

MUB 042 500D4 Multibox

Centrifugal box fan, insulated, flexible outlet

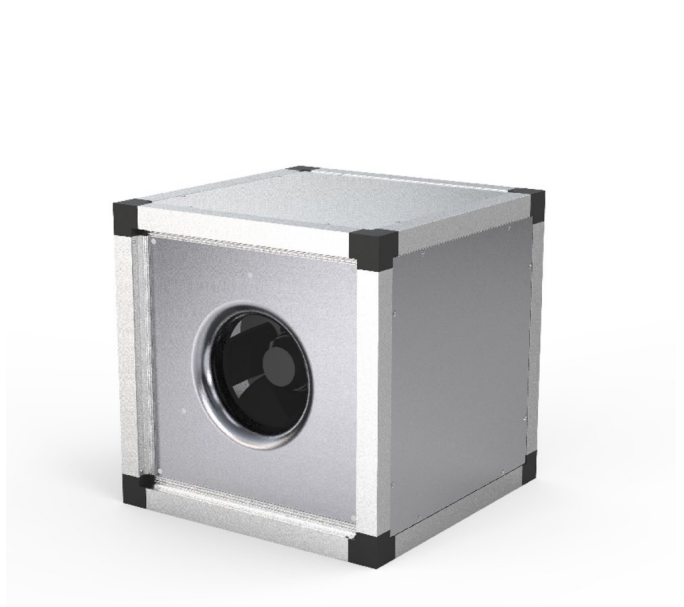
Item Number: 235396

Variant: 400V 3~ 50Hz - 90° air flow



- High efficient motor
- Speed-controllable via frequency converter
- Integral cold conductor (PTC)
- Low sound level
- Flexible airflow direction due to removable panels
- Installation in any mounting position
- Easy to maintain and reliable

The MUB fan are equipped with high efficient motors. The MUB fans have an impeller with backward curved blades, manufactured from aluminum. Speed control is only possible by using a frequency converter. Motor protection is done by cold conductors (PTC), which have to be connected to an external motor protection device. The casing consists of an aluminum frame with fiberglass reinforced plastic corners of PA6; highly shock-resistant. The double skin panels are manufactured from galvanized steel with 30 mm mineral wool insulation. To avoid condensation the profile is provided with a separate chamber to fix screws. The Multibox fans are delivered for straight through airflow but can easily be rebuilt due to removable panels. This allows flexible ventilation solutions. The MUB can also be used as extract- or supply air unit in air handling units. Installation in any mounting position is possible.



MUB with additional modules (filters, heaters etc.) are available as air handling units "K025, K042 or K062" on request!

Technical parameters

Nominal data		
Voltage (nominal)	400	V
Frequency	50	Hz
Phase(s)	3~	
Input power	1,454	W
Input current	3.01	A
Impeller speed	1,454	r.p.m.
Air flow	max 2.214	m³/s
Temperature of transported air	max 40	°C
Max temperature of transported air, when speed controlled	40	°C

Protection/Classification

Enclosure class, motor	IP55
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Insulation class	F
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Data according to ErP

ErP ready	ErP 2016; ErP 2018
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Dimensions and weights

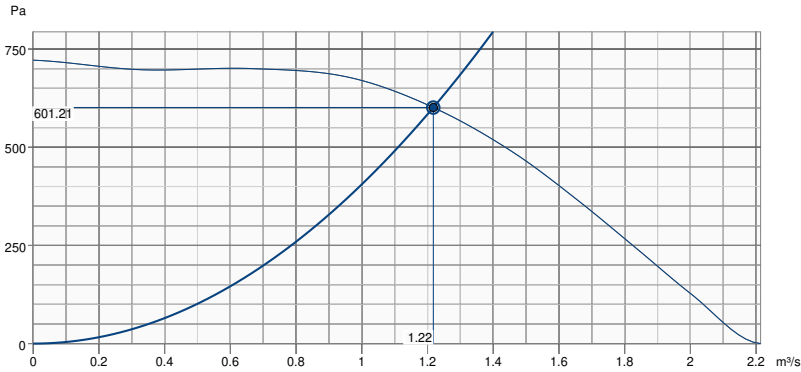
Weight	64.5 kg
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Others

Motor type	AC
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Performance

Performance curve



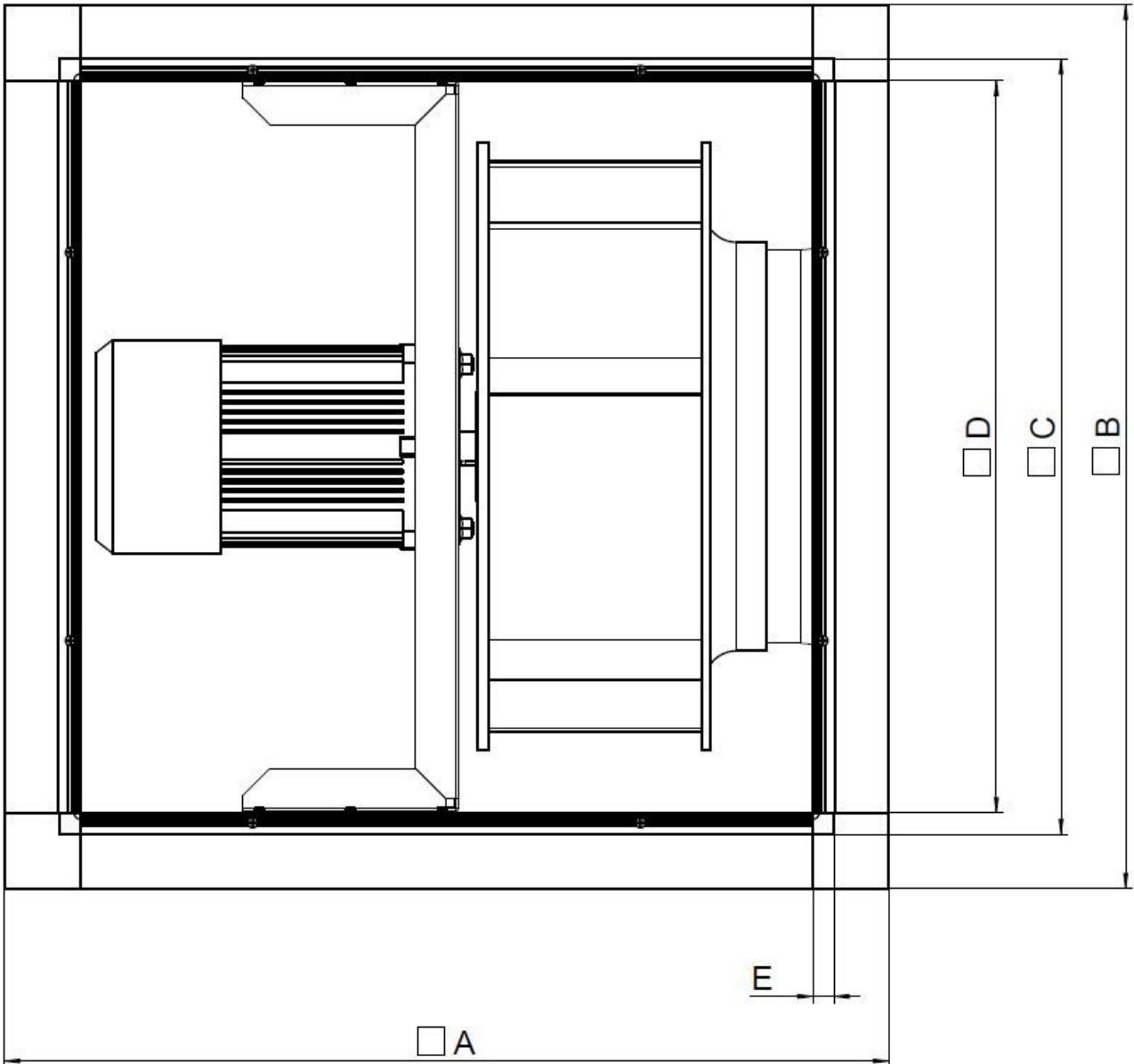
Hydraulic data

Required air flow	1.22 m³/s
Required static pressure	601 Pa
Working air flow	1.22 m³/s
Working static pressure	601 Pa
Air density	1.204 kg/m³
Power	1444.1 W
Fan control - RPM	1460 rpm
Current	3.00 A
SFP	1.186 kW/m³/s
Control voltage	400.0 V
Supply voltage	400 V

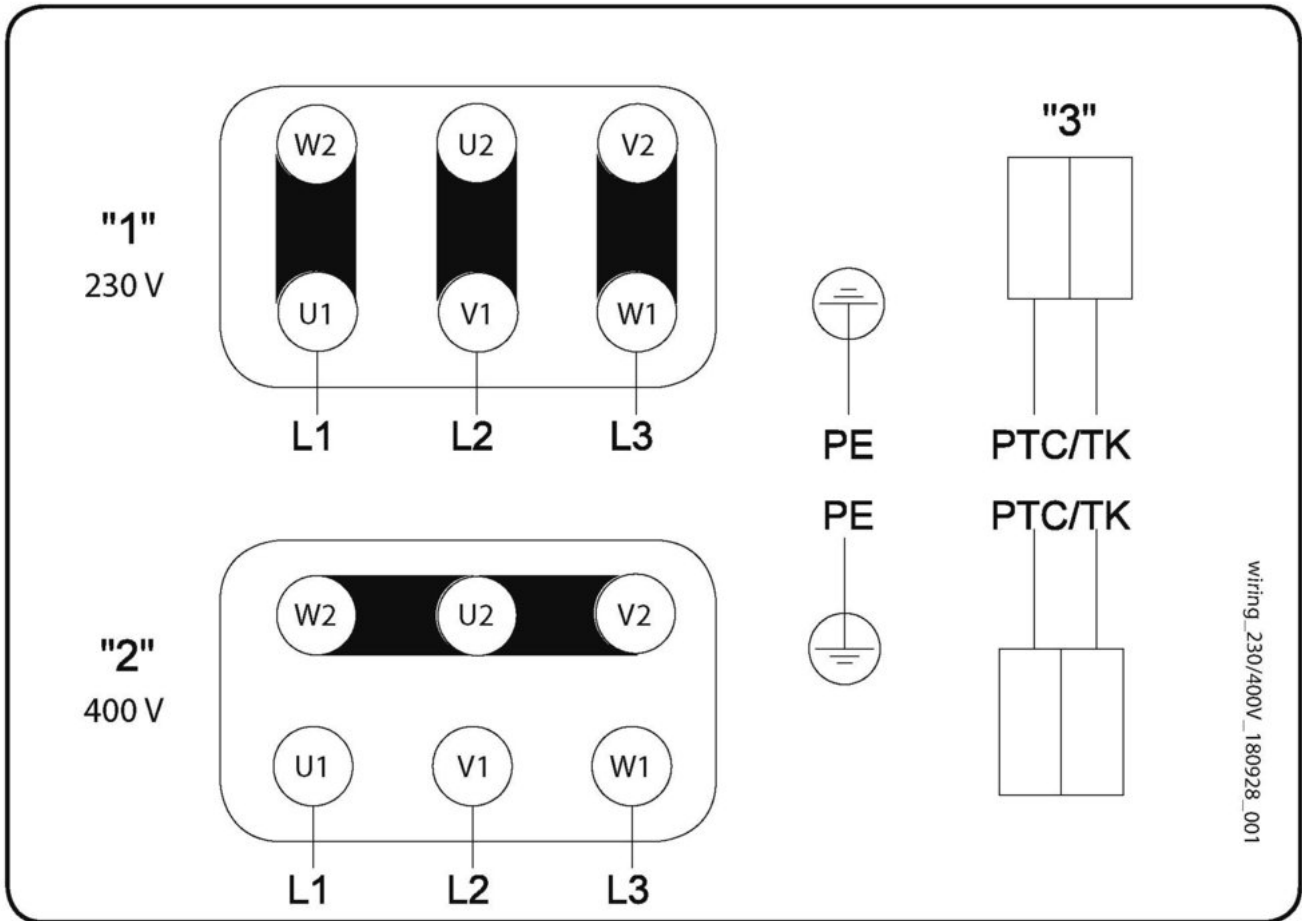
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	47	69	71	76	77	74	72	63	82
Outlet	dB(A)	48	71	73	78	78	76	74	65	83
Surrounding	dB(A)	26	51	47	46	48	48	41	28	55
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	48
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	34

Dimension

MUB 042	□A	□B	□C	□D	E
400/450/500	690	690	590	548	21



Wiring



wiring_230/400V_180928_001

- 1 3 x 230V Delta Connection
 - 2 3 x 400V Star connection
 - 3 PTC / TK
- Changing of direction of rotation by interchanging of two phases

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.

Ecodesign

Product	
Trade name	Systemair
Product name	MUB 042 500D4 IE3
Ecodesign	
ErP compliance	2018
Unit category	NRVU
Drive	External MSD or VSD
Unit type	UVU
Heat recovery type	None
Temperature ratio (UVU)	Not applicable
qv nom	1.22 m ³ /s
P nom	1.444 kW
Ps nom	601 Pa
Fan efficiency	50.7 %
External Leakage	5 %
Sound power level LWA	83 dB(A)

Accessories

- FGV 042/586-586 flex. conn. (4605)
- FRQ5-4A+LED V2 (36229)
- FRQS-4A V2 (36231)
- REV-5POL/05-7,5kW R/Y (33979)
- TUNE-AHU-DE007-042-588x588-M0 (79881)
- UGS 042/500 adapter flex. (4357)
- REV-5POL/07-EMV-7,5kW R/Y (34549)
- CCM inlet MUB042 d500 (311781)
- CCM outlet MUB042 d500 (311683)
- CCMI outlet 042 d500 KIT 30mm (239094)
- KKC-DX-L 042 cooling section (277261)
- KKC-W-L 042 cooling section (277269)
- KKF 30 042-filter-section (93311)
- KKS 042 silencer-section (276851)
- FRQ-4A V2 (36227)
- FRQ5S-4A+LED V2 (36233)
- FXDM5AM Frequency inv. IP54 (31387)
- SD-MUB Vibration pad set (37324)
- U-EK230E Motor protection (30199)
- WSD 042 (730x730x70) complete (31481)
- CCM inlet MUB042 d400 (311780)
- CCM outlet MUB042 d400 (311682)
- CCMI outlet 042 d400 KIT 30mm (239093)
- GRU 042 base frame h= 100mm (276661)
- KKC-DX-R 042 cooling section (277265)
- KKC-W-R 042 cooling section (277273)
- KKH-HW 042 heater-section (93339)

Documents

- imo_mub_all_010_en_248056
- UKCA DECLARATION OF CONFORMITY_MUB_EN_[001].PDF
- COMMISSIONING REPORT_FANS_160628_EN_001.PDF