

MUB/T 042 400EC

Centrifugal box fan, 120°C continuous, insulated

Item Number: [235389](#)

Variant: 230V 1~ 50/60Hz

- EC-motors, high level of efficiency
- 100% speed controllable
- Up to 120°C medium temperature, continuous operation
- Multi-functional use, e.g. for kitchen exhaust air
- Pre-assembled isolator is standard
- Low sound level
- Easy to maintain and reliable
- Motor outside the air stream
- Integrated motor protection
- Potentiometer included for ease of commissioning

EC technology is intelligent technology; using integral electronic control which eliminates the slip losses in the motor and ensures that the motor always runs at optimal load and guarantees that the proportion of energy utilized effectively is many times higher and the energy usage considerably lower compared with AC motors. EC fans are notable for their economical use of energy and excellent ease of control.

They can be varied in speed to match the airflow demand, and operate at high efficiency levels. For the same air volume, they consume distinctly less energy than AC fan drives. Another special feature of EC fans is their energy-saving potential not only at full load, but especially at part-load. When operating at part load, the energy used is much lower than with an asynchronous motor of equivalent output. Reduced energy usage guarantees a drop in operating costs. The power electronics are integrated in the motor housing.

All MUB/T-EC models have one potential-free terminal for error message. All motors are suitable to be used for 50/60Hz. The input voltage for single phase units can vary between 200 and 277V, for three phase units between 380 and 480V. Speed control by a 0-10V signal. The fans are delivered with a pre-wired potentiometer (0-10 V) that allows you to easily find the required working point. All MUB/T-EC fans have impellers with backward curved blades, manufactured from aluminium. The MUB/T-EC fans are suitable for medium temperatures up to 120°C continuously. The casing consists of an aluminium frame with fibreglass reinforced plastic corners and double skin, galvanised steel panels with a 30 mm mineral wool insulation. Panels are removable, allowing flexible ventilation solutions - the air direction (90°) can easily be changed. With quick lock access door. The MUB/T-EC bottom panel is shaped as a condensate tray and incorporates a pre-mounted 1" drain plug. An isolator switch is mounted on the casing. Several filter modules like f.e. activated carbon- or aluminum filters are available, calculated individually on the working point.



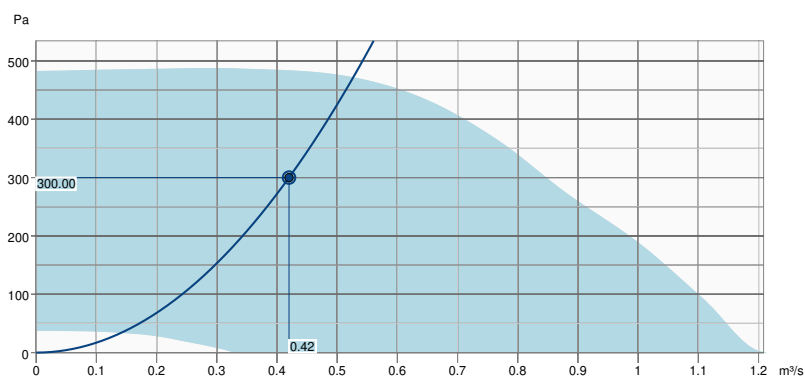
Technical parameters

Nominal data		
Voltage (nominal)	230	V
Frequency	50; 60	Hz
Phase(s)	1~	
Input power	550	W
Input current	2.45	A
Impeller speed	1,512	rpm
Air flow	max 1.208	m³/s
Temperature of transported air	max 120	°C
Max temperature of transported air, when speed controlled	120	°C

Protection/Classification	
Enclosure class, motor	IP55
Insulation class	B
Data according to ErP	
ErP ready	Not ErP relevant
Dimensions and weights	
Weight	55.5 kg
Others	
Motor type	EC

Performance

Performance curve



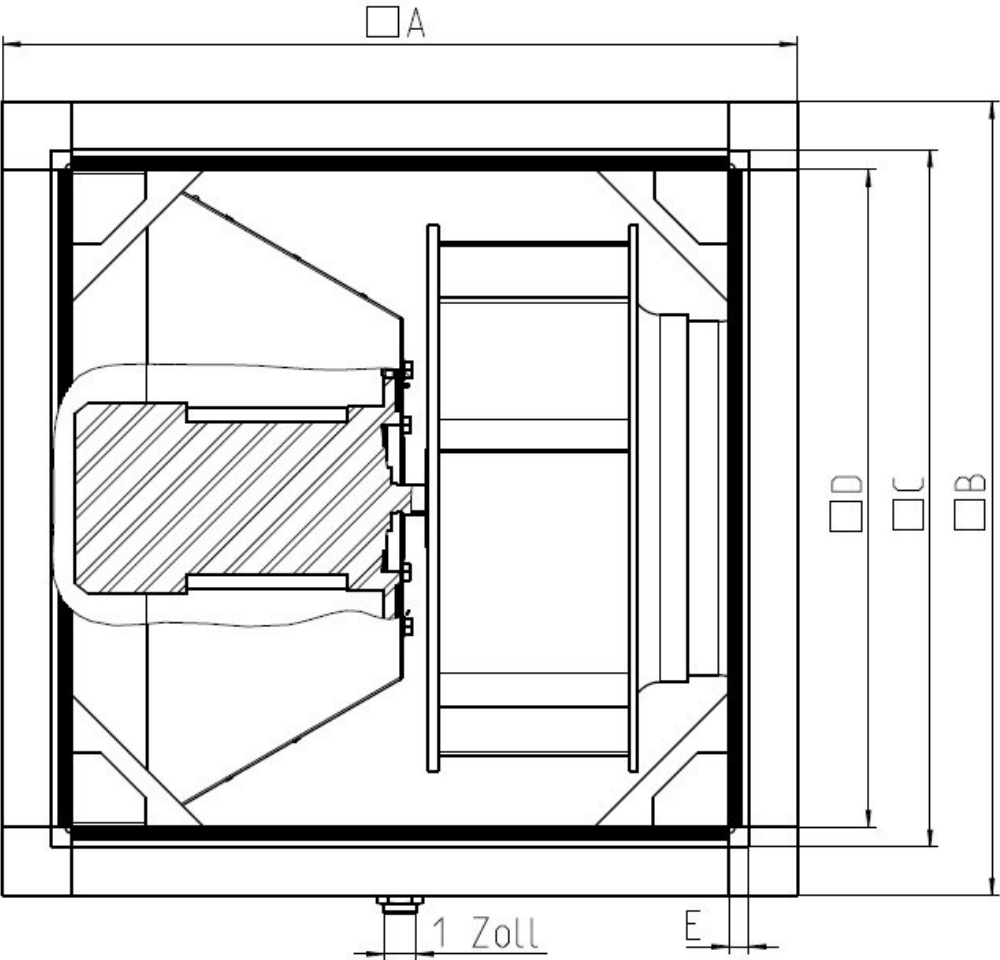
Hydraulic data

Required air flow	0.42 m³/s
Required static pressure	300 Pa
Working air flow	0.42 m³/s
Working static pressure	300 Pa
Air density	1.204 kg/m³
Power	269.5 W
Fan control - RPM	1197 rpm
Current	1.25 A
SFP	0.642 kW/m³/s
Control voltage	7.0 V
Supply voltage	230 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	36	54	56	61	63	61	57	52	68
Outlet	dB(A)	38	55	57	62	65	63	58	53	69
Surrounding	dB(A)	16	35	31	31	34	34	26	17	41
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	34
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	20

Dimension

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



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.

Accessories

- CXE/AVC Modbus (37256)
- EC-Basic-H humidity (24807)
- EC-Basic-U universal 0-10V (24806)
- EC-Vent Room Unit (3018)
- M-SG 042/588x588 (301345)
- MTV-1/010 Controller 0..10V+ (30650)
- SD-MUB Vibration pad set (37324)
- TUNE-AHU-DE007-042-588x588-M0 (79881)
- UGS 042/500 adapter flex. (4357)
- WSG 042 MUB/T complete (36071)
- FGV 042/586-586 flex. 120°C (38361)
- Presence detector/IR24-P (6995)
- CCM inlet MUB042 d400 (311780)
- CCM outlet MUB042 d400 (311682)
- CCMI outlet 042 d400 KIT 30mm (239093)
- GRU 042 base frame h= 100mm (276661)
- KKF-ALU 042-filter-section (376815)
- KKF-CAR 062-filter-section (277347)
- KKF-KITCHEN 062-filter-section (277364)
- EC-Basic-CO2 and temperature (24808)
- EC-Basic-T temperature (24805)
- EC-Vent control board (3115)
- FGV 042/586-586 flex. conn. (4605)
- MTP 10, 10K, Speed control (32731)
- Potentiometer MTP 20, 0-10V (310220)
- Step switch S-5EC, 0-10V (76738)
- UGS 042/400 adapter flex 120°C (38368)
- WSD 042 (730x730x70) complete (31481)
- CO2RT-R-D Transmitter (6993)
- HR1 Room Humidistat (215150)
- RT 0-30 Room Thermostat (5151)
- CCM inlet MUB042 d500 (311781)
- CCM outlet MUB042 d500 (311683)
- CCMI outlet 042 d500 KIT 30mm (239094)
- KKF 30 042-filter-section (93311)
- KKF-CAR 042-filter-section (277346)
- KKF-KITCHEN 042-filter-section (277363)
- KKS 042 silencer-section (276851)

Documents

- Installation, Operation and Maintenance instruction_001
- UKCA DECLARATION OF CONFORMITY_THERMOFANS_EN_002.PDF
- COMMISSIONING REPORT_FANS_160628_EN_001.PDF
- MUB-T 042 400 EC-POTI_37202_DE-EN.PDF