

## PRF Centrifugal Fans

### Dependable power for handling aggressive media

- Flexible Use
- Handles Aggressive Media
- Temperature of transported air from -15°C - +70°C

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



### Flexibility

Where dirt, corrosive gases or other problematic elements occur, fans are exposed to particular challenges. Our **PRF range** were specially developed for such applications in the food, electronics, medical facilities and chemical industries. With the help of robust and carefully selected components, there function reliably in unfavourably conditions. The range supports temperatures from -15°C to +70°C through continuous operation.

### Modularity

The position of the unit's casing, which is made from UV-resistant and waterproof PE, can be easily adapted. This making the PRF suitable for various configurations.

### Accessories

PRF fans can be selected together with variety types of **accessories** as connections, dampers, splinter protection, etc.

## Features

### Construction

Sintered casing manufactured from UV-resistant PE, waterproof. The casing can be easily turned (standard position for LG270).

The powder painted pedestal is manufactured of galvanised steel.

The motor is outside the air stream (standard).

### Impeller

The PRF fans use single-flow impellers made out of PP with effective blade geometry, dynamically **balanced** and paired with corresponding **external rotor** motors, **IEC motor** with efficiency **IE3** or **EC Motor**.

### Motor

PRF fans are equipped with **AC** or **EC motors**. Depending on the type, the motors are suitable for **50Hz** and **60Hz**.

### Motor protection

Depending on the type, **AC** motors have an **integrated** thermal protection with manual (electrical) reset, prewired integral **thermocontact TK** or **thermistor PTC** with leads to a **motor protection device**.

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

### Control

**AC motors** can be controlled by **frequency converter**.

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

### Installation

PRF Fans can be used **indoor** or with **specific accessories** also **outdoor**. With mounted **pedestal** can stand **on floor**. For **preventing vibration** to the duct is recommended to use **flexible connection**.

## Technical parameters

### Nominal data

Voltage (nominal)	230	V
Frequency	50	Hz
Phases	1~	
Input power	171	W
Input current	0.75	A
Impeller speed	1,427	rpm
Air flow	max 767	m³/h
Capacitance of capacitor	6	µF
Temperature of transported air	max 70	°C
Max temperature of transported air, when speed controlled	70	°C

### Sound data

Sound pressure level at 3m (20m² Sabin)	46	dB(A)
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### Protection/Classification

Enclosure class, motor	IP54
Insulation class	F

### Data according to ErP

ErP ready	Not ErP relevant
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### Dimensions and weights

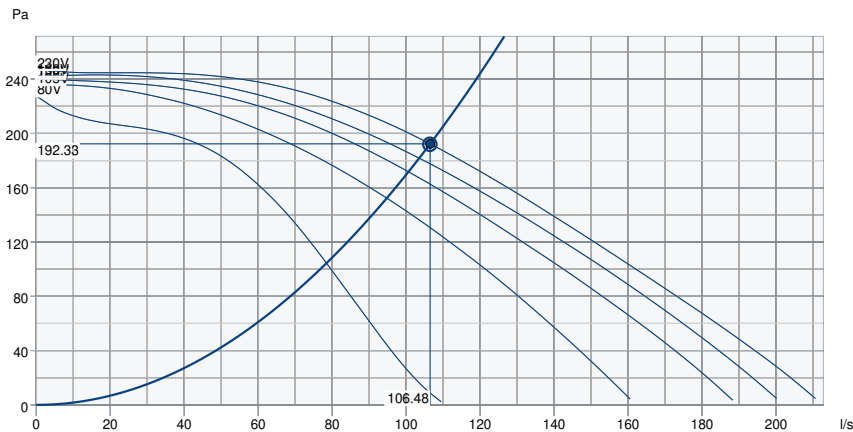
Duct dimension; Circular, inlet	160	mm
Duct dimension; Circular, outlet	160	mm
Weight	13.8	kg

### Others

Duct connection type	Circular
Motor type	AC

## Performance

### Performance curve



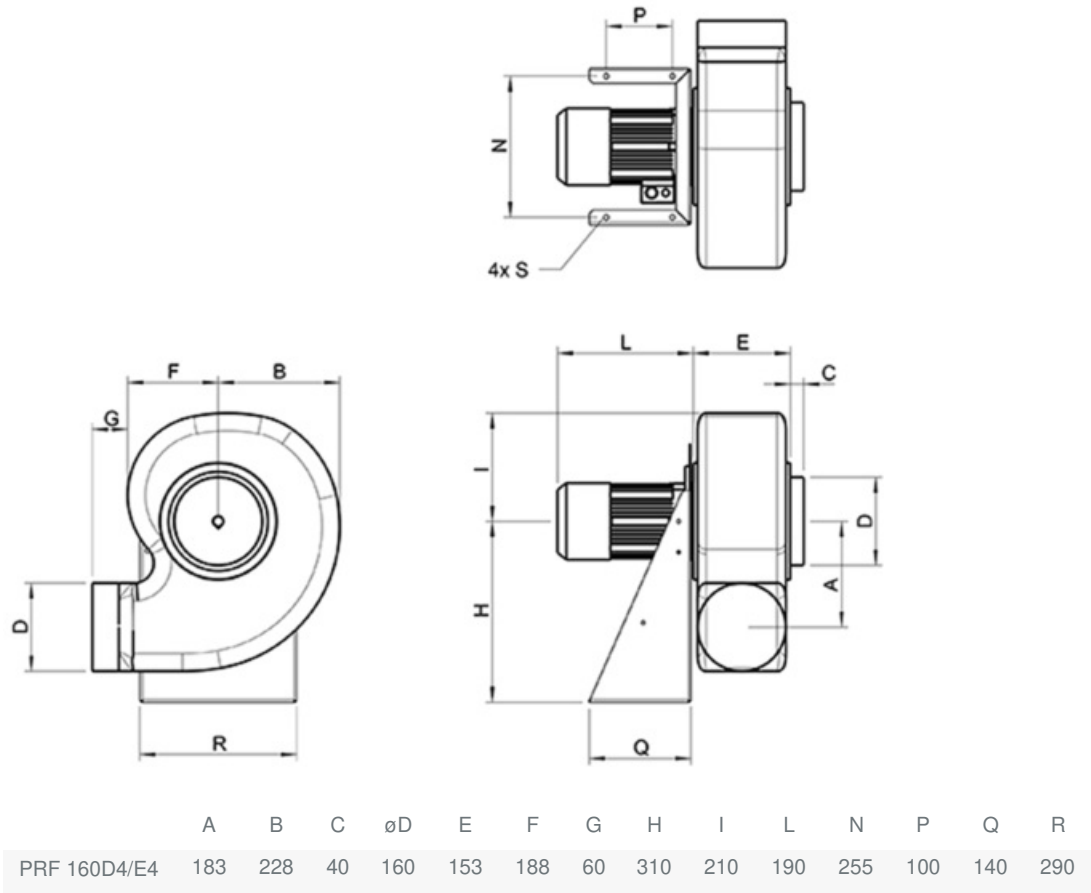
#### Hydraulic data

Required air flow	106.40 l/s
Required static pressure	192 Pa
Working air flow	106.48 l/s
Working static pressure	192 Pa
Air density	1.204 kg/m³
Power	143.0 W
Fan control - RPM	1,453 rpm
Current	0.60 A
SFP	1.343 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)	64	63	59	57	53	49	41	33	68
Outlet	dB(A)	57	60	64	62	56	51	43	34	68
Surrounding	dB(A)	33	40	43	48	47	45	36	31	53
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	46
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	32

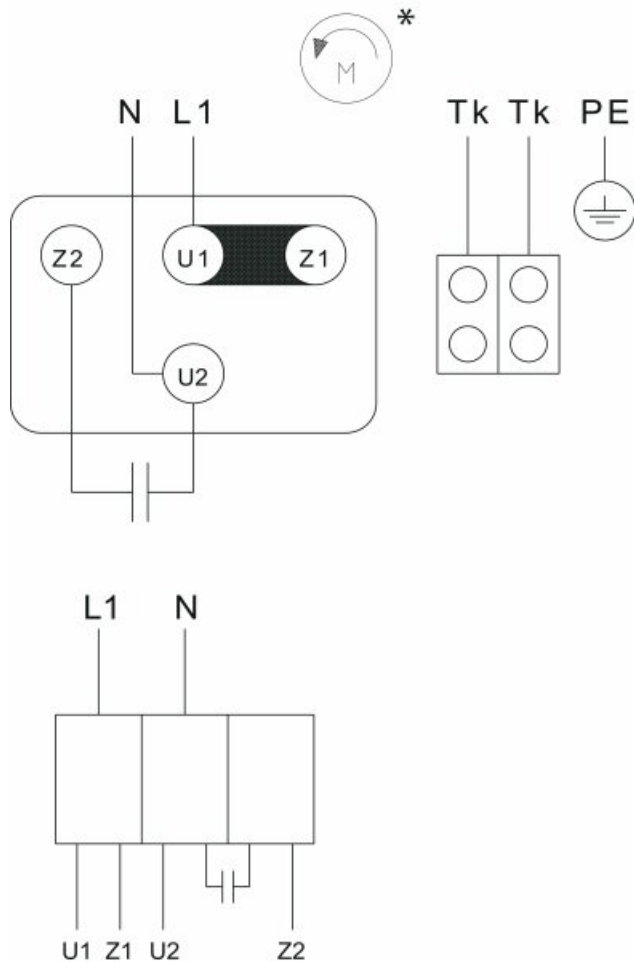
#### Accessories

**Dimension**



total height = 520 mm

## Wiring



## Accessories

- ASS-P 160 flex. con. PRF (32365)
- Motor protect. switch S-ET 10 (161199)
- REU 1.5 Speed control (5004)
- REV-5POL/05-7,5kW R/Y (33979)
- SD rubber mou. 4Pcs PRF160-250 (32568)
- VKS-P 160 gravity shutter PRF (32375)
- WSD PRF160 Weather roof KIT (309457)
- REV-5POL/05-7,5kW B/G (281745)
- Frequency converter FRQ5SE-6A (37421)
- Motor protect. switch S-ET 10E (161205)
- REV-3POL/03-7,5kW R/Y (33978)
- RTRE 1,5 Speed control (5008)
- VKA-P 160 adjust. damper PRF (32370)
- VP-Splinter protection PRF 160 (305462)
- Frequency converter FRQSE-6A (37419)

## Documents

- [compatibility with chemical agents\\_en\\_003.pdf](#)
- [Installation and Operating Instructions\\_012.pdf](#)
- [EU Declaration of Conformity\\_004.pdf](#)

## Specification

Plastic circular duct fan, developed for the exhaust of aggressive media.

Particularly suitable for exhaust air with corrosive gases, contaminated air or other aggressive components.

Sintered casing from UV-resistant PE, waterproof.

Pedestal and motor mounting made of galvanised steel, painted.

Single-flow impellers from PP with effective blade geometry.

Voltage controllable standard IEC motor.

Motor outside air flow.

Integral thermal contacts with leads to a motor protection device. Speed-controlled by voltage reduction via transformer.

Terminal box fitted on the motor.

Suitable for extract air. Variable installation, the casing position can be easily adapted. (Standard position LG270).

For indoor installation. With appropriate accessories also suitable for outdoor installation.

Preferable applications are medical facilities as well as food, electrical, chemical and metal industry.