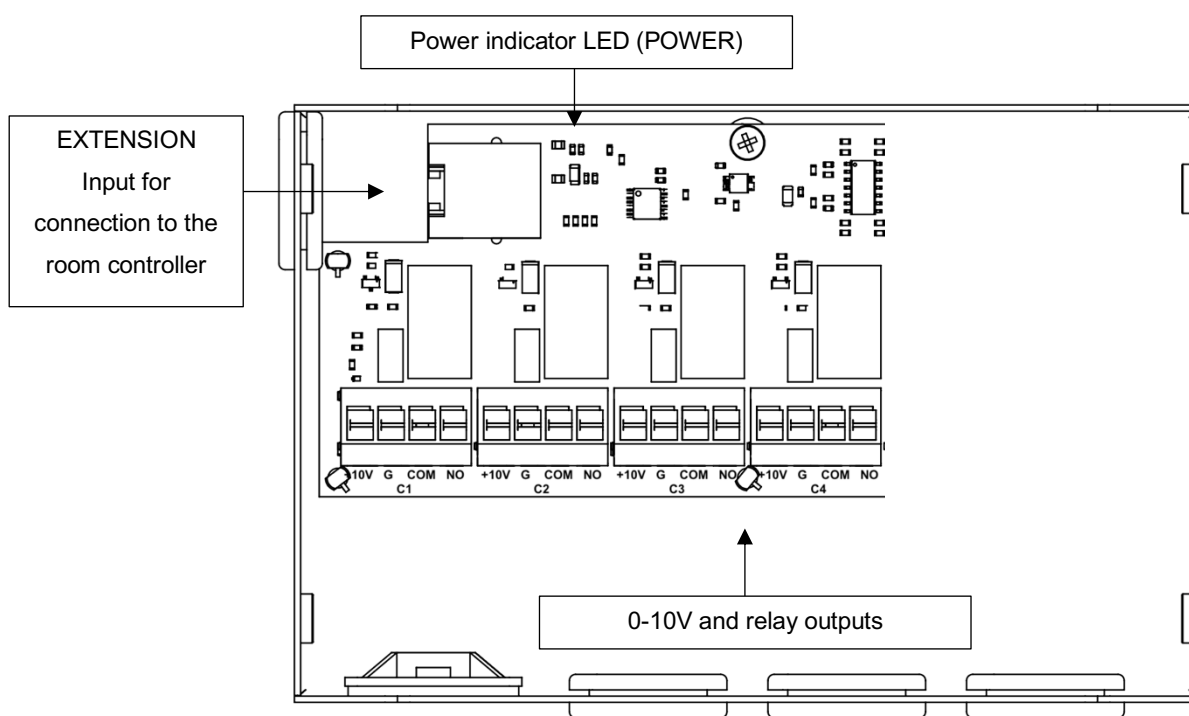
Attention! Disconnect both the room controller and the extension module from the mains before making any connections. Connect the extension module to the room controller only when the room controller is not powered—otherwise, the room controller may be damaged.

The Extension module is designed for controlling cooling fans.

The module includes 4 channels, labeled C1 to C4. Each channel provides the following outputs:

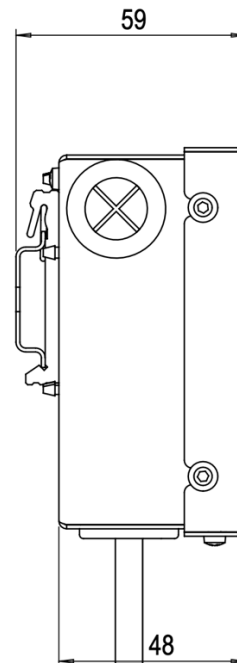
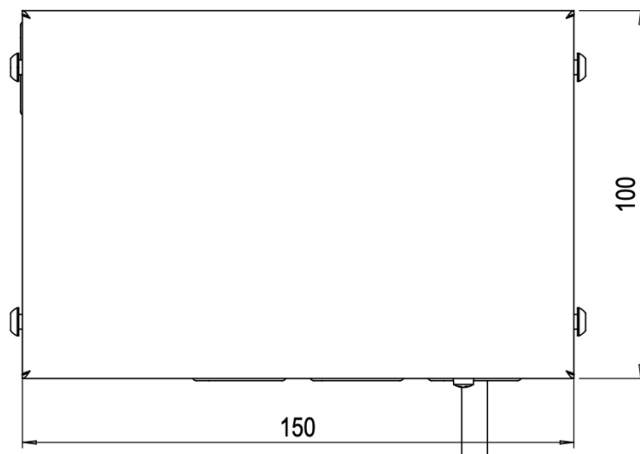
- 0 - 10 V analog output
 - Used to control the speed of the connected fan.
- Potential-free relay output (COM/NO)
 - Used to control an actuator or valve.
 - The relay is activated when a command is received from the room controller (i.e. when the cooling fan is started).

Important: When using the relay output, the Extension module must be properly grounded.



Specifications

Dimensions (mm)



Specifications:

| | |
|---|---|
| Model | A-HC-EXTC |
| Outputs for cooling fan control | 4 x 0 – 10V |
| Relays for actuator or valve control | 4 x COM/NO (Potential-Free) Maximum 2 A (230V) |
| Connectivity to the room controller | CAT5 cable, maximum length 1 meter. Included in the package |

Customer service and contact

We are grateful for any feedback on the use and features of the device. Please send your opinions and questions to: info@airobothome.com.

Manufacturer's details

AIROBOT TECHNOLOGIES AS

Reg. no. 16405978

Suur-Sõjamäe 37a, Rae vald, 75322, Estonia

info@airobothome.com

Customer Service and Guides

www.airobothome.com/abi



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