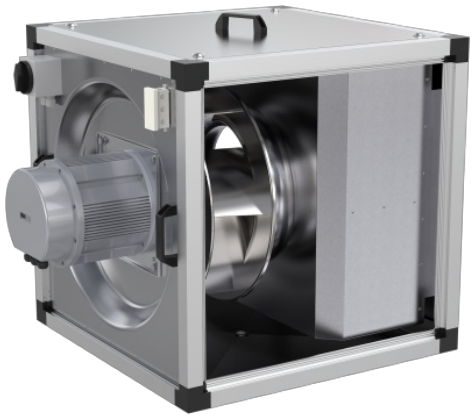


MUB/T Insulated duct fans

Powerful and efficient exhaust fans for medium temperatures up to 120°C

- For kitchen and industrial environments
- Up to 120°C medium temperature, continuous operation
- Drip pan and drain plug included
- Acoustic and thermal insulation 30 mm
- Flexible airflow direction
- 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

Application

The MUB/T fans are specially designed to **extract** air from **kitchen environments** or **industrial applications**, where **motor** must be placed **outside of air stream**. **Drip pan** with **drain plug** on bottom are constructed for **collecting** a draining **dust, oil, water**.
By MUB/T and MUB/T-S fans an easy **maintenance** is provided through **service door** with handle.

Flexibility

Depending on the type, MUB/T fans are designed for **straight through** or **90°** airflow. The **air direction** can be easily **changed** on site. The construction of the casing and thermal insulation permits **outdoor** and **indoor** use.

Performance

High performance aluminium 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.**

Certifications

epd

Eco Platform: EPD Verified

This product comes with an Environmental Product Declaration (EPD), published by EPD Norway, a global EPD program operator and member of the ECO Platform (https://www.eco-platform.org/who-is-participating.html). Compliant with ISO 14025 and EN 15804, Systemair EPDs support Life Cycle Assessments (LCAs) in all markets where the product is used. Scroll down to download the EPDs.

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/T** and **MUB/T-ECO** fans are designed for **90° airflow**.
The **MUB/T-S** fans are designed for **straight through airflow**.
Air direction can be easily **rebuilt** on site by **changing** with **service doors (MUB/T).**
Revision switch is **included** and **prewired for MUB/T** and **MUB/T-S.**
The **MUB/T-ECO** is **without revision switch** and **service door.**
Aluminium drip with **drain plug is** placed on **bottom** of casing.

Impeller

The MUB/T fans use **radial** impeller with **backward curved blades**. These are made out of aluminum, dynamically **balanced** and paired with corresponding **IEC motor** with efficiency **IE3 or EC motor**.

Motor

Depending on the type, MUB/T 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

For correct drainage the MUB/T fans must be installed in position with drip pan down. Fans can be installed in any position **indoor** and together **with weather protection roof** also **outdoor**. With mounted **base frame** the MUB/T 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; 60	Hz
Phases	1~	
Input power	1,132	W
Input power kW	1.132	kW
Input current	8.8	A
Impeller speed	1,509	rpm
Air flow	max 6,987	m^3/h
Temperature of transported air	max 120	°C
Max temperature of transported air, when speed controlled	120	°C

Protection/Classification		
Enclosure class, motor	IP55	
Insulation class	F	

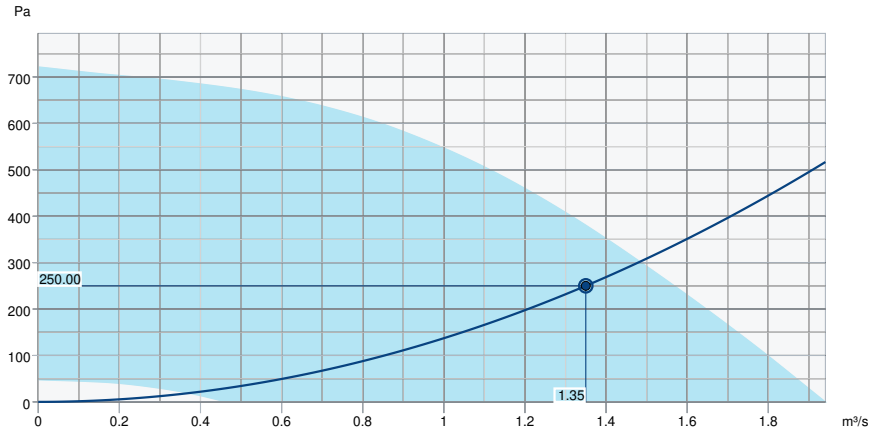
Data according to ErP		
ErP ready	Not ErP relevant	

Dimensions and weights		
Weight	74.5	kg

Others		
Duct connection type	Square	
Motor type	EC	

Performance

Performance curve



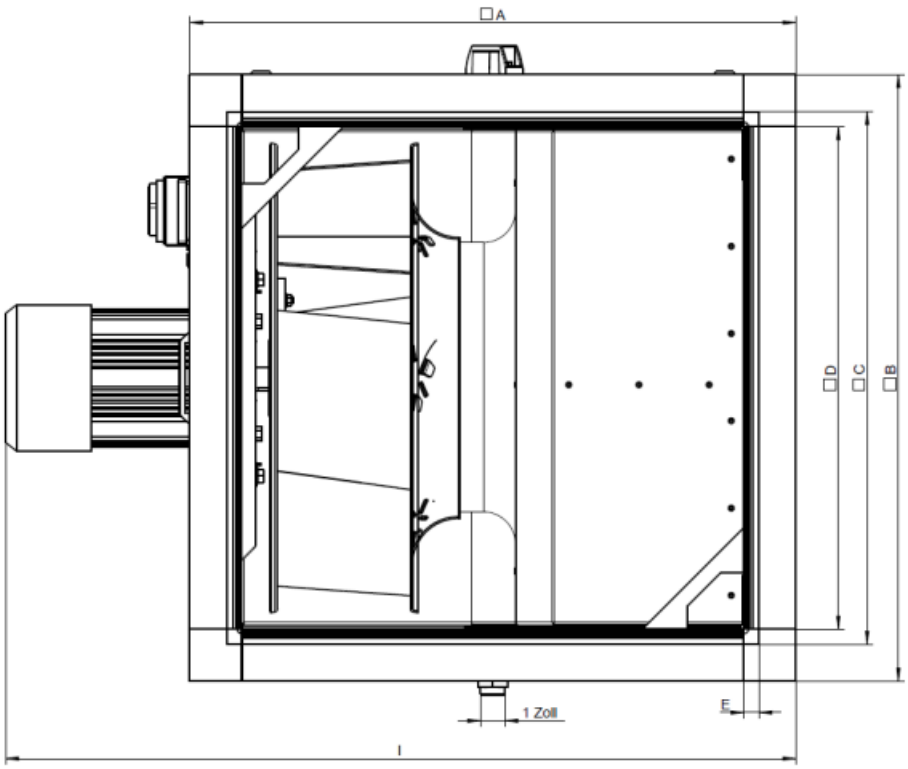
Hydraulic data	
Required air flow	1.35 m³/s
Required static pressure	250 Pa
Working air flow	1.35 m³/s
Working static pressure	250 Pa
Air density	1.204 kg/m³
Power	849.9 W
Fan control - RPM	1,356 rpm
Current	6.69 A
SFP	0.630 kW/m³/s
Control voltage	9.0 V
Supply voltage	230 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	50	72	74	77	78	74	68	63	83
Outlet	dB(A)	52	73	76	79	79	75	70	64	84
Surrounding	dB(A)	35	59	58	52	54	52	44	33	63
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	56
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	42

Acoustic

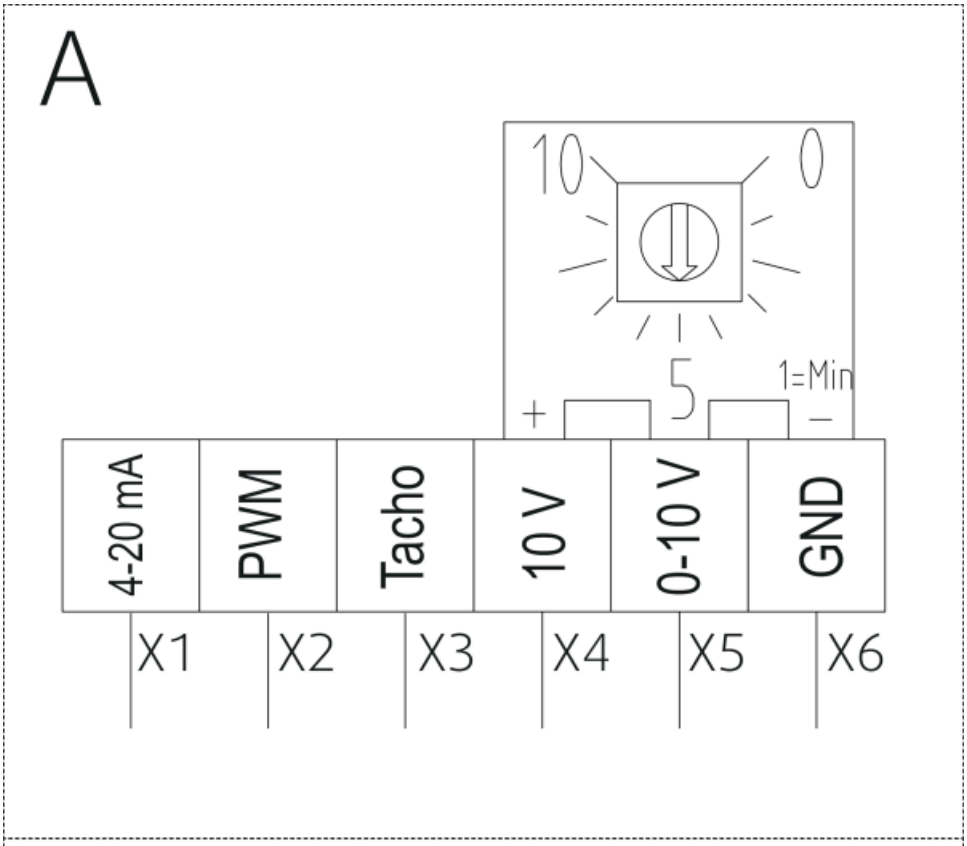
The Level of Casing-Breakout-Noise depends on the quality of shielding the acoustic inlet and outlet noises.
The shown Level of Casing-Breakout-Noise will be reached only in case of 100 % shielding the acoustic inlet and outlet noise and a correspondingly low environment noise.

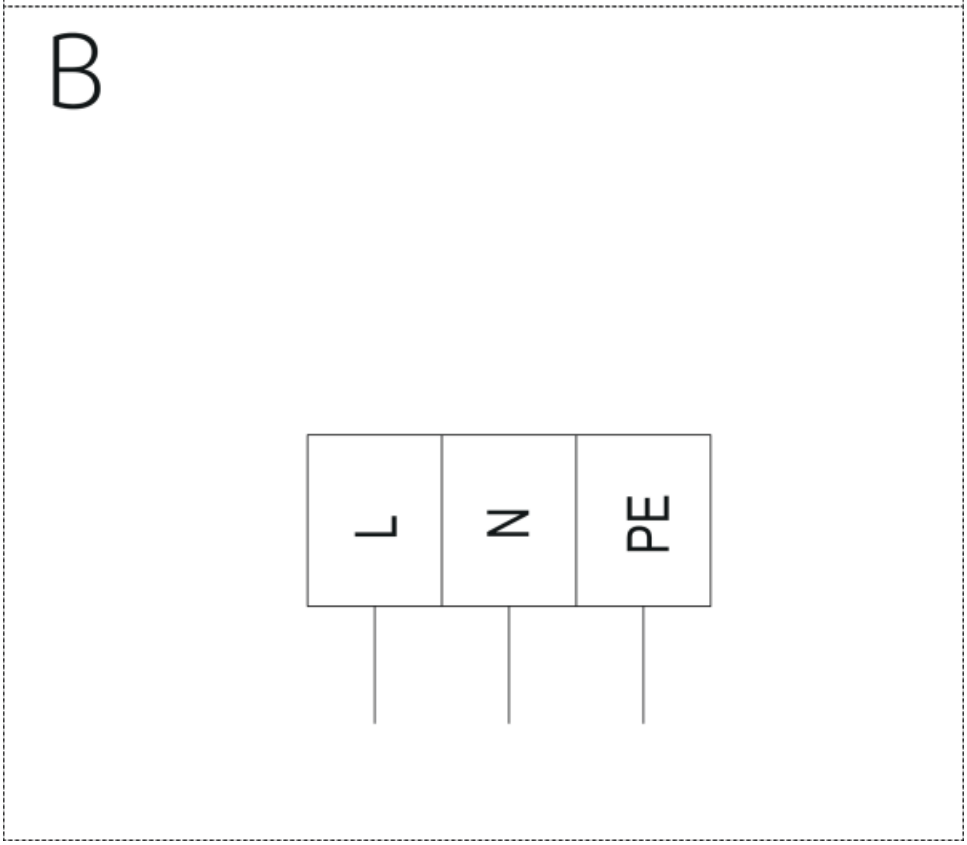
Dimension



	□A	□B	□C	□D	E	I
MUB/T-S 042 450EC	690	690	590	548	21	921

Wiring





A			**Terminal box (control)**
4–20 mA	X1	red	DC current [4 — 20 mA]
PWM	X2	brown	PWM- signal input with 80 Hz and voltage 10 to 24 Vpk The motor speed can be set via the duty cycle. When the duty cycle is changed from 10 to 95% the motor changes speed from 0% to 100% of the maximal speed. Start fire mode: apply +10V to PWM for longer than 5 seconds, e.g. by bridging against +10V (X4). Attention! in fire mode, all motor protection functions are disabled!
Tacho	X3	white	Tacho (details, see manual)
10 V	X4	yellow	10 V DC [max. 25 mW or 2.5 mA]
0–10 V	X5	blue	DC voltage [2 — 10 V]
GND	X6	black	Common (Ground)

B			Terminal box (mains)
L		brown	220-277 V~ // 50/60 Hz
N		blue	
PE		green-yellow	

Accessories

- CXE/AVC Modbus (37256)
- EC-Basic-H humidity (24807)
- EC-Basic-U universal 0-10V (24806)
- EC-Vent control board (3115)
- FGV 042/586-586 flex. conn. (4605)
- MTV-1/010 Controller 0..10V+ (30650)
- REV-3POL/03-7,5kW R/Y (33978)
- Step switch S-5EC-2, 0-10V (449084)
- UGS 042/500 adapter flex 120°C (38369)
- WSD 042 (730x730x70) complete (31481)
- WSG 042 MUB/T complete (36071)
- Presence detector/IR24-P (6995)
- CCM outlet MUB042 d400 (311682)
- CCMI outlet 042 d400 KIT 30mm (239093)
- Free cooling control FCC (238089)
- KKD 042-damper-section (333317)
- KKF-ALU 042-filter-section (376815)
- KKF-CAR 062-filter-section (277347)
- KKF-KITCHEN 062-filter-section (277364)
- Presence detector DBWF-W (382780)
- SDM Service Door MUB 042 30mm (273934)
- EC-Basic-CO2 and temperature (24808)
- EC-Basic-T temperature (24805)
- EC-Selector (9908)
- EC-Vent Room Unit (3018)
- MTP 10, 10K, Speed control (32731)
- Potentiometer MTP 20, 0-10V (310220)
- SD-MUB Vibration pad set (37324)
- UGS 042/400 adapter flex 120°C (38368)
- UGS 042/500 adapter flex. (4357)
- WSD MUB/T-S short (37497)
- FGV 042/586-586 flex. 120°C (38361)
- RT 0-30 Room Thermostat (5151)
- CCM outlet MUB042 d500 (311683)
- CCMI outlet 042 d500 KIT 30mm (239094)
- GRU 042-690/100 (276661)
- KKF 30 042-filter-section (93311)
- KKF-CAR 042-filter-section (277346)
- KKF-KITCHEN 042-filter-section (277363)
- KKS 042 silencer-section (276851)
- Room hygrostat HR-S (286251)

Documents

- Installation, Operation and Maintenance instruction_003
- EPD_416492_Systemair_MUB_T-S_EC_pdf
- COMMISSIONING REPORT_FANS_160628_EN_001.PDF
- EPD_416492_Systemair_MUB_T-S_EC_json