

## 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	Hz
Phases	1~	
Input power	232	W
Input current	1.01	A
Impeller speed	2,602	rpm
Air flow	max 0.5864	m³/s
Specific ratio	1	
Temperature of transported air	max 55	°C
Max temperature of transported air, when speed controlled	55	°C

### Sound data

Sound pressure level at 1m	43	dB(A)
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### Protection/Classification

Enclosure class, motor	IP44
Insulation class	F

### Data according to ErP

ErP ready	ErP 2018
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### Dimensions and weights

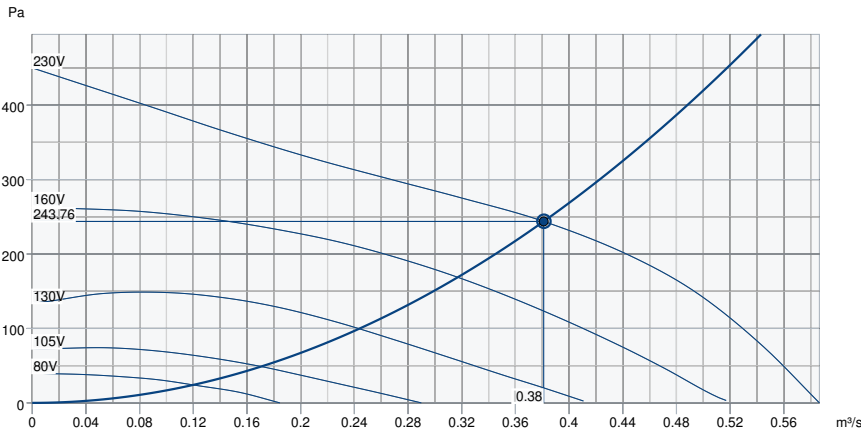
Duct dimension; Circular, inlet	315	mm
Duct dimension; Circular, outlet	315	mm
Weight	8.69	kg

### Others

Motor type	AC
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Performance

Performance curve



Hydraulic data

Required air flow	0.38 m³/s
Required static pressure	244 Pa
Working air flow	0.38 m³/s
Working static pressure	244 Pa
Air density	1.204 kg/m³
Power	203.1 W
Fan control - RPM	2,685 rpm
Current	0.80 A
SFP	0.533 kW/m³/s
Control voltage	230.0 V
Supply voltage	230 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	22	41	53	58	69	58	53	47	70
Outlet	dB(A)	24	43	54	60	70	59	54	48	71
Surrounding	dB(A)	13	20	36	48	59	49	38	28	60
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	53
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	39

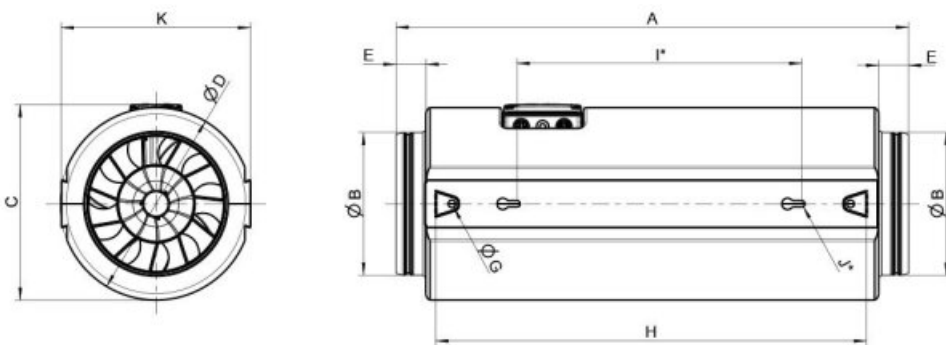
Accessories

Ecodesign

Ecodesign 327

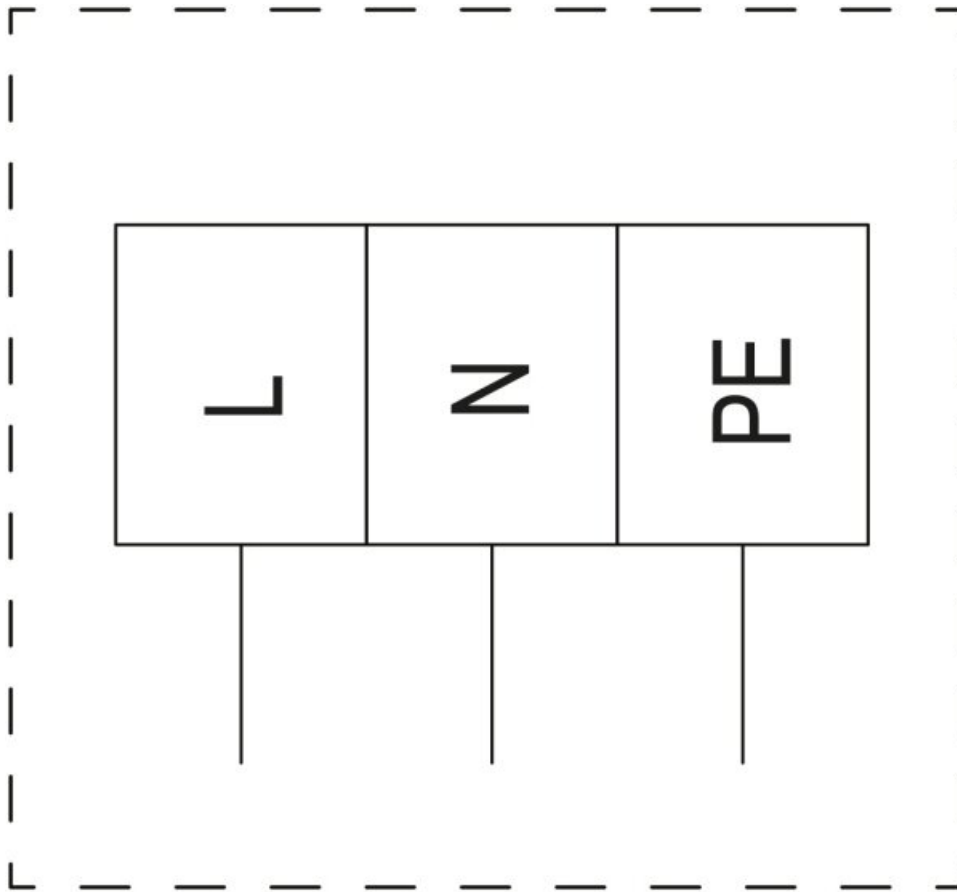
Manufacturer	Systemair GmbH
Type	Prio Silent XP 315E2
Year of manufacture	See name plate of the fan
Air flow qv	0.3889 m <sup>3</sup> /s
Efficiency category	total
Efficiency grade N	68.4
Efficiency grade target N	58
Speed (rpm) n	2,660 rpm
Pressure increase total psf	277 Pa
Power consumption Ped	190 W
Overall efficiency	57.5 %
Overall efficiency target	47.1 %
Variable speed drive	No
Additional components	Components used to calculate the energy efficiency that are not apparent from the measurement category are detailed in the CE declaration.
Maintenance	Information on installation, operation and maintenance is provided in the operating instructions.
Recycling / disposal	Information on recycling and disposal is provided in the operating instructions.

Dimension



[mm]	A	ØB	C	ØD	E	ØG	H	I*	J*	K
Prio Silent XP 315E2/EC	848	315	325	320	106	10	604	400	9	317

## Wiring



**Function / assignment**

L	Power supply 230V AC, 50...60Hz
N	Neutral conductor
PE	Protective conductor
Speed control:	Voltage controllable (See accessories in our online catalogue)
Motor protection:	By integrated thermal contacts

## Accessories

- Frequency converter FRQ5SE-6A (37421)
- REE 1 Speed control (5314)
- RETP 6 Temp/Pressure regulator (32293)
- REV-3POL/03-7,5kW R/Y (33978)
- VKK-315 Back draft damper (1628)
- DTV500A (96807)
- HR1 Room Humidistat (215150)
- RT 0-30 Room Thermostat (5151)
- CB 315-9,0 400V/3 Duct heater (5375)
- CWK 315-3-2,5 Duct cooler,circ (30025)
- FGR 315 Filter cassette (1818)
- LDC 315-900 Silencer (5197)
- VBC 315-2 Water heating batt (5461)
- VBF 315 Water heating battery (1734)
- RE 1,5 Speed control (5000)
- REPT 6 Digital regulator (5698)
- REU 1.5 Speed control (5004)
- SG 315 Protection guard (5611)
- CB 315-6,0 400V/2 Duct heater (5374)
- Frequency converter FRQSE-6A (37419)
- Presence detector/IR24-P (6995)
- CB 315-3,0 230V/1 Duct heater (5386)
- CBM 315-6,0 400V/2 Duct heater (9091)
- FFR 315 Filter cassette (1779)
- FK 315 Fast clamp (1613)
- RSK-315 Back draft damper (5604)
- VBC 315-3 Water heating batt (9844)
- IGC-315 Intake grille (76879)

## Documents

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