

MUB 042 400EV sileo Multibox

Centrifugal box fan, insulated, flexible outlet

Item Number: 235403

Variant: 230V 1~ 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 400 have 3D profiled impellers with backward curved blades, manufactured from polyamide. The MUB 400 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 shockresistant.

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) | 230 | V |
| Frequency | 50 | Hz |
| Phase(s) | 1~ | |
| Input power | 470 | W |
| Input current | 2.37 | A |
| Impeller speed | 1,345 | r.p.m. |
| Air flow | max 1.162 | m³/s |
| Capacitance of capacitor | 9 | µF |
| Temperature of transported air | max 60 | °C |
| Max temperature of transported air, when speed controlled | 60 | °C |

Protection/Classification

| | |
|------------------------|------|
| Enclosure class, motor | IP54 |
|------------------------|------|

| | |
|------------------|---|
| Insulation class | F |
|------------------|---|

Data according to ErP

| | |
|-----------|--------------------|
| ErP ready | ErP 2016; ErP 2018 |
|-----------|--------------------|

Dimensions and weights

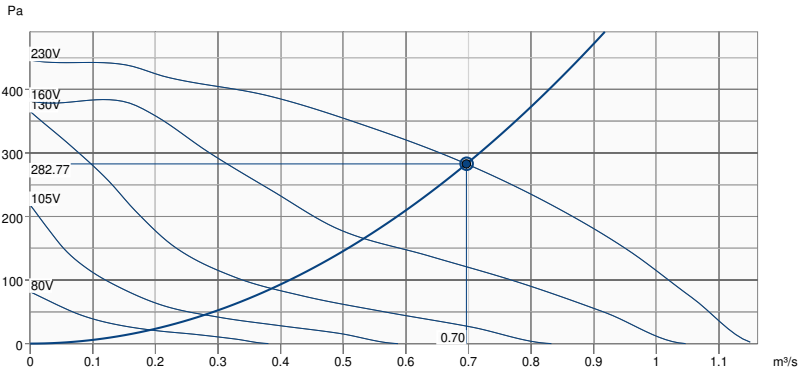
| | |
|--------|-------|
| Weight | 56 kg |
|--------|-------|

Others

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

Performance

Performance curve



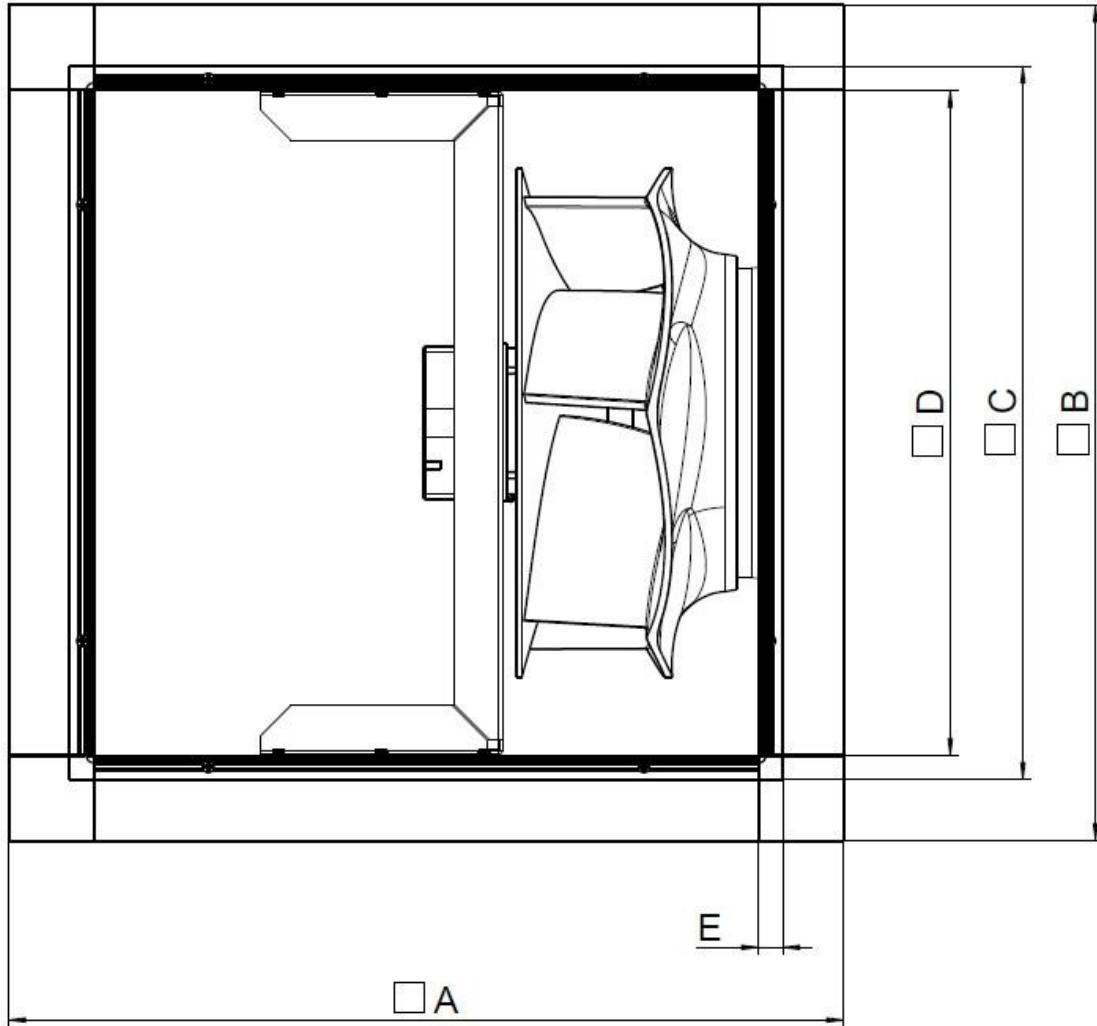
Hydraulic data

| | |
|--------------------------|---------------|
| Required air flow | 0.70 m³/s |
| Required static pressure | 283 Pa |
| Working air flow | 0.70 m³/s |
| Working static pressure | 283 Pa |
| Air density | 1.204 kg/m³ |
| Power | 470.3 W |
| Fan control - RPM | 1345 rpm |
| Current | 2.37 A |
| SFP | 0.675 kW/m³/s |
| Control voltage | 230.0 V |
| Supply voltage | 230 V |

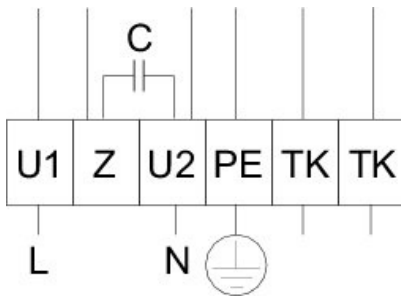
| Sound power level | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | Total |
|---|-------|----|-----|-----|-----|----|----|----|----|-------|
| Inlet | dB(A) | 40 | 61 | 60 | 66 | 69 | 66 | 62 | 56 | 73 |
| Outlet | dB(A) | 41 | 63 | 62 | 67 | 70 | 67 | 63 | 58 | 74 |
| Surrounding | dB(A) | 19 | 43 | 36 | 35 | 40 | 40 | 30 | 21 | 47 |
| Sound pressure level at 3m (20m² Sabine) | dB(A) | - | - | - | - | - | - | - | - | 40 |
| Sound pressure level at 3m free field | dB(A) | - | - | - | - | - | - | - | - | 26 |

Dimension

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



Wiring



Acoustic

| Mid-frequency band; <u>60Hz; 90°</u> | Hz | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | Tot |
|---|-------|----|-----|-----|-----|----|----|----|----|-----|
| LwA Inlet | dB(A) | 43 | 60 | 59 | 64 | 68 | 66 | 61 | 54 | 72 |
| LwA Outlet | dB(A) | 44 | 62 | 60 | 66 | 69 | 68 | 63 | 56 | 74 |
| LwA Surrounding | dB(A) | . | . | . | . | . | . | . | . | 46 |
| Measuring point: $qv = 2370 \text{ m}^3/\text{h}$, $Ps = 354 \text{ Pa}$ | | | | | | | | | | |

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 400E4 |
| 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 | 0.697 m ³ /s |
| P nom | 0.47 kW |
| Ps nom | 283 Pa |
| Fan efficiency | 42 % |
| External Leakage | 5 % |
| Sound power level LWA | 74 dB(A) |

Accessories

- FGV 042/586-586 flex. conn. (4605)
- REE 4 Speed control (5317)
- REV-5POL/05-7,5kW R/Y (33979)
- S-ET 10 Motor Protection (161199)
- TUNE-AHU-DE007-042-588x588-M0 (79881)
- 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)
- FRQ5S-E-6A (37421)
- REU 3 Speed control (5005)
- RTRE 3 Speed control (5009)
- SD-MUB Vibration pad set (37324)
- UGS 042/500 adapter flex. (4357)
- FRQS-E-6A (37419)
- 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)

Documents

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