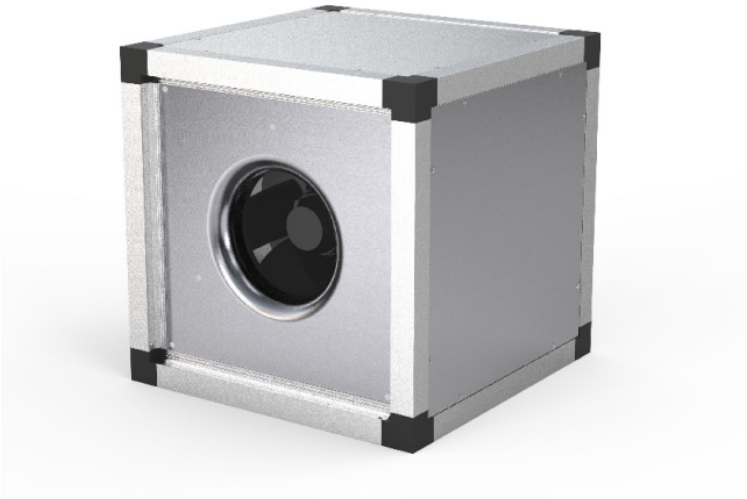


MUB Insulated duct fans

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.

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.**

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** fans have a perfect **acoustic** and **thermal** insulation capacity.

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**.
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 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 **5-step, 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)	230	V
Frequency	50	Hz
Phases	1~	
Input power	1,137	W
Input current	5.32	A
Impeller speed	1,386	rpm
Air flow	max 7,488	m³/h
Capacitance of capacitor	30	µF
Temperature of transported air	max 60	°C
Max temperature of transported air, when speed controlled	60	°C

Protection/Classification		
Enclosure class, motor	IP54	
Insulation class	F	

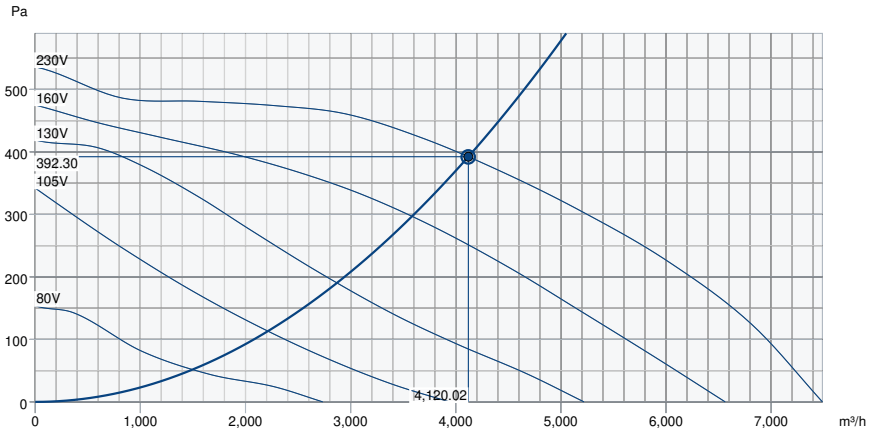
Data according to ErP		
ErP ready	ErP 2018	

Dimensions and weights		
Weight	61	kg

Others		
Motor type	AC	

Performance

Performance curve



Hydraulic data	
Required air flow	4,118 m³/h
Required static pressure	392 Pa
Working air flow	4,120 m³/h
Working static pressure	392 Pa
Air density	1.204 kg/m³
Power	1,052.5 W
Fan control - RPM	1,401 rpm
Current	5.02 A
SFP	0.920 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)	46	65	68	73	78	76	73	64	82
Outlet	dB(A)	48	67	69	75	79	78	74	66	83
Surrounding	dB(A)	26	47	44	43	48	50	41	29	54
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	47
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	33

Accessories

Ecodesign

Product		
Trade name	Systemair	
Product name	MUB 042 500E4	

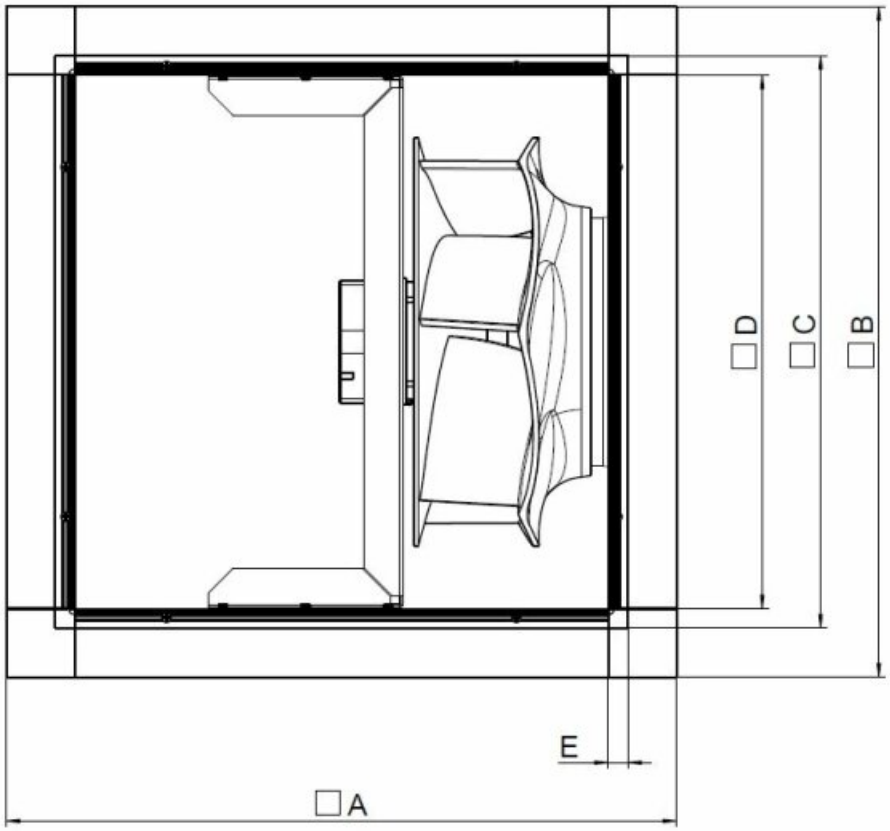
Ecodesign		
ErP compliance	2018	
Unit category	NRVU	
Drive	External MSD or VSD	
Unit type	UVU	
Heat recovery type	None	
Temperature ratio (UVU)	Not applicable	
qv nom	1.1444	m^3/s
P nom	1.053	kW
Ps nom	392	Pa
Fan efficiency	42.6	%
External Leakage	5	%
Sound power (LWA)	54	dB(A)

Acoustic

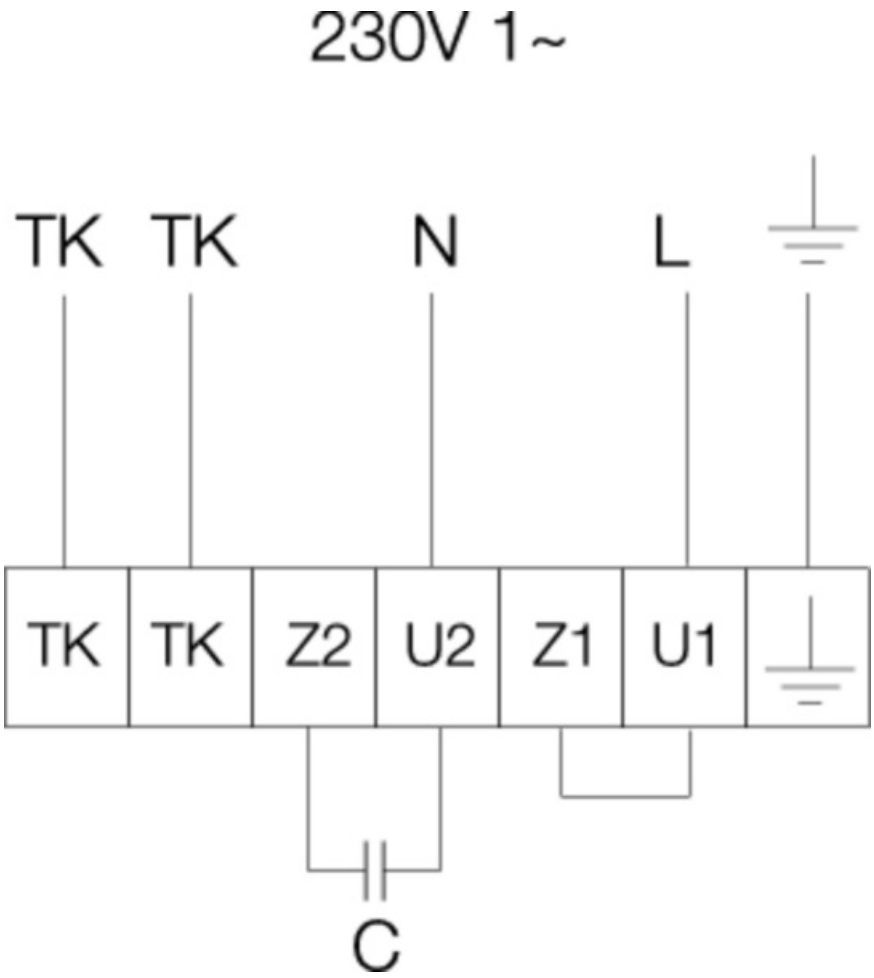
The Level of Casing-Breakout-Noise depends on the quality of shielding the acoustic inlet and outlet noises.
The shown Level of Casing-Breakout-Noise will be reached only in case of 100 % shielding the acoustic inlet and outlet noise and a correspondingly low environment noise.

Dimension

MUB 042	□A	□B	□C	□D	E
400/450/500	690	690	590	548	21



Wiring



Accessories

- FGV 042/586-586 flex. conn. (4605)
- Motor protect. switch S-ET 10 (161199)
- REV-5POL/05-7,5kW R/Y (33979)
- SD-MUB Vibration pad set (37324)
- WSD 042 (730x730x70) complete (31481)
- Frequency converter FRQSE-6A (37419)
- CCM inlet MUB042 d500 (311781)
- CCM outlet MUB042 d500 (311683)
- CCMI outlet 042 d500 KIT 30mm (239094)
- KKC-DX-L 042 cooling section (277261)
- KKC-W-L 042 cooling section (277269)
- KKD 042-damper-section (333317)
- KKH-HW 042 heater-section (93339)
- SDM Service Door MUB 042 30mm (273934)
- Frequency converter FRQ5SE-6A (37421)
- REU 7 Speed control (5007)
- RTRE 7 Speed control (5011)
- UGS 042/500 adapter flex. (4357)
- WSG 042 MUB complete (31485)
- CCM inlet MUB042 d400 (311780)
- CCM outlet MUB042 d400 (311682)
- CCMI outlet 042 d400 KIT 30mm (239093)
- GRU 042-690/100 (276661)
- KKC-DX-R 042 cooling section (277265)
- KKC-W-R 042 cooling section (277273)
- KKF 30 042-filter-section (93311)
- KKS 042 silencer-section (276851)

Documents

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