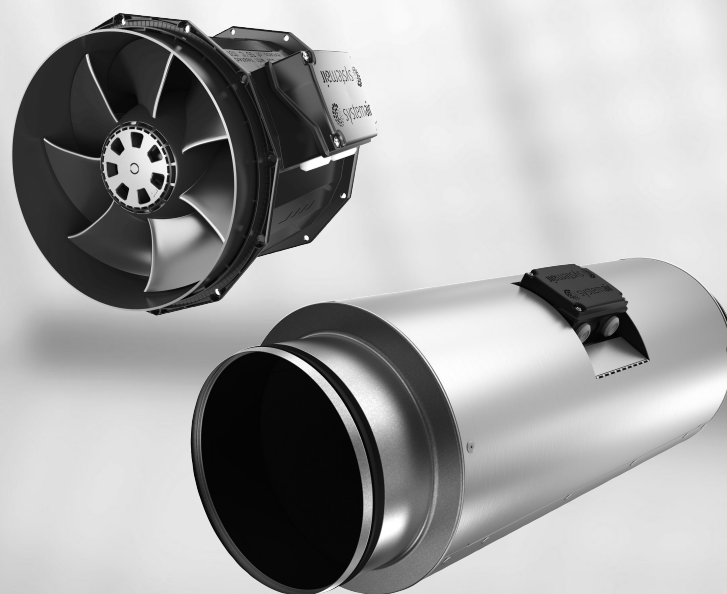


Circular duct fan prioAir, prioAir Silent

Installation and Operating Instructions

GB

Document in original language | · 006



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1 General information

1.1 Notice symbols



Danger

Direct hazard

Failure to comply with this warning will lead directly to death or to serious injury.



Caution

Hazard with a low risk

Failure to comply with this warning may lead to moderate injuries.



Warning

Potential hazard

Failure to comply with this warning may lead to death or serious injury.

Important

Hazard with risk of damage to objects

Failure to comply with this warning will lead to damage to objects.



Note:

Useful information and instructions

1.1.1 Instruction symbols

Instruction

- ◆ Carry out this action
- ◆ (if applicable, further actions)

Instruction with fixed sequence

1. Carry out this action
2. Carry out this action
3. (if applicable, further actions)

2 Important safety information

Planners, plant builders and operators are responsible for the proper assembly and intended use.

- ◆ Read the operating instructions completely and carefully.
- ◆ Keep the operating instructions and other valid documents, such as the circuit diagram or motor instructions, with the fan. They must always be available at the place of use.
- ◆ Observe and respect local conditions, regulations and laws.
- ◆ Only use the fan in a flawless condition.
- ◆ Provide generally prescribed electrical and mechanical protective devices.
- ◆ During installation, electrical connection, commissioning, troubleshooting, and maintenance, secure the location and premises against unauthorised access.
- ◆ Do not circumvent any safety components or put them out of action.
- ◆ Keep all the warning signs on the fan complete and in a legible condition.
- ◆ The device is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.
- ◆ Do not allow children to play with the device.

2.1 Personnel

The fan may only be used by qualified, instructed and trained personnel. The persons must know the relevant safety directives in order to recognise and to avoid risks. The individual activities and qualifications can be found in Table 1 *Qualifications*, page 1.

Table 1 Qualifications

| Activities | Qualifications |
|--|---|
| Storage, operation, transport, cleaning, disposal | Trained personnel (see following note) |
| Electrical connection, commissioning, electrical disconnection | Electrical expert or matching qualification |

Qualifications cont'd

| | | |
|---------------------------|---|----------------------------------|
| Installation, disassembly | Fitter or matching qualification | |
| Maintenance | Electrical expert or matching qualification | Fitter or matching qualification |
| Repair | Electrical expert or matching qualification | Fitter or matching qualification |
| | Smoke extraction fans and EX fans only by agreement with Systemair. | |

**Note:**

The operator is responsible for ensuring that personnel are instructed and have understood the contents of the operating instructions. If something is unclear, please contact Systemair or its representative.

2.2 Personal protective equipment

Wear protective equipment during all work in the vicinity of the fan.

- protective working clothes
- protective working gloves
- goggles
- protective working shoes
- helmet
- hearing protection

2.3 5 rules of electrical safety

1. Disconnect (disconnection of the electrical system from live components at all terminals)
2. Prevent reactivation
3. Test absence of voltage
4. Ground and short-circuit
5. Cover or restrict adjacent live parts

3 Warranty

For the assertion of warranty claims, the products must be correctly connected and operated, and used in accordance with the data sheets. Further prerequisites are a completed maintenance plan with no gaps and a commissioning report. Systemair will require these in the case of a warranty claim. The commissioning report is a component of this document. The maintenance plan must be created by the operator, see section 12.3 *Maintenance*, page 14.

4 Delivery, transport, storage**4.1 Safety information****Warning: Risk from rotating fan blades**

- ◆ Prevent access by unauthorised persons by safety personnel or access protection.

Warning: Suspended loads

- ◆ Wear protective equipment during all work in the vicinity of the fan, details see 2.2 *Personal protective equipment*, page 2.
- ◆ Do not walk under suspended loads.
- ◆ Make sure that there is nobody under a suspended load.

4.2 Delivery

Each fan leaves our plant in an electrically and mechanically proper condition. We recommend transporting the fan to the installation site in the original packaging.

Checking delivery

- ◆ Check the packaging and the fan for transport damage. Any findings should be noted on the cargo manifest.
- ◆ Check completeness of the delivery.

Unpacking



Warning

When opening the transport packaging, there is a risk of damage from sharp edges, nails, staples, splinters etc.

- ◆ Unpack the fan carefully.
- ◆ Check the fan for obvious transport damage.
- ◆ Only remove the packaging shortly before assembly.
- ◆ Wear protective equipment during all work in the vicinity of the fan, details see 2.2 *Personal protective equipment*, page 2.

4.3 Transport

4.3.1 Safety information

Warning: Electrical or mechanical hazards due to fire, moisture, short circuit or malfunction.

- ◆ Never transport the fan by the connecting wire, terminal box, impeller, protection grille, inlet cone or silencer.
- ◆ In open transport, please make sure that no water can penetrate into the motor or other sensitive parts.
- ◆ We recommend transporting the fan to the installation site in the original packaging.

Caution: If transported without care during loading and unloading, the fan may be damaged.

- ◆ Load and unload the fan carefully.
- ◆ Use hoisting equipment that is suitable for the weight to be hoisted.
- ◆ Observe the transportation arrows on the packaging.
- ◆ Use the fan packaging exclusively as transport protection and not as a lifting aid.

4.4 Storage

- ◆ Store the fan in the original packaging in a dry, dust-free location protected against weather.
- ◆ Avoid the effects of extreme heat or cold.

Important

Hazard due to loss of function of the motor bearing

- ◆ Avoid storing for too long (recommendation: max. 1 year).
- ◆ Check that the motor bearing functions properly before installation.

5 Description

prioAir equipped with an EC motor

The fans are driven by EC motors. These motors are delivered with a pre-wired potentiometer (0-10 V) that allows you to easily find the required working point of the fan. All motors are suitable for 50/60 Hz. The input voltage for single-phase units can vary between 200 and 277 V. All models have one potential-free terminal for error message.

prioAir equipped with an AC motor

For information on speed regulation options, see 6 Name plate and type key, page 6.

Table 2 Dimensions prioAir

| [mm] | A | B | C | D | E |
|------------------------------------|-----|-----|-----|-----|----|
| prioAir 150E2 prioAir 150EC | 412 | 149 | 211 | 187 | 40 |
| prioAir 160E2 prioAir 160EC | 220 | 159 | 211 | 187 | 25 |
| prioAir 200E2 prioAir 200EC | 245 | 199 | 249 | 227 | 25 |
| prioAir 250E2 prioAir 250EC | 300 | 249 | 303 | 284 | 30 |
| prioAir 250E2-L prioAir 250EC-L | 300 | 249 | 303 | 284 | 30 |

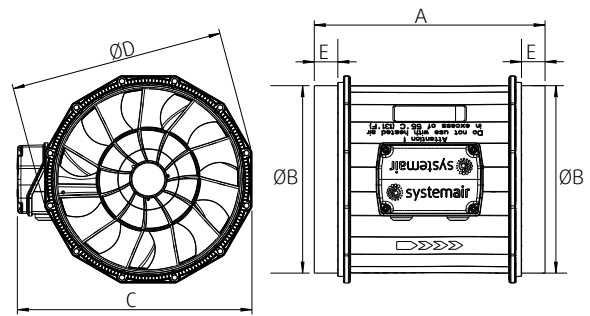
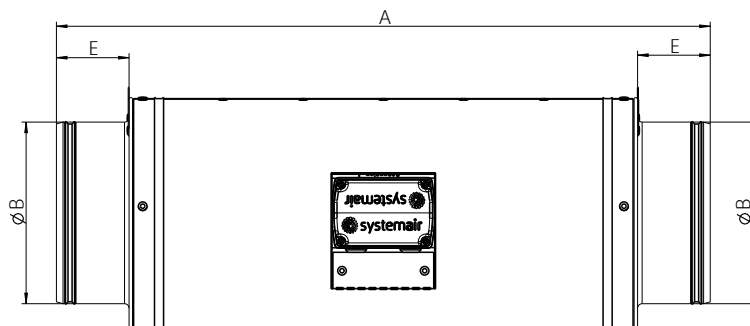
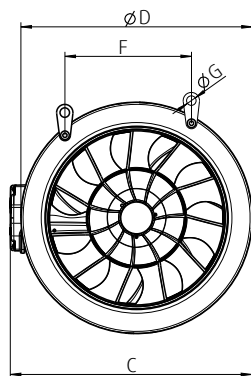


Table 3 Dimensions prioAir Silent



| [mm] | A | B | C | D | E | F | G |
|--|-----|-----|-------|-----|----|-----|------|
| prioAir Silent 150E2 prioAir Silent 150EC | 708 | 150 | 234.5 | 229 | 74 | 140 | 10.5 |
| prioAir Silent 160E2 prioAir Silent 160EC | 716 | 160 | 234.5 | 229 | 78 | 140 | 10.5 |
| prioAir Silent 200E2 prioAir Silent 200EC | 720 | 200 | 266.5 | 255 | 80 | 140 | 10.5 |
| prioAir Silent 250E2 prioAir Silent 250EC | 704 | 250 | 325.2 | 320 | 72 | 140 | 10.5 |
| prioAir Silent 250E2-L prioAir Silent 250EC-L | 704 | 250 | 325.2 | 320 | 72 | 140 | 10.5 |
| prioAir Silent 315E2-L prioAir Silent 315EC-L | 704 | 315 | - | 357 | 72 | 150 | 10,5 |

5.1 Fan data

- Max. temperature of transported air, max. ambient temperature, sound pressure -> see data sheet, available in our online catalogue.
- Voltage, current, enclosure class, weight -> see name plate

5.2 Intended use

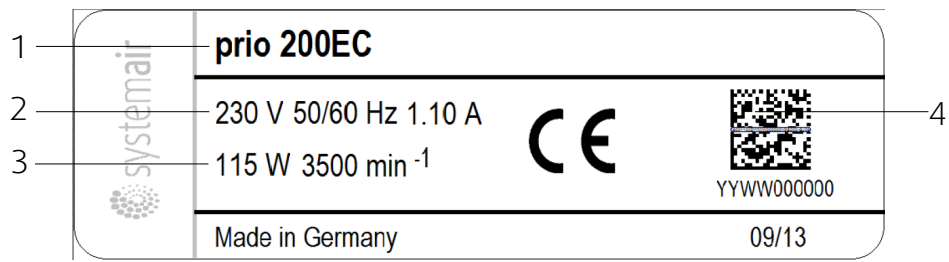
- The fans are intended for installation in ventilation systems. They can be installed both in duct systems and also with free suction via a suction-side contact protection grille. Free discharge via a contact protection grille is also possible.
- The fan is suitable for conveying clean air, with a density of 1.3 kg/m³ and a max. air humidity of 95%.
- The maximum permissible operating data on the name plate apply for an air density of 1.2 kg/m³ (sea level) and a max. air humidity of 80%.

5.3 Incorrect use

Incorrect use refers mainly to using the fan in another way to that described. The following uses are incorrect and hazardous:

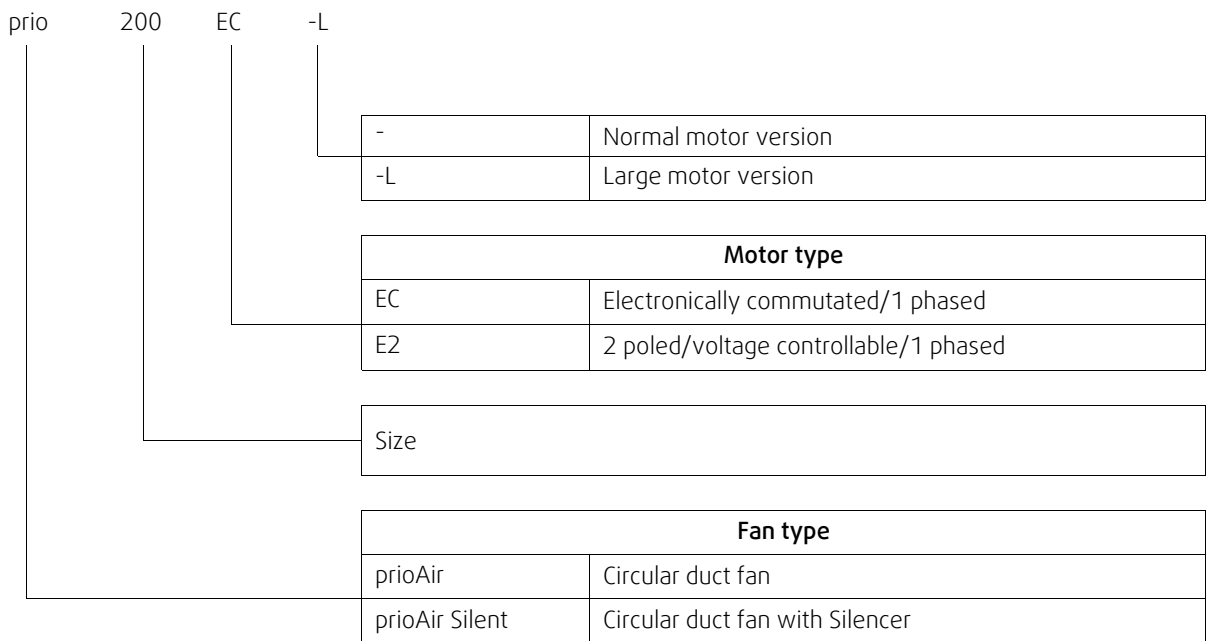
- Conveying of explosive and combustible media
- Conveying of aggressive media
- Operation in an explosive atmosphere
- Operation without duct system or protection grille
- Operation with the air connections closed
- Installation outside without weather protection

6 Name plate and type key



- | | | | |
|---|---------------------------|---|--------------------------------|
| 1 | Type designation | 3 | Input power/fan impeller speed |
| 2 | Voltage/frequency/current | 4 | Certifications |

Table 4 Type key

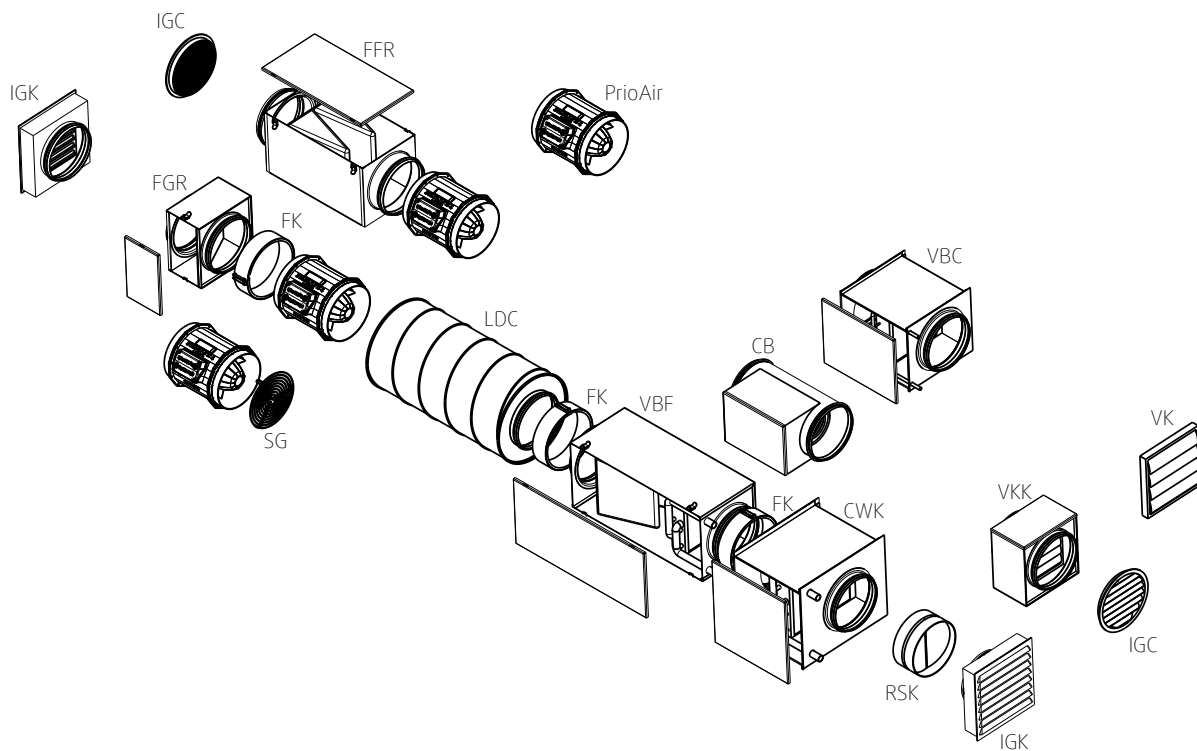


7 Accessories



Note:

For details of the accessories, please check our online catalog or contact Systemair.



| | | | | | |
|----------------|-------------------------|------------|-----------------------|------------|-------------------|
| prioAir | fan | LDC | Silencer | VKK | Back draft damper |
| IGC | Round protection grille | VBF | Water heating battery | VK | Louvre Shutter |
| IGK | Wall grid | CWK | Duct cooling battery | FK | Fast clamp |
| FGR | Filter cassette | CB | Duct heater | RSK | Back draft damper |
| FFR | Filter cassette | VBC | Water heating battery | SG | Protection guard |

8 Installation

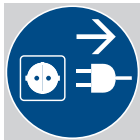
8.1 Safety information

General safety information

- ◆ Installation may only be carried out by adequately qualified persons, details see Table 1 *Qualifications*, page 1.
- ◆ Wear protective equipment during all work in the vicinity of the fan, details see 2.2 *Personal protective equipment*, page 2.
- ◆ Abide by the system-related conditions and requirements of the system manufacturer or plant constructor.
- ◆ Do not dismantle or circumvent safety elements, or put them out of function.
- ◆ Provide contact and intake protection and ensure safety distances according to DIN EN ISO13857 and DIN 24167-1.
- ◆ Prevent the possibility of foreign bodies being drawn in.
- ◆ To reduce transmission of vibration to the duct system, we recommend fast clamps from our accessory range, see chapter Accessories.

8.2 Preconditions

- ◆ Ensure that the fan and all its components are undamaged.
- ◆ Ensure that there is enough space to install the fan.
- ◆ Protect against dust and moisture when installing.
- ◆ Ensure that the information on the name plates (fan and motor) matches up with the operating conditions.
- ◆ Fit the fans in such a way that there is sufficient access for troubleshooting, maintenance and repair.



Warning: "Unintended" start-up of the unprotected impeller!

If the unit is plugged in and the fan has been removed from the duct system or the protective grille is not mounted on the fan, the impeller may start, resulting in injury.

- ◆ Unplug the unit immediately.

Important

Damage to the bearings or other parts of the fan can occur.

- ◆ Do not place a duct bend directly before or after the fan!
- ◆ Ensure a smooth and constant air flow to the device. Ensure a free exhaust. See Fig. 1 *Straight ducts*, page 8.

- Rectangular duct system: **D** = Hydraulic diameter
- Round duct system: **D** = Nominal diameter

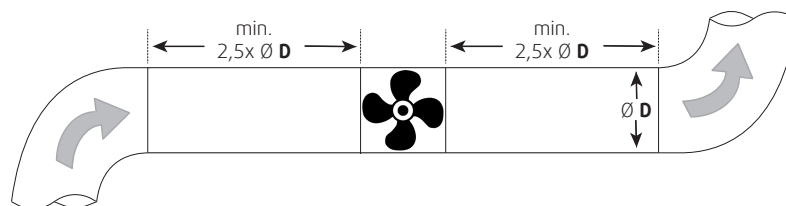


Fig. 1 Straight ducts

8.3 Installation variations

The installation is possible in any mounting position.

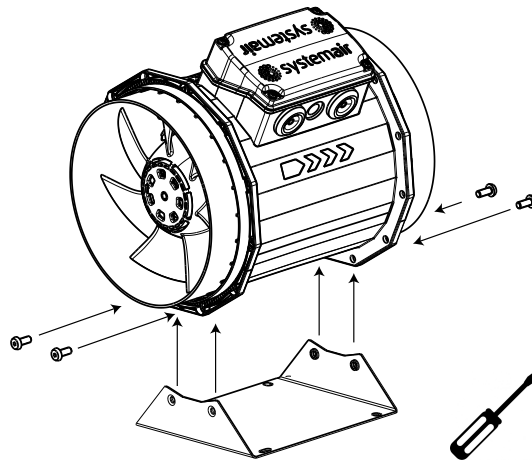
Installation with mounting bracket



Note:

The mounting bracket is available in our accessory range.

- ◆ Mount the mounting bracket on the fan, see adjacent image.



9 Electrical connection

9.1 Safety information

Warning: Danger from electrical voltage!

- ◆ Observe the 5 rules of electrical safety, see 2.3 *5 rules of electrical safety*, page 2.
- ◆ Prevent the ingress of water into the connection box.
- ◆ Electrical connection may only be carried out by adequately qualified persons, details see Table 1 *Qualifications*, page 1.
- ◆ Observe and respect local conditions, regulations and laws.
- ◆ Wear protective equipment during all work in the vicinity of the fan, details see 2.2 *Personal protective equipment*, page 2.

Warning: Danger due to electrostatic influence on medical implants (e.g. cardiac pacemaker)!

- ◆ Persons with medical implants (e.g. cardiac pacemaker) should keep enough distance to the fan.

9.2 Preconditions

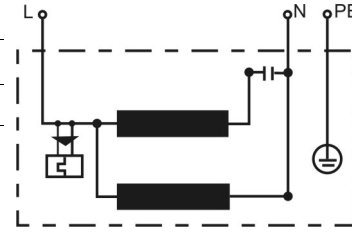
- ◆ Abide by the system-related conditions and requirements of the system manufacturer or plant constructor.
- ◆ Safety elements may not be dismantled, circumvented or deactivated.
- ◆ Install a circuit breaker in the permanent electrical installation, with a contact opening of at least 3 mm at each pole.

9.3 Connection

- ◆ Check if the data on the nameplate matches the connection data.
- ◆ Complete the electrical connection according to the circuit diagram.
- ◆ Lay the connection cables in the terminal box in such a way that allows the cover of the terminal box to be closed without resistance.
- ◆ Use all of the locking screws.
- ◆ Insert the screws by hand to avoid damaging the thread.
- ◆ Tighten all glands well in order to guarantee protection class IP.
- ◆ Screw the lid of the terminal box/inspection switch evenly tight.
- ◆ Connect the cable end in a dry environment.

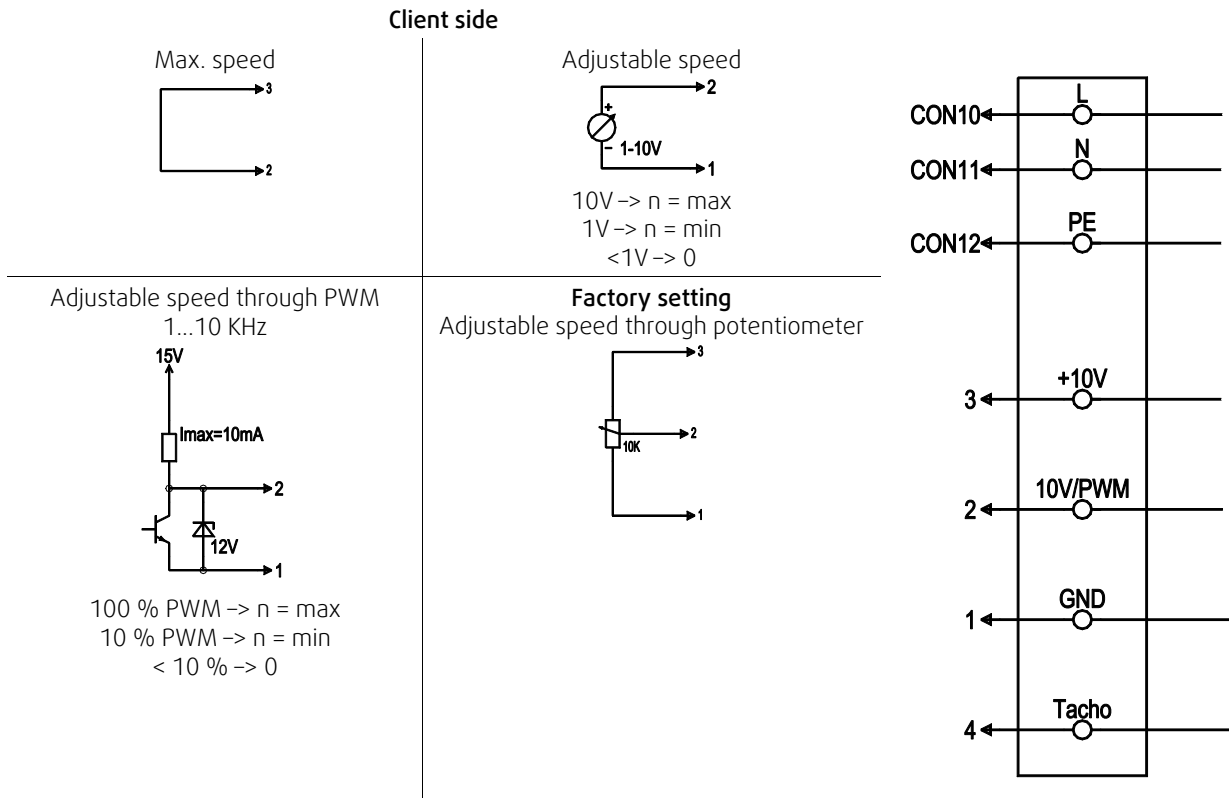
9.3.1 Wiring diagram prioAir E2

| Color | Function/pin assignment |
|--------------|-------------------------------------|
| Black | L Power supply 230 V AC, 50...60 Hz |
| Blue | N Neutral conductor |
| Green/Yellow | PE Protective conductor |



9.3.1.1 Wiring diagram prioAir EC

The fans are delivered with a pre-wired potentiometer (0–10 V)



| Wire no. | Connection | Color | Function/assignment |
|----------|--------------|----------------|--|
| CON10 | L | black or brown | Power supply 230 V AC, 50...60 Hz, see name plate for voltage range |
| CON11 | N | blue | Neutral conductor |
| CON12 | PE | green/yellow | Protective conductor |
| 1 | GND | blue | GND-connection of the controller interface |
| 2 | 0...10 V PWM | yellow | Controller input 0...10 V or PWM |
| 3 | 10 V | red | Voltage output 10 V / Short-circuit-proof power supply for external devices (e.g. poti) prioAir 150EC, prioAir 160EC → I max=1.1mA prioAir 200ECprioAir 250EC → I max=10mA |
| 4 | Tacho | white | Speed output: Open Collector, 1 impulse per revolution, electrically isolated, Isink_max = 10 mA |

9.4 Protective grounding wire

The protective grounding must have a cross-section equal to or greater than that of the phase conductor.

9.5 Residual current circuit breaker

All-current-sensitive residual current circuit breakers are required for use in alternating-current systems with 50/60 Hz, in combination with electronic devices such as EC motors, frequency converters or uninterruptible power supplies (UPS).

9.6 Protecting the motor



Note:

In fans equipped with an EC motor, there is no additional motor protection needed. The motor protection is integrated in the electronics of the motor.

Important

Damage to motor due to overcurrent, overload or short circuit.

- ◆ Lead-out temperature monitors must be integrated in the control circuit in such a way that, if a fault occurs, the motor cannot switch on again automatically after it has cooled down.
- ◆ Motor lines and temperature monitor lines should be laid separately on principle.
- ◆ Without thermal protection: Use a motor protection switch!

10 Commissioning

Warranty claims can only be made if commissioning work is carried out correctly and written evidence thereof is provided.

It is recommended to fill out the commissioning report 16 *Commissioning Report*, page 16.

10.1 Safety information

- ◆ Commissioning may only be carried out by adequately qualified persons, details see Table 1 *Qualifications*, page 1.
- ◆ Wear protective equipment during all work in the vicinity of the fan, details see 2.2 *Personal protective equipment*, page 2.

10.2 Preconditions

- ◆ Installation and electrical connection have been correctly performed.
- ◆ Residual material from installation and foreign objects have been removed from the fan and ducts.
- ◆ Inlet and outlet are free.
- ◆ Safety devices have been fitted.
- ◆ Ground cable is connected.
- ◆ Cable glands are tight.
- ◆ Nominal current (from the name plate) is not exceeded.
- ◆ Data on the name plate corresponds with the connection data.

10.3 Tests

- ◆ Before switching the fan on, check for externally visible damage and ensure that the protective equipment functions properly.

AC motor

1. Switch the fan on.
2. Checks:
 - ◆ Direction of rotation/conveyance. The direction of rotation always applies looking at the impeller.
 - The direction of rotation is best observed just before the fan stops.
 - ◆ Smooth running (any vibrations and noise)
 - ◆ Current consumption
 - ◆ Compare the current consumption with the nominal consumption on the name plate.
 - ◆ Tightness of all connections
3. Switch the fan off.

EC motor

When the mains are switched on, the motor starts an initialization (a few seconds). After the initialization the control input is active.

1. Switch the fan on via the control input.
2. Checks:
 - ◆ Direction of rotation/conveyance. The direction of rotation always applies looking at the impeller.
 - The direction of rotation is best observed just before the fan stops.
 - ◆ Smooth running (any vibrations and noise)
 - ◆ Current consumption
 - ◆ Compare the current consumption with the nominal consumption on the name plate.
 - ◆ Tightness of all connections
3. Switch the fan off via the control input.

11 Operation

11.1 Safety information

Warning: Hazard from electrical voltage or moving components.

- ◆ The device may only be operated by adequately qualified persons, details see Table 1 *Qualifications*, page 1.
- ◆ Abide by the system-related conditions and requirements of the system manufacturer or plant constructor.

11.2 Preconditions

- ◆ Ensure access only to persons who can safely handle the device.
- ◆ Only use the fan in accordance with the operating instructions and the operating instructions for the motor.
- ◆ Do not dismantle or circumvent safety elements, or put them out of function.

12 Troubleshooting/maintenance/repair

12.1 Safety information

- ◆ Troubleshooting/maintenance/repair may only be carried out by adequately qualified persons, details see Table 1 *Qualifications*, page 1.
- ◆ Wear protective equipment during all work in the vicinity of the fan, details see 2.2 *Personal protective equipment*, page 2.
- ◆ Observe the 5 rules of electrical safety, see 2.3 *5 rules of electrical safety*, page 2.
- ◆ Abide by the system-related conditions and requirements of the system manufacturer or plant constructor.
- ◆ The impeller must be at a standstill.

12.2 Troubleshooting

Table 5 Troubleshooting

| Problem | Possible causes | Remedy |
|--|---|---|
| Fan does not run smoothly | Soiling on the impeller | Clean carefully |
| | Material decomposition on the impeller due to aggressive material conveyed. | Contact Systemair |
| | Impeller rotates in wrong direction. | Contact Systemair |
| | Deformation of impeller due to excessive temperature. | Ensure that the temperature does not exceed the certified value/Install new fan |
| | Vibrations, oscillations | Check the installation of the fan/check the duct system, see 8 <i>Installation</i> , page 8 |
| Air output of fan too low | Impeller rotates in wrong direction. | Contact Systemair |
| | Wrong wiring configuration | Check and possibly correct the wiring configuration |
| | Pressure losses too high | Optimize the line routing. |
| | Flow regulators not or only partly open | Check opening position on site. |
| Grinding sounds when starting or operating the fan | Intake or pressure ducts are blocked | Remove the blockage. |
| | Check if the duct connections of the fan are strained | Loosen the duct connections and realign it. |
| Thermal contacts/resistors have triggered | Impeller rotates in wrong direction. | Contact Systemair |
| | Motor overheated | Contact Systemair |
| | Capacitor (if used) not or not correctly connected. | Connect the capacitor correctly. |
| | Motor blocked | Contact Systemair |
| Fan does not reach nominal speed | Defective motor winding | Contact Systemair |
| | Control units (if used) such as frequency converter or transformer are set incorrectly. | Correct the settings of the control units. |
| | Mechanical blockage | Remove the blockage. |
| Motor does not rotate | Faulty supply voltage | Check the supply voltage, re-establish the voltage supply. |
| | Faulty connection | Disconnect from the power supply, correct the connection, see circuit diagram. |
| | Temperature monitor has responded | Allow the motor to cool down, find and resolve the cause of the fault. |
| Electronics/motor overheated | Insufficient cooling | Improve cooling. |
| | Overloaded motor | Check if the correct fan is used for your application. |
| | Ambient temperature too high | Check if the correct fan is used for your application. |



Note:

For all other damage/defects, please contact Systemair. Defective safety-relevant fans (for Ex and smoke extraction applications) must be replaced completely.

12.3 Maintenance

Warranty claims can only be made if maintenance work is carried out correctly and written evidence thereof is provided.

We recommend regular maintenance intervals to ensure continuous fan operation. These maintenance intervals are specified in the "Activities" table below. In addition, the operator must carry out follow-up activities such as cleaning, replacing defective components or other corrective measures. For traceability reasons, a maintenance plan must be created which documents the work carried out. This must be created by the operator. If the operating conditions are "extreme", the maintenance intervals must be reduced so that maintenance is carried out more frequently. Examples of extreme operating conditions:

- Ambient temperature > 40 °C or < 0 °C, or temperature fluctuations > 20 K

Table 6 Activities

| Activity | Normal operating conditions | | Extreme operating conditions | |
|--|-----------------------------|----------|---------------------------------|------------------|
| | Every six months | Annually | Quarterly | Every six months |
| Check the fan and its components for visible damage, corrosion and contamination. | | X | | X |
| Check the impeller for damage and imbalance. | | X | | X |
| Clean the fan/ventilation system (see 13 <i>Cleaning</i> , page 14). | X | | X | |
| Check the screwed connections for damages/defects and check that they are firmly seated. | | X | See normal operating conditions | |
| Check the fan intake is free from contamination. | | X | | X |
| Check that the fan and its components are being used correctly. | X | | See normal operating conditions | |
| Check the current consumption and compare this with the rated data. | | X | | X |
| Check the electrical and mechanical protective equipment is working correctly. | | X | See normal operating conditions | |
| Check the fan's rating plate is legible. | | X | | X |
| Check the connection clamps and screwed cable connections for damage/defects, and check that they are firmly seated. | | X | See normal operating conditions | |



Note:

For all other damage/defects, please contact Systemair. Defective safety-relevant fans (for Ex and smoke extraction applications) must be replaced completely.

12.4 Spare parts

- ◆ Use original spare parts from Systemair only.
- ◆ When ordering spare parts, please specify the serial number of the fan. This can be found on the name plate.

13 Cleaning

13.1 Safety information

- ◆ Cleaning may only be carried out by adequately qualified persons, details see Table 1 *Qualifications*, page 1.
- ◆ Wear protective equipment during all work in the vicinity of the fan, details see 2.2 *Personal protective equipment*, page 2.
- ◆ Observe the 5 rules of electrical safety, see 2.3 *5 rules of electrical safety*, page 2.
- ◆ The impeller must be at a standstill.

13.2 Procedure

Important

Keeping the fan clean extends its service life.

- ◆ Install a filter monitor.
- ◆ Do not use steel brushes or sharp-edged objects.
- ◆ Do not use a high-pressure cleaner (steam jet cleaner) under any circumstances.
- ◆ Do not bend the fan blades when cleaning.
- ◆ When cleaning the impeller, pay attention to balance weights that have been positioned
- ◆ Keep the airways of the fan clear and clean them if necessary with a brush.

14 Deinstallation/dismantling

Deinstall and dismantle the fan in reverse order of installation and electrical connection.

15 Disposal

- ◆ Ensure material is recycled. Observe national regulations.
- ◆ The device and the transport packaging are predominantly made from recyclable raw materials.
- ◆ Disassemble the fan into its components.
- ◆ Separate the parts according to:
 - reusable material
 - material groups to be disposed of (metal, plastics, electrical parts, etc.)

16 Commissioning Report

Warranty claims can only be made if commissioning work is carried out correctly and written evidence thereof is provided.

Fan

Description:

Article no.:

Manufacturing order no.:

Installer

Company:

Contact person:

Company address:

Tel. no.:

Email:

Operator (Place of installation)

Company:

Contact person:

Company address:

Tel. no.:

Email:

Type of connection

Yes No

Directly to mains

0-10 V signal (EC motor)

via contactor control

Transformer

Frequency converter

Sinus filter

Shielded cables

Motor protection

Yes No

Motor protection switch or motor protection relay

PTC resistor

Resistance value [Ω]:

Thermal contact

Electrical motor protection

Others:

Functional check

Yes No

Impeller easily rotatable (by hand)

Rotation direction acc. to directional arrow

Nominal data - Fan (name plate on fan housing)

Voltage [V]:

Current [A]:

Frequency [Hz]:

Power [kW]:

Fan impeller speed [rpm]:

Measured data at commissioning

Voltage [V]:

Temp. of transported air [$^{\circ}$ C]:

Current L1 [A]*:

Fan impeller speed [rpm]:

| | |
|--|---|
| Current L2 [A]: | Air volume [m ³ /s]: |
| Current L3 [A]: | Differential pressure [Pa]*: |
| <small>*For single-phase fans, fill in line "Current L1 [A]"</small> | <small>*Δ- Pressure between suction-side and discharge of the fan</small> |

If an air flow measurement is not possible, this value can be calculated using the following formula:

$$\frac{\text{Duct cross-section [m}^2\text{]}}{\text{Flow speed [m/s]}} = \text{Air volume [m}^3\text{/s]}$$

Grille measurement acc. to VDI 2044

| | Yes | No |
|--------------------------------------|--------------------------|--------------------------|
| Commissioning of the fan successful? | <input type="checkbox"/> | <input type="checkbox"/> |

Date, installer's signature

Date, operator's signature

17 EU Declaration of conformity

The manufacturer: Systemair GmbH
Seehöfer Straße 45
97944 Boxberg
Germany

Product designation: Circular duct fans

Type designation: prioAir, prioAir Silent

Since year of manufacture: 2016

The manufacturer declares that the above mentioned products in their design and construction and the version marketed by us complies with the harmonization legislation listed below:

| | | |
|-----------------------|-------------|--|
| EU directives: | 2006/42/EC | Machinery directive |
| | 2014/30/EU | Directive electromagnetic compatibility (EMC) |
| | 2011/65/EU | RoHS directive |
| | 2009/125/EC | ErP guidelines |
| Regulations: | 327/2011 | only for fans above 125W, CE marked fans used as components are CE marked by other manufacturer. |



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