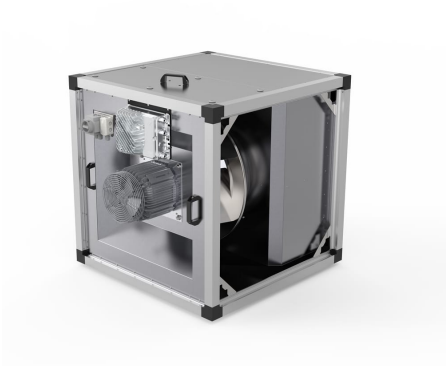


MUB/T Insulated duct fans

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**
- **C5 corrosion resistance**

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 **highly efficient** motors are designed to ensure high-level performance to **minimise power consumption** and **maximise 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 galvanised** 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 aluminium, 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, pre-wired 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)	400	V
Frequency	50;60	Hz
Phases	3~	
Input power	5155	W
Input power kW	5.155	kW
Input current	7.72	A
Impeller speed	1450	rpm
Air flow	max. 5.595	m^3/s
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	H	

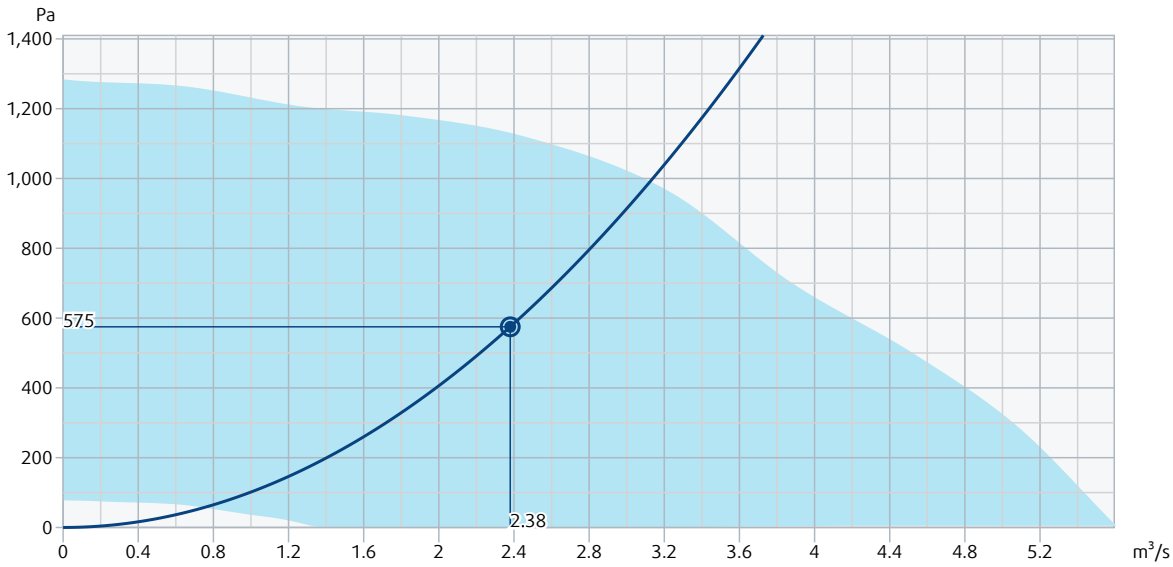
Data according to ErP		
ErP ready	Not ErP relevant	

Dimensions and weights		
Weight	163.2	kg

Others		
Duct connection type	Square	
Motor type	EC	

Performance

Performance curve



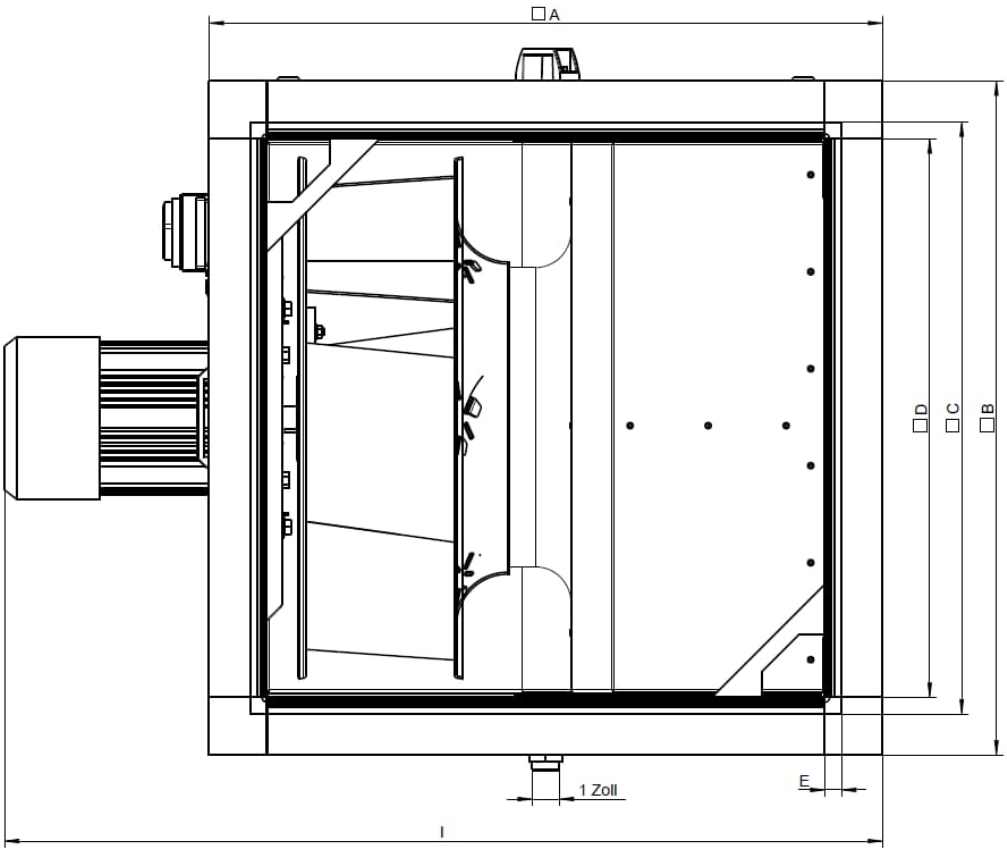
Hydraulic data	
Required air flow	2.38 m^3/s
Required static pressure	575 Pa
Working air flow	2.38 m^3/s
Working static pressure	575 Pa
Air density	1.204 kg/m^3
Power	2,310.3 W
Fan control - RPM	1,106 rpm
Current	3.62 A
SFP	0.971 $kW/m^3/s$
Control voltage	7.6 V
Supply voltage	400 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	58	73	77	77	76	74	70	66	83
Outlet	dB(A)	60	75	78	79	78	75	71	67	85
Surrounding	dB(A)	60	75	78	79	78	75	71	67	85
Sound pressure level at 3m (20m^2 Sabine)	dB(A)	-	-	-	-	-	-	-	-	78
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	64

Acoustic

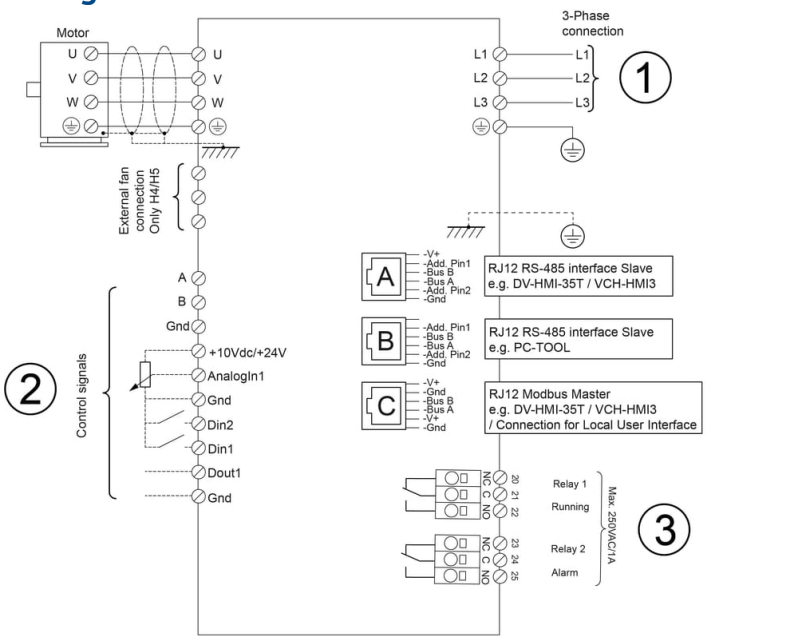
The Level of Casing-Breakout-Noise depends on the quality of shielding the acoustic inlet and outlet noises.
The shown Level of Casing-Breakout-Noise will be reached only in case of 100 % shielding the acoustic inlet and outlet noise and a correspondingly low environment noise.

Dimension



MUB/T-S 100	□A	□B	□C	□D	E	I
630EC	1020	1020	920	878	21	1143

Wiring



1	
L1, L2, L3	Supply voltage, see rating plate
PE	Protective conductor
2	
RSA	RS485- Interface for MODBUS, RSA
RSB	RS485- Interface for MODBUS, RSB
GND	Ground (-)
+10Vdc	Power supply +10Vdc - Imax 20mA
AnalogIn1	0-10V Signal input
GND	Ground (-)
Din2	Digital input 2(fectury setting - Alarm Reset)
Din1	Digital input 1(fectury setting - Start/Stop)
Dout1	Digital output(fectury setting - Tacho)
GND	Ground (-)
3	
Relay 1	(terminals 20,21,22) 20,21 closed Din Stop,21,22 close Din Start
Relay 2	(terminals 23,24,25) 24,25 closed „one/no alarm,23,24 close „critical alarm“ engine stopped

AHU Acceessories

- ALS-KBR drain plug (2727)
- EC-Basic-CO2 and temperature (24808)
- EC-Basic-T temperature (24805)
- FGV 100/916-916 flex. 120°C (38363)
- GRU 100-1020/100 (276663)
- KKF 30 100-filter-section (93313)
- KKF-CAR 100-filter-section (277348)
- KKS 100 silencer-section (276853)
- MTV-1/010 Controller 0..10V+ (30650)
- Presence detector/IR24-P (6995)
- SD-MUB Vibration pad set (37324)
- TUNE-AHU-DE009-100-918x918-M0 (79883)
- WSD MUB/T-S large (37496)
- CXE/AVC Modbus (37256)
- EC-Basic-H humidity (24807)
- EC-Basic-U universal 0-10V (24806)
- FGV 100/916-916 flex. conn. (4199)
- HR1 Room Humidistat (215150)
- KKF-ALU 100-filter-section (376817)
- KKF-KITCHEN 100-filter-section (277367)
- MTP 10, 10K, Speed control (32731)
- Potentiometer MTP 20, 0-10V (310220)
- RT 0-30 Room Thermostat (5151)
- Step switch S-5EC-2, 0-10V (449084)
- WSD 100 (1060x1060x70) compl. (31483)

Documents

- Commissioning Report
- Installation, Operation and Maintenance instruction_003
- OJ MODBUS GENII EN