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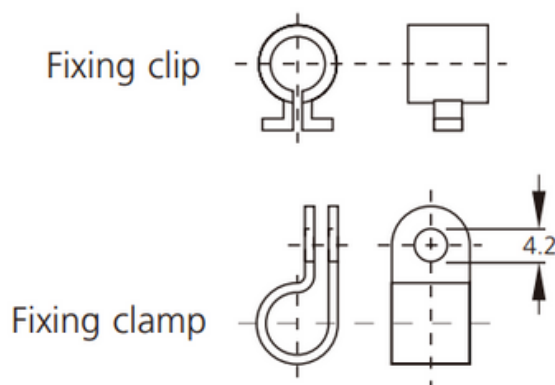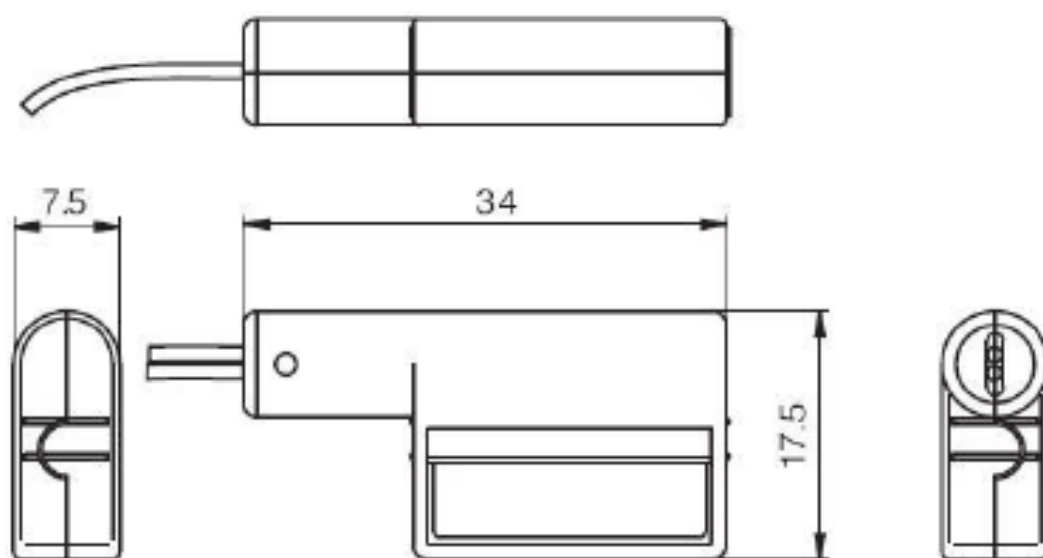
EVM-AFSM
Air Flow Sensor

Sensor Description
The Air Flow Sensor is designed to measure and monitor air flow in ventilation and air-conditioning applications. It is commonly used with filter fans, axial fans, and fan trays. The sensor detects variations in airflow, providing real-time data that is crucial for maintaining proper system performance and ensuring optimal environmental conditions.

Fixing clip

Fixing clamp

All dimensions in mm

Connecting the EVM-AFSM to the PDU
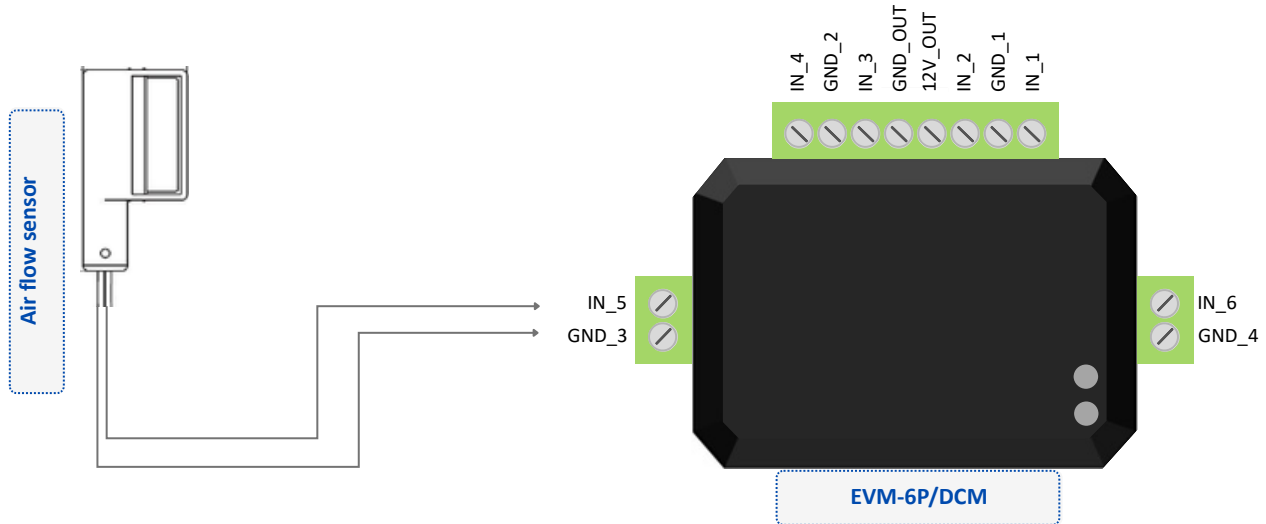
Top Terminal Block:
- IN_1 and IN_2 share the GND_1 terminal.
- IN_3 and IN_4 share the GND_2 terminal.
- 12V_OUT and GND_OUT provide power for external sensors.

Side Terminals:
- IN_5 works with GND_3.
- IN_6 works with GND_4.

Step 1

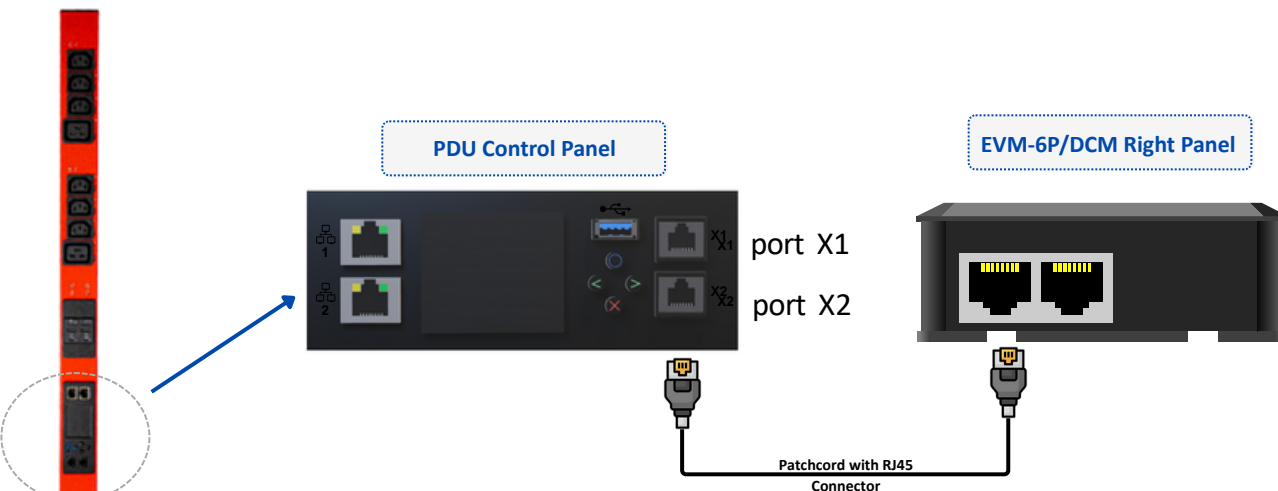Connect a dry contact sensor such as EVM-AFSM to the module, follow the steps below:
1. Determine an available input (IN_x) port on the module.
2. Connect the sensor's dry contact output to the selected IN_x terminal.
3. Connect the sensor's common (COM) or ground terminal to the corresponding GND terminal listed in the terminal block diagram.

⚠️ It is essential to use the correct GND terminal that matches the selected IN_x port. Otherwise, the input will not function correctly.

Example:

If you choose to use IN_5, connect:
- Sensor contact output → IN_5
- Sensor COM/GND → GND_3

PDU Control Panel

EVM-6P/DCM Right Panel

port X1

port X2

Patchcord with RJ45
Connector

Step 2

- Before connecting the dry contact module to X2 of the PDU, make sure to set the voltage level to 12V in the 'Internal Sensor Voltage Levels' section of the PDU's web interface. X1 is fixed and provides a default output of 3.3 V. This value is not user-configurable.

Internal Sensor Voltage Levels

X1 : ● 3.3V ○ 12V

X2 : ○ 3.3V ● 12V
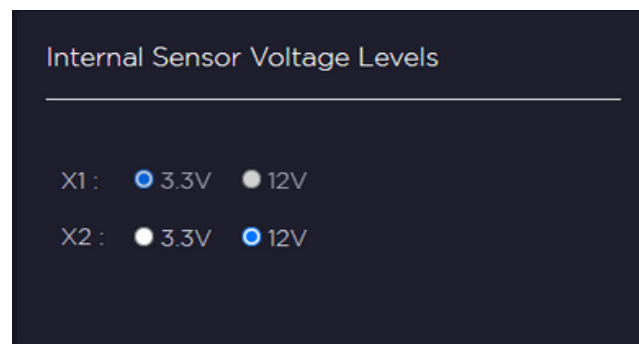
- One of the RJ45 ports of the EVM-6P/DCM Module is connected to the X2 port of the PDU control panel using a standard Ethernet (RJ45) cable. Connection to the X2 port is recommended due to its appropriate voltage level.
- Once the system is powered on, the status of the air flow sensor can be monitored in real time via the PDU interface.

🏠 The air flow sensor is intended for indoor use only and should be protected from humidity, dust, or condensation unless additional shielding is applied.

👋 It must be mounted directly on the axial fan at the point of highest airflow, avoiding dead zones or turbulent areas.

📐 Proper alignment with the airflow direction is essential for accurate detection.

🔩 Depending on the mounting surface and vibration level, either a fixing clip or a clamp with screws should be used—clamps are recommended for more secure installation.

🔧 The sensor cable must be routed securely, avoiding sharp bends and movement.

✅ After installation, power the system and confirm that airflow detection is functioning correctly via the interface.