

## MUB+FILTER Insulated duct fans

### Efficient fans for supply or exhaust ventilation systems with built in panel filter

- With built-in panel-filter, Coarse 65% (G4)
- Acoustic and thermal insulation 30 mm
- Indoor and outdoor installation
- Modular system of accessories
- Available with AC and EC motors for 50 and 60Hz

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



#### Flexibility

Designed as a process ventilation unit for removing process loads, as heat loads, dusts, etc... Used as an extract air unit for extracting mode or as a supply air unit as displacement mode. Installation in any mounting position is possible. Construction of casing and thermal insulation permits **outdoor** and **indoor** use.

#### Modularity

Thanks to variety types of **accessories** as flexible connections, dampers, roof, base frame, etc. it is easy to design any ventilation system according to your demand.

#### Performance

**High performance** impeller together with **high efficient** motors are designed to ensure high-level performance to **minimize power consumption** and **maximize efficiency**.

#### Noise

The **casing** of **MUB + FILTER** models have perfect **acoustic** and **thermal** insulation capacity.

### Certifications



Green Ventilation

### MUB+FILTER 100 630D4

30mm / Filter Coarse 65% (G4)

- With built-in panel-filter, Coarse 65% (G4)
- Revision-panel at side
- High efficient motor
- Speed-controllable via frequency converter
- Integral cold conductor (PTC)
- Low sound level
- Installation in any mounting position

- Easy to maintain and reliable

The Filter MUB fans are equipped with high efficient motors. The MUB fans have an impeller with backward curved blades, manufactured from aluminum. Speed control is only possible by using a frequency converter. Motor protection is done by cold conductors (PTC), which have to be connected to an external motor protection device. The casing consists of an aluminum frame with fiberglass reinforced plastic corners of PA6; highly shock-resistant. The double skin panels are manufactured from galvanized steel with 30 mm mineral wool insulation. To avoid condensation the profile is provided with a separate chamber to fix screws. The unit is equipped with a panel-filter, filter-class Coarse 65% (G4) and a revision-panel for replacement of the filter. The maximal airvolume is limited by the filter at maximum of 2900 l/s.

Designed as a process ventilation unit for removing process loads, as heat loads, dusts, etc... Used as an extract-air-unit for extracting mode or as a supply-air-unit as displacement mode.

Installation in any mounting position is possible.

## Features

### Construction

The casing consists of a corrosion-resistant **aluminium frame** with **fibreglass reinforced plastic corners of PA6**; highly shock-resistant. **Panels** made of **double skin galvanized** sheet steel with **30 mm acoustic** and **thermal rockwool insulation**.

### Impeller

The MUB + FILTER fans use **radial impeller with backward curved blades**. These are from high-performance composite material or aluminum, dynamically **balanced** and paired with corresponding **external rotor** motors or **IEC motor** with efficiency **IE3**.

### Motor

Depending on the type, MUB + FILTER fans are equipped with **AC** or **EC** external rotor motors. 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

**EC motors** with **built-in potentiometer** to adjust working point can be also controlled by external **signal 0-10V**. **EC motors, depending on the type** are also equipped with **ModBus** communication or **alarm signal**. **AC motors** can be controlled by **5-step, stepless** speed regulator, **D/Y** switch or **frequency converter**.

### Installation

The MUB + FILTER fans can be installed in any position **indoor** and together **with weather protection roof** also **outdoor**. With mounted **base frame** the MUB + FILTER fans can stand **on floor**. For **preventing vibration** to the duct it is recommended to use **flexible connections**.

### Filter

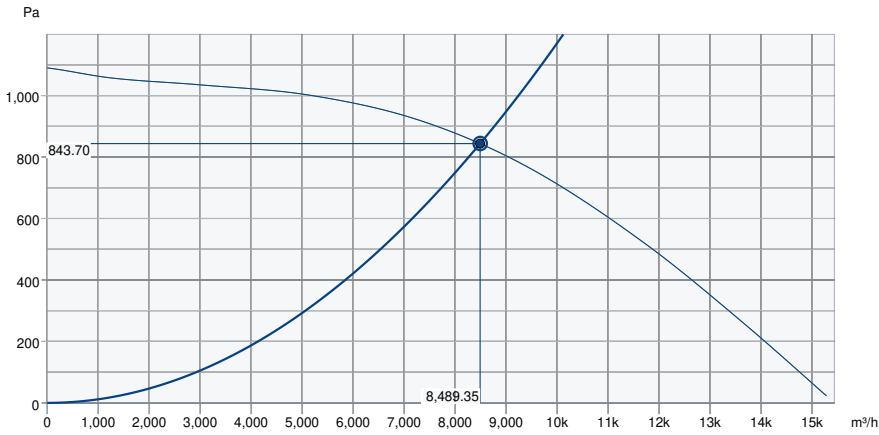
MUB + Filter comes with a built-in **Coarse 65% (G4) panel filter**.

## Technical parameters

Unit		
Frequency	50	Hz
Voltage (nominal)	400	V
Phases	3~	
Voltage type	AC	
Input current	7.96	A
Input power	4,169	W
Speed regulation	None	
Air flow	max 15,437	m³/h
Supply fan		
Voltage	400	V
Phases	3~	
Current	10.67	A
Input power (P1), supply fan	5,500	W
Impeller speed	1,480	rpm
Temperature of transported air	max 40	°C
Insulation class	F	
Enclosure class, motor	IP55	
Filter		
Filter class	Coarse 65%	
Supply air filter		
Material in filter	Panel-Filter	
Dimensions and weights		
Weight	196	kg

Performance

Performance curve



Hydraulic data

Required air flow	8,491 m³/h
Required static pressure	844 Pa
Working air flow	8,489 m³/h
Working static pressure	844 Pa
Air density	1.204 kg/m³
Power	4,112.5 W
Fan control - RPM	1,480 rpm
Current	7.89 A
SFP	1.744 kW/m³/s
Control voltage	400.0 V
Supply voltage	400 V

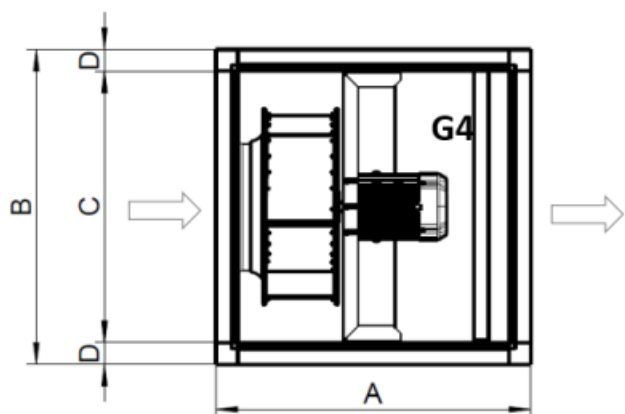
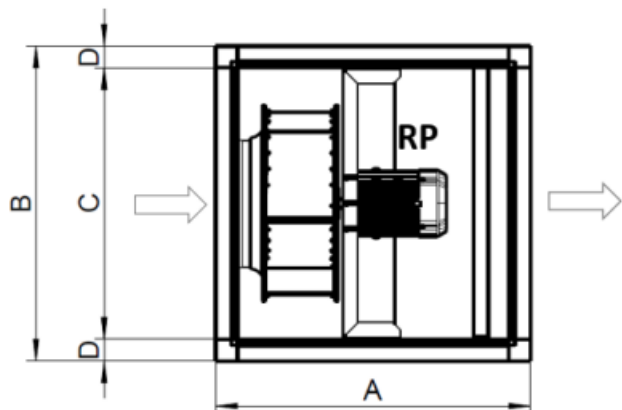
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	51	68	72	77	79	73	67	60	83
Outlet	dB(A)	53	70	75	80	82	76	69	62	85
Surrounding	dB(A)	31	53	45	46	50	46	35	25	56
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	49
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	35

## Acoustic

The Level of Casing-Breakout-Noise depends on the quality of shielding the acoustic inlet and outlet noises.

The shown Level of Casing-Breakout-Noise will be reached only in case of 100 % shielding the acoustic inlet and outlet noise and a correspondingly low environment noise.

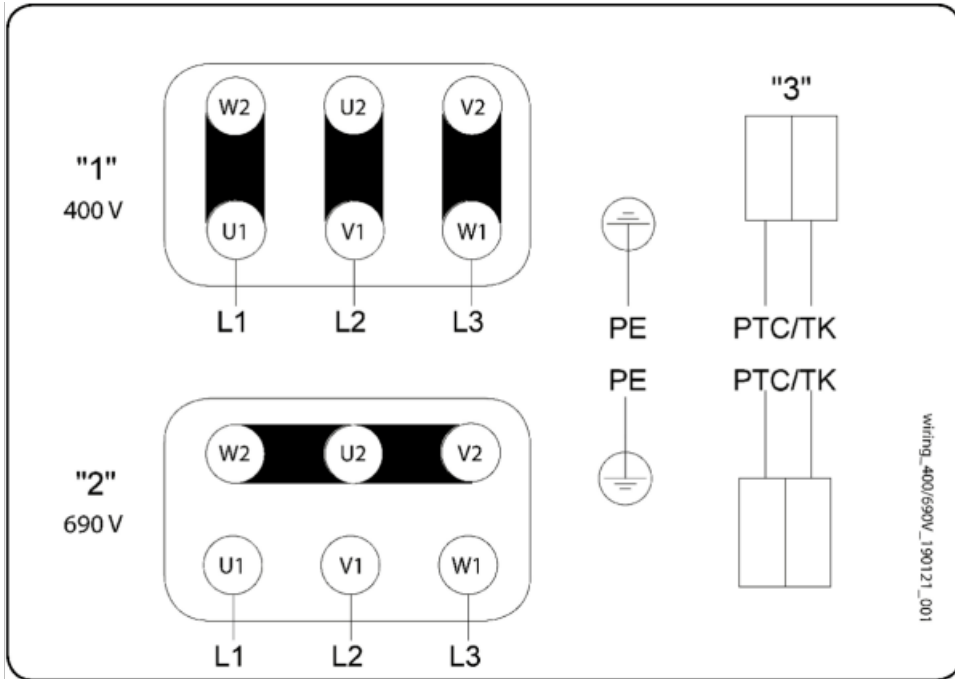
## Dimension



A	1020	mm	
B	1020	mm	
C	878	mm	Connection dimension duct
D	71	mm	

G4 = Coarse 65%

## Wiring



Three phase motor with cold conductor

"1" Delta connection

"2" Star connection

"3" Thermal motor protection optional

Changing of direction of rotation by interchanging of two phases

## Accessories

- FGV 100/916-916 flex. conn. (4199)
- Frequency converter FRQ5-10A (36230)
- Frequency converter FXDM14AM (31389)
- SD-MUB Vibration pad set (37324)
- WSD 100 (1060x1060x70) compl. (31483)
- Frequency converter FRQS-10A (36232)
- Filter Coarse65%-G4 955x875x47 (156884)
- KKD 100-damper-section (333319)
- Frequency converter FRQ-10A (36228)
- Frequency converter FRQ5S-10A (36234)
- REV-5POL/05-7,5kW R/Y (33979)
- U-EK230E Motor protection (30199)
- WSG 100 MUB complete (31487)
- REV-5POL/07-EMV-7,5kW R/Y (34549)
- GRU 100-1020/100 (276663)

## Documents

- Installation, Operation and Maintenance instruction\_001
- EU Declaration of Conformity\_en\_001.pdf
- COMMISSIONING REPORT\_FANS\_160628\_EN\_001.PDF