

## 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 H<sup>2</sup> is possible.

## 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 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	452	W
Input power kW	0.452	kW
Input current	0.8	A
Impeller speed	1,322	rpm
Air flow	max 4,037	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
------------------------------	-----------	----

### Dimensions and weights

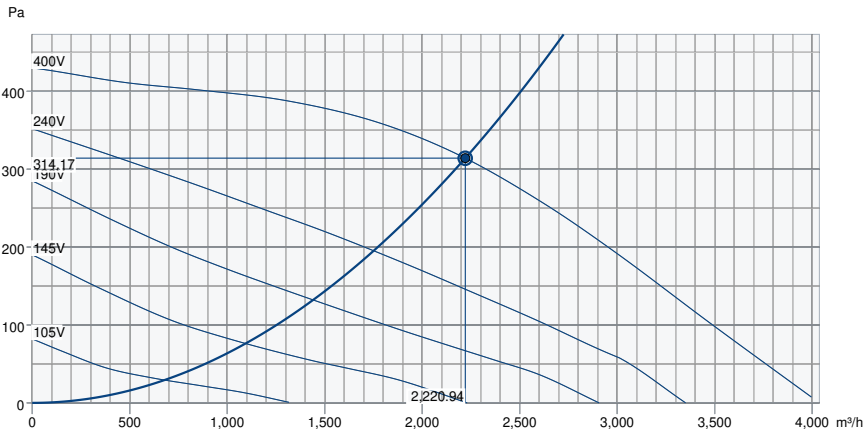
Weight	55.4	kg
--------	------	----

### Others

Motor type	AC
------------	----

Performance

Performance curve

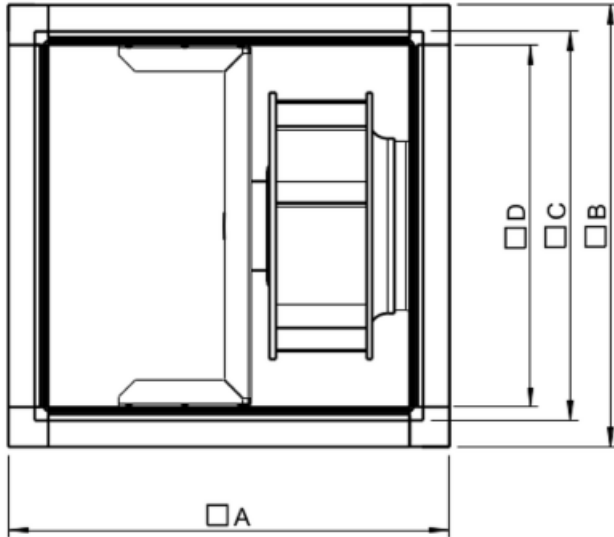


Hydraulic data

Required air flow	2,220 m³/h
Required static pressure	314 Pa
Working air flow	2,221 m³/h
Working static pressure	314 Pa
Air density	1.204 kg/m³
Power	452.5 W
Fan control - RPM	1,322 rpm
Current	0.79 A
SFP	0.733 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)	46	62	60	65	66	63	59	51	71
Outlet	dB(A)	47	64	62	66	67	65	61	53	72
Surrounding	dB(A)	38	42	50	45	43	45	50	43	55
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	48
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	34

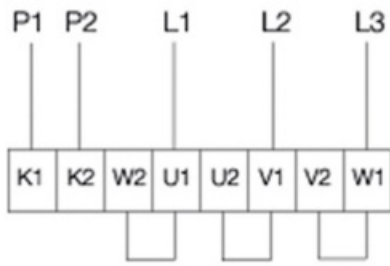
Dimension



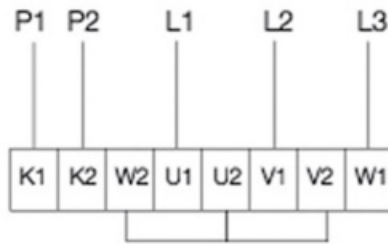
MUB-EX	A	B	C	D	E
042 355/400/450	690	690	590	548	21

## 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 1,5/6mm<sup>2</sup> 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