

MUB/T 062 560EC

Item no. 34539

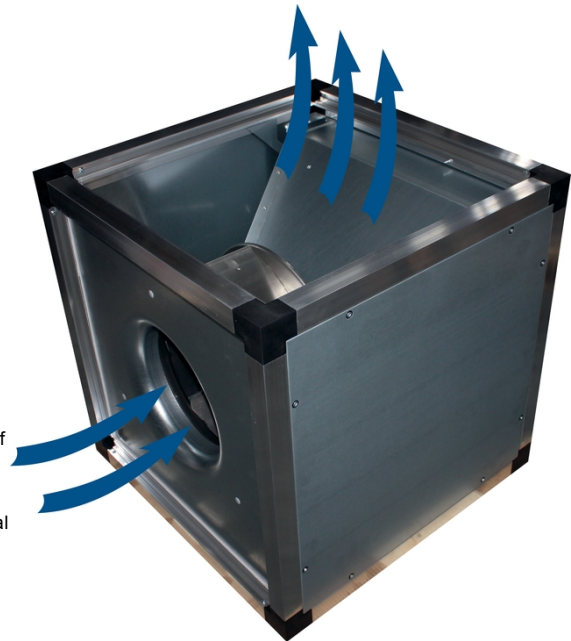
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Description

- 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
- Modular system
- Pre-assembled isolator is standard
- Low sound level
- Easy to maintain and reliable
- Motor outside the air stream
- Integrated motor protection

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. Speed control by a 0-10V signal. Every motor has an output voltage of 10V for an external potentiometer or sensor. 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 20 mm mineral wool insulation. Panels are removable, allowing flexible ventilation solutions - the air direction 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

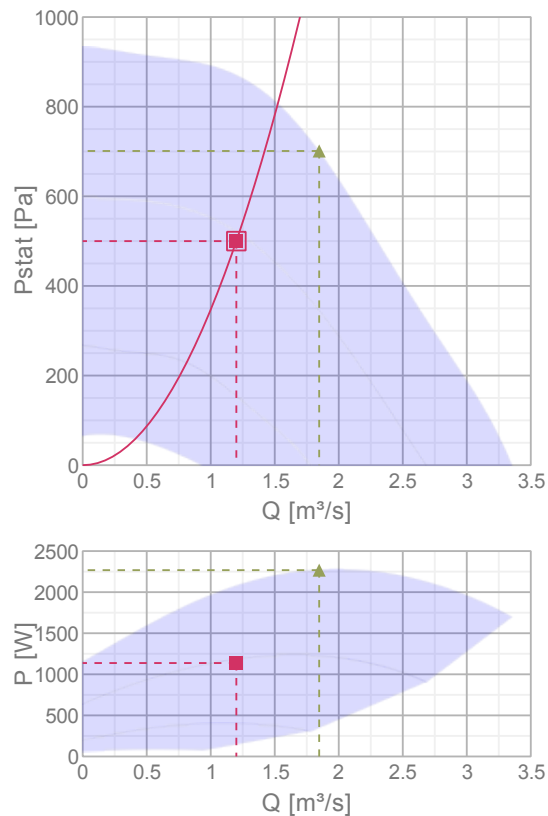
Nominal data		
Voltage	400	V
Frequency	50/60	Hz
Phase	3	~
Input power (P1)	2274	W
Current	3,3	A
Max. airflow	3,36	m³/s
Fan impeller speed	1500	r.p.m.
Weight	95	kg
Temperature data		
Max. temperature of transported air	120	°C
Sound data		
Sound pressure level at 3 m (20m² Sabin)	52	dB(A)

Protection / Classification

Insulation class	F
Enclosure class, motor	IP55

Performance

Diagrams



Selection

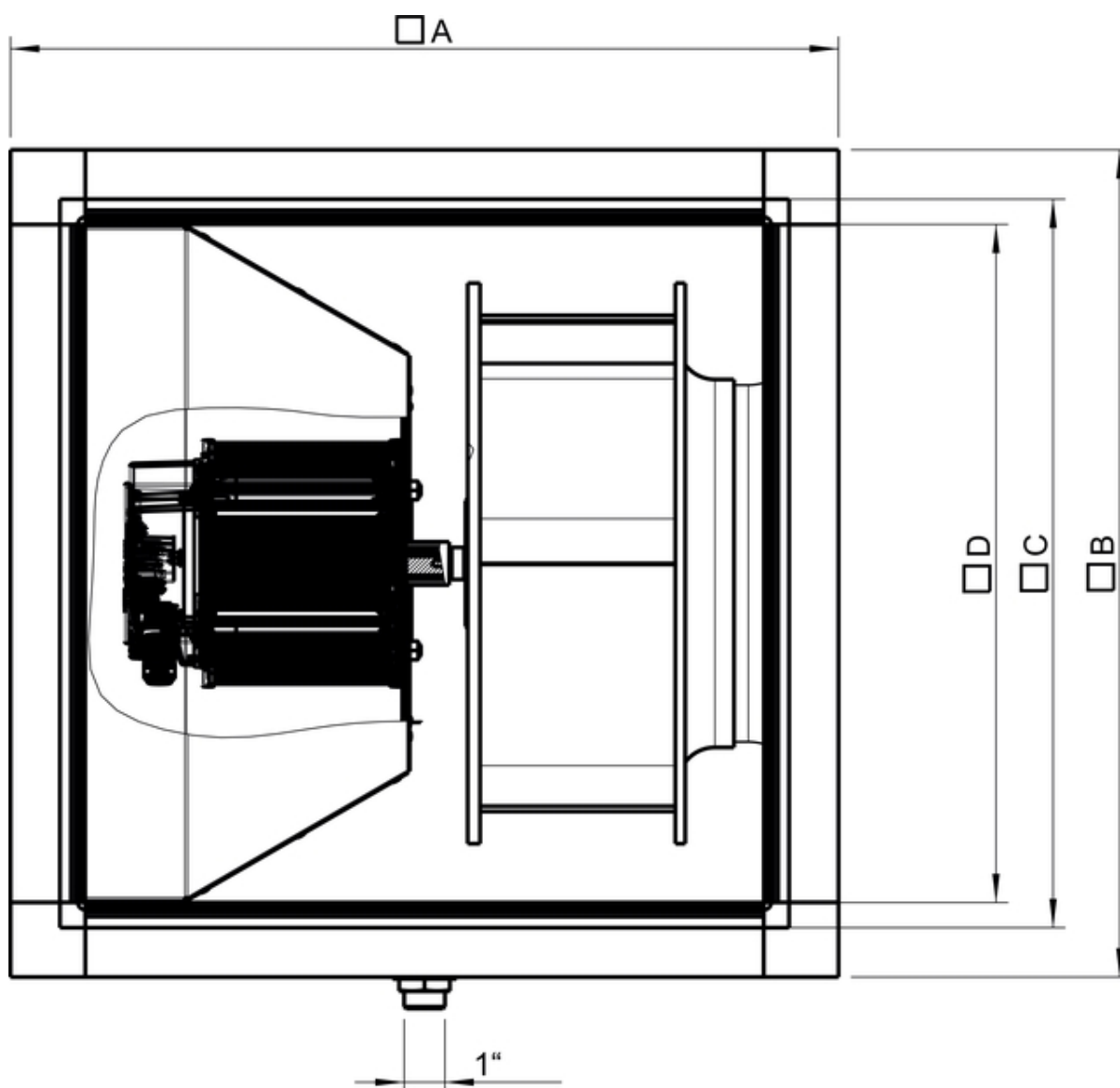
Hydraulic data

☐ Required air flow	1,2 m^3/s
☐ Required static pressure	500 Pa
☒ Working air flow	1,2 m^3/s
☒ Working static pressure	500 Pa
☒ Power	1137 W
Speed	1158 r.p.m.
Current	1,72 A
SFP	0,948 $kW/(m^3/s)$
Voltage	400 V

Max efficiency

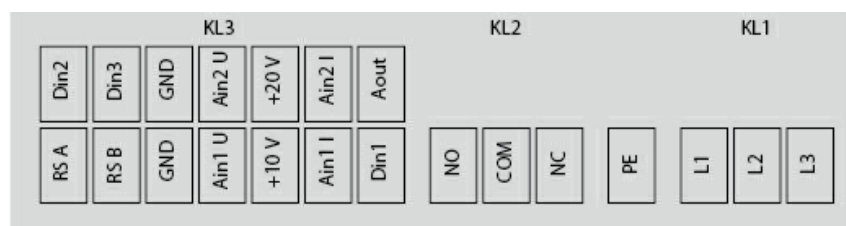
Hydraulic data	
▲ Working air flow	1,85 m³/s
▲ Working static pressure	701 Pa
▲ Power	2268 W
Speed	1450 r.p.m.
Current	3,29 A
SFP	1,23 kW/(m³/s)
Voltage	400 V

Dimensions



MUB/T EC	□A	□B	□C	□D
062 560	800	800	720	678

Wiring



Connector	Connection	Assignment / function
KL1	L3	Mains; L3
	L2	Mains; L2
	L1	Mains; L1
PE	PE	Protective earth
KL2	NC	Alarm relay, break for failure
	COM	Alarm relay, COMMON (2A, 250 VAC, AC1)
	NO	Alarm relay, make for failure

Connector	Connection	Assignment / function
KL3	Din1	Digital input 1 (enabling / disabling of electronics), Enabling: Pin open or applied voltage 5 to 50 VDC Disabling: Bridge to GND or applied voltage < 1 VDC
	Ain1 I	Analogue set value input, 4-20 mA (impedance 100Ω), only to be used as alternative to terminal Ain1 U
	+10 V	Supply for external potentiometer, 10 VDC (±3 %) max. 10 mA
	Ain1U	Analogue set value input, 0-10 V (impedance 100 kΩ), only to be used as alternative to terminal Ain1 I
	GND	GND
	RSB	RS485 interface for MODBUS RTU; RS B
	RSA	RS485 interface for MODBUS RTU; RS A
	Aout	Analogue output 0-10 V max. 5 mA, reading of current motor speed / current motor control factor
	Ain2 I	Analog. actual value input, 4-20mA (impedance 100Ω), only to be used as alternative to terminal Ain2 U
	+20 V	Supply for external sensor, 20 VDC (+25 % / -10%) max. 40 mA
	Ain2 U	Analog. actual value input, 0-10 V (impedance 100 kΩ), only to be used as alternative to terminal Ain2 I
	GND	GND
	Din3	Digital input 3 (switch Normal / Inverse), The preset effective direction of the integrated controller can be selected via BUS or via digital input Normal/Inverse. Normal: Pin open or applied voltage 5 to 50 VDC Inverse: Bridge to GND or applied voltage < 1 VDC
	Din2	Digital input 2 (switch Day / Night), The preset set of parameters can be selected via BUS or via digital input Day/Night. Day: Pin open or applied voltage 5 to 50 VDC Night: Bridge to GND or applied voltage < 1 VDC

Accessories

Electric accessories

- [HR1 Room Humidistat IP21 \(5150\)](#)
- [RT 0-30 Room Thermostat \(5151\)](#)
- [CO2RT-R-D Transmitter \(6993\)](#)
- [Presence detector/IR24-P \(6995\)](#)
- [MTV-1/010 Controller 0..10V+ \(30650\)](#)
- [MTP 10, 10K, Speed control \(32731\)](#)
- [EC-Vent Room Unit \(3018\)](#)
- [EC-Vent control board \(3115\)](#)
- [MTP 20, on/off, 3-step \(310220\)](#)
- [EC-Basic-H humidity \(24807\)](#)
- [EC-Basic-T temperature \(24805\)](#)
- [EC-Basic-U universal 0-10V \(24806\)](#)
- [EC-Basic-CO2 and temperature \(24808\)](#)
- [CXE/AVC Modbus \(37256\)](#)
- [S-5EC/FRQ \(76738\)](#)

Accessories

- [FGV 062/716-716 flex. conn. \(4198\)](#)
- [UGS 062/630 adapter flex. \(4358\)](#)
- [WSD 062 \(860x860x70\) complete \(31482\)](#)
- [SDM Service Door MUB 062 comp. \(32573\)](#)
- [CCM outlet MUB062 d630 \(311681\)](#)
- [CCM outlet MUB062 d560 \(311684\)](#)
- [CCM inlet MUB062 d560 \(311782\)](#)
- [CCM inlet MUB062 d630 \(311783\)](#)
- [M-SG 062/718x718 \(301346\)](#)
- [WSG 062 MUB/T complete \(36067\)](#)
- [SD-MUB Vibration pad set \(37324\)](#)
- [CCMI outlet 062 d560 insul KIT \(313847\)](#)
- [CCMI outlet 062 d630 insul KIT \(313848\)](#)
- [FGV 062/716-716 flex. 120°C \(38362\)](#)
- [UGS 062/500 adapter flex 120°C \(38370\)](#)
- [UGS 062/630 adapter flex 120°C \(38371\)](#)

Documentation

-  [manual_mub_all_en-de_web_\[001\].pdf \(4,49MB\)](#)
-  [ec-dec_thermofans_170614_DE,GB_003_ab 20. April.pdf \(549,66kB\)](#)
-  [Commissioning Report_fans_160628_en_001.pdf \(42,79kB\)](#)

Acoustics

Mid-frequency band, Hz										
	Hz	Tot	63	125	250	500	1k	2k	4k	8k
LwA Inlet	dB(A)	75	62	64	68	70	69	66	61	54
LwA Outlet	dB(A)	77	64	66	70	72	71	68	63	56
LwA Surrounding	dB(A)	60	47	49	53	55	54	51	46	39
Measuring point: qv = 1,8 m3/s, Ps = 701 Pa										