

MUB Insulated duct fans

Efficient fans for supply or exhaust ventilation systems

- · Acoustic and thermal insulation 30 mm
- Flexible airflow direction due to removable panels
- · 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

The MUB fans are intended to use for **supply** or **extract** air, designed to be installed in **any position**.

The MUB fans are designed for straight through airflow but can easily be rebuilt due to **removable panels** for 90° air discharge. The construction of the casing and thermal insulation permits **outdoor** and **indoor** use.

Performance

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

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.

By using special **modular systems**, where some accessories as **heaters**, **coolers**, **silencers**, **filters** or **carbon filters** are built-in in **the same type of casing**, you can even design a simple supply or exhaust **air handing unit**.

Noise

The **casing** of **MUB** fans have a perfect **acoustic** and **thermal** insulation capacity.

Certifications





Features

Construction

The casing consists of a corrosionresistant 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.

The MUB fans are designed for straight through airflow but can easily be rebuilt due to **removable panels** for 90° air discharge.

Impeller

The MUB fans use **radial** impellers with **backward curved blades**. These are made out of high-performance composite material or aluminum, dynamically **balanced** and paired with

dynamically **balanced** and paired with corresponding **AC** or **EC** external rotor motors.

Motor

Depending on the type, MUB fans are equipped with **AC** or **EC** external rotor motor. 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 5step, stepless speed regulator, D/Y switch or frequency converter.

Installation

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

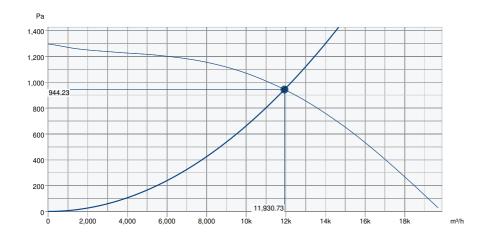


Technical parameters

Nominal data		
Voltage (nominal)	400	V
Frequency	50	Hz
Phases	3~	
Motor circuit connection	D	
nput power	5,154	W
nput power kW	5.154	kW
nput current	8.3	А
mpeller speed	1,460	rpm
Air flow	max 19,882	m³/h
Temperature of transported air	max 40	°C
Max temperature of transported air, when speed controlled	40	°C
Protection/Classification Enclosure class, motor	IP55	
Enclosure class, motor	IP55	
nsulation class	F	
Data according to ErP		
ErP ready	ErP 2018	
Dimensions and weights		
Weight	161.5	kg
Others		

Performance

Performance curve



Hydraulic data	
Required air flow	11,929 m³/h
Required static pressure	944 Pa
Working air flow	11,931 m³/h
Working static pressure	944 Pa
Air density	1.204 kg/m³
Power	5,154.9 W
Fan control - RPM	1,460 rpm
Current	8.30 A
SFP	1.555 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)	56	78	74	79	79	78	74	69	85
Outlet	dB(A)	58	80	76	81	81	80	76	71	87
Surrounding	dB(A)	38	68	61	50	52	52	45	36	69
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	62
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	48

AMCA Certified Rating statements

• Catalogue Version:

Item number: #235459 Operating Mode: 400V 3~ 50Hz - 90° air flow

Ecodesign

Product	
Trade name	Systemair
Product name	MUB 100 630D4-L IE3

Ecodesign		
ErP compliance	2018	
Unit category	NRVU	
Drive	External MSD or VSD	
Unit type	UVU	
Heat recovery type	None	
Temperature ratio (UVU)	Not applicable	
qv nom	3.3142	m³/s
P nom	5.155	kW
Ps nom	944	Pa
Fan efficiency	60.7	%
External Leakage	5	%
Sound power (LWA)	69	dB(A)

Acoustic

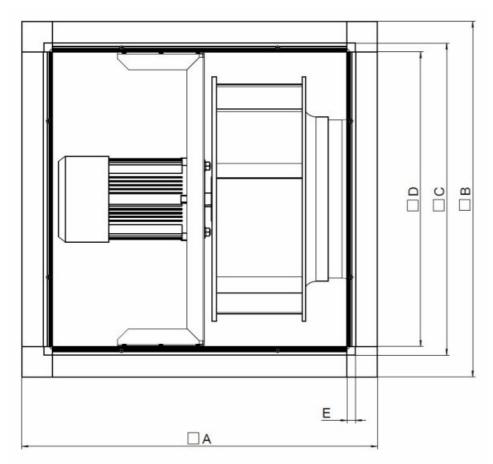
The Level of Casing-Breakout-Noise depends on the quality of shielding the acoustic inlet and outlet noises.

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.

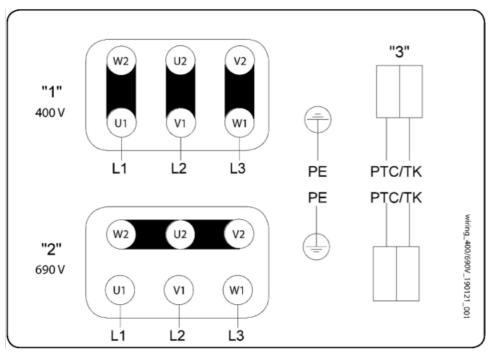
Dimension

 MUB 100
 □A
 □B
 □C
 □D
 E

 630/710
 1020
 1020
 920
 878
 21



Wiring



Three phase motor with cold conductor

Delta connection

"2" Star connection

"3" Thermal motor protection optional

Changing of direction of rotation by interchanging of two phases

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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)
- GRU 100-1020/100 (276663)
- KKC-DX-R 100 cooling section (277267)
- KKC-W-R 100 cooling section (277275)
- KKH-HW 100 heater-section (93341)

- 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)
- KKC-DX-L 100 cooling section (277263)
- KKC-W-L 100 cooling section (277271)
- KKD 100-damper-section (333319)
- KKS 100 silencer-section (276853)

Documents

- Installation, Operation and Maintenance instruction_001
- EU DECLARATION OF CONFORMITY_MUB_EN_003.PDF
- COMMISSIONING REPORT_FANS_160628_EN_001.PDF