

# MUB 042 450DV Multibox

Centrifugal box fan, insulated, flexible outlet

Item Number: 276520

Variant: 400V 3~ 50Hz - 90° air flow



- Speed-controllable
- Modular system
- Integral thermal contacts
- Low sound level
- Flexible airflow direction due to removable panels
- Installation in any mounting position
- Maintenance-free and reliable

The MUB fans size 450 have 3D profiled impellers with backward curved blades, manufactured from polyamide. The MUB 450 is equipped with external rotor motors, fully speed controllable. For speed controlling with a frequency converter a type with all pole sine filter is needed!. The three phase motors are D/Y connected for two speed operation. Motor protection is done by thermal contacts, which have to be connected to an external motor protection device. The casing consists of a corrosion-resistant aluminium frame with fibreglass reinforced plastic corners of PA6; highly shock-resistant.

The double skin panels are manufactured from galvanised 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~	
Motor circuit connection	D; Y	
Input power	761	W
Input current	1.47	A
Impeller speed	1,372	r.p.m.
Air flow	max 2.6607	m³/s
Temperature of transported air	max 60	°C
Max temperature of transported air, when speed controlled	60	°C

**Protection/Classification**

Enclosure class, motor	IP54
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Insulation class	F
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**Data according to ErP**

ErP ready	ErP 2018
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**Dimensions and weights**

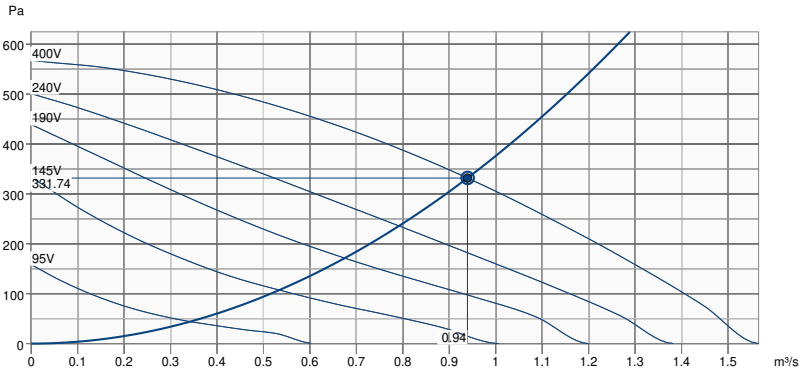
Weight	58.5 kg
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**Others**

Motor type	AC
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# Performance

## Performance curve



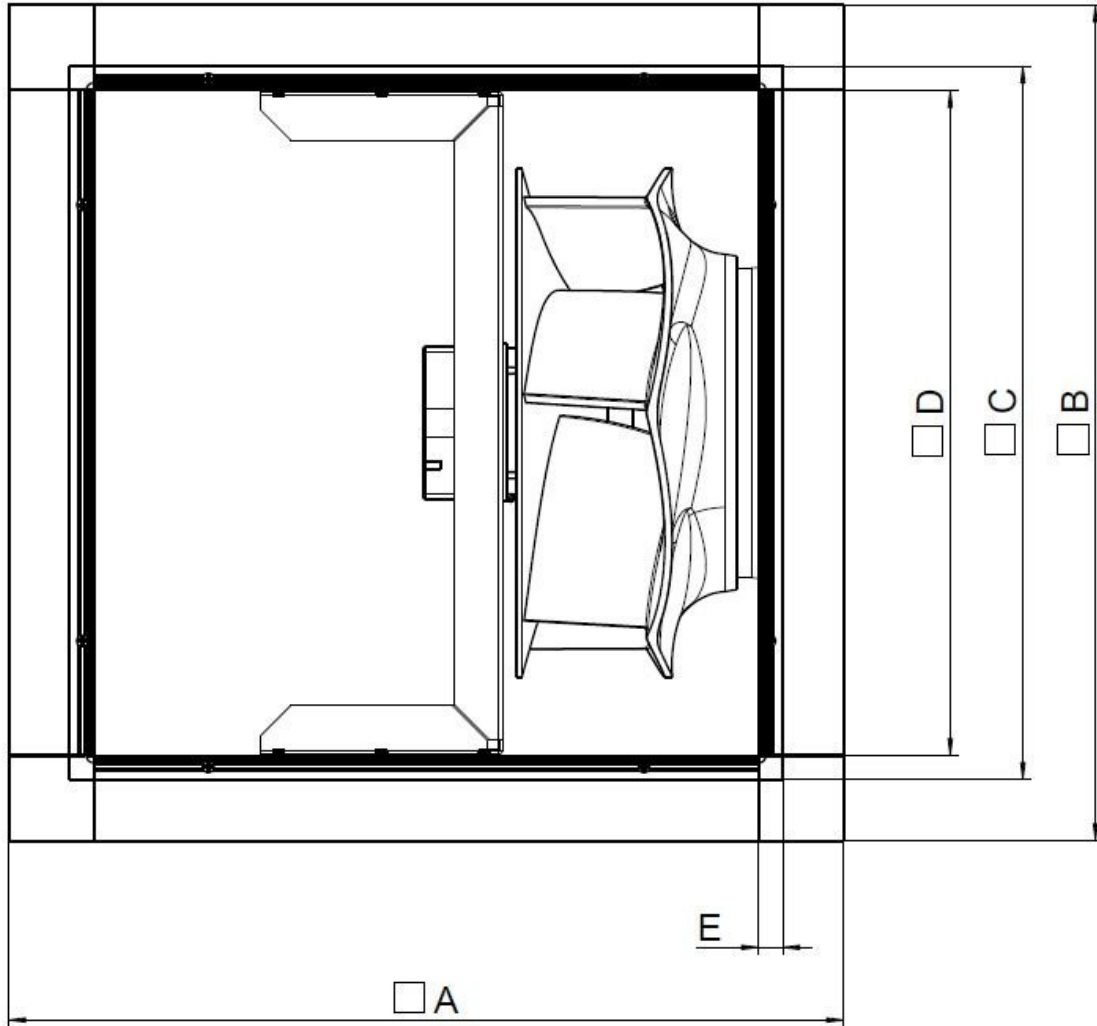
### Hydraulic data

Required air flow	0.94 m³/s
Required static pressure	332 Pa
Working air flow	0.94 m³/s
Working static pressure	332 Pa
Air density	1.204 kg/m³
Power	754.5 W
Fan control - RPM	1374 rpm
Current	1.47 A
SFP	0.803 kW/m³/s
Control voltage	400.0 V
Supply voltage	400 V

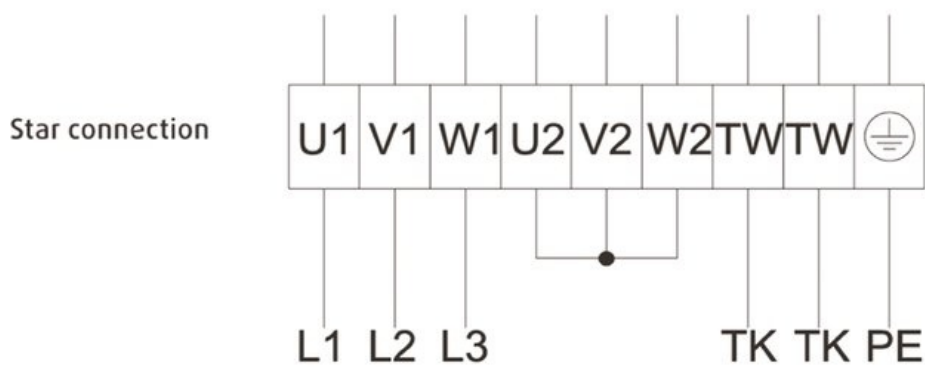
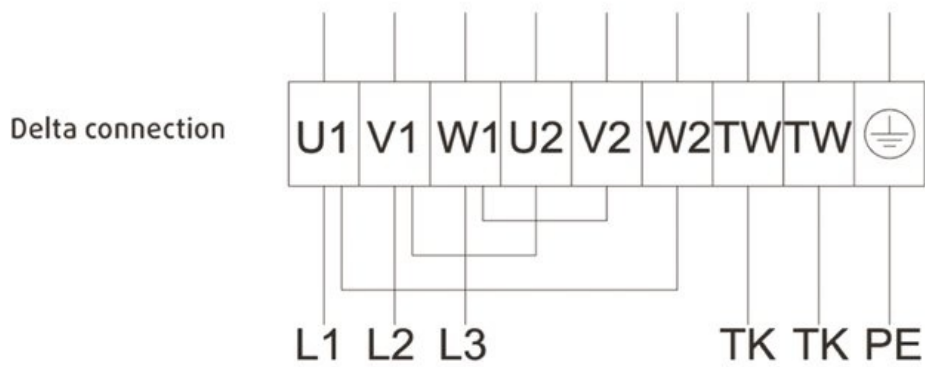
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	49	61	64	69	68	66	63	56	74
Outlet	dB(A)	51	63	66	70	70	67	64	57	75
Surrounding	dB(A)	33	46	47	42	43	43	38	25	52
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	45
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	31

## Dimension

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



## Wiring



## Ecodesign

Product	
Trade name	Systemair
Product name	MUB 042 450DV
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	0.939 m³/s
P nom	0.754 kW
Ps nom	332 Pa
Fan efficiency	41.4 %
External Leakage	5 %
Sound power level LWA	75 dB(A)

## Accessories

- FGV 042/586-586 flex. conn. (4605)
- FRQS-4A V2 (36231)
- REV-9POL/12-7,5kW R/Y (33981)
- RTRDU 2 Speed contr. Systemair (5945)
- SD-MUB Vibration pad set (37324)
- 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)
- KKS 042 silencer-section (276851)
- FRQ5S-4A+LED V2 (36233)
- REV-5POL/07-7,5kW R/Y (33980)
- RTRD 2 Speed Cont. Systemair (5941)
- S-DT2SKT Two speed switch Y/D (2697)
- UGS 042/500 adapter flex. (4357)
- WSG 042 MUB complete (31485)
- 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)
- 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