

# AiroDoctor

In-duct air purifier system V10P-ID

## Manual



**Please carefully read this manual  
before using the product**

## Dear Customer,

thank you for purchasing the AiroDoctor V10P-ID in-duct air purifier system.

In order to facilitate the installation and operation of this product, we recommend to carefully read this manual and store it in a safe place. Use these operating

instructions as a reference for a qualified and standardized installation, proper operation and maintenance.

If any questions arise during operation, please contact our customer service or your local reseller.

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## Important safety instructions

For safety reasons and to ensure proper operation of the product, all relevant regulations, rules and instructions must be strictly followed.

Upon receipt, goods must be immediately checked to exclude damages during transportation and ensure that they match the products ordered. Claims may be forfeited if the claim is not made in due time.

Storage must be vibration-free, dry and free from temperature fluctuations. Proven damage resulting from transport or storage is not covered by the warranty. Tampering with the goods for any other purpose is not permitted and will invalidate the warranty in any case!

## Features / Overview

In-duct air purifier system V10P-ID is used for cleaning the air flow in small and medium-sized HVAC systems. The fanless UV photocatalytic module is suitable for new installations as well as to retrofit existing HVAC systems.

**AiroDoctor air purification principle is based on the photocatalysis effect. The unique filter, internationally patented, certified and tested as highly effective, emits no harmful by-products.**



Viruses &  
Bacteria



Allergens &  
Fine Dust



Gases &  
Odors



An expert's report by the Charité Institute in Germany recommends AiroDoctor's technology for use in even very sensitive environments like daycare facilities and schools. Tests show that no harmful by-products are generated by the patented UV-A photocatalytic process.



International expert's reports and certifications confirm the highly effective performance of AiroDoctor's photocatalysis technology.

## Installation / Assembly

### Assembly instruction

The proper installation placement of the device is after the filters of the ventilation/ air conditioning (HVAC) unit.

The connections are designed according to DIN 24147 in „nipple dimension“, i.e. the connections fit into the existing spiral ducts. The line connections must be made airtight.

- Assembly can be carried out in any orientation.
- The flow direction is marked on the device.
- The ControlBox 10P must be accessible and serviceable, not covered or obstructed by other objects, walls, or ceiling.
- In the vicinity of heating elements, observe ambient temperatures (<50°C).

### Pressure loss, power reduction

The resulting pressure drop is 40 Pa.

### Assembly and electrical work

The connection to the power line must be carried out by trained personnel, following local regulations, using the RST 16/3 device and the supplied cable.

Preferably, connect the unit to the power supply of the HVAC system to switch the unit ON and OFF simultaneously with the existing system.

The green LED will confirm the correct connection of the device, now in standby mode, ready to use.

To reduce operating costs and extend product life, the device will activate the air purification process automatically and only when the internal sensor detects an air flow (differential air pressure sensor > 20 Pa).

## Status display / control / troubleshooting

Regularly inspect the air duct for external objects that might obstruct or damage the module. Check the device and ensure that the LEDs are properly working.

| LED indicator light |     | Status                         | Troubleshooting                                    |                             |
|---------------------|-----|--------------------------------|----------------------------------------------------|-----------------------------|
| green               | on  | ready for operation            | operating voltage is present ✓                     | -                           |
|                     | off | not ready for operation        | no operating voltage                               | check electrical connection |
| blue                | on  | photocatalysis in operation    | system running ✓                                   | -                           |
|                     | off | photocatalysis off             | ventilation system off - no air flow               | check ventilation system    |
|                     |     |                                | air flow too low - unit switched off               | check air flow              |
|                     |     |                                | operating voltage missing / indicator light green? | check electrical connection |
|                     |     | device error / internal defect | exchange / repair                                  |                             |

### Checking the photocatalytic unit

Checking is only possible when the unit is switched on.

#### Green LED (A):

the unit is properly connected to a valid power source (Standby mode).

#### Blue LED (B):

the device is actively purifying the air (photocatalytic process in progress).



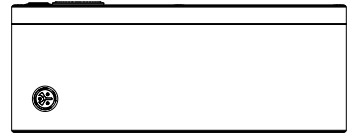
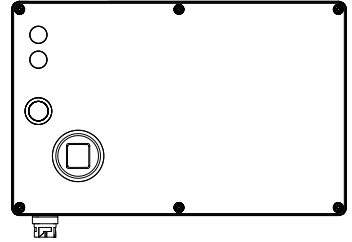
| Function control                    | Display | Operating voltage / load current photocatalysis |       | Max. deviation |
|-------------------------------------|---------|-------------------------------------------------|-------|----------------|
| Press and hold the check button (C) | top     | voltage                                         | 12 V  | - + 1.0 V      |
|                                     | down    | current                                         | 2.2 A | - + 0.6 A      |
|                                     |         | current (two units)                             | 4.5 A | - + 1.0 A      |

If the values on the display are significantly different from those in the chart, one or more LEDs are possibly faulty and need to be replaced.

## Technical data

### Range of use

- Installation situation:
  - new installation in HVAC systems
  - retrofitting existing HVAC systems
- Filter box (passive) working principle
- UV-LED photocatalysis
- Automatic activation when airflow is detected.
- Operating condition check
- Functional condition check
- Maintenance-free



### Dimensions

| Duct ø | Length 1 (mm) | Length 2 (mm) | Width (mm) | Height 1 (mm) | Height 2 (mm) |
|--------|---------------|---------------|------------|---------------|---------------|
| 250    | 356           | 280           | 294        | 398           | 294           |

**AiroDoctor**  
**In-duct air purifier system V10P-ID**



| SPECIFICATIONS                    | V10P-ID                                                                                  |
|-----------------------------------|------------------------------------------------------------------------------------------|
| Duct size diameter (mm)           | 250                                                                                      |
| Product description               | Fanless air purification system for integration into new or existing duct system         |
| Working principle / technology    | UV-A photocatalysis (wavelength 385 nm) + titanium dioxide (TiO <sub>2</sub> )           |
| Scope of application              | pre-filtered air (free from pollen & dust) / not suitable for aggressive gases           |
| Air flow rate                     | 1 × photocatalysis up to 4.7 m/s<br>2 × photocatalysis up to 7.2 m/s                     |
| Operating temperature             | 0 - 50 °C                                                                                |
| Pressure loss                     | 40 Pa                                                                                    |
| Noise emission                    | 0 dB (passive)                                                                           |
| Dimensions D×W×H (mm)             | 50 × 320 × 390                                                                           |
| Weight (kg)                       | 7.0                                                                                      |
| Installation position / duct size | in duct system / adapted to the shape and diameter of the air ducts                      |
| Control                           | <b>ControlBox V10</b>                                                                    |
| Item no.                          | CB-230/12-V10                                                                            |
| Dimensions D×W×H (mm)             | 250 × 160 × 90                                                                           |
| Protection class                  | IP 65                                                                                    |
| Connection                        | on site via RST 16/3 device connection                                                   |
| Voltage                           | 230 V AC - 50 Hz                                                                         |
| Load current                      | 0.2 A (1 PCO module) / 0.3 A (2 PCO modules)                                             |
| Power                             | 40 W (1 PCO module) / 60 W (2 PCO modules)                                               |
| Activation                        | differential air pressure sensor > = 20 Pa                                               |
| Voltage photocatalysis            | 12 V DC                                                                                  |
| Status display                    | Standby mode, ready for operation = green LED<br>Air purification in progress = blue LED |
| Functionality check               | By pressing the check button (C)<br>LED voltage - 12 V<br>LED current - 4.5 A            |

AiroDoctor® is a brand of:

**ScreenSource GmbH**

Köthener Str. 8  
06779 Raguhn-Jessnitz  
GERMANY

**Phone:** +49 (0) 30 39886850

**E-Mail:** [europa@airodoctor.com](mailto:europa@airodoctor.com)

**Web:** [www.airodoctor.com](http://www.airodoctor.com)

**Commercial register:**

Register Court Stendal, HRB 24520

VAT identification number

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