

CONTENT:

BESF160 box fan

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**EXHAUSTO**

## Technical data

Technical data, BESF160-2-1EC and BESF160-4-1

| MODEL                                     | BESF160-2-1EC               | BESF160-4-1                                            |
|-------------------------------------------|-----------------------------|--------------------------------------------------------|
| <b>Fan data</b>                           |                             |                                                        |
| Max. overall efficiency                   | 50,3 %                      |                                                        |
| ECO measurement set-up (A-D)              | D                           |                                                        |
| Efficiency requirements                   | 49, N(2015)                 |                                                        |
| ECO efficiency at optimal operating point | 63,4                        |                                                        |
| <b>Motor</b>                              |                             |                                                        |
| Motor                                     | EC motor with integral VSD  |                                                        |
| <u>Optimal operating point:</u>           |                             |                                                        |
| Absorbed power                            | 385 W                       |                                                        |
| Airflow                                   | 887 m <sup>3</sup> /h       |                                                        |
| Total pressure                            | 786 Pa                      |                                                        |
| Rpm                                       | 2845 rpm                    |                                                        |
| Nominal rpm (N)                           | 2800 rpm                    | 1400 rpm                                               |
| Electric supply (U)                       | 1x230 V ~ 50 Hz             |                                                        |
| Overload protection                       | Integrated in motor control | Integral thermal cutout (TP211) in motor power circuit |
| Max absorbed current* (I)                 | 3.8 A                       | 0.8 A                                                  |
| Max. absorbed power (P <sub>1</sub> )**   | 0.66 kW                     | 0.19 kW                                                |
| Motor output (P <sub>2</sub> )**          | 0.75 kW                     | 0.9 kW                                                 |
| <b>Supply</b>                             |                             |                                                        |
| Supply (power cable)                      |                             | 3 x 0.75 mm <sup>2</sup>                               |
| Length                                    |                             | 1.4 m.                                                 |
| <b>Other data</b>                         |                             |                                                        |
| Weight                                    | 22 kg                       | 17 kg                                                  |

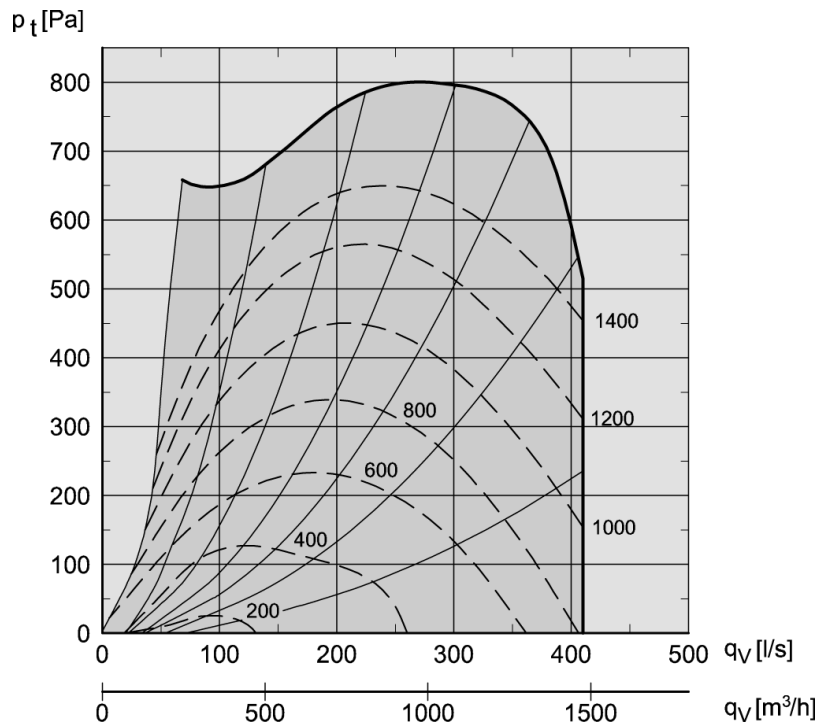
### CONDITIONS:

- \* I is the maximum absorbed current throughout the control range - or the full load current if this is larger
- \*\* P<sub>1</sub> is the maximum absorbed power from the mains supply, where P<sub>2</sub> is the motor's nominal output.
- Stated data for for t = 20°C
- Density = 1.2 /m<sup>3</sup>
- Values are based on the use of a transition piece equivalent to OGSR
- Gas temperature: min. -12°C, max. +60° C
- Ambient temperature: Max. +40° C
- Pressure ratio: < 1,11
- other points in acc. with EC327/2011 - see product instructions

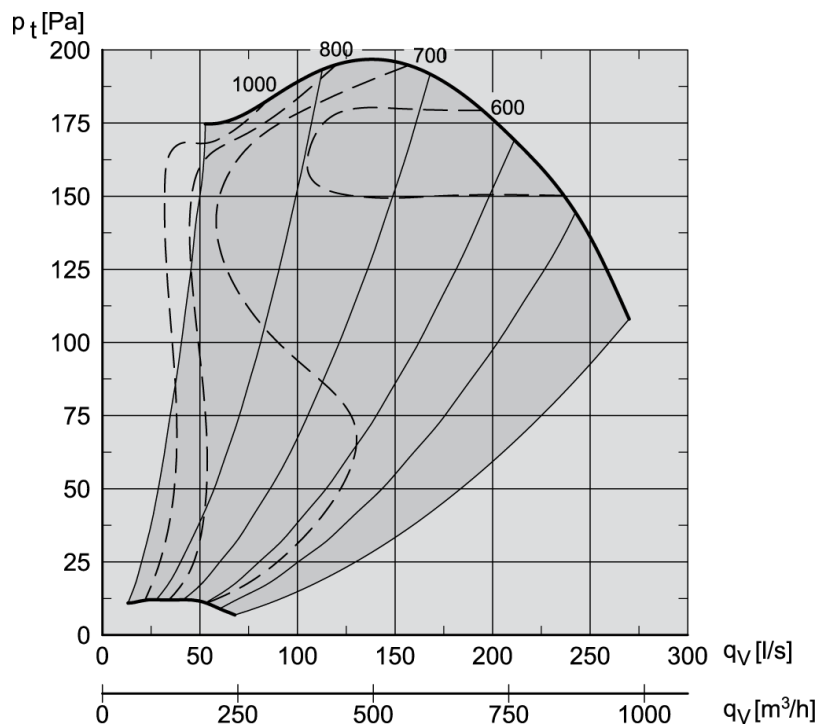
## Capacity diagrams

BESF160-2-1EC and BESF160-4-1

### BESF160-2-1EC



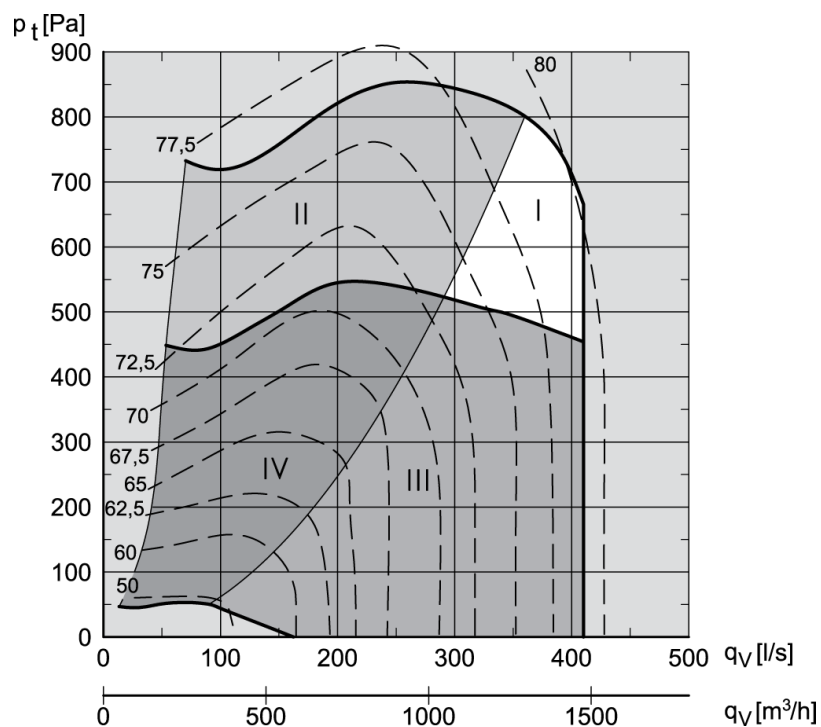
### BESF160-4-1



## Sound data

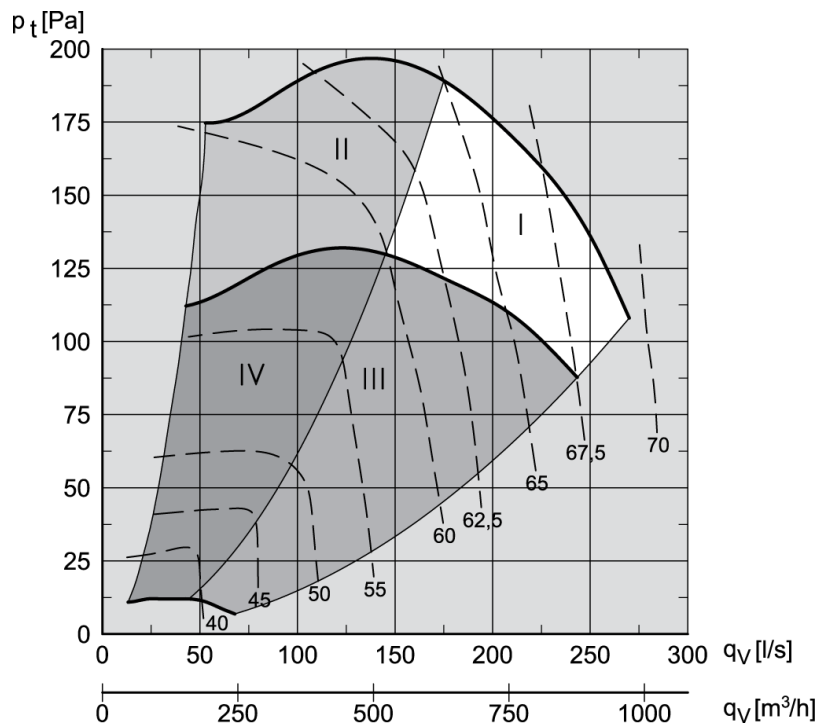
Sound data, BESF160-2-1EC and BESF160-4-1

### BESF160-2-1EC



|                 | K <sub>w</sub> [dB] |     |     |     |     |     |     |     |     | K[dB(A)]        |                 |
|-----------------|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|-----------------|
|                 | I-IV                | 63  | 125 | 250 | 500 | 1 k | 2 k | 4 k | 8 k | K <sub>WA</sub> | K <sub>pA</sub> |
| L <sub>w1</sub> | I                   | 5   | 5   | 3   | -4  | -9  | -8  | -11 | -16 |                 |                 |
|                 | II                  | 9   | 8   | 4   | -4  | -10 | -11 | -14 | -20 |                 |                 |
|                 | III                 | 8   | 8   | 3   | -3  | -7  | -11 | -14 | -22 |                 |                 |
|                 | IV                  | 12  | 10  | 4   | -4  | -10 | -13 | -16 | -23 |                 |                 |
| L <sub>w2</sub> | I                   | 6   | 4   | 4   | 0   | -2  | -2  | -9  | -14 | 4               |                 |
|                 | II                  | 9   | 7   | 5   | 0   | -4  | -3  | -11 | -15 | 4               |                 |
|                 | III                 | 7   | 6   | 4   | -1  | -1  | -7  | -12 | -18 | 3               |                 |
|                 | IV                  | 10  | 8   | 4   | -1  | -2  | -8  | -13 | -18 | 3               |                 |
| L <sub>w3</sub> | I                   | -10 | -8  | -7  | -9  | -19 | -19 | -25 | -28 | -9              | -22             |
|                 | II                  | -9  | -8  | -7  | -9  | -26 | -27 | -27 | -29 | -10             | -23             |
|                 | III                 | -8  | -7  | -11 | -9  | -30 | -33 | -33 | -35 | -11             | -24             |
|                 | IV                  | -1  | -4  | -7  | -7  | -24 | -26 | -26 | -27 | -8              | -22             |

### BESF160-4-1

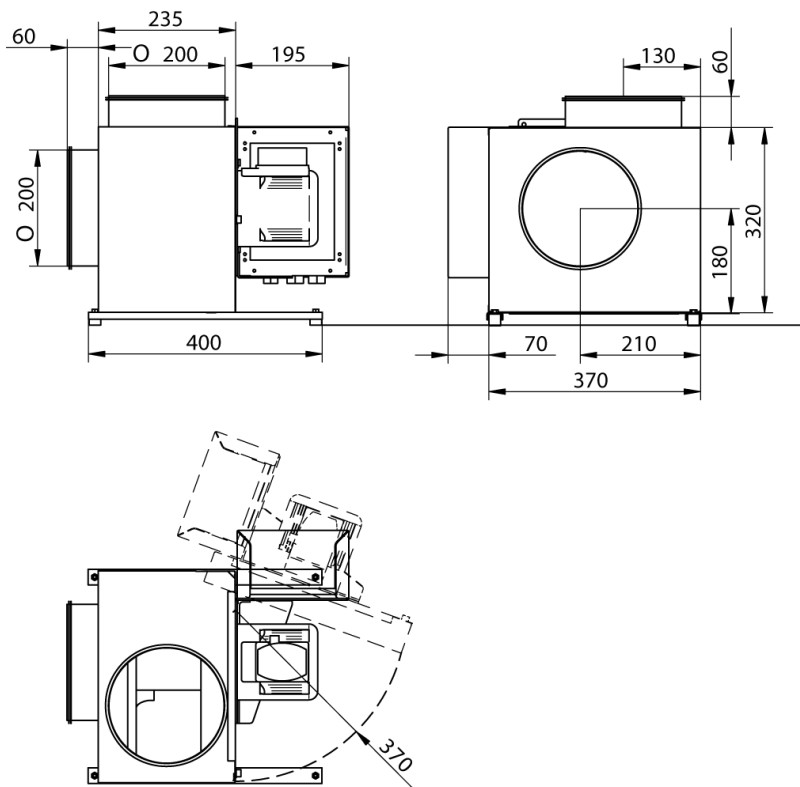


|                 | K <sub>w</sub> [dB] |     |     |     |     |     |     |     |     | K[dB(A)]        |                 |
|-----------------|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|-----------------|
|                 | I-IV                | 63  | 125 | 250 | 500 | 1 k | 2 k | 4 k | 8 k | K <sub>WA</sub> | K <sub>pA</sub> |
| L <sub>w1</sub> | I                   | 6   | 6   | 2   | -4  | -6  | -10 | -11 | -17 |                 |                 |
|                 | II                  | 12  | 10  | 4   | -5  | -9  | -15 | -18 | -27 |                 |                 |
|                 | III                 | 8   | 6   | 2   | -3  | -7  | -11 | -13 | -19 |                 |                 |
|                 | IV                  | 13  | 10  | 4   | -3  | -11 | -16 | -23 | -35 |                 |                 |
| L <sub>w2</sub> | I                   | 6   | 6   | 4   | 0   | 0   | -7  | -10 | -16 | 3               |                 |
|                 | II                  | 12  | 8   | 4   | -1  | -3  | -11 | -16 | -24 | 2               |                 |
|                 | III                 | 9   | 6   | 3   | 0   | -2  | -9  | -12 | -18 | 3               |                 |
|                 | IV                  | 14  | 9   | 4   | -1  | -6  | -13 | -20 | -31 | 1               |                 |
| L <sub>w3</sub> | I                   | -14 | -15 | -22 | -15 | -33 | -35 | -36 | -38 | -17             | -30             |
|                 | II                  | -9  | -8  | -19 | -22 | -31 | -29 | -31 | -36 | -19             | -33             |
|                 | III                 | -8  | -7  | -11 | -9  | -30 | -33 | -33 | -35 | -11             | -24             |
|                 | IV                  | -1  | -4  | -7  | -7  | -24 | -26 | -26 | -27 | -8              | -22             |

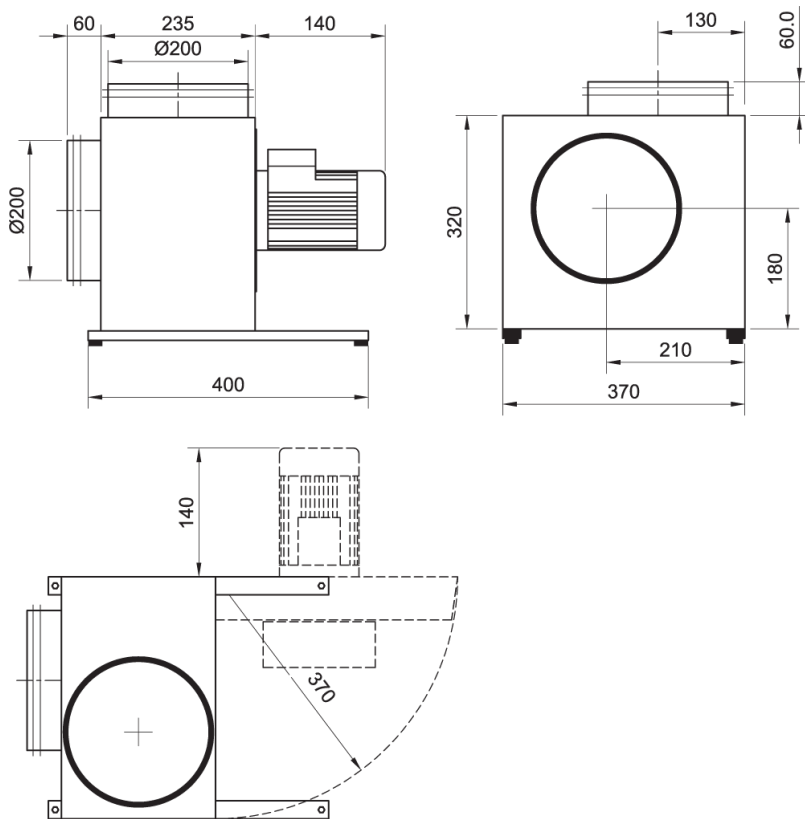
## Dimensional drawings

BESF160-2-1EC and BESF160-4-1

### BESF160-2-1EC



Dimensioned drawing for BESF160-4-1



## EXHAUSTO

# Your ventilation expert and professional business partner

At EXHAUSTO we never compromise on quality, and since we are experts in ventilation with many years of specialised experience, you can be assured of not just the best ventilation solution but also a competent business partner.

EXHAUSTO develops and manufactures high-quality products and systems for comfort ventilation in all areas of use – from offices, shops, schools and institutions to industrial buildings, hotels and hospitals. With a focus on high efficiency ratings and an energy consumption which sets new industry standards, EXHAUSTO is one of the absolute leaders of the field.



## LIVING RESIDENTIAL VENTILATION

Our homes are becoming steadily more airtight. This is a result of striving to bring down energy consumption. But what is good for energy consumption may be bad for indoor climate. Airtight construction makes it hard to evacuate humidity, and humidity provides good growth conditions for mould. Mould not only damages the actual building, but also leads to an unhealthy indoor climate which affects our health and well-being.



## WORKING OFFICE VENTILATION

Did you know that studies have shown that a poor indoor climate can affect your employees' productivity by as much as 15%? And that the number of errors made goes up as temperatures rise above 20-22°C or CO<sub>2</sub> levels top 1000 ppm?



## LEARNING SCHOOL VENTILATION

In less than an hour, schoolchildren hit the CO<sub>2</sub> wall. They become tired, get head-aches and lack concentration. A poor indoor climate impairs the teacher's working conditions and drastically reduces pupils' ability to learn.

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