



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 (except MUB/T 100 630D4-K2-L) 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**.

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 (except MUB/T 100 630D4-K2-L).

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	314	W
Input power kW	0.314	kW
Input current	2.64	A
Impeller speed	1,509	rpm
Air flow	max 3,261	m³/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
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Dimensions and weights

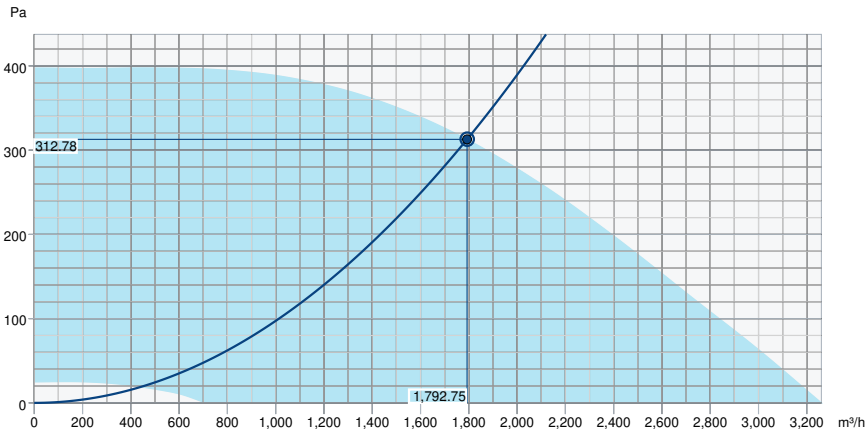
Weight	33.5	kg
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Others

Duct connection type	Square
Motor type	EC

Performance

Performance curve



Hydraulic data

Required air flow	1,793 m³/h
Required static pressure	313 Pa
Working air flow	1,793 m³/h
Working static pressure	313 Pa
Air density	1.204 kg/m³
Power	313.4 W
Fan control - RPM	1,509 rpm
Current	2.64 A
SFP	0.629 kW/m³/s
Control voltage	10.0 V
Supply voltage	230 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	43	66	62	64	64	61	57	58	71
Outlet	dB(A)	44	67	64	65	66	62	59	60	73
Surrounding	dB(A)	28	53	44	38	39	39	32	27	54
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	47
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	33

AMCA Certified Rating statements

- Catalogue Version:

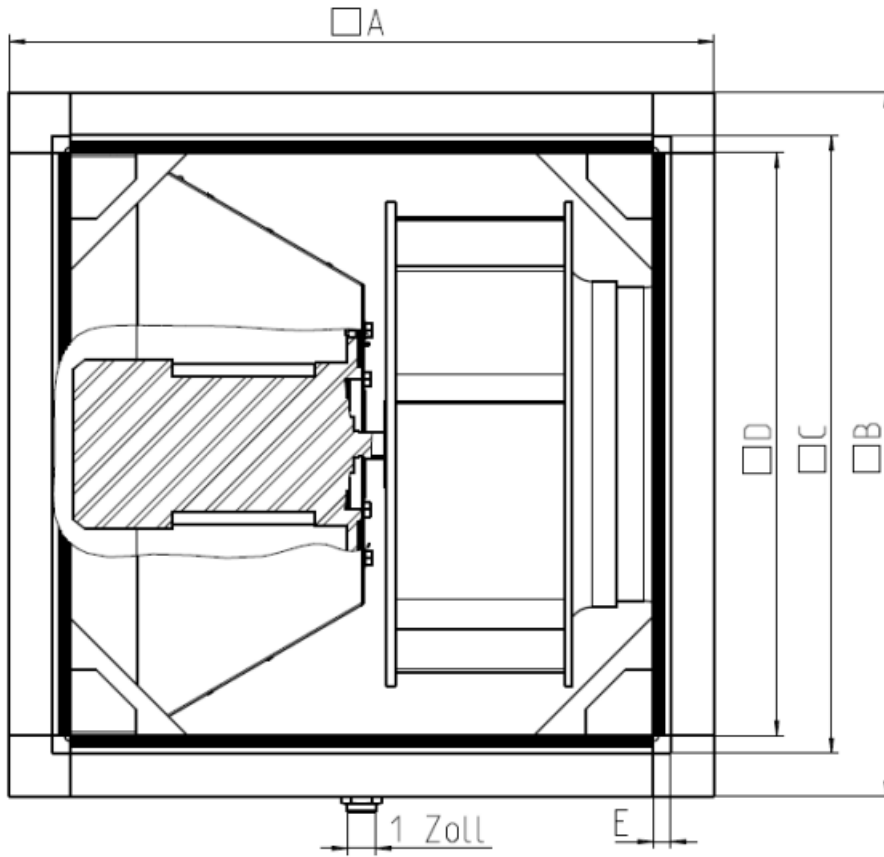
Acoustic

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.

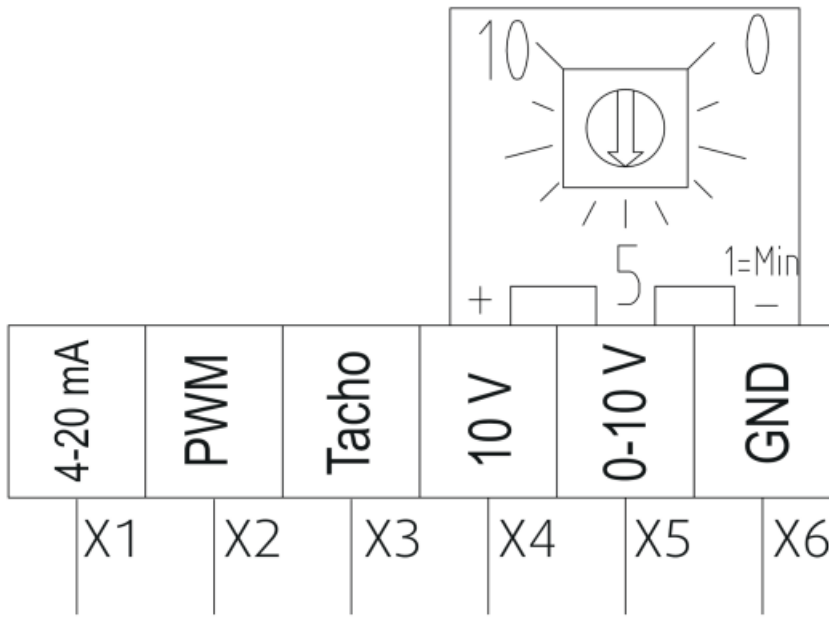
Dimension

MUB/T 025	□A	□B	□C	□D	E
355	520	520	420	378	21

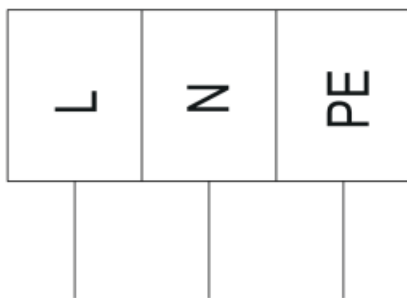


Wiring

A



B



A Terminal box (control)

4–20 mA	X1	red	DC current [4 — 20 mA]
PWM	X2	brown	<p>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.</p> <p>Start fire mode: apply +10V to PM for longer than 5 seconds, e.g. by bridging against +10V (X4). Attention! in fire mode, all motor protection functions are disabled!</p>
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 025/416-416 flex. conn. (4196)
- MTV-1/010 Controller 0..10V+ (30650)
- SD-MUB Vibration pad set (37324)
- UGS 025/355 adapter flex 120°C (38365)
- WSD 025 (560x560x70) complete (31480)
- FGV 025/416-416 flex. 120°C (38360)
- RT 0-30 Room Thermostat (5151)
- CCM outlet MUB025 d315 (312535)
- CCMI outlet 025 d355 KIT 30mm (239092)
- GRU 025-520/100 (276660)
- KKF 30 025-filter-section (93310)
- KKS 025 silencer-section (276850)
- Room hygrostat HR-S (286251)
- 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)
- Step switch S-5EC-2, 0-10V (449084)
- UGS 025/355 adapter flex. (4356)
- WSG 025 MUB/T complete (36070)
- Presence detector/IR24-P (6995)
- CCM inlet MUB025 d315 (312562)
- CCMI outlet 025 d315 KIT 30mm (239091)
- Free cooling control FCC (238089)
- KKD 025-damper-section (333316)
- KKF-ALU 025-filter-section (376814)
- Presence detector DBWF-W (382780)
- SDM Service Door MUB 025 30mm (273933)

Documents

- Installation, Operation and Maintenance instruction_001
- COMMISSIONING REPORT_FANS_160628_EN_001.PDF