



## Prio Silent XP Circular Duct Fans

### Mixed-flow fan with integrated silencer

- Unique patented combination of silencer and fan casing
- Option to change air direction in casing
- Available with AC and EC motors for 50 and 60Hz
- Sound and energy optimized impellers
- Very low weight
- Easy to clean

[Find more details in our online catalogue.](#)

### Flexibility

The prio silent XP fans are intended to use for **supply** or **extract** air and are designed to be installed in **any position**. This ensures that the fans can be used in a variety of **commercial** and **domestic** applications.

### Reliability

The hybrid silencer/casing has a very good **resistance** against most **chemicals and oils**. The hydrophobic surface of the casing is **easy to clean** and allows using the fan in **wet conditions**.

### Performance

The **sound optimized** impellers together with **high efficient** external rotor motors are designed to ensure high-level performance to **minimize power consumption** and **maximize efficiency**.

### Accessories

Prio silent XP can be selected together with variety types of **accessories** as fast clamps, heaters, filters, dampers, etc.

## Certifications



Ecodesign (ErP) compliant

## Features

### Construction

Hybrid silencer/casing manufactured from EPP and special composite material, is fully air tight class C according to EN12237.

Fans are equipped with an external **terminal box with** protection class **IP55**.

### Impeller

Prio silent XP have aerodynamically optimized impellers and guide vanes. These are from lightweight, hard-wearing fiberglass reinforced **polyamide**, dynamically **balanced** and paired with corresponding external rotor motors.

### Motor

Depending on the type, prio silent XP fans are equipped with **AC** or **EC** external rotor motor. Motors are suitable for **50Hz** and **60Hz**.

### Motor protection

Fans with **AC** motors have an **integrated** thermal protection with manual (electrical) reset.

Fans with **EC** motors have an **integrated** electronic **thermal protection** including **locked-rotor protection** and **soft-start**.

### Control

**EC motors** with **built-in potentiometer** to adjust working point can be also controlled by external **signal 0-10V**.

**AC motors** can be controlled by **5-step** or **stepless** speed regulator.

### Installation

Prio silent XP can be installed in any position by using metal rail with holes. Spigot with 25 mm length is perfectly designed to connect circular duct by using **fast clamps preventing vibration** to the duct.

## Technical parameters

### Nominal data

Voltage (nominal)	230	V
Frequency	50; 60	Hz
Phases	1~	
Input power	132	W
Input current	1.13	A
Impeller speed	2,226	rpm
Air flow	max 0.4964	m³/s
Temperature of transported air	max 55	°C
Max temperature of transported air, when speed controlled	55	°C

### Sound data

Sound pressure level at 1m	40	dB(A)
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### Protection/Classification

Enclosure class, motor	IP44
Insulation class	B

### Data according to ErP

ErP ready	Not ErP relevant
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### Dimensions and weights

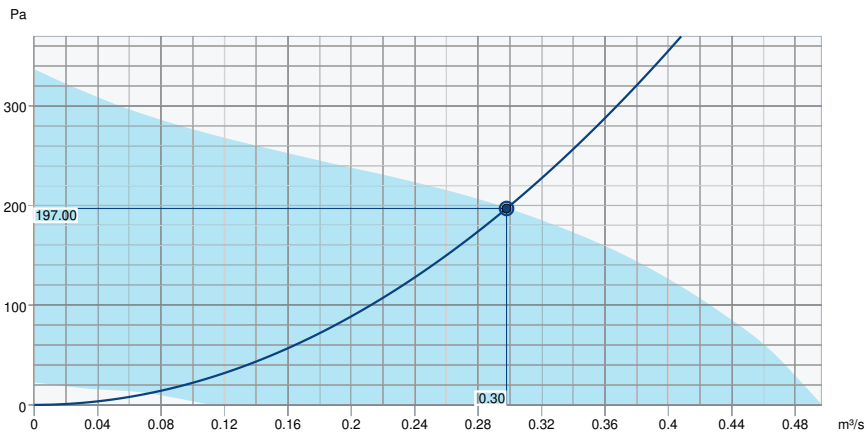
Duct dimension; Circular, inlet	250	mm
Duct dimension; Circular, outlet	250	mm
Weight	6.07	kg

### Others

Motor type	EC
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Performance

Performance curve



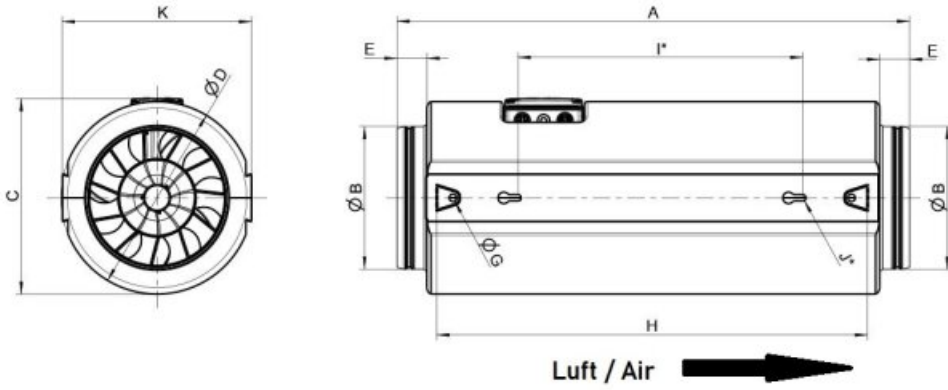
Hydraulic data

Required air flow	0.30 m³/s
Required static pressure	197 Pa
Working air flow	0.30 m³/s
Working static pressure	197 Pa
Air density	1.204 kg/m³
Power	122.3 W
Fan control - RPM	2,364 rpm
Current	1.00 A
SFP	0.410 kW/m³/s
Control voltage	10.0 V
Supply voltage	230 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	19	40	53	56	60	54	50	42	63
Outlet	dB(A)	21	41	54	58	62	56	51	43	65
Surrounding	dB(A)	12	15	30	40	49	41	30	21	50
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	43
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	29

Accessories

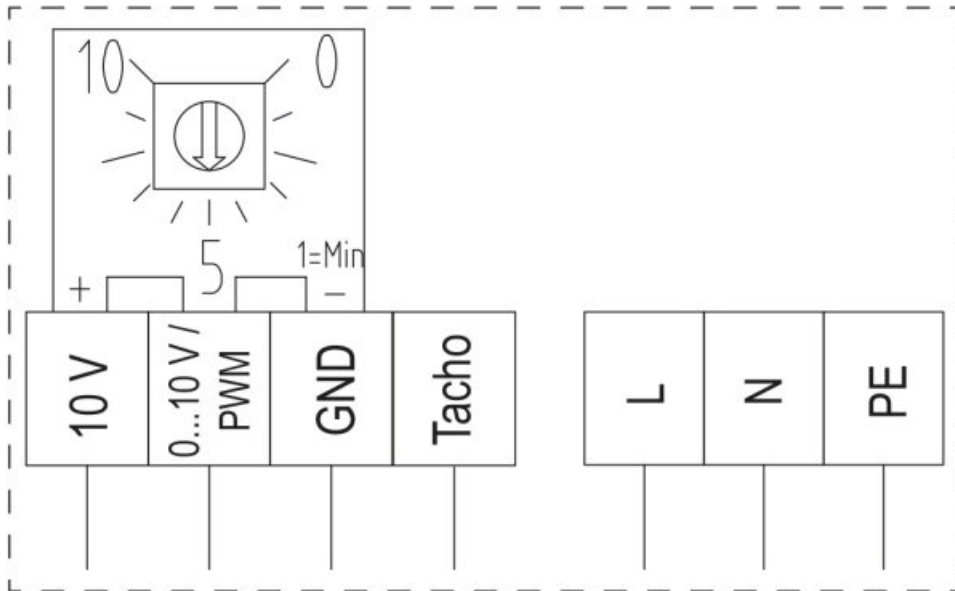
## Dimension



[mm]

	A	$\varnothing B$	C	$\varnothing D$	E	$\varnothing G$	H	$I^*$	$J^*$	K
Prio Silent XP 250E2/EC/EC-L	760	250	325	320	62	10	604	400	9	317

## Wiring



### Function / assignment

L	Power supply 230V AC, 50...60 Hz, see name plate for voltage range
N	Neutral conductor
PE	Protective conductor
0...10V / PWM	Controller input 0...10V or PWM
10V	Voltage output 10V / Short-circuit-proof power supply for external devices (e.g. poti) prio 150EC, prio 160EC → I max=1.1mA prio 200EC, prio 250EC → I max=10mA
GND	GND-connection of the controller interface
Tacho	Speed output: Open Collector, 1 impulse per revolution, electrically isolated, I <sub>sink_max</sub> =10mA

## Accessories

- CXE/AVC Modbus (37256)
- EC-Basic-CO2 and temperature (24808)
- EC-Basic-T temperature (24805)
- EC-Vent control board (3115)
- MTP 10, 10K, Speed control (32731)
- Potentiometer MTP 20, 0-10V (310220)
- SG 250 Protection guard (5610)
- VKK-250 Back draft damper (1627)
- HR1 Room Humidistat (215150)
- RT 0-30 Room Thermostat (5151)
- CB 250-9,0 400V/3 Duct heater (5373)
- FFR 250 Filter cassette (1776)
- FK 250 Fast clamp (1612)
- RSK-250 Back draft damper (5603)
- VBC 250-3 Water heating batt (9843)
- VK-25 Louvre shutter (5640)
- IGC-250 Intake grille (76878)
- DMD-C Pressure controller (15793)
- EC-Basic-H humidity (24807)
- EC-Basic-U universal 0-10V (24806)
- EC-Vent Room Unit (3018)
- MTV-1/010 Controller 0..10V+ (30650)
- REV-3POL/03-7,5kW R/Y (33978)
- Step switch S-5EC-2, 0-10V (449084)
- CB 250-6,0 400V/2 Duct heater (5372)
- Presence detector/IR24-P (6995)
- CB 250-3,0 230V/1 Duct heater (5385)
- CBM 250-6,0 400V/2 Duct heater (9089)
- FGR 250 Filter cassette (1815)
- LDC 250-900 Silencer (5196)
- VBC 250-2 Water heating batt (5460)
- VBF 250 Water heating battery (1733)
- BMS Trickle & Boost Switch (120363)

## Documents

- imo\_prioair\_en\_003
- UKCA DECLARATION OF CONFORMITY\_PRIO\_PRIO-XP\_EN\_002.PDF