



Prio Circular Duct Fans

Quiet and compact mixed-flow fan



- Available with AC and EC motors for 50 and 60Hz
- Easy to install
- Sound and energy optimized impellers

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

Flexibility

The prio fans are intended to use for **supply** or **extract** air, 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 unit's **airtight casing** and corrosion resistance allows to use indoors and in damp areas. The combination of a reliable casing and motor construction ensures to minimize the need for maintenance of the fans and allows long **continuous operation**.

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

Features

Construction

Casing made out of special composite material or sheet metal, is fully airtight class C according to EN12237. The Fans are equipped with an external **terminal box with** protection class **IP44**.

Impeller

Prio fans 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 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 fans can be installed in any position **indoor** and in **damp areas**. Spigot with 25 mm length is perfectly designed to connect circular duct by **fast clamps preventing vibration** to the duct.

Technical parameters

Nominal data

Voltage (nominal)	230	V
Frequency	60; 50	Hz
Phases	1~	
Input power	528	W
Input current	2.32	A
Impeller speed	2,446	rpm
Air flow	max ; 3,784;	m³/h
Temperature of transported air	max 55	°C
Max temperature of transported air, when speed controlled	55	°C

Sound data

Sound pressure level at 3m (20m² Sabin)	56	dB(A)
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Protection/Classification

Enclosure class, motor	IP54
Insulation class	F

Data according to ErP

ErP ready	ErP 2018
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Dimensions and weights

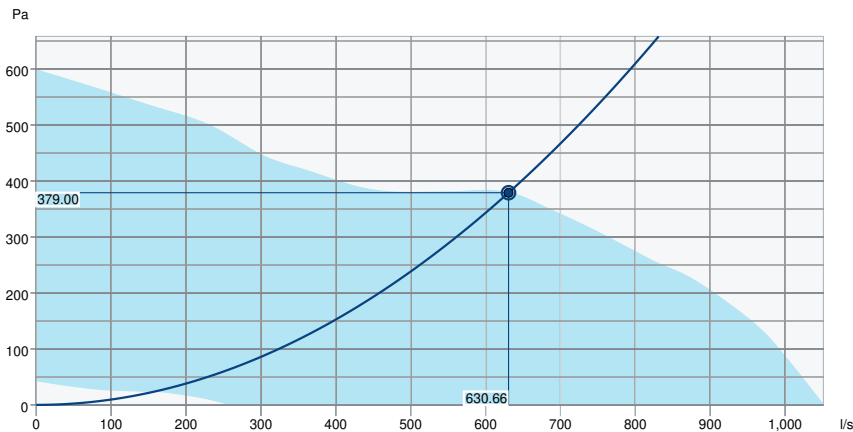
Duct dimension; Circular, inlet	315	mm
Duct dimension; Circular, outlet	315	mm
Weight	8.52	kg

Others

Duct connection type	Circular
Motor type	EC

Performance

Performance curve



Hydraulic data

Required air flow	630.66 l/s
Required static pressure	379 Pa
Working air flow	630.66 l/s
Working static pressure	379 Pa
Air density	1.204 kg/m³
Power	440.6 W
Fan control - RPM	2,501 rpm
Current	1.90 A
SFP	0.699 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)	51	73	72	77	80	78	71	62	84
Outlet	dB(A)	60	64	75	76	78	76	70	61	83
Surrounding	dB(A)	15	37	52	60	58	54	51	37	63
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	56
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	42

Accessories

Ecodesign

Product		
Trade name	Systemair	
Product name	prio 315 EC	
Ecodesign 327		
Manufacturer	Systemair Sweden AB, Industrivägen 3, Skinnskatteberg, Sweden	
Type	prio 315 EC	
Year of manufacture	See name plate of the fan	
Air flow qv	2,272	m³/h
Efficiency category	total	
Efficiency grade N	70.8	
Efficiency grade target N	58	
Speed (rpm) n	2,501	rpm
Pressure increase total psf	418	Pa
Power consumption Ped	441	W
Overall efficiency	62.3	%
Overall efficiency target	49.4	%
Variable speed drive	Yes	
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 mainenance is provided in the operating instructions.	
Recycling / disposal	Information on recycling and disposal is provided in the operating instructions.	

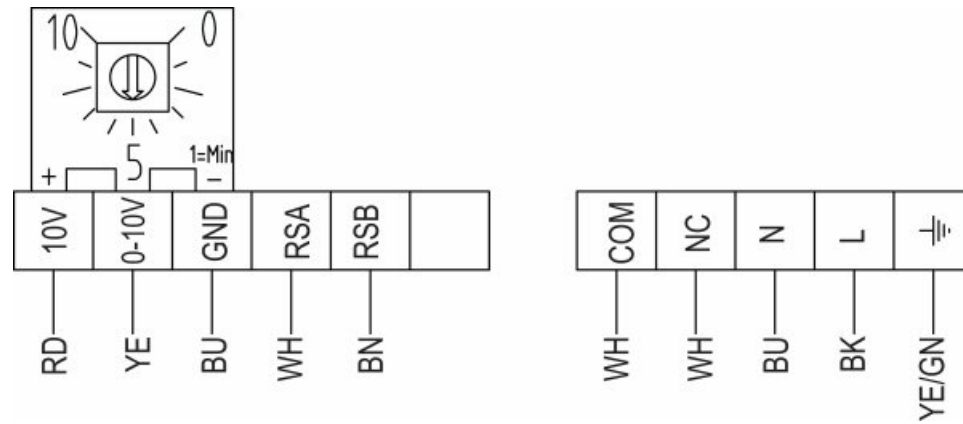
Technical drawing of the 1000 Series LED Panel Light showing front and side views with dimensions.

Front View (Left): A circular view of the light panel. The outer diameter is 450 mm. The mounting bracket has a height of 100 mm and a width of 45 mm.

Side View (Right): A rectangular view of the light panel. The overall width is 450 mm. The mounting bracket has a height of 15 mm. The panel has a depth of 60 mm. The mounting holes are spaced 60 mm apart and have a diameter of $\phi 10$. The panel is labeled with "1000 Series" and "LED". The overall height is ϕC . The panel has a depth of 60 mm. The mounting holes are spaced 60 mm apart and have a diameter of $\phi 10$. The panel is labeled with "1000 Series" and "LED".

Article name: prio 315 EC | Product link: <https://shop.systemair.com/en/productPermalink?p=94786> | Item number: 87795 | Variant: 230V 1~ 50/60Hz | Document type: Product card | Created at: 2023-08-30 | Generated by: Systemair Online Catalogue | Language: English

Wiring



RD	Red
YE	Yellow
BU	Blue
WH	White
GN	Green
BN	Brown
BK	Black

Accessories

- CXE/AVC Modbus (37256)
- EC-Basic-H humidity (24807)
- EC-Basic-U universal 0-10V (24806)
- EC-Vent control board (3115)
- MTP 10, 10K, Speed control (32731)
- Potentiometer MTP 20, 0-10V (310220)
- REV-3POL/03-7,5kW R/Y (33978)
- Step switch S-5EC, 0-10V (76738)
- CB 315-6,0 400V/2 Duct heater (5374)
- HR1 Room Humidistat (215150)
- RT 0-30 Room Thermostat (5151)
- CB 315-12,0 400V/3 Duct heater (5387)
- CB 315-9,0 400V/3 Duct heater (5375)
- CBMF 315-9,0 400V/3 Duct heater (12354)
- FFR 315 Filter cassette (1779)
- FK 315 Fast clamp (1613)
- RSK-315 Back draft damper (5604)
- VBC 315-3 Water heating batt (9844)
- VK-30 Louvre shutter (5641)
- EC-Basic-CO2 and temperature (24808)
- EC-Basic-T temperature (24805)
- EC-Selector (9908)
- EC-Vent Room Unit (3018)
- MTV-1/010 Controller 0..10V+ (30650)
- Pressure controller PCA 1000D2 (76739)
- SG 315 Protection guard (5611)
- VKK-315 Back draft damper (1628)
- CO2RT-R-D Transmitter (6993)
- Presence detector/IR24-P (6995)
- Safety switch 2-pole grey (210679)
- CB 315-3,0 230V/1 Duct heater (5386)
- CBM 315-9,0 400V/3 Duct heater (5485)
- 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)
- Room hygrostat HR-S (286251)

Documents

- INSTALLATION__OPERATION_AND_MAINTENANCE_INSTRUCTION_K__KV__PRIO_273896_EN_008.PDF
- MODBUS LITE V5.01 parameter specification.pdf
- COMMISSIONING_RECCORD_FANS__EN.PDF