

MUB-EX Insulated duct fans

Hard-wearing explosion-proof fans for critical applications

- Combine maximum safety with maximum flexibility
- Certified according to ATEX directive 2014/34/EU
- Discharge direction adjustable on site
- Low sound level

[Find more details in our online catalogue](#)



Safety first

MUB EX fans are designed for challenging environments where explosive atmospheres can occur. Which is why they are tested according to ATEX directive 2014/34/EU – to ensure they'll perform as intended after installation.

Sturdy and strong

MUB EX fans come with an aluminium frame and impellers, double skin panels manufactured from galvanised steel, shock-resistant corners, and panel rivets. Making them highly resistant to environmental stressors in their specialised applications.

Flexibility

Like all MUB fans, MUB EX fans come with removable panels so the outlet side can be chosen on-site prior to installation. Giving you further flexibility if your plans or requirements change in between ordering and final installation.

Performance

MUB-EX can be used for temperature classes T1, T2 and T3. Exhaust of explosive gases in Zone 1 and Zone 2, and groups IIA and IIB plus hydrogen H² is possible.

Features

Construction

The **casings** consist 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 inlet nozzle is made of copper, which prevents sparking even in exceptional cases.

The MUB-EX fans are designed for straight airflow as standard. Due to its flexible components, the air direction can be adjusted on site.

Impeller

The MUB-EX fans use **radial** impeller with **backward curved blades**. These are made out of aluminium, dynamically **balanced** and paired with corresponding **external rotor** motors.

Motor

Voltage controllable, explosion proof, 3-phase external rotor motor. Separate "Ex-e" connection box available as an accessory.

Motor protection

Integrated PTC thermistors, to be connected to a motor protection device.

Control

Speed controllable by a 5-step transformer

Installation

The MUB-EX fans can be installed in any position.

Technical parameters

Nominal data

Voltage (nominal)	400	V
Frequency	50	Hz
Phases	3~	
Input power	790	W
Input power kW	0.79	kW
Input current	1.31	A
Impeller speed	1,316	rpm
Air flow	max 5,563	m³/h
Temperature of transported air	max 40	°C
Max temperature of transported air, when speed controlled	40	°C

Protection/Classification

Enclosure class, motor	IP44
Insulation class	F
Explosion proof marking	II 2G Ex h IIB+H2 T3 Gb
Certificate	TPS 20 ATEX 085751 0008 X

Ambient and duct temperature

Ambient and duct temperature	-20 to 40	°C
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Dimensions and weights

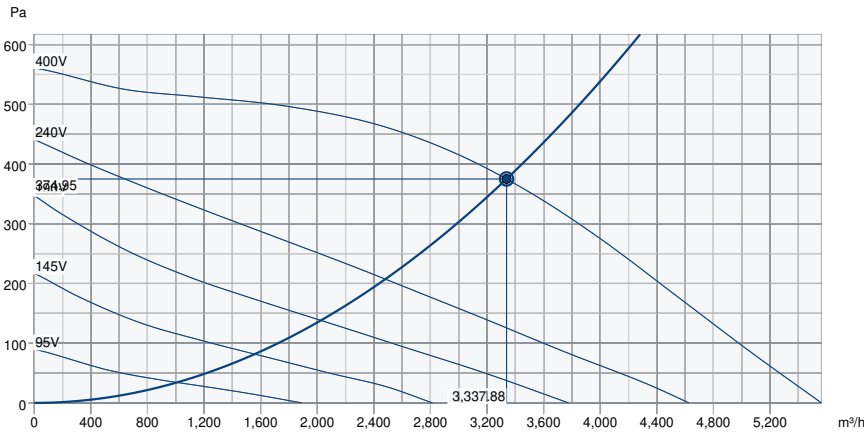
Weight	51	kg
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Others

Motor type	AC
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Performance

Performance curve

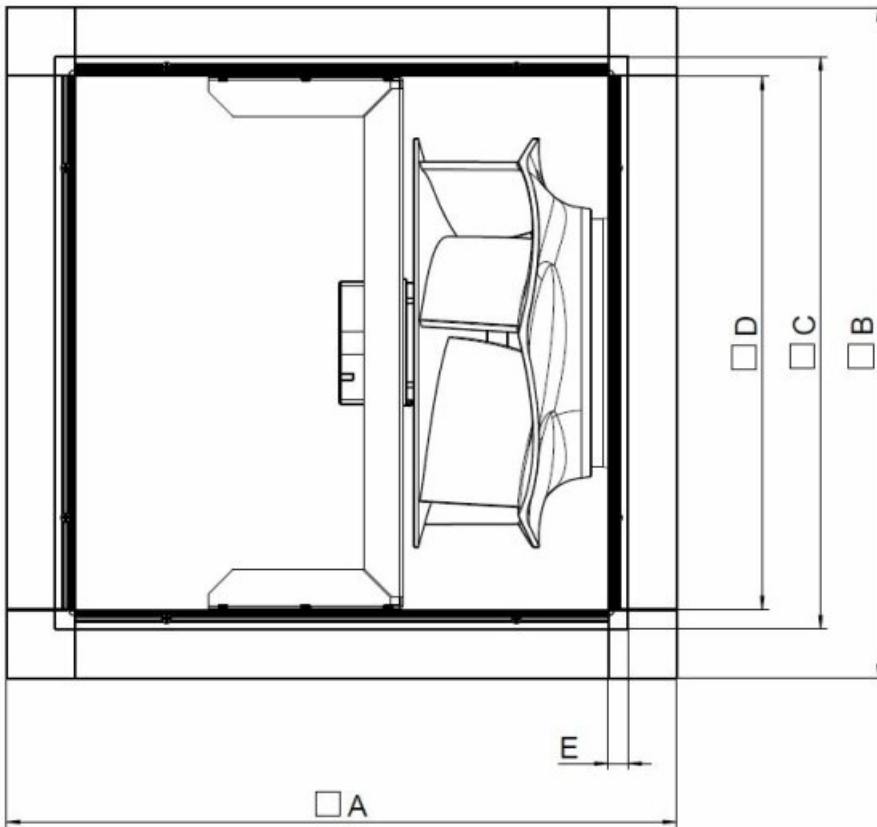


Hydraulic data

Required air flow	3,338 m³/h
Required static pressure	375 Pa
Working air flow	3,338 m³/h
Working static pressure	375 Pa
Air density	1.204 kg/m³
Power	789.0 W
Fan control - RPM	1,317 rpm
Current	1.32 A
SFP	0.851 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)	49	65	65	69	70	66	60	55	75
Outlet	dB(A)	50	67	66	71	71	67	61	57	76
Surrounding	dB(A)	43	48	57	48	45	45	48	42	59
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	52
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	38

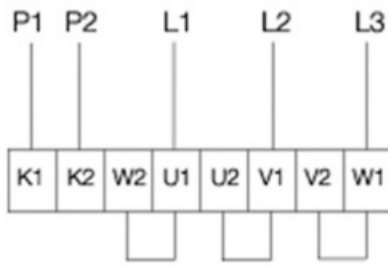
Dimension



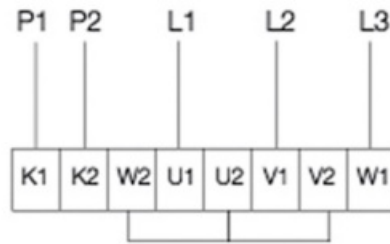
MUB-EX	A	B	C	D	E
042 355/400/450	690	690	590	548	21

Wiring

230V3~ (D)



400V3~ (Y)



U1 brown

V1 blue

W1 black

U2 red

V2 grey

W2 orange

K1 white (PTC)

K2 white (PTC)

Accessories

- R-DK4 KT Transformer (302568) (6051)
- RTRD 2 Speed Cont. Systemair (5941)
- SD-MUB Vibration pad set (37324)
- WSD 042 (730x730x70) complete (31481)
- REV-3POL/ATEX-11kW R/Y (36414)
- CCM inlet MUB042 d500 (311781)
- CCM outlet MUB042 d500 (311683)
- CCMI outlet 042 d400 KIT 30mm (239093)
- Ex e-Terminal box 1,5/6mm² 32A (2704)
- REV-5POL/07-7,5kW R/Y (33980)
- RTRDU 2 Speed contr. Systemair (5945)
- U-EK230E Motor protection (30199)
- WSG 042 MUB complete (31485)
- CCM inlet MUB042 d400 (311780)
- CCM outlet MUB042 d400 (311682)
- FGV-EX 042/586-586 flex. conn. (239061)
- CCMI outlet 042 d500 KIT 30mm (239094)

Documents

- imo_fans_atex_en_008
- TPS_20_ATEX_085751_0008_X_EN_2.PDF
- EU_DECLARATION_OF_CONFORMITY_ALL_009_314830.PDF