

KBT 225EC THERMO FAN

Item no. 77222

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Description

- EC-motors, high level of efficiency
- 100% speed controllable
- Integrated motor protection
- Low noise level
- Max temperature of transported air 120°C
- Weather protection for the motor is standard
- Drain plug for liquids that accumulate in the casing is standard



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 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. Every motor has an output voltage of 10V and 20V for an external potentiometer or sensor.

The KBT-EC fans have impellers manufactured from galvanized sheet steel with forward-curved blades. The casing is manufactured from double-skinned galvanized sheet steel and is insulated with 50 mm mineral wool.

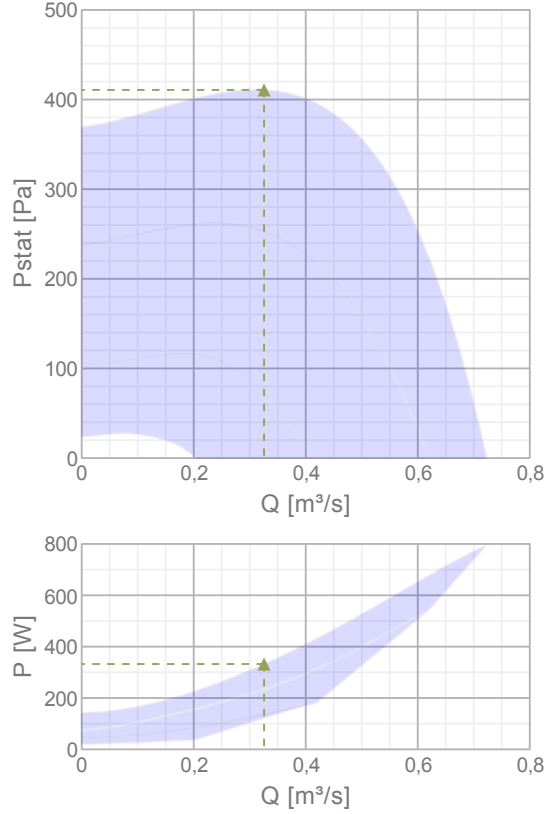
The KBT-EC fans have a swing-out door for easy inspection and service. The fan is isolated from the casing via connectors and anti-vibration dampers are incorporated into the base frame.

Technical parameters

| Nominal data | | |
|-------------------------------------|-------|-------------------|
| Voltage | 400 | V |
| Frequency | 50 | Hz |
| Phase | 3 | ~ |
| Input power (P1) | 794 | W |
| Current | 1,36 | A |
| Max. airflow | 0,723 | m ³ /s |
| R.p.m. | 1387 | r.p.m. |
| Weight | 38 | kg |
| Temperature data | | |
| Max. temperature of transported air | 120 | °C |
| Protection / Classification | | |
| Insulation class | B | |
| Enclosure class, motor | IP55 | |

Diagrams

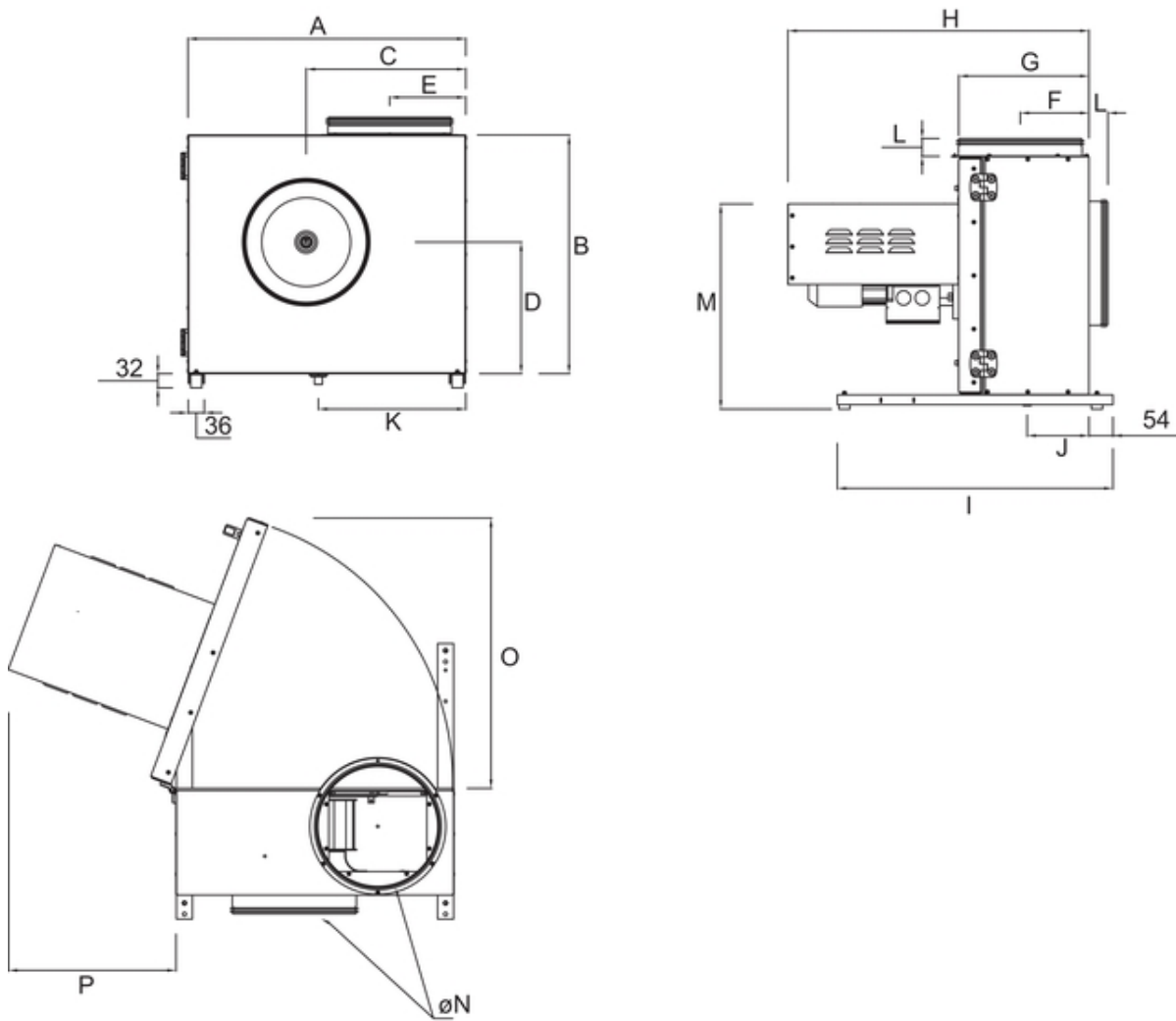
Diagrams



Max efficiency

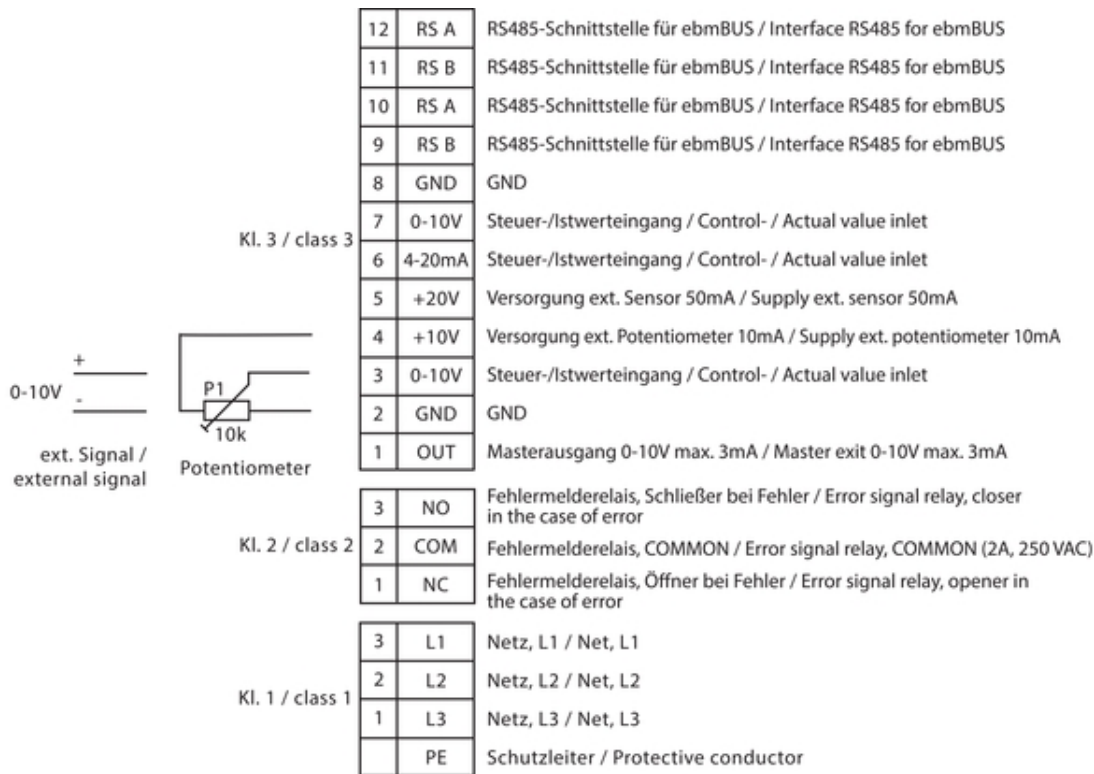
| Hydraulic data | |
|---------------------------|-------------------------|
| ▲ Working air flow | 0,326 m ³ /s |
| ▲ Working static pressure | 411 Pa |
| ▲ Power | 332 W |
| Speed | 1515 r.p.m. |
| Current | 0,641 A |
| SFP | 1,02 W/(l/s) |
| Voltage | 400 V |

Dimensions



| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|
| KBT 160 | 437 | 384 | 249 | 212 | 128 | 100 | 209 | 473 | 470 | 100 | 227 | 43 | 345 | 160 | 437 | 320 |
| KBT 180 | 470 | 412 | 272 | 224 | 134 | 105 | 218 | 483 | 470 | 95 | 244 | 43 | 366 | 180 | 470 | 320 |
| KBT 200 | 510 | 445 | 293 | 250 | 143 | 115 | 233 | 617 | 470 | 113 | 273 | 43 | 392 | 200 | 510 | 440 |
| KBT 225 | 522 | 455 | 301 | 256 | 147 | 121 | 251 | 635 | 620 | 121 | 282 | 43 | 412 | 225 | 522 | 440 |
| KBT 250 | 576 | 500 | 333 | 280 | 161 | 140 | 272 | 656 | 620 | 139 | 305 | 43 | 436 | 250 | 576 | 440 |
| KBT 280 | 625 | 537 | 359 | 296 | 171 | 155 | 293 | 677 | 620 | 139 | 331 | 43 | 462 | 280 | 625 | 440 |

Wiring



Art.-Nr.: 305332

Accessories



Electric accessories

[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 \(310220\)](#)
[REV-5POL/05 EC.3-.REV-switch \(35757\)](#)
[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

[ASF 225/KB Flex. connection \(2715\)](#)
[KBT 225/250/280 Wall bracket \(182813\)](#)

Documentation

-  [202341_Fans_Instructions_CE_A010.pdf \(1,83MB\)](#)
 [EC-fans_Operation_and_maintenance_instr_206268_CE_\(A022\).pdf \(2,88MB\)](#)