



# **KLEEblower**

Side channel- & turboblowers

## **More than 75 years of experience – we know the industry**

Brd. Klee Engineering and Trading Company was founded in 1944 and has been listed on OMX (formerly the Copenhagen Stock Exchange) since 1986.

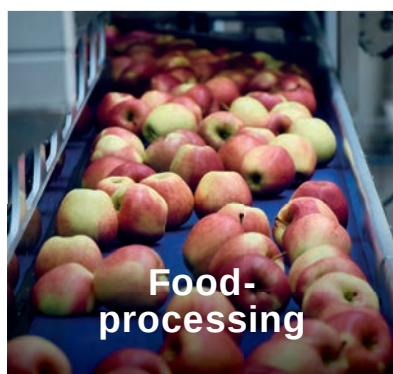
We are located in Greater Copenhagen and offer solutions within technical components and semi-finished products for the industry. Our broad and deep product range is divided into eight areas: Gears & Gearmotors, Motors, Pumps & Blowers, Controls & Electronics, Pneumatics & Hydraulics, Linear Motion Technology, Transmissions, Machine-, DIN- & Norm Parts, Rubber & Plastic.

In our workshop we build and assemble customer-specific solutions, e.g. in special colour, with customer logo or other text. The possibilities are many.

We are approx. 65 employees in Denmark. Our colleagues in our subsidiaries in Taiwan and China focus on sourcing and quality control for our Danish and international customers.



# KLEE solutions





**KLEE blower** CE

| Type        | 11kV | Phase   | 3     | Power | 3    | Batch number | 11.2011 |
|-------------|------|---------|-------|-------|------|--------------|---------|
| KL308-2050V | 4.3A | 50Hz    | 1.1kW | Cond  | 0.82 |              |         |
| KL308-440V  | 2.5A | 2000rpm |       |       |      |              |         |
| KL220-2050V | 4.6A | 50Hz    | 1.3kW | IP54  |      |              |         |
| KL308-400V  | 2.7A | 3400rpm |       |       |      |              |         |

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# KLEEblower

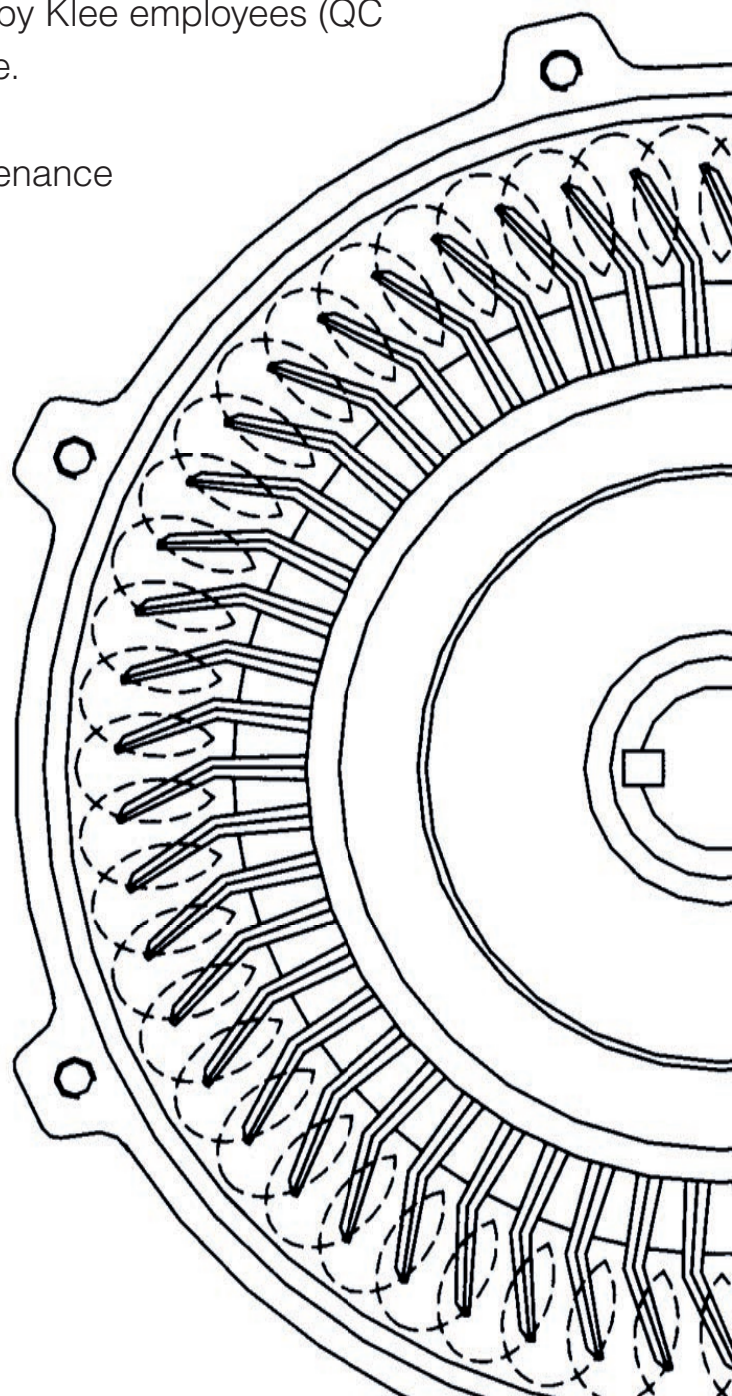
## A reliable and durable solution

KLEEblower is our own range of side channel- and turbo blowers.

We have chosen the design and top quality components for manufacturing ourselves, so we can offer our customers the best possible solution.

Production is quality controlled and approved by Klee employees (QC engineers) before leaving the manufacturing site.

KLEEblowers are reliable, have very low maintenance and are durable.



# Side channel blowers

## Characteristics

### Side channel blowers

The wide range of side channel blowers are available as single and double stage versions with max air flow up to 1344 m<sup>3</sup>/h and pressure up to 780 mbar. Our own strict quality control ensures a very high standard and quality.

#### Characteristics

- Wide voltage range
- 50/60 Hz motors
- Insulation class F or H (from 5.5 kW)
- High quality bearings with high temperature grease
- High quality wave washers
- High quality multilayer shaft seals
- Build-in bimetallic thermo switch from 5.5 kW
- For continuous drive
- Low noise and vibration level
- Almost maintenance free
- CE, UL and CSA approved
- All units are QC inspected by Klee
- Ceramic bearings as option
- Standard color: RAL 7003 grey

#### Principle of operation

Three-dimensional blower impeller rotation enables the air between the vanes to accelerate along the radius direction. The air is forced to return to the base of the impeller due to pressure difference throwing it outward and forward through a spiral path. This action is repeated and causes the air gain pressure until it reaches the outlet port of the housing. The air is ejected from the impeller and from the blower through the outlet.

### Kleeblower L model

Klee has designed a special model of side channel blowers with lower bearing temperature that ensures longer lasting bearings. The L-model is available with output up to 3.4 kW and performance ranges up to 372 m<sup>3</sup>/h and max pressure up to 280 mbar.

#### L model features

- Lower bearing temperature
- Extended grease life in bearings
- Less maintenance
- Grease-free environment in the blower housing
- Excellent for vertical blower installation

### Special design

The bearing in front is placed outside the housing between the motor and the blower unit with an extended aluminum bearing-hub. The fan of the motor cools down the extended hub that ensures an optimal cooling of the bearing.

### Longer operation life

The external bearing design allows the bearings to operate in low temperature that causes fast heat dissipation and uniform loading capacity. The bearing grease is more durable causing longer maintenance intervals.

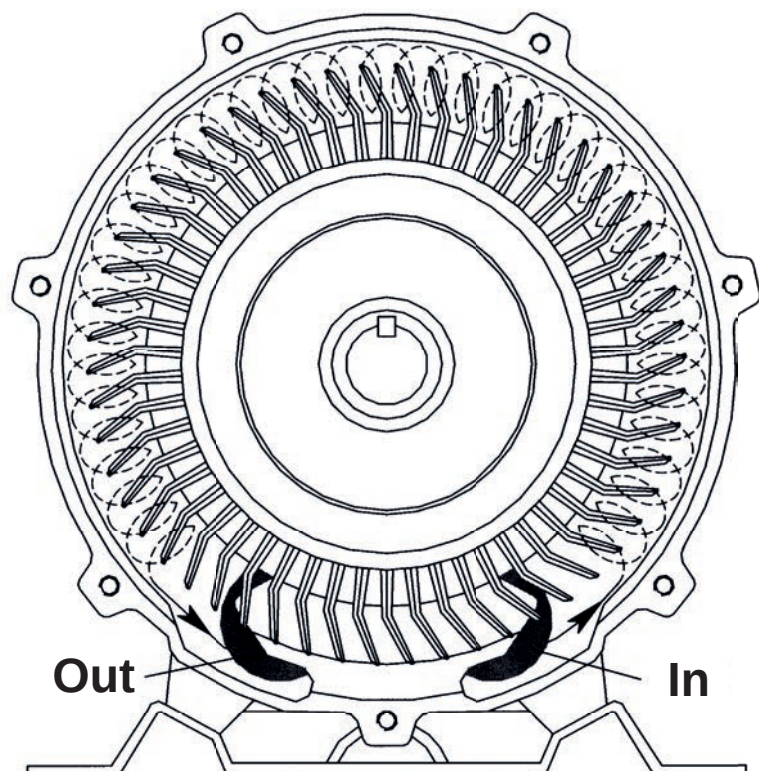


Illustration A. Example of the working principle of a side channel blower.





# Applications

## Vacuum, KLEEblower type KB

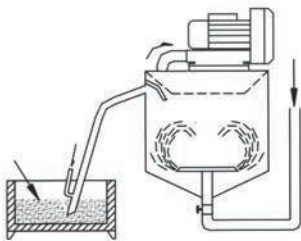
KLEEblower type KB provides up to 1344 m<sup>3</sup>/h and differential vacuum down to 650 mbar.

Please refer to page 54-55 for more information.

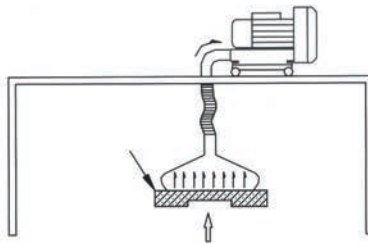
It is advised to secure the blower against overheating. Avoid exceeding the allowable vacuum limit.



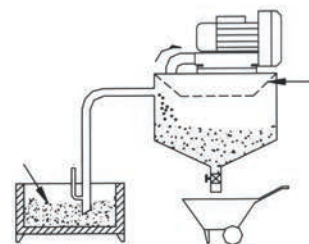
**1. Food washing equipment**



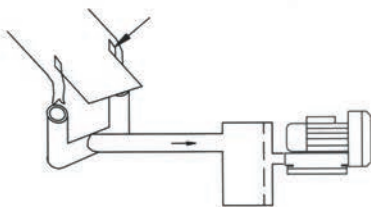
**2. Exhaust gases**



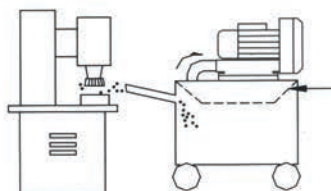
**3. Power & granule conveyor**



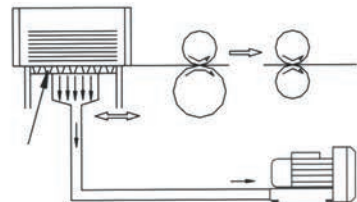
**4. Paper cutting equipment**



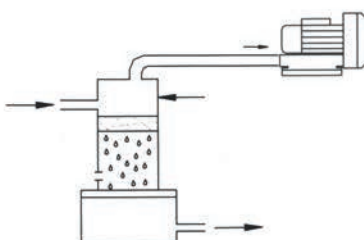
**5. Industrial vacuuming**



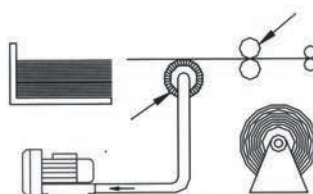
**6. Paperboard conveyor**



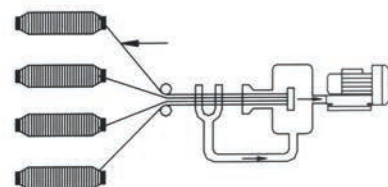
**7. Degasification**



**8. Printing machine**



**9. Automatic weaving machine**



# Applications

## Pressure, KLEEblower type KB

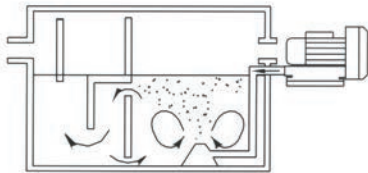
KLEEblower type KB provides up to 1344 m<sup>3</sup>/h and differential pressure up to 780 mbar.

Please refer to page 54-55 for more information.

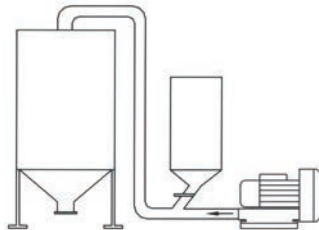
It is advised to secure the blower against overheating. Avoid exceeding the allowable pressure limit.



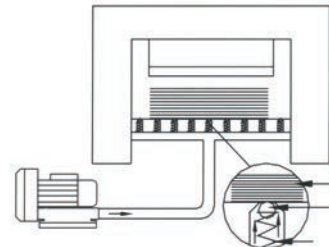
**1. Sewage Treatment Plants**



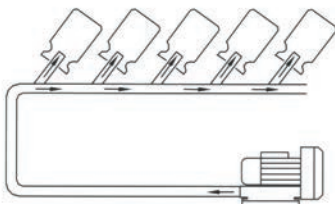
**2. Powder & granule conveyor**



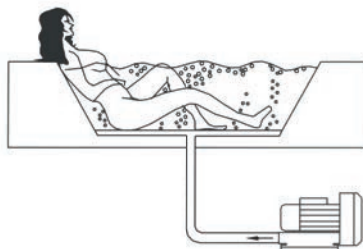
**3. Air cushioned paper knife**



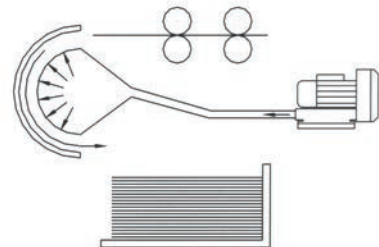
**4. Air drying of containers**



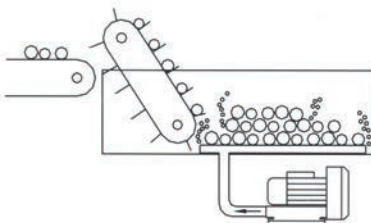
**5. Jacuzzi**



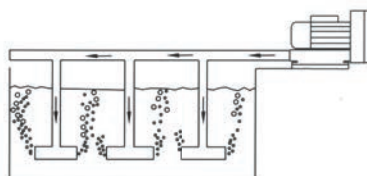
**6. Air drying for offset printing**



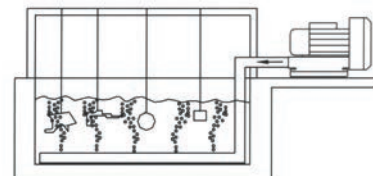
**7. Vegetable washer**



**8. Oxygen supply for culture field**



**9. Electrolytic treatment**



50 Hz

# KB-series 50 Hz

## Overview (single- og double-stage)

– Single-stage side channel blower with max. air flow of 1344 m³/h and max. air pressure of 450 mbar

– Double-stage side channel blower (high pressure) with max. air flow of 575 m³/h max. air pressure of 780 mbar.

– Double-stage side channel blower (large flow) with max. air flow of 990 m³/h and max. air pressure of 270 mbar.

| Type                             | Curve no.            | Output [kW]       | Voltage star/delta [V]                                            | Maximum airflow [m³/min] | Safety limit Vacuum / pressure [mbar] | Noise level [dB]              | Vacuum / pressure valve PVC/ALU |                            |
|----------------------------------|----------------------|-------------------|-------------------------------------------------------------------|--------------------------|---------------------------------------|-------------------------------|---------------------------------|----------------------------|
| Single-stage                     |                      |                   |                                                                   |                          |                                       |                               |                                 |                            |
| KB-129<br>KB-129-1               | 22F<br>22F           | 0.2<br>0.2        | 3 x 230/400<br>(1 x 230)<br>(different voltage on request)        | 0.8<br>0.8               | 70/70<br>70/70                        | 53<br>53                      | RV-03<br>RV-03                  | RVA-03<br>RVA-03           |
| KB-229<br>KB-229-1               | 31F<br>31F           | 0.4<br>0.4        |                                                                   | 1.4<br>1.4               | 110/130<br>110/130                    | 58<br>58                      | RV-03<br>RV-03                  | RVA-03<br>RVA-03           |
| KB-229L<br>KB-229L1              | 32F<br>32F           | 0.4<br>0.4        |                                                                   | 1.4<br>1.4               | 110/130<br>110/130                    | 58<br>58                      | RV-03<br>RV-03                  | RVA-03<br>RVA-03           |
| KB-329<br>KB-329-1               | 41F<br>41F           | 0.75<br>0.75      |                                                                   | 2.4<br>2.4               | 140/140<br>140/140                    | 63<br>63                      | RV-03<br>RV-03                  | RVA-03<br>RVA-03           |
| KB-329L<br>KB-329L-1             | 42F<br>42F           | 0.75<br>0.75      |                                                                   | 2.4<br>2.4               | 140/140<br>140/140                    | 63<br>63                      | RV-03<br>RV-03                  | RVA-03<br>RVA-03           |
| KB-329                           | 43F                  | 0.9               |                                                                   | 2.4                      | 165/180                               | 63                            | RV-03                           | RVA-03                     |
| KB-339                           | 44F                  | 1.3               |                                                                   | 2.4                      | 175/200                               | 63                            | RV-03                           | RVA-03                     |
| KB-429<br>KB-429L<br>KB-429-1    | 52F<br>52F<br>53F    | 1.3<br>1.3<br>1.5 | 3 x 230/400<br>(1 x 220/240)<br>(different voltage on request)    | 3.6<br>3.6<br>3.6        | 180/180<br>180/180<br>210/220         | 70<br>70<br>70                | RV-03<br>RV-03<br>RV-03         | RVA-03<br>RVA-03<br>RVA-03 |
| KB-429                           | 54F                  | 1.75              |                                                                   | 3.6                      | 210/220                               | 70                            | RV-03                           | RVA-03                     |
| KB-429L                          | 54F                  | 1.75              |                                                                   | 3.6                      | 210/220                               | 70                            | RV-03                           | RVA-03                     |
| KB-429                           | 55F                  | 2.2               |                                                                   | 3.6                      | 220/270                               | 70                            | RV-03                           | RVA-03                     |
| KB-429HF                         | 56HF                 | 1.3               |                                                                   | 4.40                     | 180/180                               | 70                            | RV-03                           | RVA-03                     |
| KB-429HF                         | 57HF                 | 1.75              |                                                                   | 4.40                     | 210/220                               | 70                            | RV-03                           | RVA-03                     |
| KB-429HF                         | 58HF                 | 2.2               |                                                                   | 4.40                     | 220/270                               | 70                            | RV-03                           | RVA-03                     |
| KB-529<br>KB-529-1               | 61F<br>61F           | 2.2<br>2.2        |                                                                   | 5.2<br>5.2               | 230/230<br>230/230                    | 72<br>72                      | ATV-20<br>ATV-20                | ATV-20<br>ATV-20           |
| KB-529L                          | 61F                  | 2.2               |                                                                   | 5.2                      | 230/230                               | 72                            | ATV-20                          | ATV-20                     |
| KB-629                           | 62F                  | 3.4               |                                                                   | 5.2                      | 260/280                               | 72                            | RV-03                           | RVA-03                     |
| KB-629-1                         | 62F                  | 3.4               |                                                                   | 5.2                      | 260/280                               | 72                            | RV-03                           | RVA-03                     |
| KB-629L                          | 62F                  | 3.4               |                                                                   | 5.2                      | 260/280                               | 72                            | RV-03                           | RVA-03                     |
| KB-639                           | 63F                  | 4.0               |                                                                   | 5.2                      | 270/330                               | 72                            | RV-03                           | RVA-03                     |
| KB-529HF<br>KB-629HF<br>KB-639HF | 61HF<br>62HF<br>63HF | 2.2<br>3.4<br>4.0 |                                                                   |                          | 6.9<br>6.9<br>6.9                     | 230/230<br>260/300<br>270/330 | 72<br>72<br>72                  | RV-03<br>RV-03<br>RV-03    |
| KB-729<br>KB-829                 | 81F<br>82F           | 5.5<br>7.5        | 3 x 230/400 or<br>(3 x 400/690)<br>(different voltage on request) | 9.2<br>9.2               | 270/300<br>300/400                    | 74<br>74                      | -- --<br>-- --                  | ATV-25<br>ATV-25           |
| KB-919<br>KB-929<br>KB-939       | 91F<br>92F<br>93F    | 9<br>13<br>20     |                                                                   | 18.9<br>18.9<br>18.9     | 200/200<br>300/300<br>350/450         | 76<br>76<br>76                | -- --<br>-- --<br>-- --         | ATV-25<br>ATV-25<br>ATV-25 |

50 Hz



| Type         | Curve no. | Output [kW] | Voltage star/delta [V]                                            | Maximum airflow [m³/min] | Safety limit Vacuum / pressure [mbar] | Noise level [dB] | Vacuum / pressure valve PVC/ALU |          |          |
|--------------|-----------|-------------|-------------------------------------------------------------------|--------------------------|---------------------------------------|------------------|---------------------------------|----------|----------|
| Double-stage |           |             |                                                                   |                          |                                       |                  |                                 |          |          |
| KB-2308      | 101F      | 0.75        | 3 x 230/400 or<br>(3 x 400/690)<br>(different voltage on request) | 1.5                      | 200/240                               | 60               | RV-03                           | RVA-03   |          |
| KB-3315      | 110F      | 1.3         |                                                                   | 2.6                      | 220/250                               | 66               | RV-03                           | RVA-03   |          |
| KB-3319      | 111F      | 1.75        |                                                                   | 2.6                      | 275/320                               | 66               | RV-03                           | RVA-03   |          |
| KB-3326      | 112F      | 2.2         |                                                                   | 2.6                      | 280/375                               | 66               | RV-36                           | RVA-36   |          |
| KB-4337      | 121F      | 3.4         |                                                                   | 3.7                      | 345/410                               | 74               | RV-36                           | RVA-36   |          |
| KB-4346      | 122F      | 4.0         |                                                                   | 3.7                      | 355/495                               | 74               | RV-36                           | RVA-36   |          |
| KB-6346      | 131F      | 4.0         | 3 x 230/400 or<br>(3 x 400/690)<br>(different voltage on request) | 5.2                      | 360/380                               | 75               | 2xRV-36                         | RVA-36   |          |
| KB-6355      | 132F      | 5.5         |                                                                   | 5.2                      | 410/515                               | 75               | 2xRV-36                         | 2xRVA-36 |          |
| KB-6375      | 133F      | 7.5         |                                                                   | 5.2                      | 420/580                               | 75               | 2xRV-36                         | 2xRVA-36 |          |
| KB-6455      | 142F      | 5.5         |                                                                   | 7.8                      | 200/220                               | 75               | RV-36                           | RV-36    |          |
| KB-6475      | 143F      | 7.5         |                                                                   | 7.8                      | 240/270                               | 75               | RVA-36                          | RVA-36   |          |
| KB-8310      | 151F      | 7.5         |                                                                   | 9.6                      | 320/320                               | 76               | -- --                           | 2xATV-25 |          |
| KB-8315      | 152F      | 11          |                                                                   | 9.6                      | 430/600                               | 76               | -- --                           | 2xATV-25 |          |
| KB-8320      | 153F      | 16          |                                                                   | 9.6                      | 450/700                               | 76               | -- --                           | -        |          |
| KB-8415      | 162F      | 11          |                                                                   |                          | 14.2                                  | 260/260          | 76                              | -- --    | 2xATV-25 |

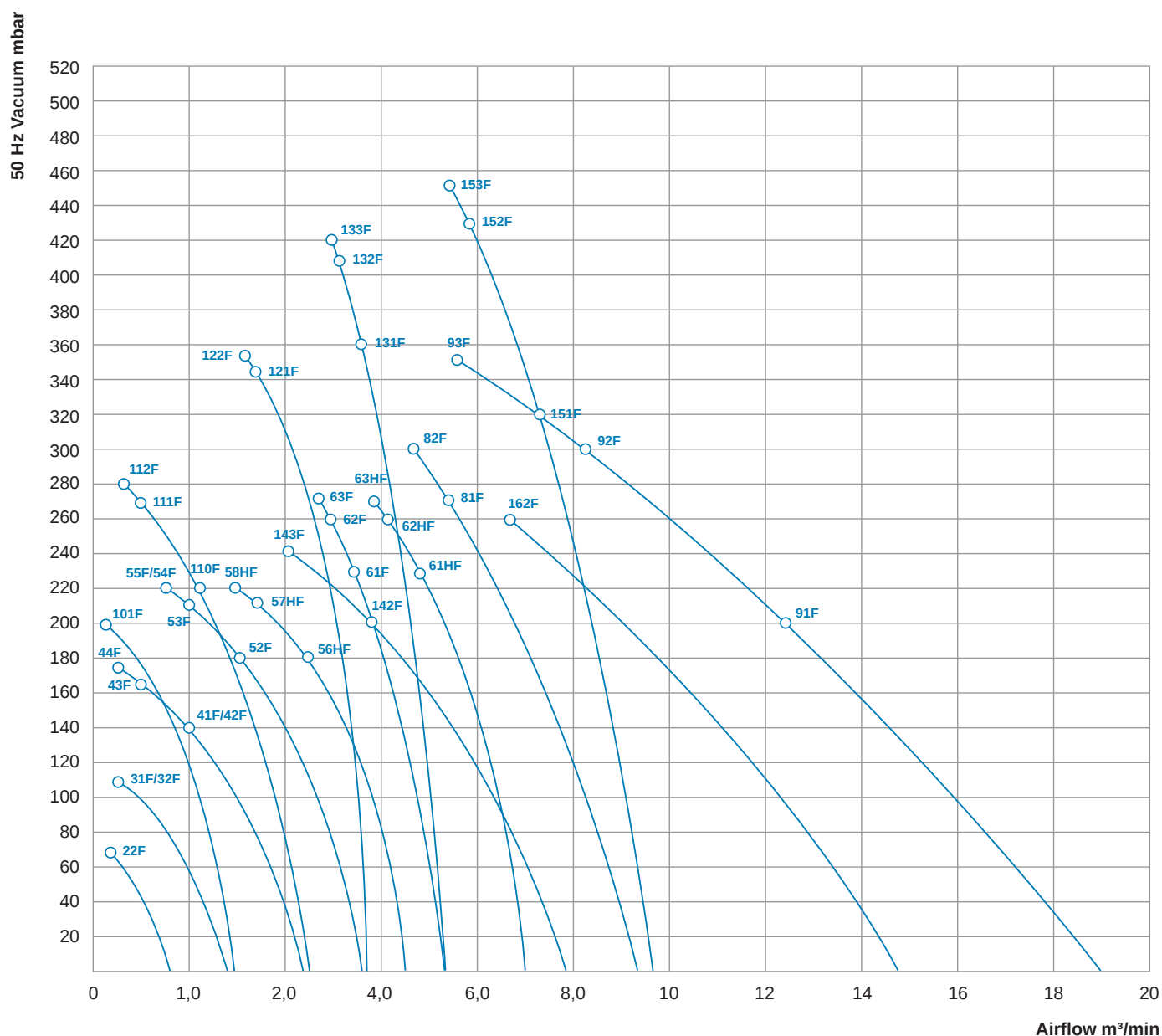
Colour code • dark grey: 3 phase / Colour code • orange: 1 phase

The technical data is based on 1 bar (abs) free atmosphere and 20 °C with inlet air density 1.2 kg/m³, incl. 10% variance.  
All rights reserved for technical specification changes without prior approval from any source outside Brd. Klee, when considered necessary based on our research and development.

It is recommended to use a pressure/vacuum safety valve to protect the fan from overheating and exceeding the permissible pressure/vacuum. Please see page 54-55 for further information. Bi-metal switch is standard on motors from 5.5 kW and all 1-phase models.

# Vacuum diagram

## KB-series 50 Hz



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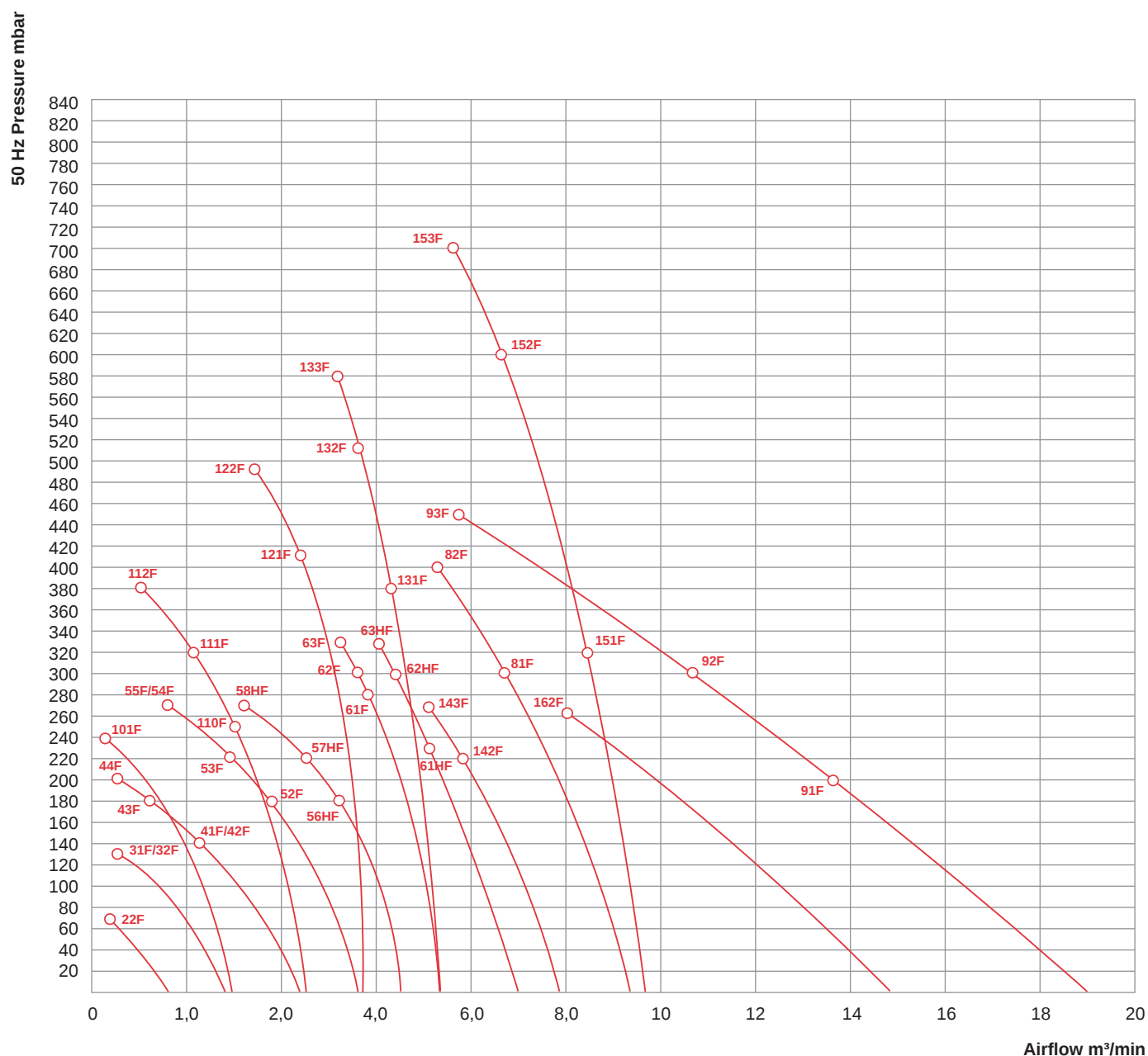
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Pressure

50 Hz

# Pressure diagram

## KB-series 50 Hz



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# Technical data “vacuum”

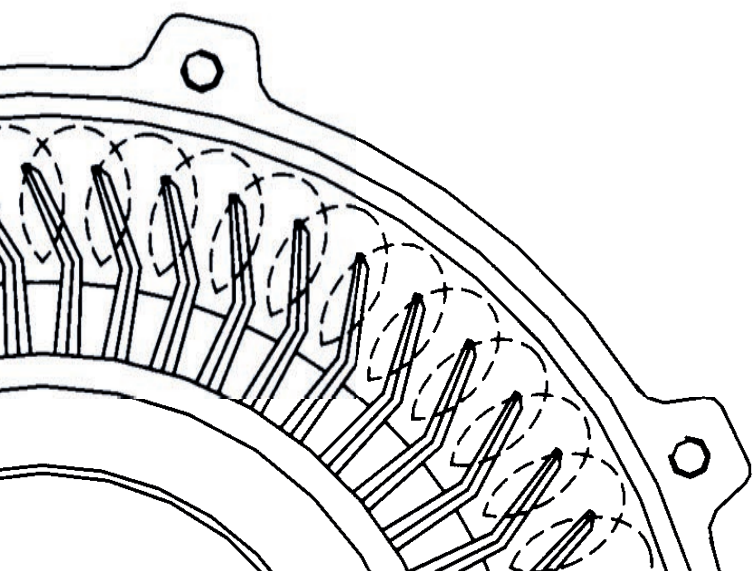
## KB-series 50 Hz single-stage

| Models            |        | Single-stage vacuum |      |      |      |      |      |      |      |      |      |      |  |
|-------------------|--------|---------------------|------|------|------|------|------|------|------|------|------|------|--|
| Series 1          | mbar   | 0                   | 10   | 20   | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |  |
| KB-129 0.2 kW     | m³/min | 0.8                 | 0.72 | 0.66 | 0.56 | 0.48 | 0.38 | 0.25 | 0.12 | -    | -    | -    |  |
| KB-129-1 0.2 kW   | m³/min | 0.8                 | 0.72 | 0.66 | 0.56 | 0.48 | 0.38 | 0.25 | 0.12 | -    | -    | -    |  |
| Series 2          | mbar   | 0                   | 20   | 40   | 60   | 80   | 100  | 110  | 120  | 130  | 140  | 150  |  |
| KB-229 0.4 kW     | m³/min | 1.4                 | 1.25 | 0.92 | 0.8  | 0.63 | 0.41 | 0.25 | -    | -    | -    | -    |  |
| KB-229-1 0.4 kW   |        | 1.4                 | 1.25 | 0.92 | 0.8  | 0.63 | 0.41 | 0.25 | -    | -    | -    | -    |  |
| KB-229L 0.4 kW    |        | 1.4                 | 1.25 | 0.92 | 0.8  | 0.63 | 0.41 | 0.25 | -    | -    | -    | -    |  |
| KB-229L-1 0.4 kW  |        | 1.4                 | 1.25 | 0.92 | 0.8  | 0.63 | 0.41 | 0.25 | -    | -    | -    | -    |  |
| Series 3          | mbar   | 0                   | 20   | 40   | 60   | 80   | 100  | 120  | 140  | 165  | 175  | 185  |  |
| KB-329 0.75 kW    | m³/min | 2.4                 | 2.2  | 1.85 | 1.75 | 1.4  | 1.25 | 0.9  | 0.75 | -    | -    | -    |  |
| KB-329-1 0.75 kW  |        | 2.4                 | 2.2  | 1.85 | 1.75 | 1.4  | 1.25 | 0.9  | 0.75 | -    | -    | -    |  |
| KB-329L 0.75 kW   |        | 2.4                 | 2.2  | 1.85 | 1.75 | 1.4  | 1.25 | 0.9  | 0.75 | -    | -    | -    |  |
| KB-329L-1 0.75 kW |        | 2.4                 | 2.2  | 1.85 | 1.75 | 1.4  | 1.25 | 0.9  | 0.75 | -    | -    | -    |  |
| KB-329 0.9 kW     |        | 2.4                 | 2.2  | 1.85 | 1.75 | 1.4  | 1.25 | 0.9  | 0.75 | 0.43 | -    | -    |  |
| KB-339 1.3kW      |        | 2.4                 | 2.2  | 1.85 | 1.75 | 1.4  | 1.25 | 0.9  | 0.75 | 0.43 | 0.35 | -    |  |
| Series 4          | mbar   | 0                   | 25   | 50   | 75   | 100  | 130  | 160  | 180  | 200  | 210  | 220  |  |
| KB-429 1.3 kW     | m³/min | 3.6                 | 3.3  | 3.0  | 2.7  | 2.2  | 1.77 | 1.15 | 0.91 | -    | -    | -    |  |
| KB-429L 1.3 kW    |        | 3.6                 | 3.3  | 3.0  | 2.7  | 2.2  | 1.77 | 1.15 | 0.91 | -    | -    | -    |  |
| KB-429-1 1.5 kW   |        | 3.6                 | 3.3  | 3.0  | 2.7  | 2.2  | 1.77 | 1.15 | 0.91 | 0.68 | 0.52 | -    |  |
| KB-429 1.75 kW    |        | 3.6                 | 3.3  | 3.0  | 2.7  | 2.2  | 1.77 | 1.15 | 0.91 | 0.68 | 0.52 | -    |  |
| KB-429L 1.75kW    |        | 3.6                 | 3.3  | 3.0  | 2.7  | 2.2  | 1.77 | 1.15 | 0.91 | 0.68 | 0.52 | -    |  |
| KB-429 2.2 kW     |        | 3.6                 | 3.3  | 3.0  | 2.7  | 2.2  | 1.77 | 1.15 | 0.91 | 0.68 | 0.52 | 0.38 |  |
| Series 4 HF       | mbar   | 0                   | 25   | 50   | 75   | 100  | 130  | 160  | 180  | 200  | 210  | 220  |  |
| KB-429 1.3 kW HF  | m³/min | 4.40                | 3.83 | 3.17 | 2.67 | 2.17 | 1.67 | 1.33 | 1.00 | -    | -    | -    |  |
| KB-429 1.75 kW HF |        | 4.40                | 3.83 | 3.17 | 2.67 | 2.17 | 1.67 | 1.33 | 1.00 | 0.67 | 0.33 | -    |  |
| KB-429 2.2 kW HF  |        | 4.40                | 3.83 | 3.17 | 2.67 | 2.17 | 1.67 | 1.33 | 1.00 | 0.67 | 0.33 | 0.17 |  |

# Technical data “vacuum”

## KB-series 50 Hz single-stage

| Models           |        | Single-stage vacuum (continued) |     |      |      |     |      |     |      |      |      |      |
|------------------|--------|---------------------------------|-----|------|------|-----|------|-----|------|------|------|------|
| Series 5 & 6     | mbar   | 0                               | 50  | 100  | 120  | 140 | 160  | 180 | 200  | 230  | 260  | 270  |
| KB-529 2.2 kW    | m³/min | 5.2                             | 4.5 | 3.6  | 3.2  | 2.8 | 2.3  | 1.9 | 1.65 | 1.18 | -    | -    |
| KB-529-1 2.2 kW  |        | 5.2                             | 4.5 | 3.6  | 3.2  | 2.8 | 2.3  | 1.9 | 1.65 | 1.18 | -    | -    |
| KB-529L 2.2 kW   |        | 5.2                             | 4.5 | 3.6  | 3.2  | 2.8 | 2.3  | 1.9 | 1.65 | 1.18 | -    | -    |
| KB-629 3.4 kW    |        | 5.2                             | 4.5 | 3.6  | 3.2  | 2.8 | 2.3  | 1.9 | 1.65 | 1.18 | 0.75 | -    |
| KB-629-1 3.4 kW  |        | 5.2                             | 4.5 | 3.6  | 3.2  | 2.8 | 2.3  | 1.9 | 1.65 | 1.18 | 0.75 | -    |
| KB-629L 3.4 kW   |        | 5.2                             | 4.5 | 3.6  | 3.2  | 2.8 | 2.3  | 1.9 | 1.65 | 1.18 | 0.75 | -    |
| KB-639 4.0 kW    |        | 5.2                             | 4.5 | 3.6  | 3.2  | 2.8 | 2.3  | 1.9 | 1.65 | 1.18 | 0.75 | 0.55 |
| Series 5 & 6 HF  | mbar   | 0                               | 50  | 100  | 120  | 140 | 160  | 180 | 200  | 230  | 260  | 270  |
| KB-529 2.2 kW HF | m³/min | 6.9                             | 5.8 | 4.0  | 3.5  | 3.0 | 2.6  | 1.7 | 1.33 | 1.00 | -    | -    |
| KB-629 3.4 kW HF |        | 6.9                             | 5.8 | 4.0  | 3.5  | 3.0 | 2.6  | 1.7 | 1.33 | 1.00 | 0.67 | -    |
| KB-639 4.0 kW HF |        | 6.9                             | 5.8 | 4.0  | 3.5  | 3.0 | 2.6  | 1.7 | 1.33 | 1.00 | 0.67 | 0.50 |
| Series 7 & 8     | mbar   | 0                               | 50  | 100  | 130  | 160 | 180  | 200 | 230  | 250  | 270  | 300  |
| KB-729 5.5 kW    | m³/min | 9.2                             | 8.3 | 7.2  | 6.3  | 5.6 | 4.9  | 4.4 | 3.3  | 2.7  | 2.0  | -    |
| KB-829 7.5 kW    |        | 9.2                             | 8.3 | 7.2  | 6.3  | 5.6 | 4.9  | 4.4 | 3.3  | 2.7  | 2.0  | 1.5  |
| Series 9         | mbar   | 0                               | 50  | 100  | 120  | 160 | 200  | 240 | 270  | 300  | 325  | 350  |
| KB-919 9.0 kW    | m³/min | 18.9                            | 18  | 17.8 | 16.7 | 15  | 12.5 | -   | -    | -    | -    | -    |
| KB-929 13.0 kW   |        | 18.9                            | 18  | 17.8 | 16.7 | 15  | 12.5 | 9.5 | 8.4  | 6.8  | -    | -    |
| KB-939 20.0 kW   |        | 18.9                            | 18  | 17.8 | 16.7 | 15  | 12.5 | 9.5 | 8.4  | 6.8  | 5.2  | 3.2  |



# Technical data “vacuum”

## KB-series 50 Hz double-stage

| Models          |        | Double-stage vacuum |      |      |      |      |      |      |      |      |      |      |
|-----------------|--------|---------------------|------|------|------|------|------|------|------|------|------|------|
| Series 23       | mbar   | 0                   | 25   | 50   | 75   | 100  | 125  | 150  | 175  | 200  | 210  | 220  |
| KB-2308 0.75 kW | m³/min | 1.5                 | 1.4  | 1.25 | 1.1  | 0.9  | 0.8  | 0.7  | 0.45 | 0.25 | -    | -    |
| Series 33       | mbar   | 0                   | 50   | 100  | 130  | 160  | 180  | 200  | 220  | 250  | 275  | 280  |
| KB-3319 1.75 kW | m³/min | 2.6                 | 2.2  | 1.8  | 1.65 | 1.35 | 1.22 | 0.95 | 0.88 | 0.68 | 0.45 | -    |
| KB-3326 2.2 kW  |        | 2.6                 | 2.2  | 1.8  | 1.65 | 1.35 | 1.22 | 0.95 | 0.88 | 0.68 | 0.45 | 0.4  |
| Series 43       | mbar   | 0                   | 50   | 100  | 150  | 200  | 250  | 275  | 300  | 325  | 345  | 355  |
| KB-4337 3.4 kW  | m³/min | 3.7                 | 3.6  | 3.15 | 2.5  | 1.85 | 1.4  | 1.1  | 0.9  | 0.7  | 0.55 | -    |
| KB-4346 4.0 kW  |        | 3.7                 | 3.6  | 3.15 | 2.5  | 1.85 | 1.4  | 1.1  | 0.9  | 0.7  | 0.55 | 0.45 |
| Series 63       | mbar   | 0                   | 50   | 100  | 150  | 200  | 250  | 300  | 330  | 360  | 410  | 420  |
| KB-6346 4.0 kW  | m³/min | 5.2                 | 5.05 | 4.8  | 4.2  | 3.8  | 2.9  | 2.0  | 1.7  | 1.3  | -    | -    |
| KB-6355 5.5 kW  |        | 5.2                 | 5.05 | 4.8  | 4.2  | 3.8  | 2.9  | 2.0  | 1.7  | 1.3  | 0.85 | -    |
| KB-6375 7.5 kW  |        | 5.2                 | 5.05 | 4.8  | 4.2  | 3.8  | 2.9  | 2.0  | 1.7  | 1.3  | 0.85 | 0.8  |
| Series 64       | mbar   | 0                   | 50   | 100  | 120  | 140  | 160  | 180  | 200  | 220  | 240  | 250  |
| KB-6455 5.5 kW  | m³/min | 7.8                 | 7.25 | 6.55 | 6.2  | 5.7  | 5.2  | 4.4  | 3.8  | -    | -    | -    |
| KB-6475 7.5 kW  |        | 7.8                 | 7.25 | 6.55 | 6.2  | 5.7  | 5.2  | 4.4  | 3.8  | 3.2  | 1.35 | -    |
| Series 83       | mbar   | 0                   | 75   | 150  | 200  | 250  | 300  | 320  | 350  | 400  | 430  | 450  |
| KB-8310 7.5 kW  | m³/min | 9.6                 | 9.2  | 8.4  | 7.6  | 6.7  | 5.5  | 5.0  | -    | -    | -    | -    |
| KB-8315 11.0 kW |        | 9.6                 | 9.2  | 8.4  | 7.6  | 6.7  | 5.5  | 5.0  | 4.15 | 2.3  | 1.4  | -    |
| KB-8320 19.0 kW |        | 9.6                 | 9.2  | 8.4  | 7.6  | 6.7  | 5.5  | 5.0  | 4.15 | 2.3  | 1.4  | 1.2  |
| Series 84       | mbar   | 0                   | 25   | 50   | 75   | 100  | 125  | 150  | 175  | 200  | 230  | 260  |
| KB-8415 11.0 kW | m³/min | 14.2                | 13.5 | 12.1 | 11.2 | 9.95 | 9.4  | 8.85 | 8.2  | 7.6  | 6.6  | 6.0  |

Pressure

50 Hz

# Technical data “pressure”

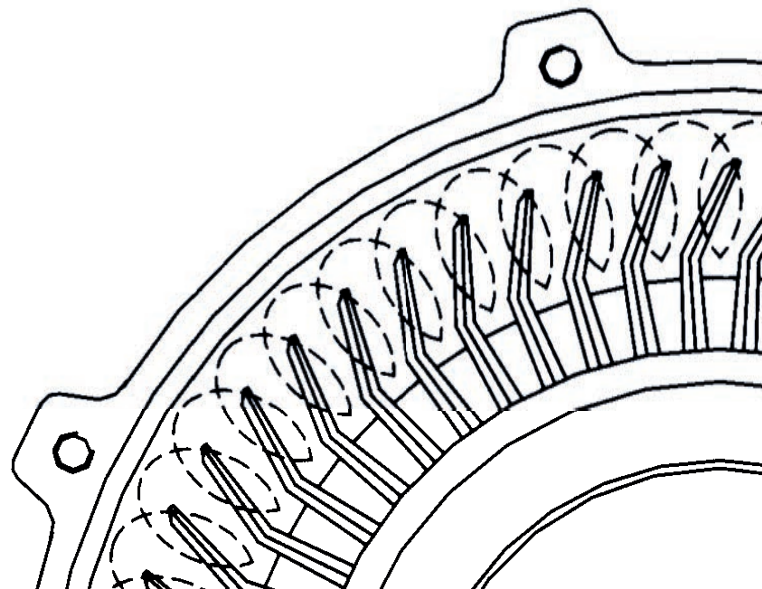
## KB-series 50 Hz single-stage

| Models            |        | Single-stage pressure |      |      |      |      |      |      |      |      |      |      |
|-------------------|--------|-----------------------|------|------|------|------|------|------|------|------|------|------|
| Series 1          | mbar   | 0                     | 10   | 20   | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
| KB-129 0.2 kW     | m³/min | 0.8                   | 0.72 | 0.66 | 0.56 | 0.48 | 0.38 | 0.25 | 0.12 | -    | -    | -    |
| KB-129-1 0.2 kW   | m³/min | 0.8                   | 0.72 | 0.66 | 0.56 | 0.48 | 0.38 | 0.25 | 0.12 | -    | -    | -    |
| Series 2          | mbar   | 0                     | 20   | 40   | 60   | 80   | 100  | 110  | 120  | 130  | 140  | 150  |
| KB-229 0.4 kW     | m³/min | 1.4                   | 1.2  | 1.0  | 0.88 | 0.8  | 0.5  | 0.35 | 0.25 | 0.15 | -    | -    |
| KB-229-1 0.4 kW   |        | 1.4                   | 1.2  | 1.0  | 0.88 | 0.8  | 0.5  | 0.35 | 0.25 | 0.15 | -    | -    |
| KB-229L 0.4 kW    |        | 1.4                   | 1.2  | 1.0  | 0.88 | 0.8  | 0.5  | 0.35 | 0.25 | 0.15 | -    | -    |
| KB-229L-1 0.4 kW  |        | 1.4                   | 1.2  | 1.0  | 0.88 | 0.8  | 0.5  | 0.35 | 0.25 | 0.15 | -    | -    |
| Series 3          | mbar   | 0                     | 20   | 40   | 60   | 80   | 100  | 120  | 140  | 160  | 180  | 200  |
| KB-329 0.75 kW    | m³/min | 2.4                   | 2.2  | 2.0  | 1.82 | 1.75 | 1.4  | 1.2  | 0.9  | -    | -    | -    |
| KB-329-1 0.75 kW  |        | 2.4                   | 2.2  | 2.0  | 1.82 | 1.75 | 1.4  | 1.2  | 0.9  | -    | -    | -    |
| KB-329L 0.75 kW   |        | 2.4                   | 2.2  | 2.0  | 1.82 | 1.75 | 1.4  | 1.2  | 0.9  | -    | -    | -    |
| KB-329L-1 0.75 kW |        | 2.4                   | 2.2  | 2.0  | 1.82 | 1.75 | 1.4  | 1.2  | 0.9  | -    | -    | -    |
| KB-329 0.9 kW     |        | 2.4                   | 2.2  | 2.0  | 1.82 | 1.75 | 1.4  | 1.2  | 0.9  | 0.75 | 0.52 | -    |
| KB-339 1.3kW      |        | 2.4                   | 2.2  | 2.0  | 1.82 | 1.75 | 1.4  | 1.2  | 0.9  | 0.75 | 0.52 | 0.4  |
| Series 4          | mbar   | 0                     | 40   | 80   | 100  | 130  | 150  | 180  | 200  | 220  | 250  | 270  |
| KB-429 1.3 kW     | m³/min | 3.6                   | 3.15 | 3.0  | 2.7  | 2.2  | 1.8  | 1.45 | -    | -    | -    | -    |
| KB-429L 1.3 kW    |        | 3.6                   | 3.15 | 3.0  | 2.7  | 2.2  | 1.8  | 1.45 | -    | -    | -    | -    |
| KB-429-1 1.5 kW   |        | 3.6                   | 3.15 | 3.0  | 2.7  | 2.2  | 1.8  | 1.45 | 1.2  | 0.87 | -    | -    |
| KB-429 1.75 kW    |        | 3.6                   | 3.15 | 3.0  | 2.7  | 2.2  | 1.8  | 1.45 | 1.2  | 0.87 | -    | -    |
| KB-429L 1.75kW    |        | 3.6                   | 3.15 | 3.0  | 2.7  | 2.2  | 1.8  | 1.45 | 1.2  | 0.87 | -    | -    |
| KB-429 2.2 kW     |        | 3.6                   | 3.15 | 3.0  | 2.7  | 2.2  | 1.8  | 1.45 | 1.2  | 0.87 | 0.73 | 0.45 |
| Series 4 HF       | mbar   | 0                     | 40   | 80   | 100  | 130  | 150  | 180  | 200  | 220  | 250  | 270  |
| KB-429 1.3 kW HF  | m³/min | 4.40                  | 3.50 | 2.83 | 2.33 | 2.00 | 1.67 | 1.33 | -    | -    | -    | -    |
| KB-429 1.75 kW HF |        | 4.40                  | 3.50 | 2.83 | 2.33 | 2.00 | 1.67 | 1.33 | 1.00 | 0.67 | -    | -    |
| KB-429 2.2 kW HF  |        | 4.40                  | 3.50 | 2.83 | 2.33 | 2.00 | 1.67 | 1.33 | 1.00 | 0.67 | 0.33 | 0.17 |

# Technical data “pressure”

## KB-series 50 Hz single-stage

| Models           |        | Single-stage pressure |      |      |      |      |      |      |      |      |     |      |
|------------------|--------|-----------------------|------|------|------|------|------|------|------|------|-----|------|
| Series 5 & 6     | mbar   | 0                     | 50   | 100  | 150  | 175  | 200  | 230  | 250  | 280  | 300 | 330  |
| KB-529 2.2 kW    | m³/min | 5.2                   | 4.95 | 4.4  | 3.75 | 3.2  | 2.95 | 2.2  | -    | -    | -   | -    |
| KB-529-1 2.2 kW  |        | 5.2                   | 4.95 | 4.4  | 3.75 | 3.2  | 2.95 | 2.2  | -    | -    | -   | -    |
| KB-529L 2.2 kW   |        | 5.2                   | 4.95 | 4.4  | 3.75 | 3.2  | 2.95 | 2.2  | -    | -    | -   | -    |
| KB-629 3.4 kW    |        | 5.2                   | 4.95 | 4.4  | 3.75 | 3.2  | 2.95 | 2.2  | 1.85 | 1.5  | -   | -    |
| KB-629-1 3.4 kW  |        | 5.2                   | 4.95 | 4.4  | 3.75 | 3.2  | 2.95 | 2.2  | 1.85 | 1.5  | -   | -    |
| KB-629L 3.4 kW   |        | 5.2                   | 4.95 | 4.4  | 3.75 | 3.2  | 2.95 | 2.2  | 1.85 | 1.5  | -   | -    |
| KB-639 4.0 kW    |        | 5.2                   | 4.95 | 4.4  | 3.75 | 3.2  | 2.95 | 2.2  | 1.85 | 1.5  | 1.2 | 0.85 |
| Series 5 & 6 HF  | mbar   | 0                     | 50   | 100  | 150  | 175  | 200  | 230  | 250  | 280  | 300 | 330  |
| KB-529 2.2 kW HF | m³/min | 6.9                   | 6.0  | 5.0  | 4.0  | 3.7  | 3.2  | 2.9  | -    | -    | -   | -    |
| KB-629 3.4 kW HF |        | 6.9                   | 6.0  | 5.0  | 4.0  | 3.7  | 3.2  | 2.9  | 2.5  | 2.2  | 1.8 | -    |
| KB-639 4.0 kW HF |        | 6.9                   | 6.0  | 5.0  | 4.0  | 3.7  | 3.2  | 2.9  | 2.5  | 2.2  | 1.8 | 1.5  |
| Series 7 & 8     | mbar   | 0                     | 50   | 100  | 150  | 200  | 250  | 300  | 325  | 350  | 375 | 400  |
| KB-729 5.5 kW    | m³/min | 9.2                   | 8.4  | 7.75 | 6.9  | 5.92 | 4.95 | 3.85 | -    | -    | -   | -    |
| KB-829 7.5 kW    |        | 9.2                   | 8.4  | 7.75 | 6.9  | 5.92 | 4.95 | 3.85 | 3.25 | 2.6  | 2.1 | 1.85 |
| Series 9         | mbar   | 0                     | 50   | 100  | 150  | 200  | 250  | 300  | 325  | 350  | 400 | 450  |
| KB-919 9.0 kW    | m³/min | 18.9                  | 18.5 | 17.8 | 16.0 | 14.5 | -    | -    | -    | -    | -   | -    |
| KB-929 13.0 kW   |        | 18.9                  | 18.5 | 17.8 | 16.0 | 14.5 | 13.0 | 10.8 | -    | -    | -   | -    |
| KB-939 20.0 kW   |        | 18.9                  | 18.5 | 17.8 | 16.0 | 14.5 | 13.0 | 10.8 | 9.5  | 8.95 | 7.6 | 6.0  |



Pressure

50 Hz

# Technical data “pressure”

## KB-series 50 Hz double-stage

| Models          |        | Double-stage pressure |      |      |      |      |      |      |      |      |      |      |
|-----------------|--------|-----------------------|------|------|------|------|------|------|------|------|------|------|
| Series 23       | mbar   | 0                     | 25   | 50   | 75   | 100  | 125  | 150  | 175  | 200  | 220  | 240  |
| KB-2308 0.75 kW | m³/min | 1.5                   | 1.35 | 1.18 | 1.0  | 0.9  | 0.75 | 0.65 | 0.53 | 0.4  | 0.25 | 0.13 |
| Series 33       | mbar   | 0                     | 50   | 100  | 150  | 200  | 250  | 275  | 300  | 320  | 350  | 375  |
| KB-3319 1.75 kW | m³/min | 2.6                   | 2.2  | 1.18 | 1.0  | 0.9  | 0.75 | 0.65 | 0.53 | 0.4  | -    | -    |
| KB-3326 2.2 kW  |        | 2.6                   | 2.2  | 1.18 | 1.0  | 0.9  | 0.75 | 0.65 | 0.53 | 0.4  | 0.25 | 0.13 |
| Series 43       | mbar   | 0                     | 50   | 100  | 150  | 200  | 250  | 300  | 350  | 410  | 450  | 495  |
| KB-4337 3.4 kW  | m³/min | 3.7                   | 3.65 | 3.5  | 3.15 | 2.9  | 2.3  | 1.8  | 1.45 | 0.85 | -    | -    |
| KB-4346 4.0 kW  |        | 3.7                   | 3.65 | 3.5  | 3.15 | 2.9  | 2.3  | 1.8  | 1.45 | 0.85 | 0.73 | 0.5  |
| Series 63       | mbar   | 0                     | 100  | 200  | 250  | 300  | 380  | 400  | 450  | 515  | 550  | 580  |
| KB-6346 4.0 kW  | m³/min | 5.2                   | 4.9  | 4.3  | 3.95 | 3.5  | 2.65 | -    | -    | -    | -    | -    |
| KB-6355 5.5 kW  |        | 5.2                   | 4.9  | 4.3  | 3.95 | 3.5  | 2.65 | 2.52 | 2.0  | 1.65 | -    | -    |
| KB-6375 7.5 kW  |        | 5.2                   | 4.9  | 4.3  | 3.95 | 3.5  | 2.65 | 2.52 | 2.0  | 1.65 | 1.53 | 1.35 |
| Series 64       | mbar   | 0                     | 50   | 100  | 120  | 140  | 160  | 180  | 200  | 220  | 250  | 270  |
| KB-6455 5.5 kW  | m³/min | 7.8                   | 7.25 | 6.48 | 6.2  | 5.7  | 5.3  | 4.8  | 4.3  | 3.7  | -    | -    |
| KB-6475 7.5 kW  |        | 7.8                   | 7.25 | 6.48 | 6.2  | 5.7  | 5.3  | 4.8  | 4.3  | 3.7  | 2.8  | 2.3  |
| Series 83       | mbar   | 0                     | 75   | 150  | 250  | 320  | 400  | 500  | 550  | 600  | 650  | 700  |
| KB-8310 7.5 kW  | m³/min | 9.6                   | 9.3  | 8.8  | 7.9  | 7.2  | -    | -    | -    | -    | -    | -    |
| KB-8315 11.0 kW |        | 9.6                   | 9.3  | 8.8  | 7.9  | 7.2  | 6.2  | 4.7  | 4.3  | 4.0  | -    | -    |
| KB-8320 19.0 kW |        | 9.6                   | 9.3  | 8.8  | 7.9  | 7.2  | 6.2  | 4.7  | 4.3  | 4.0  | 3.5  | 2.8  |
| Series 84       | mbar   | 0                     | 25   | 50   | 75   | 100  | 125  | 150  | 175  | 200  | 230  | 260  |
| KB-8415 11.0 kW | m³/min | 14.2                  | 13.4 | 12.9 | 12.5 | 12.1 | 11.0 | 9.9  | 9.2  | 8.8  | 7.8  | 7.0  |

60 Hz

# KB-series 60 Hz

## Overview (single- og double-stage)

– Single-stage side channel blower with max. air flow of 1344 m³/h and max. air pressure of 430 mbar.

– Double-stage side channel blower (high pressure) with max. air flow of 654 m³/h max. air pressure of 780 mbar.

– Double-stage side channel blower (large flow) with max. air flow of 990 m³/h and max. air pressure of 270 mbar.

| Type                             | Curve no.            | Output [kW]        | Voltage star/delta [V]                                          | Maximum airflow [m³/min] | Safety limit Vacuum / pressure [mbar] | Noise level [dB] | Vacuum / pressure valve PVC/ALU |                            |
|----------------------------------|----------------------|--------------------|-----------------------------------------------------------------|--------------------------|---------------------------------------|------------------|---------------------------------|----------------------------|
| Single-stage                     |                      |                    |                                                                 |                          |                                       |                  |                                 |                            |
| KB-129<br>KB-129-1               | 22S<br>22F           | 0.25<br>0.25       | 3x 276/480<br>(1 x 276)<br>(different voltage on request)       | 1.0<br>1.0               | 75/80<br>75/80                        | 55<br>55         | RV-03<br>RV-03                  | RVA-03<br>RVA-03           |
| KB-229<br>KB-229-1               | 31S<br>31S           | 0.5<br>0.5         |                                                                 | 1.7<br>1.7               | 140/170<br>140/170                    | 61<br>61         | RV-03<br>RV-03                  | RVA-03<br>RVA-03           |
| KB-229L<br>KB-229L1              | 32S<br>32S           | 0.5<br>0.5         |                                                                 | 1.7<br>1.7               | 140/170<br>140/170                    | 61<br>61         | RV-03<br>RV-03                  | RVA-03<br>RVA-03           |
| KB-329<br>KB-319-1               | 41S<br>41S           | 0.85<br>0.85       |                                                                 | 2.9<br>2.9               | 140/140<br>140/140                    | 64<br>64         | RV-03<br>RV-03                  | RVA-03<br>RVA-03           |
| KB-329L<br>KB-329L-1             | 42S<br>42S           | 0.85<br>0.85       |                                                                 | 2.9<br>2.9               | 140/140<br>140/140                    | 64<br>64         | RV-03<br>RV-03                  | RVA-03<br>RVA-03           |
| KB-329                           | 43S                  | 1.1                |                                                                 | 2.9                      | 180/180                               | 64               | RV-03                           | RVA-03                     |
| KB-339                           | 44S                  | 1.5                |                                                                 | 2.9                      | 205/230                               | 64               | RV-03                           | RVA-03                     |
| KB-429<br>KB-429L<br>KB-429-1    | 52S<br>52S<br>53S    | 1.5<br>1.5<br>1.75 | 3x 276/480<br>(1 x 276)<br>(different voltage on request)       | 4.2<br>4.2<br>4.2        | 180/180<br>180/180<br>210/220         | 73<br>73<br>73   | RV-03<br>RV-03<br>RV-03         | RVA-03<br>RVA-03<br>RVA-03 |
| KB-429                           | 54S                  | 1.9                |                                                                 | 4.2                      | 210/220                               | 73               | RV-03                           | RVA-03                     |
| KB-429L                          | 54S                  | 1.9                |                                                                 | 4.2                      | 210/220                               | 73               | RV-03                           | RVA-03                     |
| KB-429                           | 55S                  | 2.6                |                                                                 | 4.2                      | 220/270                               | 73               | RV-03                           | RVA-03                     |
| KB-429HF<br>KB-429HF<br>KB-429HF | 56HF<br>57HF<br>58HF | 1.5<br>1.9<br>2.6  |                                                                 | 5.25<br>5.25<br>5.25     | 180/180<br>230/220<br>255/300         | 73<br>73<br>73   | RV-03<br>RV-03<br>RV-03         | RVA-03<br>RVA-03<br>RVA-03 |
| KB-529<br>KB-529-1               | 61S<br>61S           | 2.6<br>2.6         |                                                                 | 6.2<br>6.2               | 220/220<br>220/220                    | 77<br>77         | ATV-20<br>ATV-20                | ATV-20<br>ATV-20           |
| KB-529L                          | 61S                  | 2.6                |                                                                 | 6.2                      | 220/220                               | 77               | ATV-20                          | ATV-20                     |
| KB-629<br>KB-629-1               | 62S<br>62S           | 3.7<br>3.7         |                                                                 | 6.2<br>6.2               | 280/280<br>280/280                    | 77<br>77         | RV-03<br>RV-03                  | RVA-03<br>RVA-03           |
| KB-629L                          | 62S                  | 3.7                |                                                                 | 6.2                      | 280/280                               | 77               | RV-03                           | RVA-03                     |
| KB-639                           | 63S                  | 4.6                |                                                                 | 6.2                      | 315/320                               | 77               | RV-03                           | RVA-03                     |
| KB-529HF<br>KB-629HF<br>KB-639HF | 61HF<br>62HF<br>63HF | 2.6<br>3.7<br>4.6  |                                                                 | 8.3<br>8.3<br>8.3        | 220/250<br>280/280<br>315/320         | 77<br>77<br>77   | RV-03<br>RV-03<br>RV-03         | RVA-03<br>RVA-03<br>RVA-03 |
| KB-729<br>KB-829                 | 81S<br>82S           | 6.3<br>8.6         | 3 x 276/480 or<br>(3 x 480/-)<br>(different voltage on request) | 10.9<br>10.9             | 290/290<br>350/400                    | 79<br>79         | -- --<br>-- --                  | ATV-25<br>ATV-25           |
| KB-919<br>KB-929<br>KB-939       | 91S<br>92S<br>93S    | 11<br>15<br>22     |                                                                 | 22.4<br>22.4<br>22.4     | 190/190<br>290/290<br>370/430         | 81<br>81<br>81   | -- --<br>-- --<br>-- --         | ATV-25<br>ATV-25<br>ATV-25 |

60 Hz



| Type         | Curve no. | Output [kW] | Voltage star/delta [V]                                    | Maximum airflow [m³/min] | Safety limit Vacuum / pressure [mbar] | Noise level [dB] | Vacuum / pressure valve PVC/ALU |           |
|--------------|-----------|-------------|-----------------------------------------------------------|--------------------------|---------------------------------------|------------------|---------------------------------|-----------|
| Double-stage |           |             |                                                           |                          |                                       |                  |                                 |           |
| KB-2308      | 101S      | 0.85        | 3 x 276/480 or (3 x 480/-) (different voltage on request) | 1.8                      | 245/245                               | 66               | RV-03                           | RVA-03    |
| KB-3319      | 110S      | 1.5         |                                                           | 3.0                      | 235/250                               | 69               | RV-03                           | RVA-03    |
| KB-3319      | 111S      | 1.9         |                                                           | 3.0                      | 300/300                               | 69               | RV-03                           | RVA-03    |
| KB-3326      | 112S      | 2.6         |                                                           | 3.0                      | 350/435                               | 69               | RV-36                           | RVA-36    |
| KB-4337      | 121S      | 3.7         |                                                           | 4.5                      | 405/415                               | 77               | RV-36                           | RVA-36    |
| KB-4346      | 122S      | 4.6         |                                                           | 4.5                      | 410/500                               | 77               | RV-36                           | RVA-36    |
| KB-6346      | 131S      | 4.6         | 3 x 276/480 or (3 x 480/-) (different voltage on request) | 6.2                      | 380/380                               | 79               | 2xRV-36                         | RVA-36    |
| KB-6355      | 132S      | 6.3         |                                                           | 6.2                      | 425/530                               | 79               | 2xRV-36                         | 2xRVA-36  |
| KB-6375      | 133S      | 8.6         |                                                           | 6.2                      | 450/675                               | 79               | 2xRV-36                         | 2xRVA-36* |
| KB-6455      | 142S      | 6.3         |                                                           | 9.2                      | 200/220                               | 79               | RV-36                           | RV-36     |
| KB-6475      | 143S      | 8.6         |                                                           | 9.2                      | 260/270                               | 79               | RVA-36                          | RVA-36    |
| KB-8310      | 151S      | 8.6         |                                                           | 10.9                     | 320/320                               | 81               | -- --                           | 2xATV-25  |
| KB-8315      | 152S      | 13          |                                                           | 10.9                     | 455/600                               | 81               | -- --                           | 2xATV-25  |
| KB-8320      | 153S      | 19          |                                                           | 10.9                     | 650/780                               | 81               | -- --                           | -         |
| KB-8415      | 162S      | 13          |                                                           | 16.5                     | 260/260                               | 81               | -- --                           | 2xATV-25  |

Colour code • dark grey: 3 phase / Colour code • orange: 1 phase

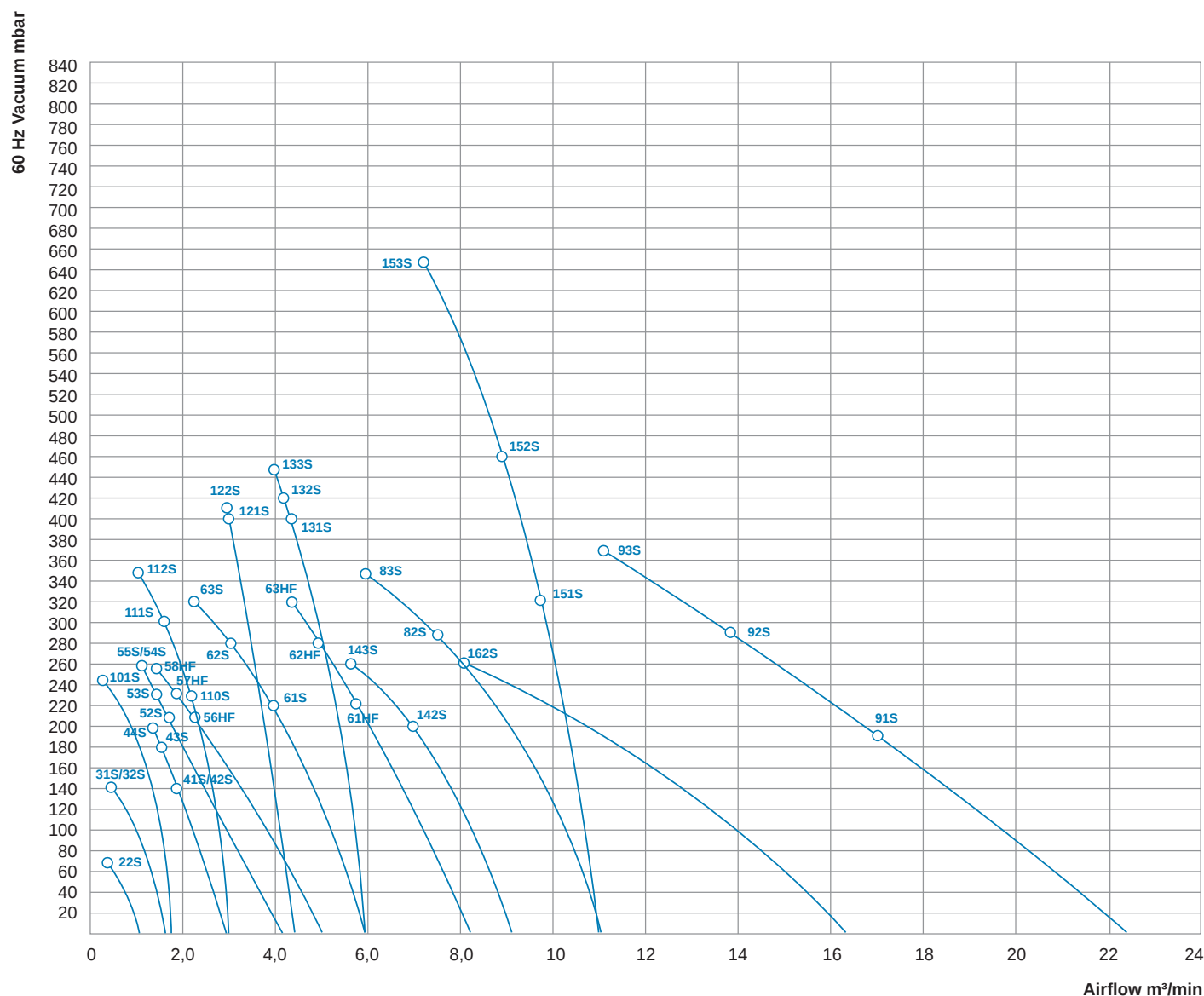
The technical data is based on 1 bar (abs) free atmosphere and 20 °C with inlet air density 1.2 kg/m³, incl. 10% variance. All rights reserved for technical specification changes without prior approval from any source outside Brd. Klee, when considered necessary based on our research and development.

It is recommended to use a pressure/vacuum safety valve to protect the fan from overheating and exceeding the permissible pressure/vacuum. Please see page 54-55 for further information. Bi-metal switch is standard on motors from 5.5 kW and all 1-phase models.

\* Cannot be used at "Pressure" max. setting is 600 mbar.

# Vacuum diagram

## KB-series 60 Hz



The technical data is based on 1 bar (abs) free atmosphere and 20 °C with inlet air density 1.2 kg/m³, incl. 10% variance. All rights reserved for technical specification changes without prior approval from any source outside Brd. Klee, when considered necessary based on our research and development.

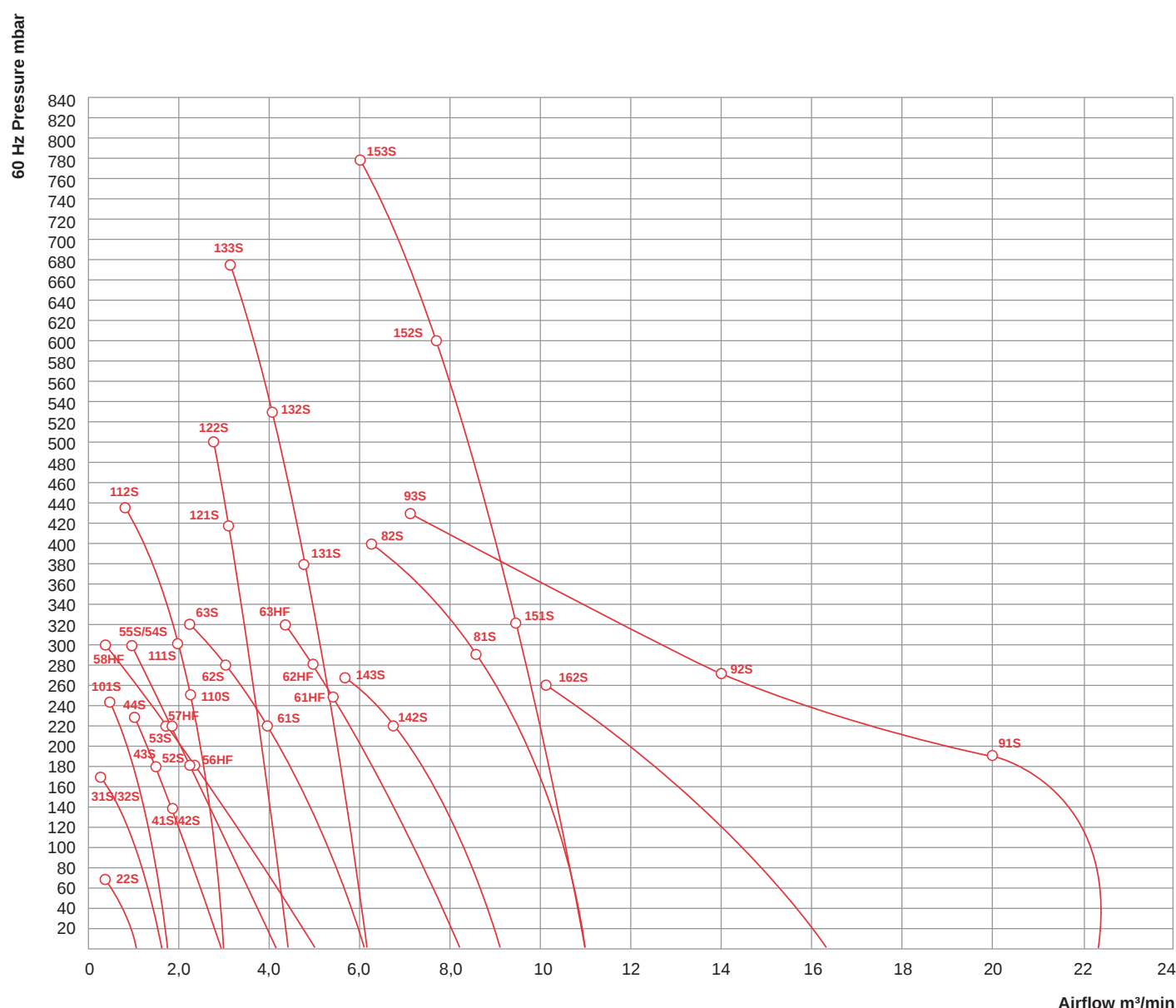
It is recommended to use a pressure/vacuum safety valve to protect the fan from overheating and exceeding the permissible pressure/vacuum. Please see page 54-55 for further information. Bi-metal switch is standard on motors from 5.5 kW and all 1-phase models.

Pressure

60 Hz

# Pressure diagram

## KB-series 60 Hz



The technical data is based on 1 bar (abs) free atmosphere and 20 °C with inlet air density 1.2 kg/m³, incl. 10% variance. All rights reserved for technical specification changes without prior approval from any source outside Brd. Klee, when considered necessary based on our research and development.

It is recommended to use a pressure/vacuum safety valve to protect the fan from overheating and exceeding the permissible pressure/vacuum. Please see page 54-55 for further information. Bi-metal switch is standard on motors from 5.5 kW and all 1-phase models.

# Technical data “vacuum”

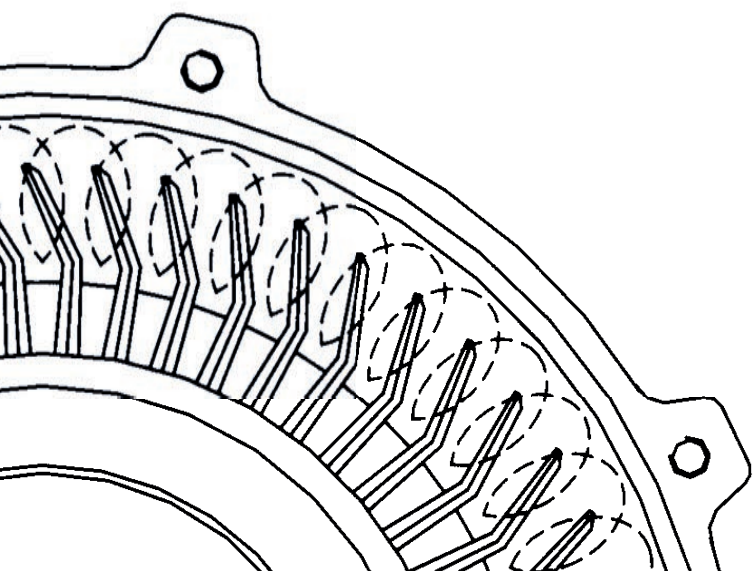
## KB-series 60 Hz single-stage

| Models            |        | Single-stage vacuum |      |      |      |      |      |      |      |      |      |      |
|-------------------|--------|---------------------|------|------|------|------|------|------|------|------|------|------|
| Series 1          | mbar   | 0                   | 10   | 20   | 30   | 40   | 50   | 60   | 70   | 75   | 80   | 90   |
| KB-129 0.25 kW    | m³/min | 1.0                 | 0.92 | 0.85 | 0.8  | 0.7  | 0.62 | 0.47 | 0.28 | 0.15 | -    | -    |
| KB-129L 0.25 kW   | m³/min | 1.0                 | 0.92 | 0.85 | 0.8  | 0.7  | 0.62 | 0.47 | 0.28 | 0.15 | -    | -    |
| Series 2          | mbar   | 0                   | 20   | 40   | 60   | 80   | 100  | 110  | 120  | 130  | 140  | 150  |
| KB-229 0.5 kW     | m³/min | 1.7                 | 1.5  | 1.25 | 1.07 | 0.85 | 0.7  | 0.57 | 0.5  | 0.32 | 0.25 | -    |
| KB-229-1 0.5 kW   |        | 1.7                 | 1.5  | 1.25 | 1.07 | 0.85 | 0.7  | 0.57 | 0.5  | 0.32 | 0.25 | -    |
| KB-229L 0.5 kW    |        | 1.7                 | 1.5  | 1.25 | 1.07 | 0.85 | 0.7  | 0.57 | 0.5  | 0.32 | 0.25 | -    |
| KB-229L-1 0.5 kW  |        | 1.7                 | 1.5  | 1.25 | 1.07 | 0.85 | 0.7  | 0.57 | 0.5  | 0.32 | 0.25 | -    |
| Series 3          | mbar   | 0                   | 20   | 40   | 60   | 80   | 100  | 120  | 140  | 160  | 180  | 205  |
| KB-329 0.85 kW    | m³/min | 2.9                 | 2.7  | 2.5  | 2.2  | 2.0  | 1.8  | 1.65 | 1.4  | -    | -    | -    |
| KB-329-1 0.85 kW  |        | 2.9                 | 2.7  | 2.5  | 2.2  | 2.0  | 1.8  | 1.65 | 1.4  | -    | -    | -    |
| KB-329L 0.85 kW   |        | 2.9                 | 2.7  | 2.5  | 2.2  | 2.0  | 1.8  | 1.65 | 1.4  | -    | -    | -    |
| KB-329L-1 0.85 kW |        | 2.9                 | 2.7  | 2.5  | 2.2  | 2.0  | 1.8  | 1.65 | 1.4  | -    | -    | -    |
| KB-329 1.1 kW     |        | 2.9                 | 2.7  | 2.5  | 2.2  | 2.0  | 1.8  | 1.65 | 1.4  | 1.2  | 0.85 | -    |
| KB-339 1.5 kW     |        | 2.9                 | 2.7  | 2.5  | 2.2  | 2.0  | 1.8  | 1.65 | 1.4  | 1.2  | 0.85 | 0.55 |
| Series 4          | mbar   | 0                   | 25   | 50   | 75   | 100  | 140  | 180  | 210  | 230  | 255  | 280  |
| KB-429 1.5 kW     | m³/min | 4.2                 | 3.85 | 3.7  | 3.3  | 3.0  | 2.2  | 1.65 | -    | -    | -    | -    |
| KB-429L 1.5 kW    |        | 4.2                 | 3.85 | 3.7  | 3.3  | 3.0  | 2.2  | 1.65 | -    | -    | -    | -    |
| KB-429-1 1.75 kW  |        | 4.2                 | 3.85 | 3.7  | 3.3  | 3.0  | 2.2  | 1.65 | 1.25 | -    | -    | -    |
| KB-429 1.9 kW     |        | 4.2                 | 3.85 | 3.7  | 3.3  | 3.0  | 2.2  | 1.65 | 1.25 | -    | -    | -    |
| KB-429L 1.9 kW    |        | 4.2                 | 3.85 | 3.7  | 3.3  | 3.0  | 2.2  | 1.65 | 1.25 | -    | -    | -    |
| KB-429 2.6 kW     |        | 4.2                 | 3.85 | 3.7  | 3.3  | 3.0  | 2.2  | 1.65 | 1.2t | 0.83 | 0.57 | -    |
| Series 4 HF       | mbar   | 0                   | 25   | 50   | 75   | 100  | 140  | 180  | 210  | 230  | 255  | 280  |
| KB-429 1.5 kW HF  | m³/min | 5.25                | 5.00 | 4.58 | 3.92 | 3.50 | 2.33 | 1.67 | -    | -    | -    | -    |
| KB-429 1.75 kW HF |        | 5.25                | 5.00 | 4.58 | 3.92 | 3.50 | 2.33 | 1.67 | 1.33 | 1.00 | -    | -    |
| KB-429 2.6 kW HF  |        | 5.25                | 5.00 | 4.58 | 3.92 | 3.50 | 2.33 | 1.67 | 1.33 | 1.00 | 0.67 | -    |

# Technical data “vacuum”

## KB-series 60 Hz single-stage

| Models           |                     | Single-stage vacuum (continued) |      |      |      |      |      |      |      |      |      |      |
|------------------|---------------------|---------------------------------|------|------|------|------|------|------|------|------|------|------|
| Series 5 & 6     | mbar                | 0                               | 50   | 100  | 130  | 160  | 180  | 200  | 220  | 250  | 280  | 315  |
| KB-529 2.6 kW    | m <sup>3</sup> /min | 6.2                             | 5.8  | 5.4  | 4.9  | 4.4  | 4.0  | 3.5  | 2.9  | -    | -    | -    |
| KB-529-1 2.6 kW  |                     | 6.2                             | 5.8  | 5.4  | 4.9  | 4.4  | 4.0  | 3.5  | 2.9  | -    | -    | -    |
| KB-529L 2.6 kW   |                     | 6.2                             | 5.8  | 5.4  | 4.9  | 4.4  | 4.0  | 3.5  | 2.9  | -    | -    | -    |
| KB-629 3.7 kW    |                     | 6.2                             | 5.8  | 5.4  | 4.9  | 4.4  | 4.0  | 3.5  | 2.9  | 2.0  | 1.55 | -    |
| KB-629-1 3.7 kW  |                     | 6.2                             | 5.8  | 5.4  | 4.9  | 4.4  | 4.0  | 3.5  | 2.9  | 2.0  | 1.55 | -    |
| KB-629L 3.7 kW   |                     | 6.2                             | 5.8  | 5.4  | 4.9  | 4.4  | 4.0  | 3.5  | 2.9  | 2.0  | 1.55 | -    |
| KB-639 4.6 kW    |                     | 6.2                             | 5.8  | 5.4  | 4.9  | 4.4  | 4.0  | 3.5  | 2.9  | 2.0  | 1.55 | 0.95 |
| Series 5 & 6 HF  | mbar                | 0                               | 50   | 100  | 130  | 160  | 180  | 200  | 220  | 250  | 280  | 315  |
| KB-529 2.6 kW HF | m <sup>3</sup> /min | 8.3                             | 7.2  | 6.3  | 5.0  | 4.5  | 3.7  | 3.0  | 2.50 | -    | -    | -    |
| KB-629 3.7 kW HF |                     | 8.3                             | 7.2  | 6.3  | 5.0  | 4.5  | 3.7  | 3.0  | 2.50 | 1.83 | 1.33 | -    |
| KB-639 4.6 kW HF |                     | 8.3                             | 7.2  | 6.3  | 5.0  | 4.5  | 3.7  | 3.0  | 2.50 | 1.83 | 1.33 | 0.83 |
| Series 7 & 8     | mbar                | 0                               | 50   | 100  | 130  | 160  | 180  | 200  | 250  | 290  | 320  | 350  |
| KB-729 6.3 kW    | m <sup>3</sup> /min | 10.9                            | 10.7 | 9.7  | 9.2  | 8.8  | 8.2  | 7.85 | 6.5  | 5.15 | -    | -    |
| KB-829 8.6 kW    |                     | 10.9                            | 10.7 | 9.7  | 9.2  | 8.8  | 8.2  | 7.85 | 6.5  | 5.15 | 4.1  | 2.7  |
| Series 9         | mbar                | 0                               | 50   | 100  | 150  | 190  | 230  | 260  | 290  | 320  | 350  | 370  |
| KB-919 11.0 kW   | m <sup>3</sup> /min | 22.4                            | 21.8 | 21.2 | 20.0 | 18.2 | -    | -    | -    | -    | -    | -    |
| KB-929 15.0 kW   |                     | 22.4                            | 21.8 | 21.2 | 20.0 | 18.2 | 16.3 | 14.0 | 12.1 | -    | -    | -    |
| KB-939 23.0 kW   |                     | 22.4                            | 21.8 | 21.2 | 20.0 | 18.2 | 16.3 | 14.0 | 12.1 | 9.8  | 8.5  | 7.4  |



# Technical data “vacuum”

## KB-series 60 Hz double-stage

| Models          |        | Double-stage vacuum |      |      |      |      |      |      |      |      |      |      |
|-----------------|--------|---------------------|------|------|------|------|------|------|------|------|------|------|
| Series 23       | mbar   | 0                   | 25   | 50   | 75   | 100  | 125  | 150  | 175  | 200  | 220  | 245  |
| KB-2308 0.85 kW | m³/min | 1.8                 | 1.7  | 1.51 | 1.38 | 1.25 | 1.07 | 0.9  | 0.78 | 0.63 | 0.46 | 0.28 |
| Series 33       | mbar   | 0                   | 50   | 100  | 150  | 200  | 220  | 225  | 275  | 300  | 325  | 350  |
| KB-3319 1.9 kW  | m³/min | 3.0                 | 2.9  | 2.4  | 2.0  | 1.65 | 1.35 | 1.2  | 0.91 | 0.8  | -    | -    |
| KB-3319 2.6 kW  |        | 3.0                 | 2.9  | 2.4  | 2.0  | 1.65 | 1.35 | 1.2  | 0.91 | 0.8  | 0.65 | 0.47 |
| Series 43       | mbar   | 0                   | 50   | 100  | 150  | 200  | 250  | 275  | 300  | 350  | 405  | 410  |
| KB-4337 3.7 kW  | m³/min | 4.5                 | 4.15 | 3.9  | 3.3  | 2.8  | 2.0  | 1.8  | 1.62 | 1.18 | 0.78 | -    |
| KB-4346 4.6 kW  |        | 4.5                 | 4.15 | 3.9  | 3.3  | 2.8  | 2.0  | 1.8  | 1.62 | 1.18 | 0.78 | 0.75 |
| Series 63       | mbar   | 0                   | 50   | 100  | 200  | 250  | 300  | 350  | 380  | 400  | 425  | 450  |
| KB-6346 4.6 kW  | m³/min | 6.2                 | 6.05 | 5.9  | 5.2  | 4.8  | 4.05 | 3.3  | 2.8  | -    | -    | -    |
| KB-6355 6.3 kW  |        | 6.2                 | 6.05 | 5.9  | 5.2  | 4.8  | 4.05 | 3.3  | 2.8  | 2.5  | 2.0  | -    |
| KB-6375 8.6 kW  |        | 6.2                 | 6.05 | 5.9  | 5.2  | 4.8  | 4.05 | 3.3  | 2.8  | 2.5  | 2.0  | 1.8  |
| Series 64       | mbar   | 0                   | 50   | 100  | 120  | 140  | 160  | 180  | 200  | 220  | 240  | 260  |
| KB-6455 6.3 kW  | m³/min | 9.2                 | 8.5  | 7.7  | 7.15 | 6.8  | 6.2  | 5.6  | 5.0  | -    | -    | -    |
| KB-6475 8.6 kW  |        | 9.2                 | 8.5  | 7.7  | 7.15 | 6.8  | 6.2  | 5.6  | 5.0  | 4.4  | 3.65 | 2.6  |
| Series 83       | mbar   | 0                   | 75   | 150  | 200  | 320  | 400  | 455  | 500  | 550  | 600  | 650  |
| KB-8310 8.6 kW  | m³/min | 10.9                | 9.8  | 8.8  | 8.35 | 6.5  | -    | -    | -    | -    | -    | -    |
| KB-8315 13.0 kW |        | 10.9                | 9.8  | 8.8  | 8.35 | 6.5  | 5.2  | 3.9  | -    | -    | -    | -    |
| KB-8320 19.0 kW |        | 10.9                | 9.8  | 8.8  | 8.35 | 6.5  | 5.2  | 3.9  | 3.0  | 1.8  | 1.25 | 0.8  |
| Series 84       | mbar   | 0                   | 25   | 50   | 75   | 100  | 125  | 150  | 175  | 200  | 230  | 260  |
| KB-8415 13.0 kW | m³/min | 16.5                | 16.2 | 15.9 | 14.9 | 13.7 | 13.0 | 11.9 | 10.8 | 9.8  | 8.8  | 8.0  |

Pressure

60 Hz

# Technical data “pressure”

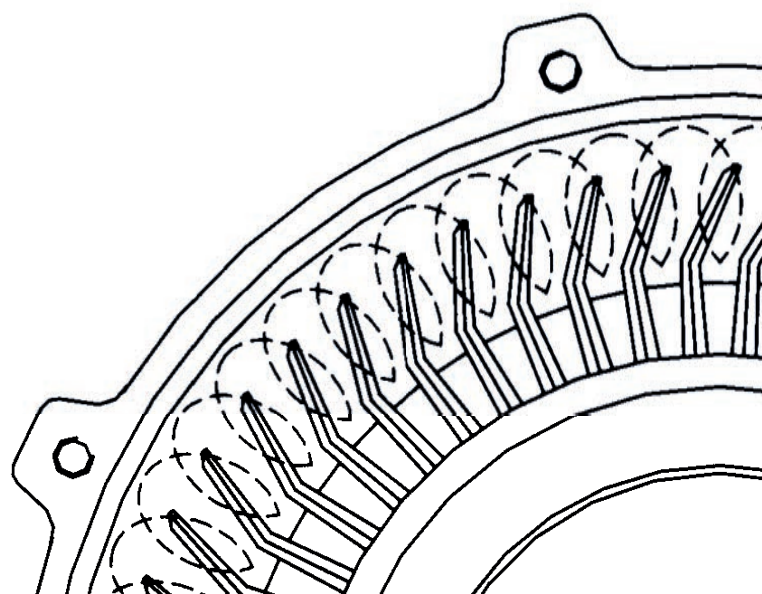
## KB-series 60 Hz single-stage

| Models            |        | Single-stage pressure |      |      |      |      |      |      |      |      |      |      |
|-------------------|--------|-----------------------|------|------|------|------|------|------|------|------|------|------|
| Series 1          | mbar   | 0                     | 10   | 20   | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  |
| KB-129 0.25 kW    | m³/min | 1.0                   | 0.95 | 0.9  | 0.85 | 0.75 | 0.68 | 0.51 | 0.4  | 0.2  | -    | -    |
| KB-129-1 0.25 kW  | m³/min | 1.0                   | 0.95 | 0.9  | 0.85 | 0.75 | 0.68 | 0.51 | 0.4  | 0.2  | -    | -    |
| Series 2          | mbar   | 0                     | 20   | 40   | 60   | 80   | 100  | 120  | 140  | 160  | 170  | 180  |
| KB-229 0.5 kW     | m³/min | 1.7                   | 1.6  | 1.5  | 1.13 | 1.0  | 0.87 | 0.75 | 0.55 | 0.42 | 0.3  | -    |
| KB-229-1 0.5 kW   |        | 1.7                   | 1.6  | 1.5  | 1.13 | 1.0  | 0.87 | 0.75 | 0.55 | 0.42 | 0.3  | -    |
| KB-229L 0.5 kW    |        | 1.7                   | 1.6  | 1.5  | 1.13 | 1.0  | 0.87 | 0.75 | 0.55 | 0.42 | 0.3  | -    |
| KB-229L-1 0.5 kW  |        | 1.7                   | 1.6  | 1.5  | 1.13 | 1.0  | 0.87 | 0.75 | 0.55 | 0.42 | 0.3  | -    |
| Series 3          | mbar   | 0                     | 30   | 60   | 80   | 100  | 120  | 140  | 160  | 180  | 200  | 230  |
| KB-329 0.85 kW    | m³/min | 2.9                   | 2.8  | 2.7  | 2.5  | 2.2  | 2.0  | 1.75 | -    | -    | -    | -    |
| KB-329-1 0.85 kW  |        | 2.9                   | 2.8  | 2.7  | 2.5  | 2.2  | 2.0  | 1.75 | -    | -    | -    | -    |
| KB-329L 0.85 kW   |        | 2.9                   | 2.8  | 2.7  | 2.5  | 2.2  | 2.0  | 1.75 | -    | -    | -    | -    |
| KB-329L-1 0.85 kW |        | 2.9                   | 2.8  | 2.7  | 2.5  | 2.2  | 2.0  | 1.75 | -    | -    | -    | -    |
| KB-329 1.1 kW     |        | 2.9                   | 2.8  | 2.7  | 2.5  | 2.2  | 2.0  | 1.75 | 1.5  | 1.2  | -    | -    |
| KB-339 1.5 kW     |        | 2.9                   | 2.8  | 2.7  | 2.5  | 2.2  | 2.0  | 1.75 | 1.5  | 1.2  | 0.95 | 0.7  |
| Series 4          | mbar   | 0                     | 40   | 80   | 120  | 140  | 160  | 180  | 200  | 220  | 250  | 300  |
| KB-429 1.5 kW     | m³/min | 4.2                   | 3.7  | 3.2  | 2.7  | 2.3  | 2.1  | 1.9  | -    | -    | -    | -    |
| KB-429L 1.5 kW    |        | 4.2                   | 3.7  | 3.2  | 2.7  | 2.3  | 2.1  | 1.9  | -    | -    | -    | -    |
| KB-429-1 1.75 kW  |        | 4.2                   | 3.7  | 3.2  | 2.7  | 2.3  | 2.1  | 1.9  | 1.8  | 1.7  | -    | -    |
| KB-429 1.9 kW     |        | 4.2                   | 3.7  | 3.2  | 2.7  | 2.3  | 2.1  | 1.9  | 1.8  | 1.7  | -    | -    |
| KB-429L 1.9kW     |        | 4.2                   | 3.7  | 3.2  | 2.7  | 2.3  | 2.1  | 1.9  | 1.8  | 1.7  | -    | -    |
| KB-429 2.6 kW     |        | 4.2                   | 3.7  | 3.2  | 2.7  | 2.3  | 2.1  | 1.9  | 1.8  | 1.7  | 1.5  | 1.18 |
| Series 4 HF       | mbar   | 0                     | 40   | 80   | 120  | 140  | 160  | 180  | 200  | 220  | 250  | 300  |
| KB-429 1.5 kW HF  | m³/min | 5.25                  | 4.33 | 3.50 | 3.00 | 2.67 | 2.33 | 2.17 | -    | -    | -    | -    |
| KB-429 1.75 kW HF |        | 5.25                  | 4.33 | 3.50 | 3.00 | 2.67 | 2.33 | 2.17 | 1.67 | 1.33 | -    | -    |
| KB-429 2.6 kW HF  |        | 5.25                  | 4.33 | 3.50 | 3.00 | 2.67 | 2.33 | 2.17 | 1.67 | 1.33 | 1.00 | 0.33 |

# Technical data “pressure”

## KB-series 60 Hz single-stage

| Models           |        | Single-stage pressure (continued) |       |      |      |      |      |      |      |      |      |      |
|------------------|--------|-----------------------------------|-------|------|------|------|------|------|------|------|------|------|
| Series 5 & 6     | mbar   | 0                                 | 50    | 100  | 150  | 175  | 200  | 220  | 250  | 280  | 300  | 320  |
| KB-529 2.6 kW    | m³/min | 6.2                               | 5.5   | 4.95 | 4.2  | 3.95 | 3.65 | 3.45 | -    | -    | -    | -    |
| KB-529-1 2.6 kW  |        | 6.2                               | 5.5   | 4.95 | 4.2  | 3.95 | 3.65 | 3.45 | -    | -    | -    | -    |
| KB-529L 2.6 kW   |        | 6.2                               | 5.5   | 4.95 | 4.2  | 3.95 | 3.65 | 3.45 | -    | -    | -    | -    |
| KB-629 3.7 kW    |        | 6.2                               | 5.5   | 4.95 | 4.2  | 3.95 | 3.65 | 3.45 | 3.0  | 2.6  | -    | -    |
| KB-629-1 3.7 kW  |        | 6.2                               | 5.5   | 4.95 | 4.2  | 3.95 | 3.65 | 3.45 | 3.0  | 2.6  | -    | -    |
| KB-629L 3.7 kW   |        | 6.2                               | 5.5   | 4.95 | 4.2  | 3.95 | 3.65 | 3.45 | 3.0  | 2.6  | -    | -    |
| KB-639 4.6 kW    |        | 6.2                               | 5.5   | 4.95 | 4.2  | 3.95 | 3.65 | 3.45 | 3.0  | 2.6  | 2.3  | 2.1  |
| Series 5 & 6 HF  | mbar   | 0                                 | 50    | 100  | 150  | 175  | 200  | 220  | 250  | 280  | 300  | 320  |
| KB-529 2.6 kW HF | m³/min | 8.30                              | 7.17  | 6.67 | 5.83 | 5.33 | 5.00 | 4.67 | 4.17 | -    | -    | -    |
| KB-629 3.7 kW HF |        | 8.30                              | 7.17  | 6.67 | 5.83 | 5.33 | 5.00 | 4.67 | 4.17 | 3.83 | -    | -    |
| KB-639 4.6 kW HF |        | 8.30                              | 7.17  | 6.67 | 5.83 | 5.33 | 5.00 | 4.67 | 4.17 | 3.83 | 3.50 | 3.00 |
| Series 7 & 8     | mbar   | 0                                 | 50    | 100  | 150  | 220  | 290  | 300  | 325  | 350  | 375  | 400  |
| KB-729 6.3 kW    | m³/min | 10.9                              | 9.8   | 9.3  | 8.6  | 7.5  | 6.1  | -    | -    | -    | -    | -    |
| KB-829 8.6 kW    |        | 10.9                              | 9.8   | 9.3  | 8.6  | 7.5  | 6.1  | 5.9  | 5.2  | 4.8  | 4.1  | 3.4  |
| Series 9         | mbar   | 0                                 | 50    | 100  | 150  | 190  | 250  | 290  | 325  | 350  | 400  | 430  |
| KB-919 11.0 kW   | m³/min | 22.4                              | 22.35 | 22.3 | 21.7 | 20.2 | -    | -    | -    | -    | -    | -    |
| KB-929 15.0 kW   |        | 22.4                              | 22.35 | 22.3 | 21.7 | 20.2 | 16.8 | 14.0 | -    | -    | -    | -    |
| KB-939 23.0 kW   |        | 22.4                              | 22.35 | 22.3 | 21.7 | 20.2 | 16.8 | 14.0 | 11.9 | 9.8  | 7.3  | 4.4  |



Pressure

60 Hz

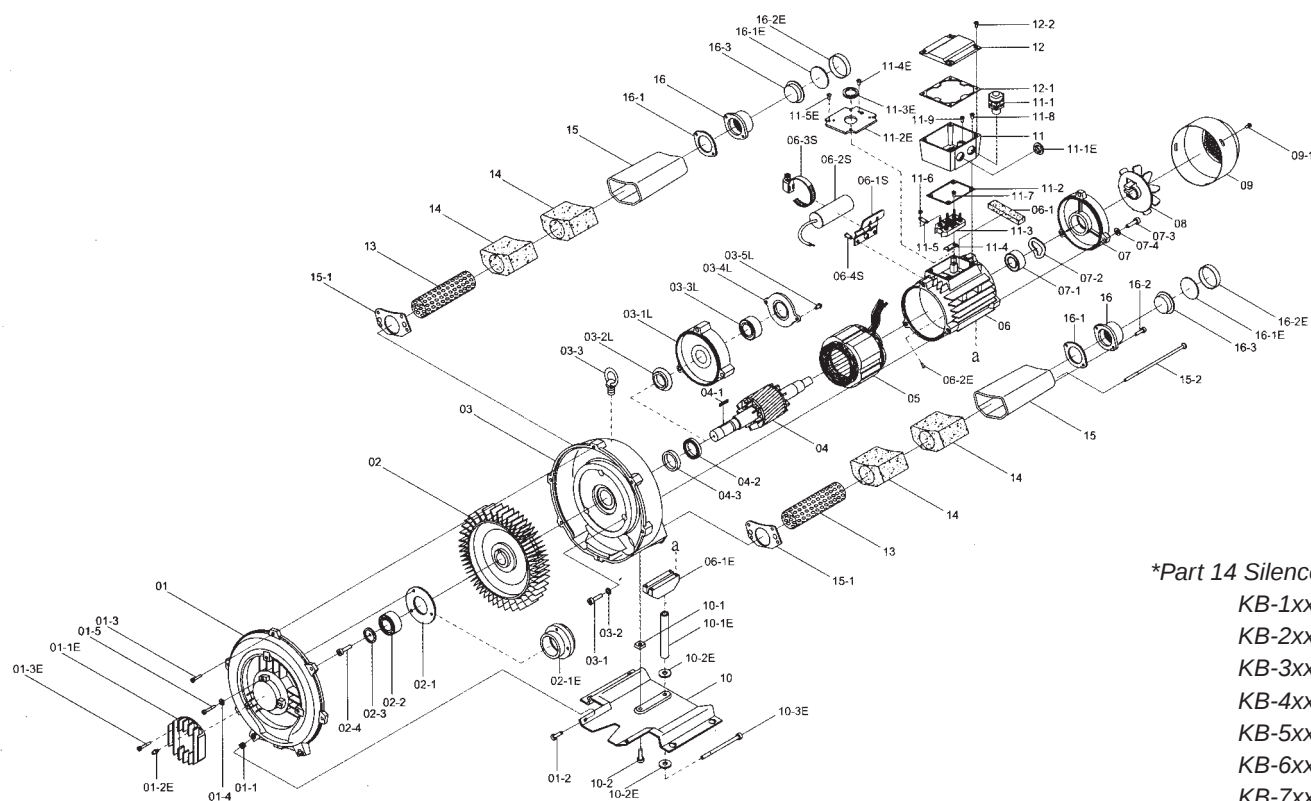
# Technical data “pressure”

## KB-series 60 Hz double-stage

| Models          |        | Double-stage pressure |      |      |      |      |      |      |      |      |      |      |
|-----------------|--------|-----------------------|------|------|------|------|------|------|------|------|------|------|
| Series 23       | mbar   | 0                     | 25   | 50   | 75   | 100  | 125  | 150  | 175  | 200  | 220  | 245  |
| KB-2308 0.85 kW | m³/min | 1.8                   | 1.75 | 1.65 | 1.55 | 1.4  | 1.22 | 1.05 | 0.9  | 0.75 | 0.65 | 0.5  |
| Series 33       | mbar   | 0                     | 50   | 100  | 150  | 200  | 250  | 300  | 325  | 350  | 400  | 435  |
| KB-3319 1.9 kW  | m³/min | 3.0                   | 2.8  | 2.5  | 2.1  | 1.8  | 1.6  | 1.35 | -    | -    | -    | -    |
| KB-3326 2.6 kW  |        | 3.0                   | 2.8  | 2.5  | 2.1  | 1.8  | 1.6  | 1.35 | 1.18 | 0.98 | 0.8  | 0.68 |
| Series 43       | mbar   | 0                     | 50   | 100  | 150  | 200  | 250  | 300  | 350  | 415  | 450  | 500  |
| KB-4337 3.7 kW  | m³/min | 4.5                   | 4.2  | 4.0  | 3.8  | 3.45 | 3.15 | 2.85 | 2.4  | 1.85 | -    | -    |
| KB-4346 4.6 kW  |        | 4.5                   | 4.2  | 4.0  | 3.8  | 3.45 | 3.15 | 2.85 | 2.4  | 1.85 | 1.75 | 1.5  |
| Series 63       | mbar   | 0                     | 75   | 150  | 200  | 250  | 300  | 380  | 450  | 530  | 600  | 675  |
| KB-6346 4.6 kW  | m³/min | 6.2                   | 5.8  | 5.3  | 5.0  | 4.8  | 4.38 | 3.9  | -    | -    | -    | -    |
| KB-6355 6.3 kW  |        | 6.2                   | 5.8  | 5.3  | 5.0  | 4.8  | 4.38 | 3.9  | 3.4  | 2.9  | -    | -    |
| KB-6375 8.6 kW  |        | 6.2                   | 5.8  | 5.3  | 5.0  | 4.8  | 4.38 | 3.9  | 3.4  | 2.9  | 2.7  | 2.3  |
| Series 64       | mbar   | 0                     | 50   | 100  | 120  | 140  | 160  | 180  | 200  | 220  | 250  | 270  |
| KB-6455 6.3 kW  | m³/min | 9.2                   | 8.4  | 7.65 | 7.4  | 7.05 | 6.8  | 6.45 | 6.25 | 5.9  | -    | -    |
| KB-6475 8.6 kW  |        | 9.2                   | 8.4  | 7.65 | 7.4  | 7.05 | 6.8  | 6.45 | 6.25 | 5.9  | 5.4  | 5.2  |
| Series 83       | mbar   | 0                     | 100  | 200  | 320  | 400  | 500  | 550  | 600  | 650  | 700  | 780  |
| KB-8310 8.6 kW  | m³/min | 10.9                  | 10.8 | 10.2 | 9.2  | -    | -    | -    | -    | -    | -    | -    |
| KB-8315 13.0 kW |        | 10.9                  | 10.8 | 10.2 | 9.2  | 8.3  | 6.92 | 6.45 | 6.0  | -    | -    | -    |
| KB-8320 19.0 kW |        | 10.9                  | 10.8 | 10.2 | 9.2  | 8.3  | 6.92 | 6.45 | 6.0  | 5.35 | 4.85 | 4.0  |
| Series 84       | mbar   | 0                     | 25   | 50   | 75   | 100  | 125  | 150  | 175  | 200  | 230  | 260  |
| KB-8415 13.0 kW | m³/min | 16.5                  | 15.7 | 15.2 | 14.2 | 13.8 | 13.0 | 12.6 | 12.0 | 11.2 | 10.8 | 9.95 |

# Single-stage

## Exploded view and parts list



*\*Part 14 Silencer foam*

*KB-1xx: 1 pcs.*

*KB-2xx: 1 pcs.*

*KB-3xx: 1 pcs.*

*KB-4xx: 2 pcs.*

*KB-5xx: 2 pcs.*

*KB-6xx: 2 pcs.*

*KB-7xx: 3 pcs.*

*KB-8xx: 3 pcs.*

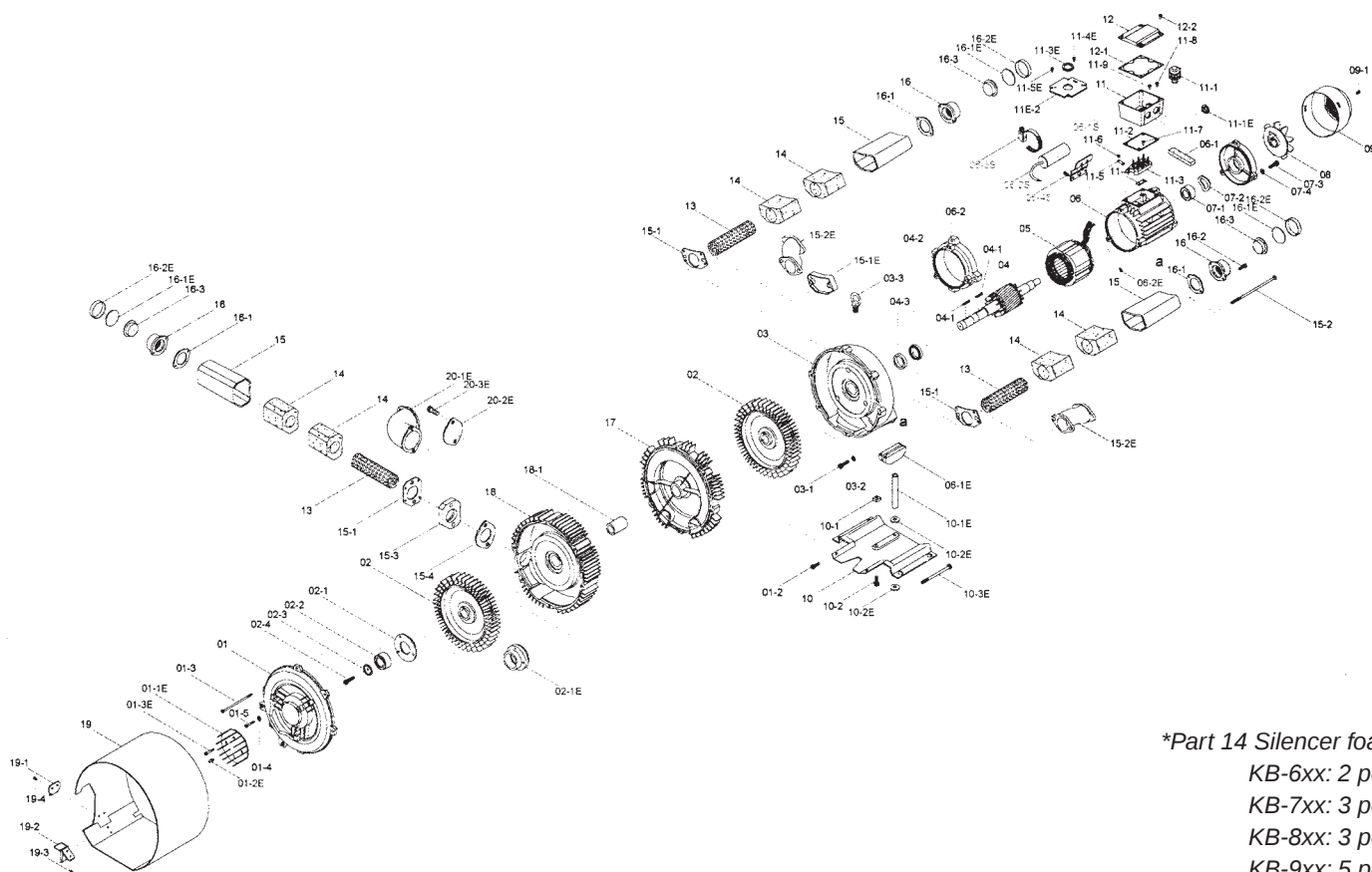
*KB-9xx: 5 pcs.*

|        |                      |        |                   |        |                       |        |                       |
|--------|----------------------|--------|-------------------|--------|-----------------------|--------|-----------------------|
| 01.    | Compressor cover     | 04.    | Rotor             | 08.    | Fan                   | 12.    | Upper terminal box    |
| 01-1E. | Front bearing cover  | 04-1.  | Key               | 09.    | Fan cover             | 12-1.  | Rubber gasket         |
| 01-2E. | Nippel               | 04-2.  | Oli seal          | 10.    | Base                  | 13.    | Silencer mesh         |
| 02.    | Impeller             | 04-3.  | Felt ring         | 10-1E. | Support               | 14*.   | Silencer foam         |
| 02-1.  | Inner bearing cover  | 05.    | Stator & coil     | 11.    | Lower terminal box    | 15.    | Silencer casing       |
| 02-2.  | Front bearing        | 06.    | Motor housing     | 11-1.  | Cable gland           | 15-1.  | Silencer gasket       |
| 02-3.  | Disc                 | 06-1.  | Spronge filler    | 11-2.  | Rubber gasket (lower) | 16.    | Inlet/outlet          |
| 02-1E. | Bearing socket       | 06-1E. | Bracket           | 11-3.  | Terminal board        | 16-1.  | Inlet (outlet) gasket |
| 03.    | Compressure housing  | 06-1S. | Capacitor bracket | 11-4.  | Board case            | 16-3.  | Inlet (outlet) plug   |
| 03-3.  | Eye bolt             | 06-2S. | Capacitor         | 11-5.  | Wire connection       | 16-1E. | Inlet (outlet) plate  |
| 03-1L. | A-shield (L-Model)   | 06-3S. | Steel clip        | 11-6.  | Nut                   | 16-2E. | Inlet (outlet) cover  |
| 03-2L. | VA-seal (L-Model)    | 07.    | Motor cover       | 11-1E. | Plug                  |        |                       |
| 03-3L. | Front bearing WP (L) | 07-1.  | Rear bearing      | 11-2E. | Steel plate           |        |                       |
| 03-4L. | Bearing washer (L)   | 07-2.  | Wave washer       | 11-3E. | Rubber ring           |        |                       |

*Parts not listed are standard ones, e.g. nut, screw, washer.*

# Double-stage

## Exploded view and parts list



*\*Part 14 Silencer foam*  
 KB-6xx: 2 pcs.  
 KB-7xx: 3 pcs.  
 KB-8xx: 3 pcs.  
 KB-9xx: 5 pcs.

|        |                     |        |                       |        |                       |        |                       |
|--------|---------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|
| 01.    | Compressor cover    | 06-1.  | Spronge filler        | 11-3.  | Terminal board        | 15-1E. | Outlet cover          |
| 01-1E. | Front bearing cover | 06-2.  | A-shield              | 11-4.  | Board case            | 15-2E. | Extension Pipe        |
| 01-2E. | Nippel              | 06-1S. | Capacitor bracket     | 11-5.  | Wire connection       | 16.    | Inlet/outlet          |
| 02.    | Impeller            | 06-2S. | Capacitor             | 11-6.  | Nut                   | 16-1.  | Inlet (outlet) gasket |
| 02-1.  | Inner bearing cover | 06-3S. | Steel clip            | 11-1E. | Plug                  | 16-3.  | Inlet (outlet) plug   |
| 02-2.  | Front bearing       | 07.    | Motor cover           | 11-2E. | Steel plate           | 16-1E. | Inlet (outlet) plate  |
| 02-3.  | Disc                | 07-1.  | Rear bearing          | 11-3E. | Rubber ring           | 16-2E. | Inlet (outlet) cover  |
| 02-1E. | Bearing socket      | 07-2.  | Wave washer           | 12.    | Upper terminal box    | 17.    | Middle cover          |
| 03.    | Compressure housing | 08.    | Fan                   | 12-1.  | Rubber gasket         | 18.    | Middle housing        |
| 03-3.  | Eye bolt            | 09.    | Fan cover             | 13.    | Silencer mesh         | 18-1.  | Spacer                |
| 04.    | Rotor               | 10.    | Base                  | 14*.   | Silencer foam         | 19.    | Protective cap        |
| 04-1.  | Key                 | 10-1E. | Support               | 15.    | Silencer casing       | 19-1.  | Buckle (upper)        |
| 04-2.  | Oli seal            | 11.    | Lower terminal box    | 15-1.  | Silencer gasket       | 19-2.  | Buckle (under)        |
| 04-3.  | Felt ring           | 11-1.  | Cable gland           | 15-3.  | Silencer block        | 20-1E. | 90° extension pipe    |
| 05.    | Stator & coil       | 11-2.  | Rubber gasket (upper) | 15-4.  | Silencer gasket/block | 20-2E. | End cover             |
| 06.    | Motor housing       |        |                       |        |                       |        |                       |

*Parts not listed are standard ones, e.g. nut, screw, washer.*

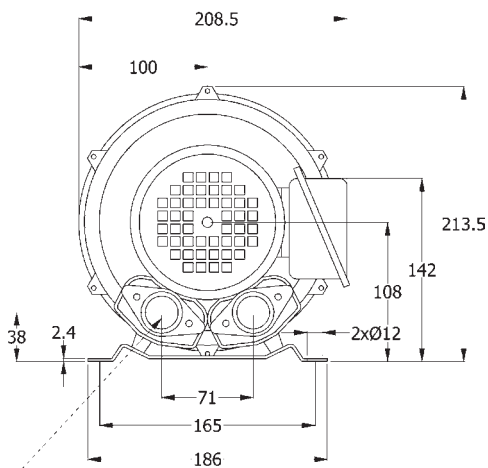
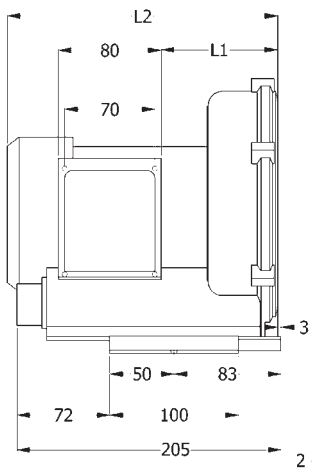
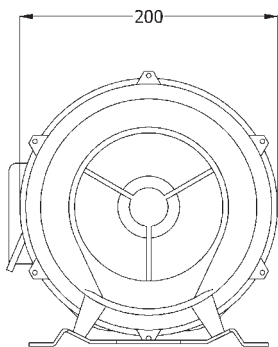
# Specifications type KB 1..

## Single-stage (side channel blowers)

- NSK bearings with high temperature grease
  - CE, UL and CSA approved
- All units are QC inspected by Klee
  - Built-in bi-metal switch for 1-phase models



| Type no.         |       | KB-129   | KB-129-1 |
|------------------|-------|----------|----------|
| Phases           |       | 3        | 1        |
| Output kW        | 50 Hz | 0.20     | 0.20     |
|                  | 60 Hz | 0.25     | 0.25     |
| Voltage Volt     | 50 Hz | 230/400  | 230      |
|                  | 60 Hz | 276/480  | 230      |
| Current Amp      | 50 Hz | 1.2/0.69 | 1.7      |
|                  | 60 Hz | 1.3/0.75 | 1.8      |
| Vacuum mbar      | 50 Hz | 70       | 70       |
|                  | 60 Hz | 75       | 75       |
| Pressure mbar    | 50 Hz | 70       | 70       |
|                  | 60 Hz | 80       | 80       |
| Airflow m³/min   | 50 Hz | 0.8      | 0.8      |
|                  | 60 Hz | 1.0      | 1.0      |
| Insulation class |       | F        | F        |
| L1               |       | 90       | 90       |
| L2               |       | 209.5    | 209.5    |
| Weight Kg        |       | 6.5      | 6.5      |



# Specifications type KB 2..

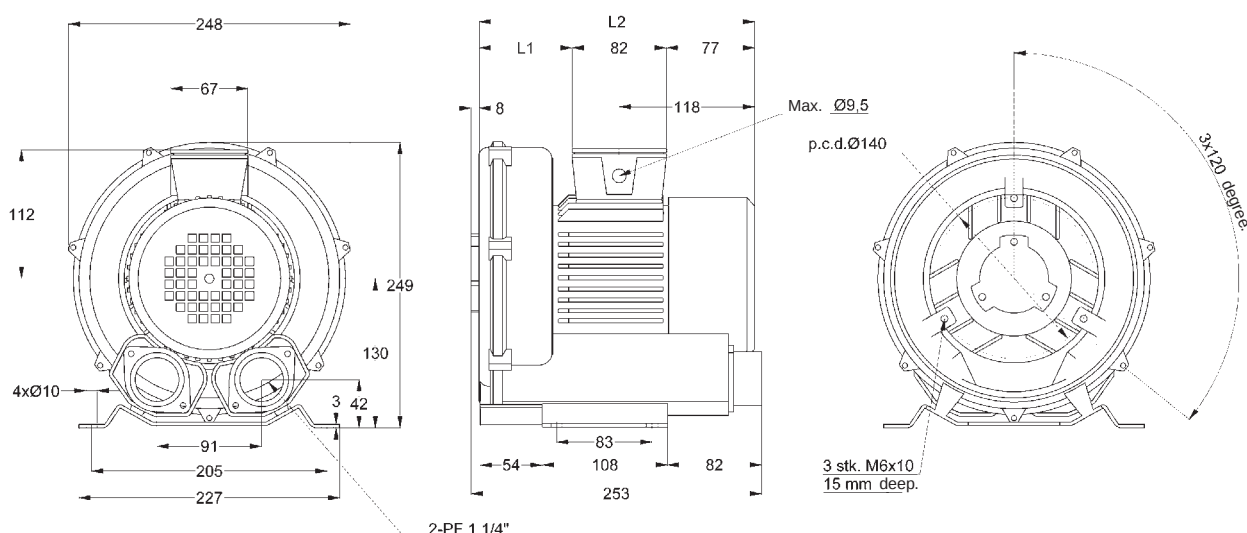
## Single-stage (side channel blowers)

- NSK bearings with high temperature grease
- CE, UL and CSA approved

- All units are QC inspected by Klee
- Built-in bi-metal switch for 1-phase models



| Type no.                    |       | KB-229  | KB-229-1 | KB-229L | KB-229L-1 |
|-----------------------------|-------|---------|----------|---------|-----------|
| Phases                      |       | 3       | 1        | 3       | 1         |
| Output kW                   | 50 Hz | 0.4     | 0.4      | 0.4     | 0.4       |
|                             | 60 Hz | 0.5     | 0.5      | 0.5     | 0.5       |
| Voltage Volt                | 50 Hz | 230/400 | 230      | 230/400 | 230       |
|                             | 60 Hz | 276/480 | 276      | 276/480 | 276       |
| Current Amp                 | 50 Hz | 2.1/1.2 | 2.8      | 2.1/1.2 | 2.8       |
|                             | 60 Hz | 2.3/1.3 | 2.9      | 2.3/1.3 | 2.9       |
| Vacuum mbar                 | 50 Hz | 110     | 110      | 110     | 110       |
|                             | 60 Hz | 140     | 140      | 140     | 140       |
| Pressure mbar               | 50 Hz | 130     | 130      | 130     | 130       |
|                             | 60 Hz | 170     | 170      | 170     | 170       |
| Airflow m <sup>3</sup> /min | 50 Hz | 1.4     | 1.4      | 1.4     | 1.4       |
|                             | 60 Hz | 1.7     | 1.7      | 1.7     | 1.7       |
| Insulation class            |       | F       | F        | F       | F         |
| L1                          |       | 80      | 80       | 103     | 103       |
| L2                          |       | 239     | 239      | 262     | 262       |
| Weight Kg                   |       | 11      | 11.5     | 11.5    | 12        |



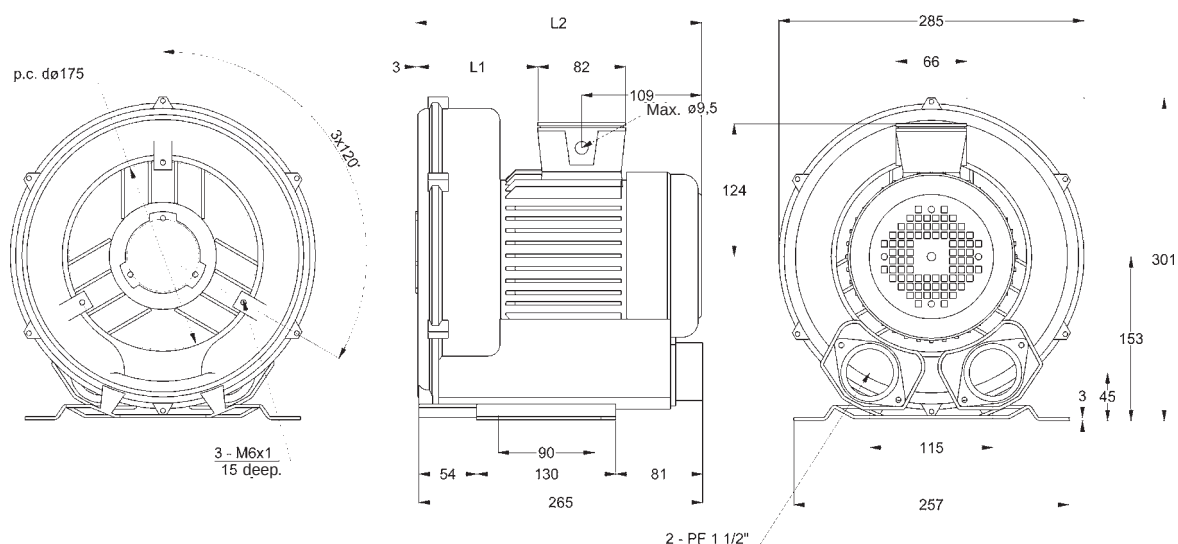
# Specifications type KB 3..

## Single-stage (side channel blowers)

- NSK bearings with high temperature grease
- CE, UL and CSA approved
- All units are QC inspected by Klee
- Built-in bi-metal switch for 1-phase models
- Available with 3-phase IE2/IE3 motor



| Type no.                    |       | KB-329  | KB-329-1 | KB-329L | KB-329L-1 | KB-329  | KB-339  |
|-----------------------------|-------|---------|----------|---------|-----------|---------|---------|
| Phases                      |       | 3       | 1        | 3       | 1         | 3       | 3       |
| Output kW                   | 50 Hz | 0.75    | 0.75     | 0.75    | 0.75      | 0.9     | 1.3     |
|                             | 60 Hz | 0.85    | 0.85     | 0.85    | 0.85      | 1.1     | 1.5     |
| Voltage Volt                | 50 Hz | 230/400 | 230      | 230/400 | 230       | 230/400 | 230/400 |
|                             | 60 Hz | 276/480 | 276      | 276/480 | 276       | 276/480 | 276/480 |
| Current Amp                 | 50 Hz | 3.3/1.9 | 6.5      | 3.3/1.9 | 6.5       | 4.2/2.4 | 4.6/2.7 |
|                             | 60 Hz | 3.6/2.1 | 7        | 3.6/2.1 | 7         | 4.5/2.6 | 5.2/3.0 |
| Vacuum mbar                 | 50 Hz | 140     | 140      | 140     | 140       | 165     | 175     |
|                             | 60 Hz | 140     | 140      | 140     | 140       | 180     | 205     |
| Pressure mbar               | 50 Hz | 140     | 140      | 140     | 140       | 180     | 200     |
|                             | 60 Hz | 140     | 140      | 140     | 140       | 180     | 230     |
| Airflow m <sup>3</sup> /min | 50 Hz | 2.4     | 2.4      | 2.4     | 2.4       | 2.4     | 2.4     |
|                             | 60 Hz | 2.9     | 2.9      | 2.9     | 2.9       | 2.9     | 2.9     |
| Insulation class            |       | F       | F        | F       | F         | F       | F       |
| L1                          |       | 129     | 129      | 161     | 161       | 129     | 129     |
| L2                          |       | 279     | 279      | 311.5   | 311.5     | 279     | 279     |



# Specifications type KB 4..

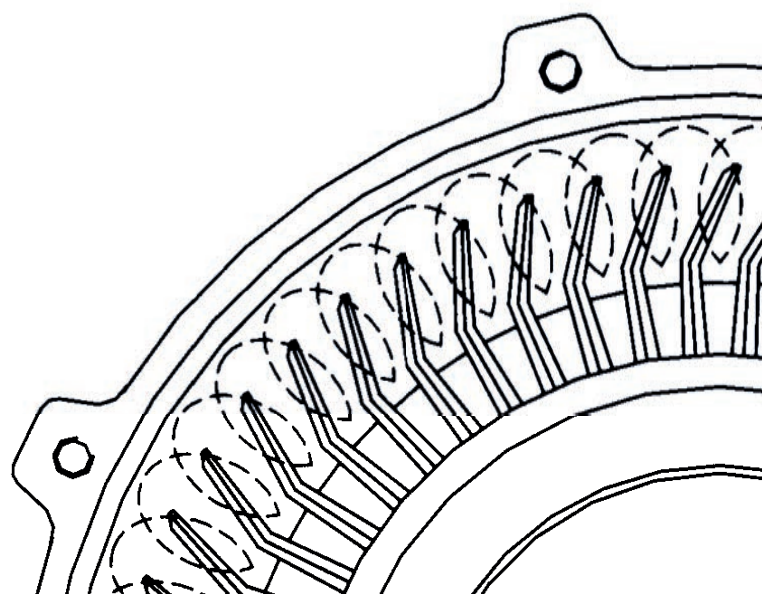
## Single-stage (side channel blowers)

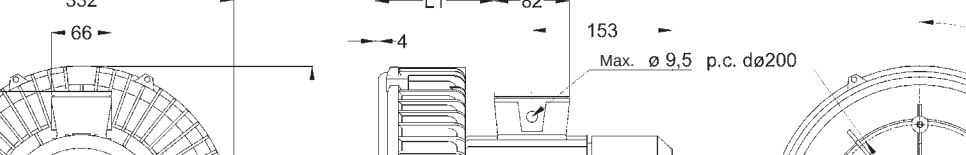
- NSK bearings with high temperature grease
- CE, UL and CSA approved
- All units are QC inspected by Klee
- Built-in bi-metal switch for 1-phase models
- Available with 3-phase IE2/IE3 motor



| Type no.                    |       | KB-429  | KB-429-1 | KB-429L | KB-429L-1 | KB-429HF |
|-----------------------------|-------|---------|----------|---------|-----------|----------|
| Phases                      |       | 3       | 1        | 3       | 1         | 3        |
| Output kW                   | 50 Hz | 1.3     | 1.3      | 1.3     | 1.3       | 1.3      |
|                             | 60 Hz | 1.5     | 1.5      | 1.5     | 1.5       | 1.5      |
| Voltage Volt                | 50 Hz | 230/400 | 230      | 230/400 | 230       | 230/400  |
|                             | 60 Hz | 276/480 | 276      | 276/480 | 276       | 276/480  |
| Current Amp                 | 50 Hz | 5.7/3.3 | 10       | 5.7/3.3 | 10        | 5.7/3.3  |
|                             | 60 Hz | 6.0/3.5 | 11       | 6.0/3.5 | 11        | 6.0/3.5  |
| Vacuum mbar                 | 50 Hz | 180     | 180      | 180     | 180       | 180      |
|                             | 60 Hz | 180     | 180      | 180     | 180       | 180      |
| Pressure mbar               | 50 Hz | 180     | 180      | 180     | 180       | 180      |
|                             | 60 Hz | 180     | 180      | 180     | 180       | 180      |
| Airflow m <sup>3</sup> /min | 50 Hz | 3.6     | 3.6      | 3.6     | 3.6       | 4.40     |
|                             | 60 Hz | 4.2     | 4.2      | 4.2     | 4.2       | 5.25     |
| Insulation class            |       | F       | F        | F       | F         | F        |
| L1                          |       | 126     | 126      | 167.5   | 167.5     | 167.5    |
| L2                          |       | 320     | 320      | 361.5   | 361.5     | 361.5    |

*Continues on the next page.*





Technical drawings of the 2-PF 2" pump assembly, showing three views: front, side, and top.

**Front View:** Shows the circular pump housing with a central impeller. Dimensions include: overall diameter 332, central hole diameter 66, total height 135.5, mounting flange diameter 120, mounting flange width 260, and base diameter 298. There are 4xØ14 mounting holes and a 2-PF 2" connection.

**Side View:** Shows the pump housing and the 2-PF 2" connection. Dimensions include: overall height 338.5, mounting flange height 175, mounting flange width 47, and base width 4. The 2-PF 2" connection is shown with a 115mm diameter and a 155mm length. The overall width is 315mm.

**Top View:** Shows the circular pump housing with a central impeller. Dimensions include: overall diameter 332, central hole diameter 66, total height 135.5, mounting flange diameter 120, mounting flange width 260, and base diameter 298. There are 4xØ14 mounting holes and a 2-PF 2" connection.

**Detail View:** Shows the 2-PF 2" connection with a maximum diameter of 9.5 p.c. dØ200. The connection is shown with a 153mm diameter and a 100mm length. The overall width is 315mm.

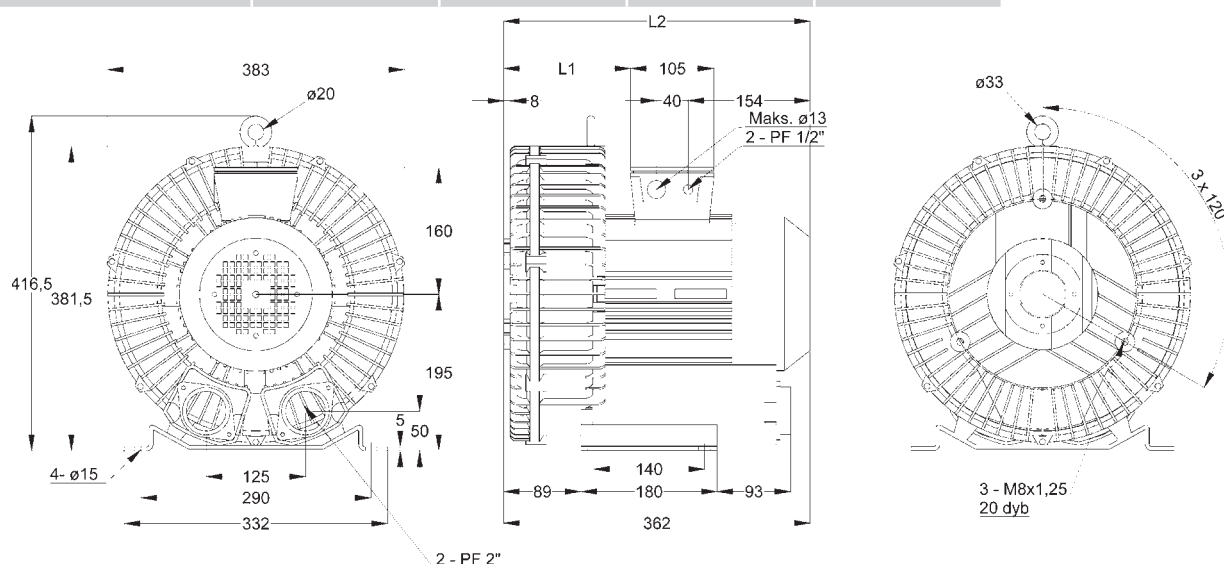
# Specifications type KB 5..

## Single-stage (side channel blowers)

- NSK bearings with high temperature grease
- CE, UL and CSA approved
- All units are QC inspected by Klee
- Built-in bi-metal switch for 1-phase models
- Available with 3-phase IE2/IE3 motor



| Type no.                    |       | KB-529   | KB-529-1 | KB-529L  | KB-529HF |
|-----------------------------|-------|----------|----------|----------|----------|
| Phases                      |       | 3        | 1        | 3        | 3        |
| Output kW                   | 50 Hz | 2.2      | 2.2      | 2.2      | 2.2      |
|                             | 60 Hz | 2.6      | 2.6      | 2.6      | 2.6      |
| Voltage Volt                | 50 Hz | 230/400  | 230      | 230/400  | 230/400  |
|                             | 60 Hz | 276/480  | 276      | 276/480  | 276/480  |
| Current Amp                 | 50 Hz | 9.7/5.6  | 18       | 9.7/5.6  | 9.7/5.6  |
|                             | 60 Hz | 10.7/6.2 | 21.6     | 10.7/6.2 | 10.7/6.2 |
| Vacuum mbar                 | 50 Hz | 230      | 230      | 230      | 230      |
|                             | 60 Hz | 220      | 220      | 220      | 220      |
| Pressure mbar               | 50 Hz | 230      | 230      | 230      | 230      |
|                             | 60 Hz | 220      | 220      | 220      | 220      |
| Airflow m <sup>3</sup> /min | 50 Hz | 5.2      | 5.2      | 5.2      | 6.9      |
|                             | 60 Hz | 6.2      | 6.2      | 6.2      | 8.3      |
| Insulation class            |       | F        | F        | F        | F        |
| L1                          |       | 143.5    | 143.5    | 186.5    | 186.5    |
| L2                          |       | 370      | 370      | 413      | 413      |
| Weight Kg                   |       | 32       | 33.5     | 33.5     | 34       |



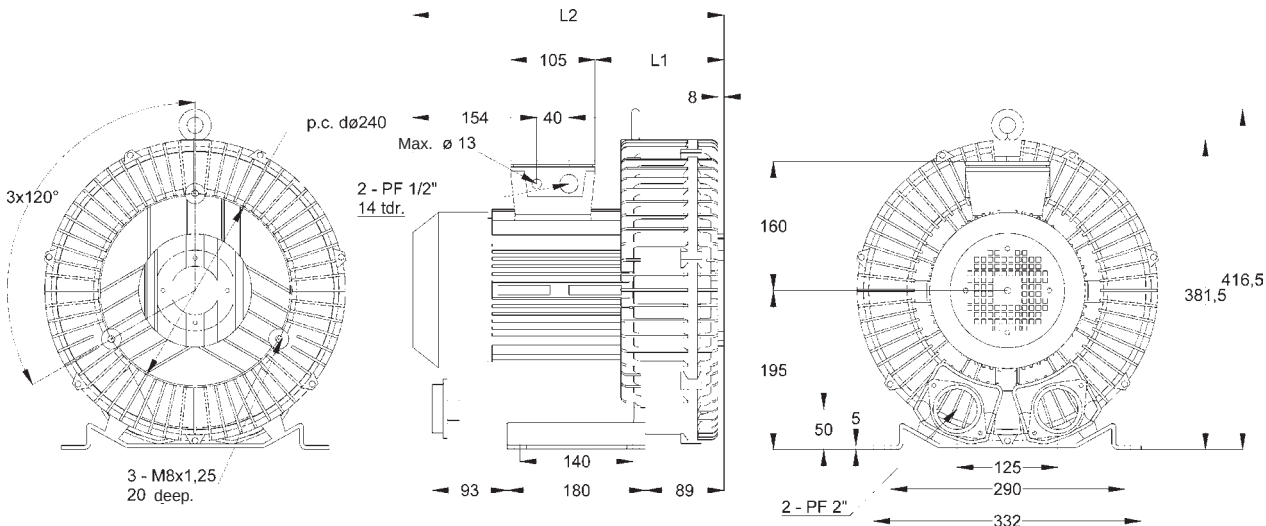
# Specifications type KB 6..

## Single-stage (side channel blowers)

- NSK bearings with high temperature grease
  - CE, UL and CSA approved
  - All units are QC inspected by Klee
- Built-in bi-metal switch for 1-phase models
  - Available with 3-phase IE2/IE3 motor



| Type no.         |       | KB-629   | KB-629-1 | KB-629L  | KB-639   | KB-629HF | KB-639HF |
|------------------|-------|----------|----------|----------|----------|----------|----------|
| Phases           |       | 3        | 1        | 3        | 3        | 3        | 3        |
| Output kW        | 50 Hz | 3.4      | 3.4      | 3.4      | 4.0      | 3.4      | 4.0      |
|                  | 60 Hz | 3.7      | 3.7      | 3.7      | 4.6      | 3.7      | 4.6      |
| Voltage Volt     | 50 Hz | 230/400  | 230      | 230/400  | 230/400  | 230/400  | 230/400  |
|                  | 60 Hz | 276/480  | 276      | 276/480  | 276/480  | 276/480  | 276/480  |
| Current Amp      | 50 Hz | 12.5/7.2 | 28       | 12.5/7.2 | 14.3/8.2 | 12.5/7.2 | 14.3/8.2 |
|                  | 60 Hz | 13.5/7.8 | 30       | 13.5/7.8 | 16.2/9.3 | 13.5/7.8 | 16.2/9.3 |
| Vacuum mbar      | 50 Hz | 260      | 260      | 260      | 270      | 260      | 270      |
|                  | 60 Hz | 280      | 280      | 280      | 315      | 280      | 315      |
| Pressure mbar    | 50 Hz | 280      | 280      | 280      | 330      | 280      | 330      |
|                  | 60 Hz | 280      | 280      | 280      | 320      | 280      | 320      |
| Airflow m³/min   | 50 Hz | 5.2      | 5.2      | 5.2      | 5.2      | 6.9      | 6.9      |
|                  | 60 Hz | 6.2      | 6.2      | 6.2      | 6.2      | 8.30     | 8.30     |
| Insulation class |       | F        | F        | F        | F        | F        | F        |
| L1               |       | 143.5    | 143.5    | 186.5    | 143.5    | 143.5    | 143.5    |
| L2               |       | 370      | 370      | 413      | 370      | 370      | 370      |



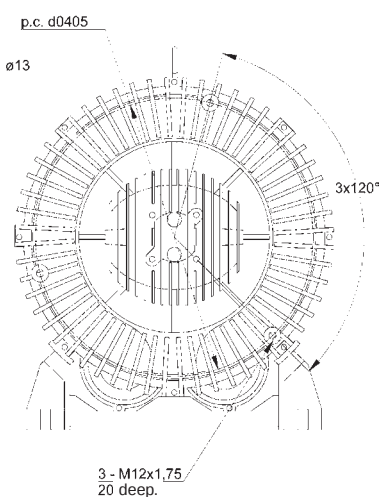
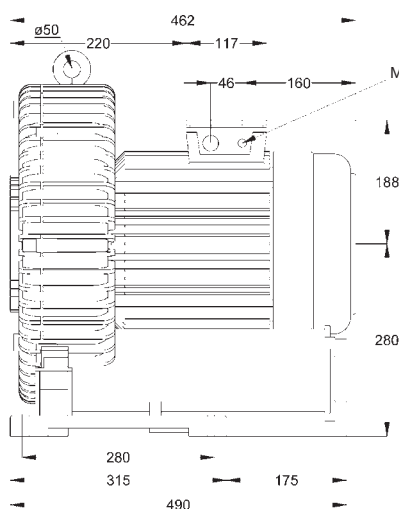
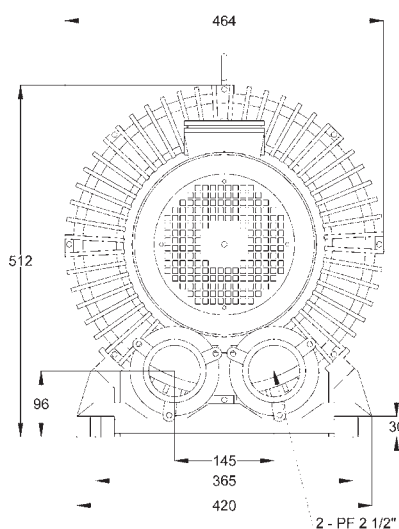
# Specifications type KB 7/8..

## Single-stage (side channel blowers)

- NSK bearings with high temperature grease
- CE, UL and CSA approved
- All units are QC inspected by Klee
- Built-in bi-metal switch
- Available with 3-phase IE2/IE3 motor



| Type no.                    |       | KB-729   | KB-829    |
|-----------------------------|-------|----------|-----------|
| Phases                      |       | 3        | 3         |
| Output kW                   | 50 Hz | 5.5      | 7.5       |
|                             | 60 Hz | 6.3      | 8.6       |
| Voltage Volt                | 50 Hz | 400/690  | 400/690   |
|                             | 60 Hz | 480/828  | 482/828   |
| Current Amp                 | 50 Hz | 12/6.9   | 15.1/8.7  |
|                             | 60 Hz | 14.7/8.5 | 19.1/11.0 |
| Vacuum mbar                 | 50 Hz | 270      | 300       |
|                             | 60 Hz | 290      | 350       |
| Pressure mbar               | 50 Hz | 300      | 400       |
|                             | 60 Hz | 290      | 400       |
| Airflow m <sup>3</sup> /min | 50 Hz | 9.2      | 9.2       |
|                             | 60 Hz | 10.9     | 10.9      |
| Insulation class            |       | H        | H         |
| Weight Kg                   |       | 78       | 82        |



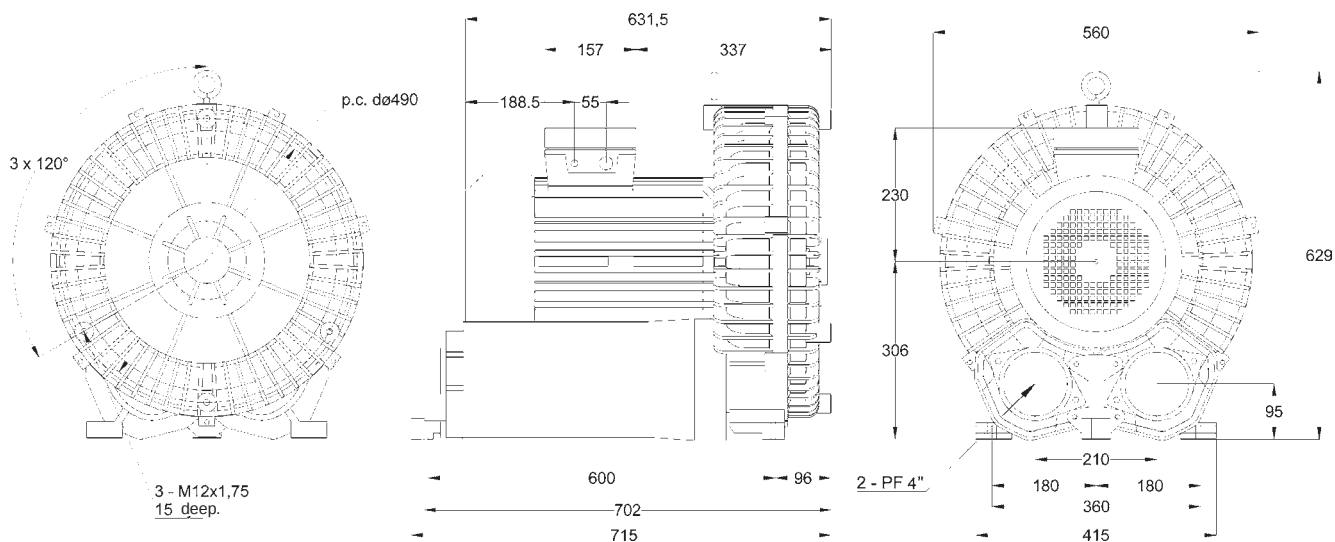
# Specifications type KB 9..

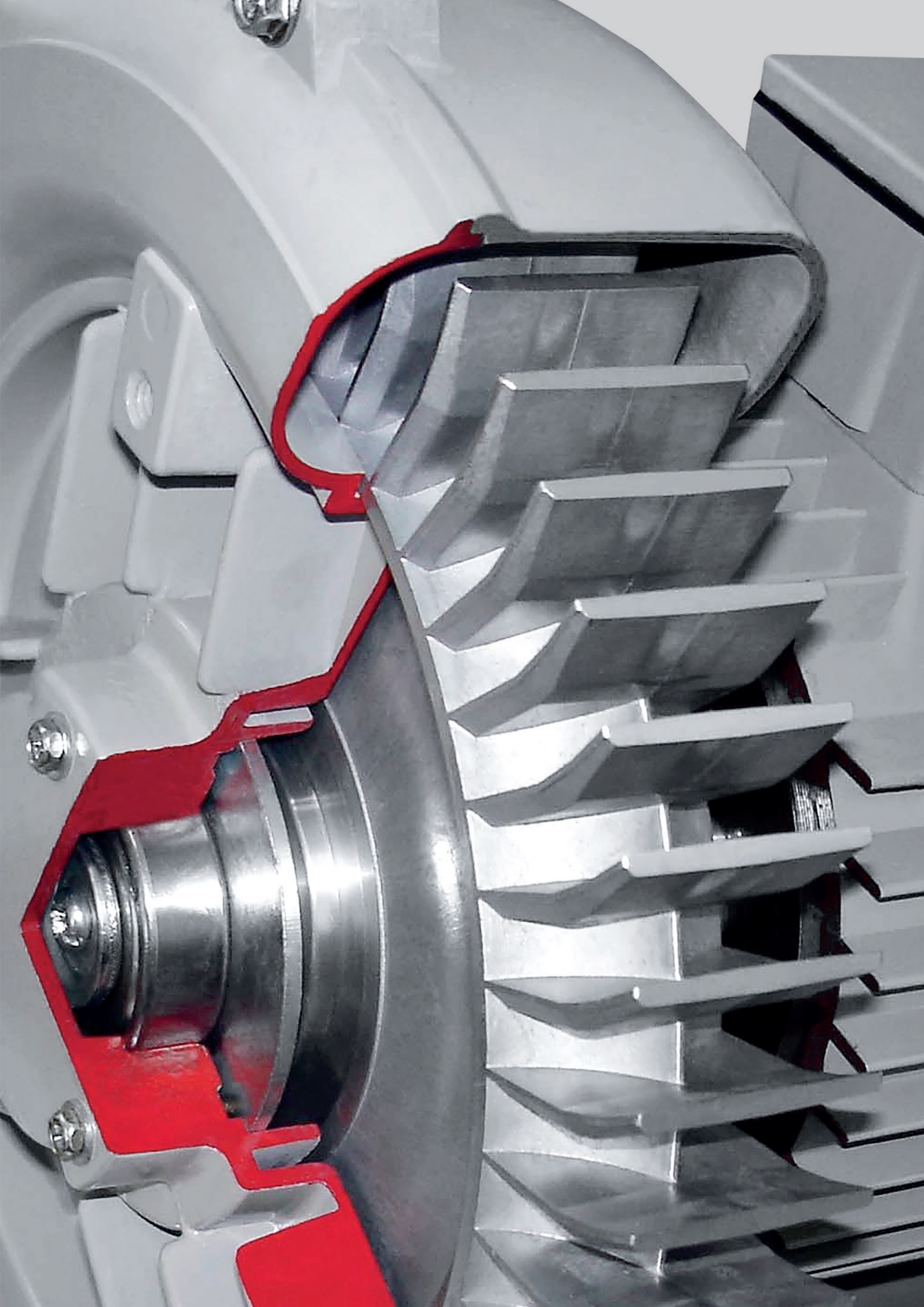
## Single-stage (side channel blowers)

- NSK bearings with high temperature grease
  - CE, UL and CSA approved
  - All units are QC inspected by Klee
- Built-in bi-metal switch
  - Available with 3-phase IE2/IE3 motor



| Type no.         |       | KB-919    | KB-929    | KB-939    |
|------------------|-------|-----------|-----------|-----------|
| Phases           |       | 3         | 3         | 3         |
| Output kW        | 50 Hz | 9         | 13        | 20        |
|                  | 60 Hz | 11        | 15        | 22        |
| Voltage Volt     | 50 Hz | 400/690   | 400/690   | 400/690   |
|                  | 60 Hz | 480/828   | 480/828   | 480/828   |
| Current Amp      | 50 Hz | 20.8/12.0 | 26.3/15.2 | 38.6/22.3 |
|                  | 60 Hz | 21.4/12.4 | 28.9/16.7 | 44/25.3   |
| Vacuum mbar      | 50 Hz | 200       | 300       | 350       |
|                  | 60 Hz | 190       | 290       | 370       |
| Pressure mbar    | 50 Hz | 200       | 300       | 450       |
|                  | 60 Hz | 190       | 290       | 430       |
| Airflow m³/min   | 50 Hz | 18.9      | 18.9      | 18.9      |
|                  | 60 Hz | 22.4      | 22.4      | 22.4      |
| Insulation class |       | H         | H         | H         |
| Weight Kg        |       | 100       | 112       | 159       |





# Type designation/models

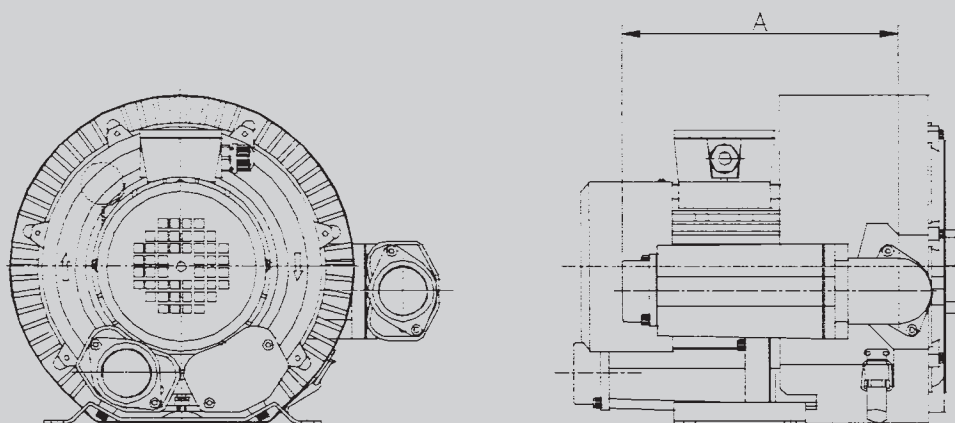
## Double-stage (side channel blowers)

**Description for maximum pressure:**

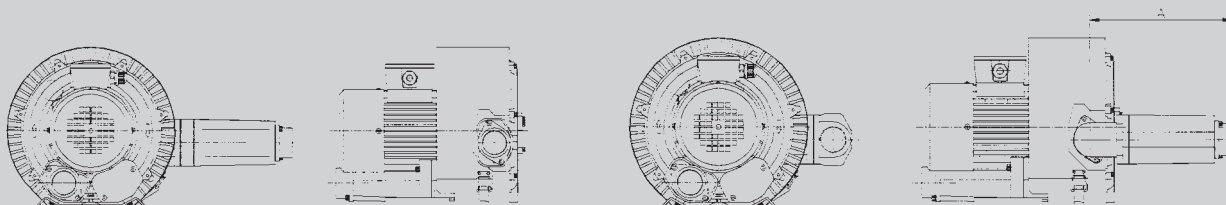
KB (x)3.. = Serially connected impeller

**Description for maximum flow:**

KB (x)4.. = Parallel connected impeller



Type KB23.. - KB33.. - KB43.. - KB63.. - KB83..



90 degree outlet on request

Special version on request

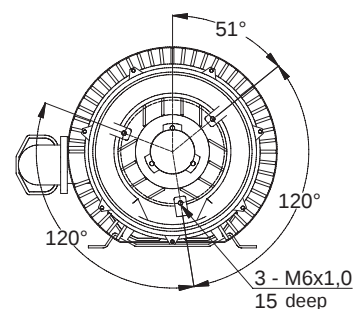
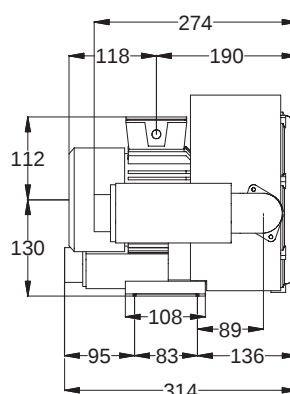
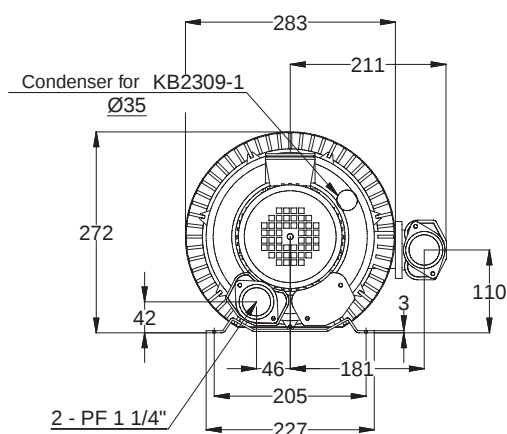
# Specifications type KB 23..

## Double-stage (side channel blowers)

- NSK bearings with high temperature grease
- CE, UL and CSA approved
- All units are QC inspected by Klee
- Built-in bi-metal switch for 1-phase models
- Available with 3-phase IE2/IE3 motor



| Type no.                    |       | KB-2308 | KB-2308-1 |
|-----------------------------|-------|---------|-----------|
| Phases                      |       | 3       | 1         |
| Output kW                   | 50 Hz | 0.75    | 0.75      |
|                             | 60 Hz | 0.85    | 0.85      |
| Voltage Volt                | 50 Hz | 230/400 | 230       |
|                             | 60 Hz | 276/480 | 276       |
| Current Amp                 | 50 Hz | 3.3/1.9 | 12.3      |
|                             | 60 Hz | 3.6/2.1 | 13        |
| Vacuum mbar                 | 50 Hz | 200     | 200       |
|                             | 60 Hz | 245     | 245       |
| Pressure mbar               | 50 Hz | 240     | 240       |
|                             | 60 Hz | 245     | 245       |
| Airflow m <sup>3</sup> /min | 50 Hz | 1.5     | 1.5       |
|                             | 60 Hz | 1.8     | 1.8       |
| Insulation class            |       | F       | F         |
| Weight Kg                   |       | 17      | 17        |



# Specifications type KB 33..

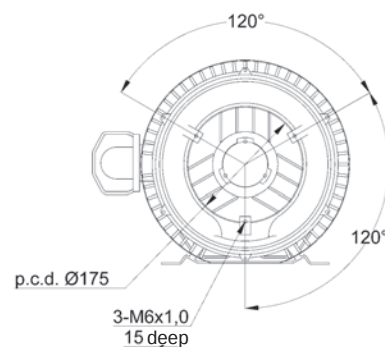
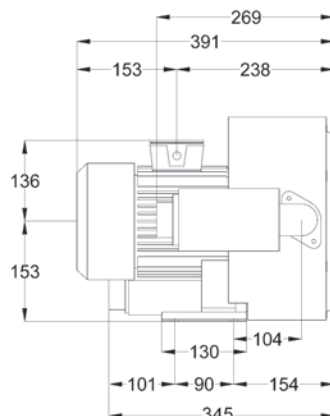
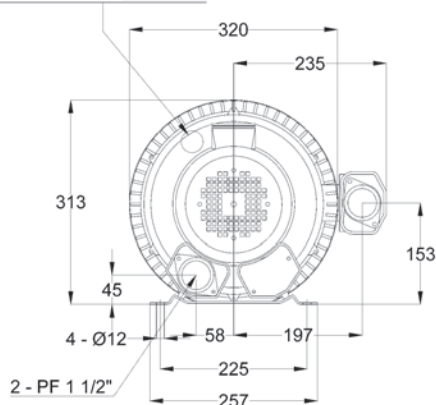
## Double-stage (side channel blowers)

- NSK bearings with high temperature grease
- CE, UL and CSA approved
- All units are QC inspected by Klee
- Built-in bi-metal switch for 1-phase models
- Available with 3-phase IE2/IE3 motor



| Type no.                    |       | KB-3315-1 | KB-3319 | KB-3326 |
|-----------------------------|-------|-----------|---------|---------|
| Phases                      |       | 1         | 3       | 3       |
| Output kW                   | 50 Hz | 1.3       | 1.75    | 2.2     |
|                             | 60 Hz | 1.5       | 1.9     | 2.6     |
| Voltage Volt                | 50 Hz | 230       | 230/400 | 230/400 |
|                             | 60 Hz | 276       | 276/480 | 276/480 |
| Current Amp                 | 50 Hz | 12.3      | 6.7/3.9 | 7.8/4.5 |
|                             | 60 Hz | 13        | 7/4     | 9.5/5.5 |
| Vacuum mbar                 | 50 Hz | 220       | 275     | 280     |
|                             | 60 Hz | 235       | 300     | 350     |
| Pressure mbar               | 50 Hz | 250       | 320     | 375     |
|                             | 60 Hz | 250       | 300     | 435     |
| Airflow m <sup>3</sup> /min | 50 Hz | 2.6       | 2.6     | 2.6     |
|                             | 60 Hz | 3.0       | 3.0     | 3.0     |
| Insulation class            |       | F         | F       | F       |
| Weight Kg                   |       | 24        | 25      | 28      |

Condenser for KB3315-1



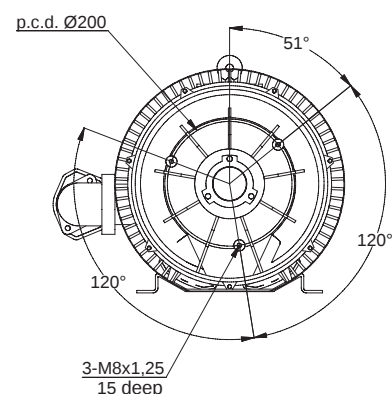
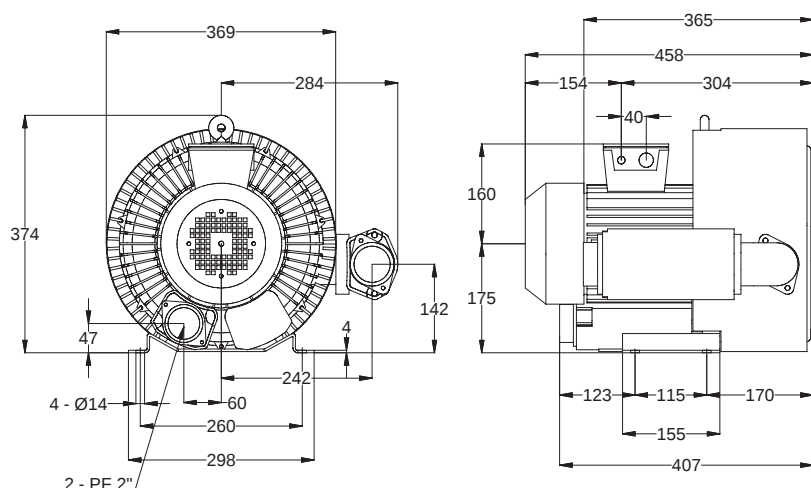
# Specifications type KB 43..

## Double-stage (side channel blowers)

- NSK bearings with high temperature grease
- CE, UL and CSA approved
- All units are QC inspected by Klee
- Built-in bi-metal switch for 1-phase models
- Available with 3-phase IE2/IE3 motor



| Type no.                    |       | KB-4337  | KB-4346  |
|-----------------------------|-------|----------|----------|
| Phases                      |       | 3        | 3        |
| Output kW                   | 50 Hz | 3.4      | 4.0      |
|                             | 60 Hz | 3.7      | 4.6      |
| Voltage Volt                | 50 Hz | 230/400  | 230/400  |
|                             | 60 Hz | 276/480  | 276/480  |
| Current Amp                 | 50 Hz | 12.5/7.2 | 14.3/8.2 |
|                             | 60 Hz | 13.5/7.8 | 16.2/9.3 |
| Vacuum mbar                 | 50 Hz | 345      | 355      |
|                             | 60 Hz | 405      | 410      |
| Pressure mbar               | 50 Hz | 410      | 460      |
|                             | 60 Hz | 415      | 495      |
| Airflow m <sup>3</sup> /min | 50 Hz | 3.7      | 3.7      |
|                             | 60 Hz | 4.5      | 4.5      |
| Insulation class            |       | F        | F        |
| Weight Kg                   |       | 43       | 45       |



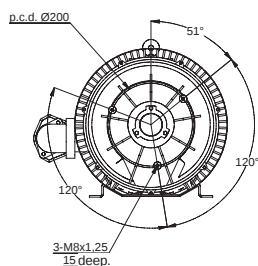
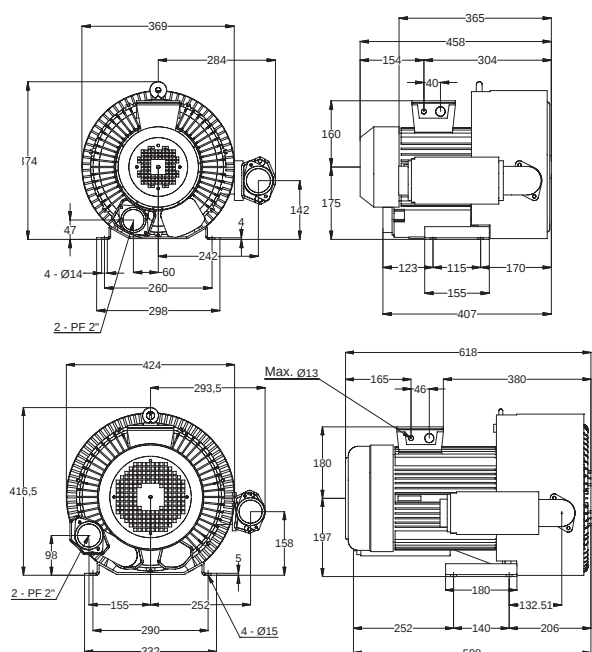
# Specifications type KB 63..

## Double-stage (side channel blowers)

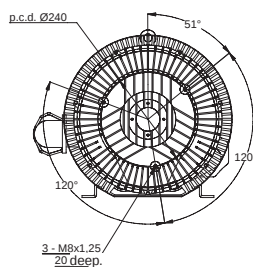
- NSK bearings with high temperature grease
- CE, UL and CSA approved
- All units are QC inspected by Klee
- Built-in bi-metal switch for 1-phase models from 5.5 kW
- Available with 3-phase IE2/IE3 motor



| Type no.                    |       | KB-6346  | KB-6355   | KB-6375 |
|-----------------------------|-------|----------|-----------|---------|
| Phases                      |       | 3        | 3         | 3       |
| Output kW                   | 50 Hz | 4.0      | 5.5       | 7.5     |
|                             | 60 Hz | 4.6      | 6.3       | 8.0     |
| Voltage Volt                | 50 Hz | 230/400  | 230/400   | 230/400 |
|                             | 60 Hz | 276/480  | 276/480   | 276/480 |
| Current Amp                 | 50 Hz | 14.3/8.2 | 21/12     | 27/15.6 |
|                             | 60 Hz | 16.2/9.3 | 26.5/15.3 | 34/19.6 |
| Vacuum mbar                 | 50 Hz | 360      | 410       | 420     |
|                             | 60 Hz | 380      | 425       | 450     |
| Pressure mbar               | 50 Hz | 380      | 515       | 580     |
|                             | 60 Hz | 380      | 530       | 675     |
| Airflow m <sup>3</sup> /min | 50 Hz | 5.2      | 5.2       | 5.2     |
|                             | 60 Hz | 6.2      | 6.2       | 6.2     |
| Insulation class            |       | F        | H         | H       |
| Weight Kg                   |       | 55       | 72        | 81      |



Type KB-6346.



Type KB-6355 and Type KB-6375.

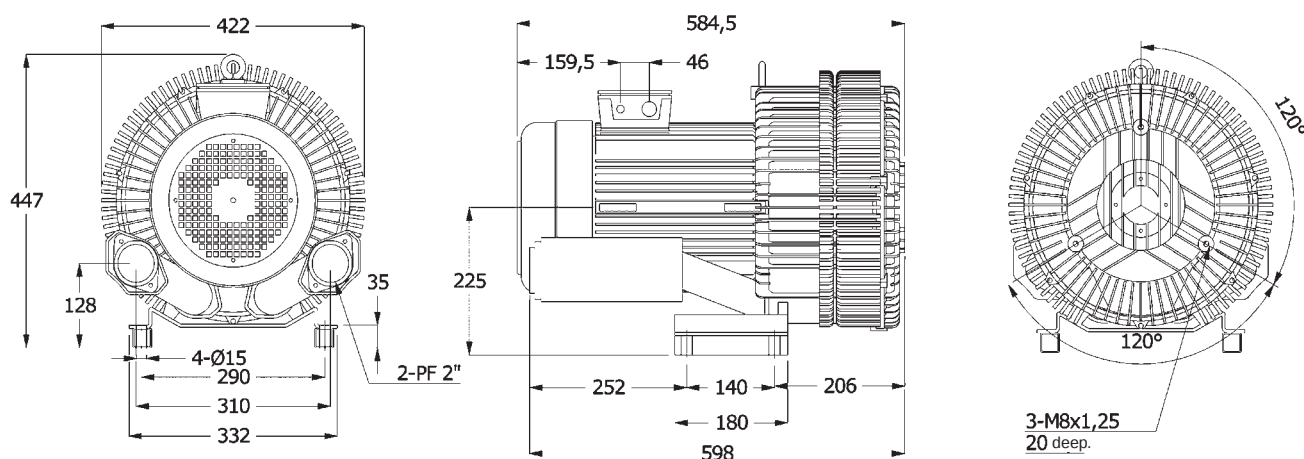
# Specifications type KB 64..

## Double-stage (side channel blowers)

- NSK bearings with high temperature grease
- CE, UL and CSA approved
- All units are QC inspected by Klee
- Built-in bi-metal switch for 1-phase models
- Available with 3-phase IE2/IE3 motor



| Type no.                    |       | KB-6455  | KB-6475   |
|-----------------------------|-------|----------|-----------|
| Phases                      |       | 3        | 3         |
| Output kW                   | 50 Hz | 5.5      | 7.5       |
|                             | 60 Hz | 6.3      | 8.0       |
| Voltage Volt                | 50 Hz | 400/690  | 400/690   |
|                             | 60 Hz | 480/828  | 480/828   |
| Current Amp                 | 50 Hz | 12/6.9   | 15.6/9.0  |
|                             | 60 Hz | 15.3/8.8 | 19.6/11.3 |
| Vacuum mbar                 | 50 Hz | 200      | 240       |
|                             | 60 Hz | 200      | 260       |
| Pressure mbar               | 50 Hz | 220      | 270       |
|                             | 60 Hz | 220      | 270       |
| Airflow m <sup>3</sup> /min | 50 Hz | 7.8      | 7.8       |
|                             | 60 Hz | 9.2      | 9.2       |
| Insulation class            |       | H        | H         |
| Weight Kg                   |       | 70       | 81        |



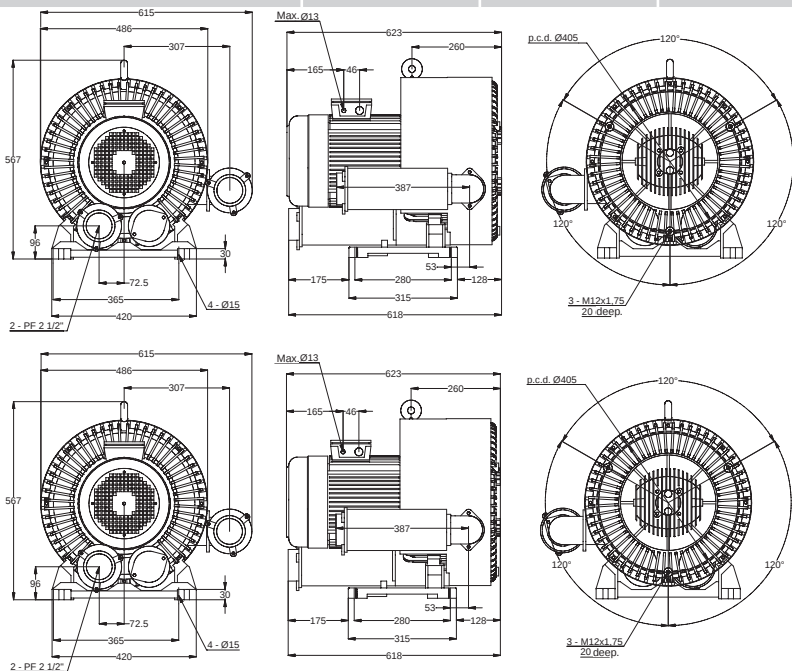
# Specifications type KB 83..

## Double-stage (side channel blowers)

- NSK bearings with high temperature grease
  - CE, UL and CSA approved
  - All units are QC inspected by Klee
- Built-in bi-metal switch for 1-phase models
  - Available with 3-phase IE2/IE3 motor



| Type no.         |       | KB-8310   | KB-8315 | KB-8320 |
|------------------|-------|-----------|---------|---------|
| Phases           |       | 3         | 3       | 3       |
| Output kW        | 50 Hz | 7.5       | 11      | 16      |
|                  | 60 Hz | 8.6       | 13      | 19      |
| Voltage Volt     | 50 Hz | 400/690   | 400/690 | 400/690 |
|                  | 60 Hz | 480/828   | 480/828 | 480/828 |
| Current Amp      | 50 Hz | 15.6/9.0  | 27/15.6 | 39/22.5 |
|                  | 60 Hz | 19.6/11.3 | 30/17.3 | 42/24.3 |
| Vacuum mbar      | 50 Hz | 320       | 430     | 450     |
|                  | 60 Hz | 320       | 455     | 650     |
| Pressure mbar    | 50 Hz | 320       | 600     | 700     |
|                  | 60 Hz | 320       | 600     | 780     |
| Airflow m³/min   | 50 Hz | 9.6       | 9.6     | 9.6     |
|                  | 60 Hz | 10.9      | 10.9    | 10.9    |
| Insulation class |       | H         | H       | H       |
| Weight Kg        |       | 112       | 142     | 160     |



Type KB-8310.

Type KB-8315 and Type KB-8320.

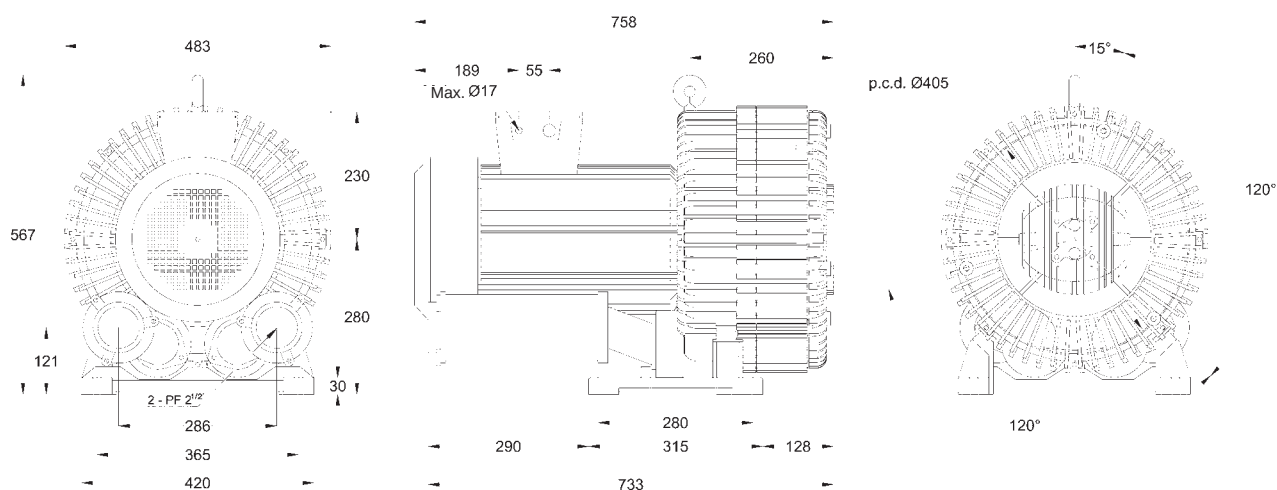
# Specifications type KB 84..

## Double-stage (side channel blowers)

- NSK bearings with high temperature grease
- CE, UL and CSA approved
- All units are QC inspected by Klee
- Built-in bi-metal switch for 1-phase models
- Available with 3-phase IE2/IE3 motor



| Type no.                    |       | KB-8415   |
|-----------------------------|-------|-----------|
| Phases                      |       | 3         |
| Output kW                   | 50 Hz | 11        |
|                             | 60 Hz | 13        |
| Voltage Volt                | 50 Hz | 400/690   |
|                             | 60 Hz | 480/828   |
| Current Amp                 | 50 Hz | 25/14.5   |
|                             | 60 Hz | 27.5/15.9 |
| Vacuum mbar                 | 50 Hz | 260       |
|                             | 60 Hz | 260       |
| Pressure mbar               | 50 Hz | 260       |
|                             | 60 Hz | 260       |
| Airflow m <sup>3</sup> /min | 50 Hz | 14.2      |
|                             | 60 Hz | 16.5      |
| Insulation class            |       | H         |
| Weight Kg                   |       | 140       |

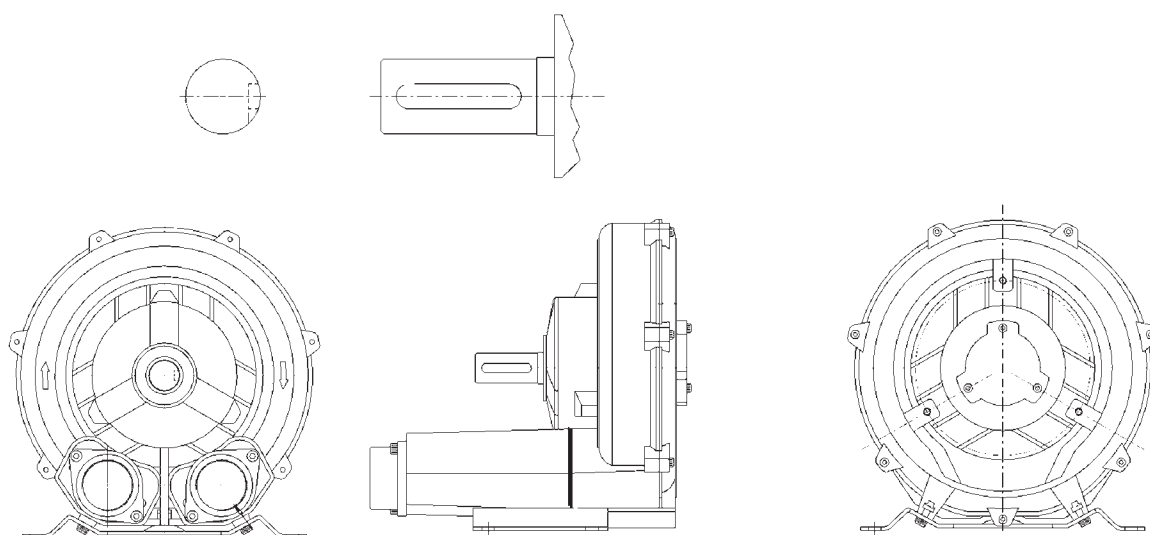


# Bare shaft

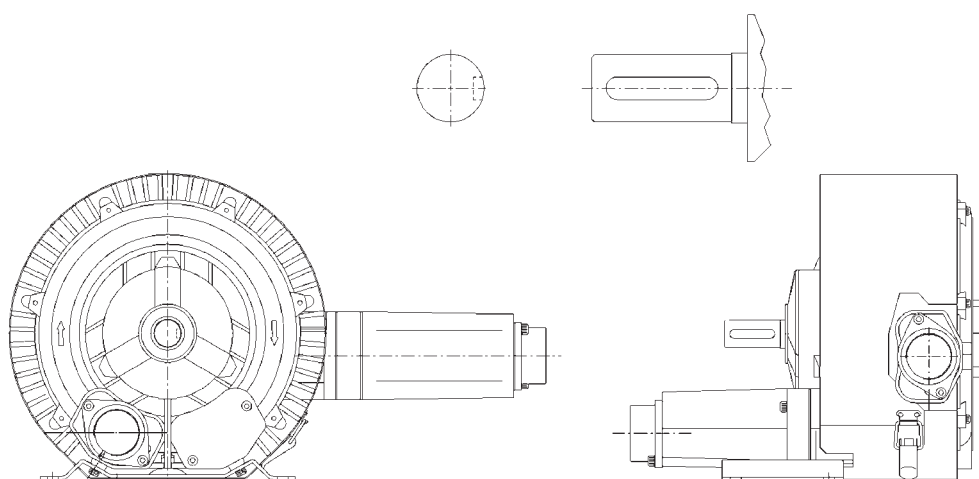
## Information page

We supply side channel blowers in both single- and double-stage models with bare shaft for belt drive.

The size of the pulley can be changed by lowering the speed and changing the pressure/vacuum or airflow of the side channel blower.



**Single-stage** type KB-201, KB-301, KB-401, KB-601, KB-801 and KB-901.



**Double-stage** type KB-231, KB-331, KB-431, KB-631, KB-641 and KB-831.

# KLEEblower KPБ

## IE3 for higher efficiency

New: KLEEblower type KPБ with integrated IE3 motor is available on request.

Contact us for more information.

### Other options for side channel blowers

- IE2 + IE3 versions
- Large selection of colors
- Insulated ceramic bearings
- Phoenix plug
- Sensors e.g. PT100.



# Silencer

## Accessories for side channel blowers

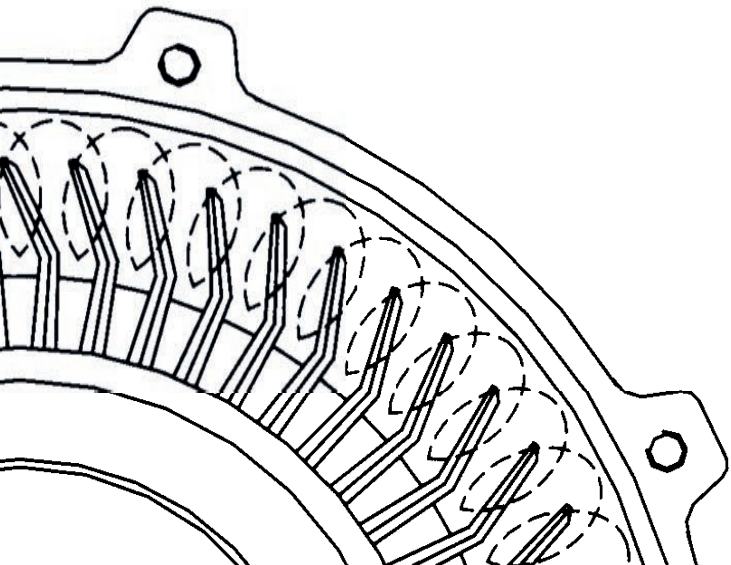
**Silencer**

**Application:**

- For reduction of noise level 5 db.
- Used in side channel blowers and suitable for both pressure and vacuum use.

- Durable operation temperature:  
-10 °C to +120 °C
- Keep away from grease and volatile oil/gas.

| Type no. | Thread (BSPT) | For model         |
|----------|---------------|-------------------|
| SI-2     | 2"            | KB-1... – KB-6... |
| SI-2     | 3"            | KB-7... – KB-8... |

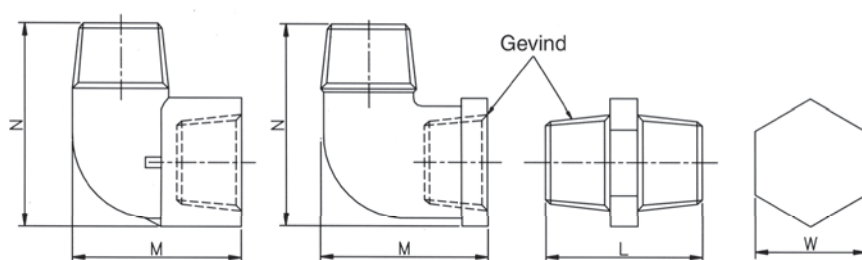


# Pipe bend & inlet air filter

## Accessories for side channel blowers

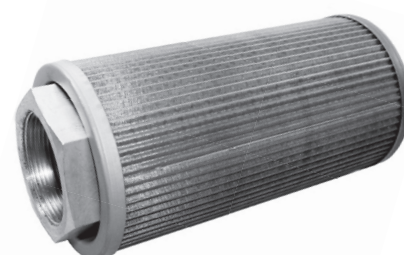
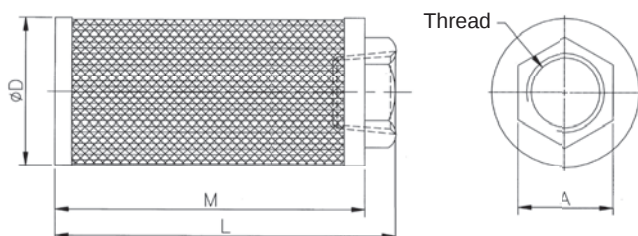
### Pipe bend

| Type no. | Thread (BPST) | L [mm] | M [mm] | N [mm] | W [mm] | Material  | For model                                            |
|----------|---------------|--------|--------|--------|--------|-----------|------------------------------------------------------|
| BC-10    | 1"            | 52     | 52     | 73     | 38     | Cast iron | KB-1...                                              |
| BC-12    | 1 1/4"        | 56     | 65     | 90     | 47     | Cast iron | KB-2..., KB-23..                                     |
| BC-15    | 1 1/2"        | 60     | 73     | 97     | 54     | Cast iron | KB-3..., KB-33..                                     |
| BC-20    | 2"            | 67     | 85     | 120    | 65     | Cast iron | KB-4..., KB-5..., KB-6..., KB-43.., KB-63.., KB-64.. |
| BP-20    | 2"            | 75     | 94     | 110    | 67     | Plastic   | KB-4..., KB-5..., KB-6..., KB-43.., KB-63.., KB-64.. |
| BC-25    | 2 1/2"        | 76     | 105    | 137    | 82     | Cast iron | KB-7..., KB-8..., KB-83.., KB-84..                   |
| BC-40    | 4"            | 96     | 165    | 233    | 121    | Cast iron | KB-9...                                              |



**Inlet air filter** (If inlet not is connected to any pipe, a filter with larger area has to be installed on the inlet).

| Type no. | Thread (BPST) | A [mm] | D [mm] | L [mm] | M [mm] | Filtration mesh (MY) | For model                                            |
|----------|---------------|--------|--------|--------|--------|----------------------|------------------------------------------------------|
| MF-08    | 1"            | 42     | 58     | 170    | 155    | 100                  | KB-1...                                              |
| MF-10    | 1 1/4"        | 54     | 71     | 186    | 170    | 100                  | KB-2..., KB-23..                                     |
| MF-12    | 1 1/2"        | 65     | 85     | 196    | 182    | 100                  | KB-3..., KB-33..                                     |
| MF-16    | 2"            | 75     | 103    | 215    | 202    | 100                  | KB-4..., KB-5..., KB-6..., KB-43.., KB-63.., KB-64.. |
| MF-20    | 2 1/2"        | 97     | 148    | 274    | 252    | 100                  | KB-4..., KB-5..., KB-6..., KB-43.., KB-63.., KB-64.. |
| MF-32    | 4"            | 142    | 208    | 380    | 357    | 100                  | KB-7..., KB-8..., KB-83.., KB-84..                   |

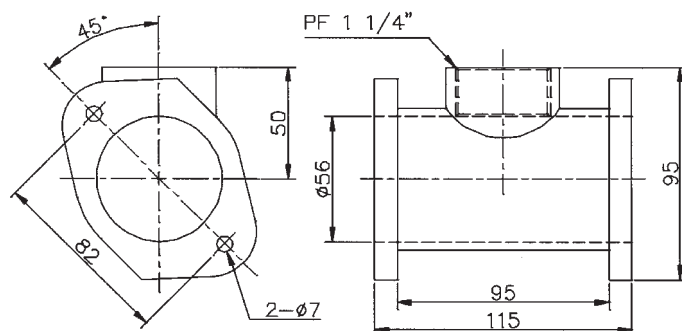
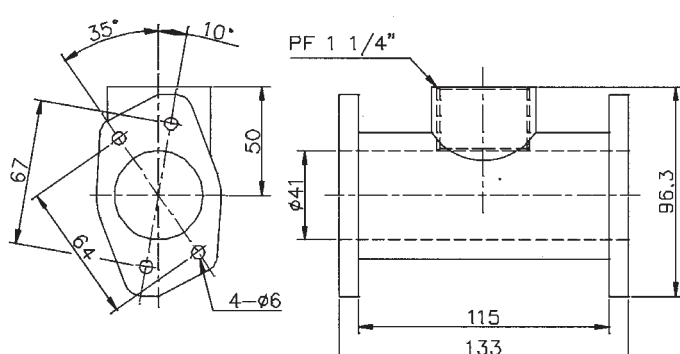


# T-angle, pressure/vacuum valve

## Accessories for side channel blowers

### T-angle for pressure- & vacuum relief valve

| Type | Thread (BPST) | For model               | Material |
|------|---------------|-------------------------|----------|
| TB01 | 1 1/4"        | KB-2..., KB3...         | Aluminum |
| TB02 | 1 1/4"        | KB-4..., KB5..., KB6... | Aluminum |



### Pressure and vacuum relief valve 2 in 1 model

The Klee safety valve is both a pressure relief and vacuum limiting valve that protects the fan and ensures optimum efficiency.

The safety valve opens and releases the excess pressure or restricting the vacuum by drawing air from the outside.

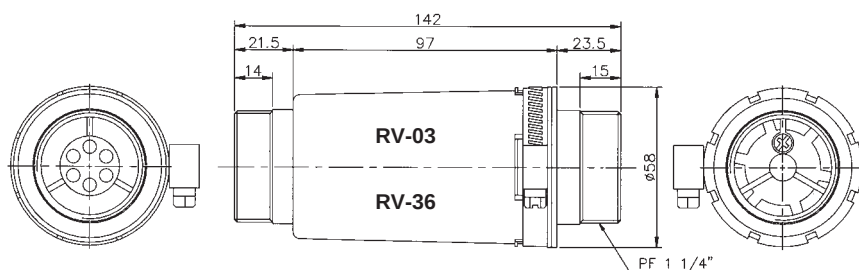


# Pressure- & vacuum relief valve

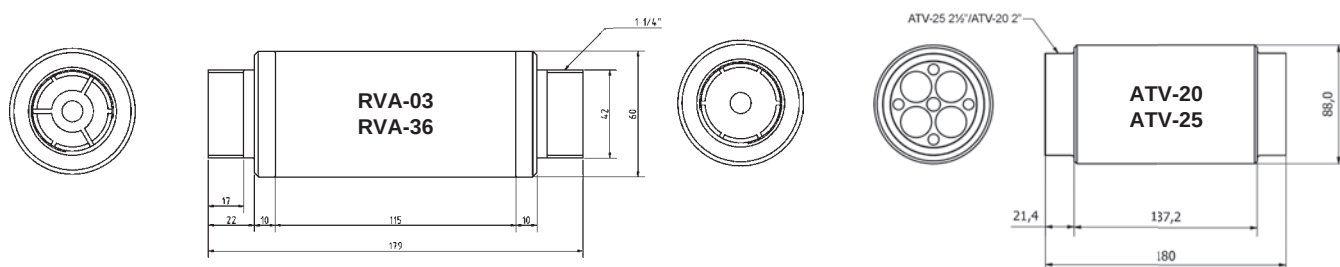
## Accessories for side channel blowers



| Type  | Thread (BPST) | Range mbar | Material    | For model            |
|-------|---------------|------------|-------------|----------------------|
| RV-03 | 1 1/4"        | 0-300      | Plastic PVC | Page 10-11 and 20-21 |
| RV-36 | 1 1/4"        | 300-600    | Plastic PVC | Page 10-11 and 20-21 |



| Type   | Thread (BPST) | Range mbar | Material | For model            |
|--------|---------------|------------|----------|----------------------|
| RVA-03 | 1 1/4"        | 0-300      | Aluminum | Page 10-11 and 20-21 |
| RVA-36 | 1 1/4"        | 300-600    | Aluminum | Page 10-11 and 20-21 |
| ATV-20 | 2"            | 200-280    | Aluminum | Page 10-11 and 20-21 |
| ATV-25 | 2 1/2"        | 280-350    | Aluminum | Page 10-11 and 20-21 |





# Inlets/outlets

## Accessories for side channel blowers

### Inlet/outlet for hose pipe in cast aluminum

| Type no.  | D [mm] | d [mm] | H [mm] | L [mm] | P [mm] | Fig. [mm] | For model                                               |
|-----------|--------|--------|--------|--------|--------|-----------|---------------------------------------------------------|
| 1-OD-32   | 32     | 5.5    | 29     | 35     | 50     | 1         | KB-1...                                                 |
| 2-OD-32   | 32     | 6      | 31     | 38     | 64     | 1         | KB-2..., KB-23...                                       |
| 2-OD-37   | 37     | 6      | 31     | 38     | 64     | 1         | KB-2..., KB-23...                                       |
| 3-OD-44   | 44     | 6      | 37     | 44     | 67     | 1         | KB-3..., KB-33...                                       |
| 3-OD-51   | 51     | 6      | 31     | 38     | 67     | 1         | KB-3..., KB-33...                                       |
| 4-OD-50   | 50     | 7      | 44     | 52     | 83     | 1         | KB-4..., KB-5..., KB-6..., KB-43..., KB-63..., KB-64... |
| 4-OD-57   | 57     | 7      | 58     | 65     | 83     | 1         | KB-4..., KB-5..., KB-6..., KB-43..., KB-63..., KB-64... |
| 3-OD-44-2 | 44     | 7      | 28     | 57     | 67     | 2         | KB-3..., KB-33...                                       |
| 3-OD-55-2 | 55     | 7      | 52     | 105    | 67     | 2         | KB-3..., KB-33...                                       |

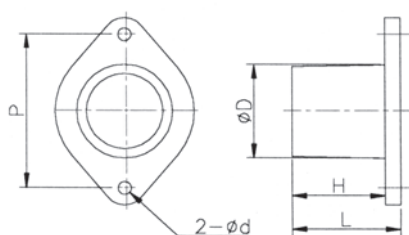


Fig. 1

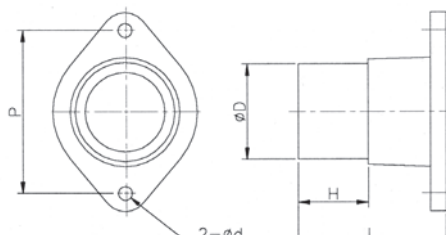


Fig. 2



### Threaded inlet/outlet in cast aluminum or cast iron

| Type no. | Thread (BSPT) | d [mm] | H [mm] | L [mm] | P [mm] | Fig. [mm] | For model                                               |
|----------|---------------|--------|--------|--------|--------|-----------|---------------------------------------------------------|
| 1-T10    | 1"            | 5.5    | 18     | 23     | 50     | 3         | KB-1...                                                 |
| 2-T12    | 1 1/4"        | 6      | 22     | 29     | 64     | 3         | KB-2..., KB-23...                                       |
| 3-T15    | 1 1/2"        | 6      | 24     | 31     | 67     | 3         | KB-3..., KB-33...                                       |
| 5-T20    | 2"            | 7      | 18     | 25     | 83     | 3         | KB-4..., KB-5..., KB-6..., KB-43..., KB-63..., KB-64... |
| 7-T25    | 2 1/2"        | 7      | 16     | 31     | 130    | 4         | KB-7..., KB-8..., KB-83..., KB-84...                    |
| 9-T40    | 4"            | 9      | 29     | 36     | 150    | 3         | KB-9...                                                 |

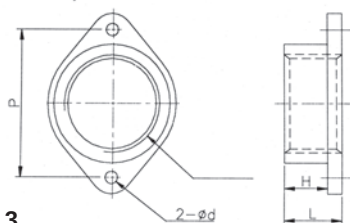


Fig. 3

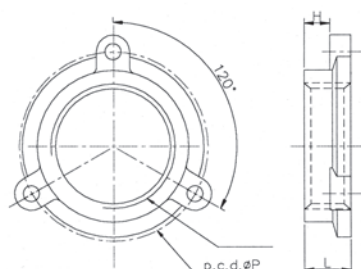


Fig. 4

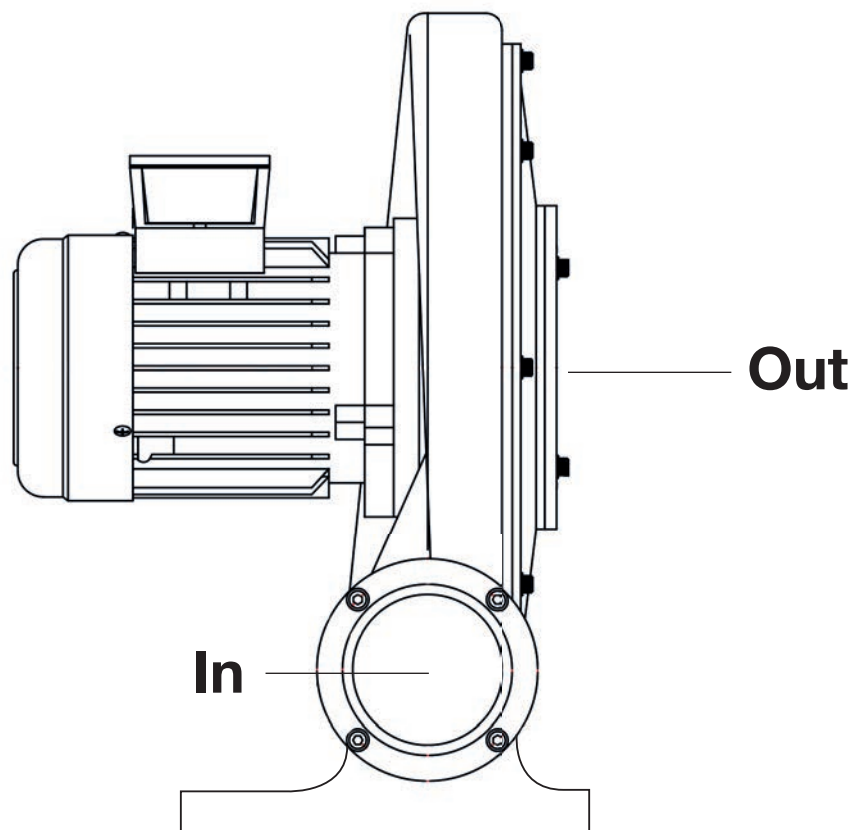


# Turboblowers

## Function

Turboblowers are specially designed for large flow, low noise and high efficiency. They are made of aluminum. All models are lightweight models and are especially good at running hot and are therefore suitable for continuous operation. The rotor blades are specifically balanced so that they rotate stably at high speeds and with very low vibration.

Turboblowers are used in e.g. wood-working machinery, destruction furnaces, dryers, hot airblowers, plastic separators, laminating, film machinery, textile machinery, grain elevators, breads, printing machines and machines for the refrigeration industry.

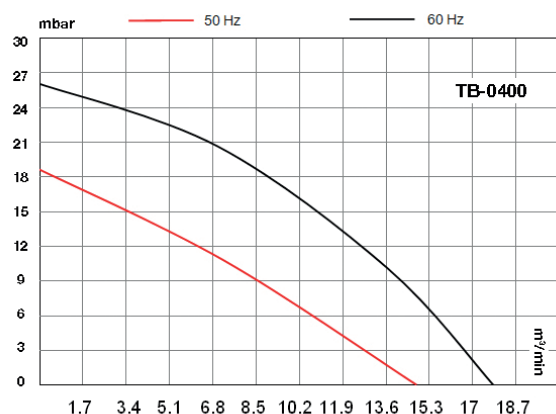
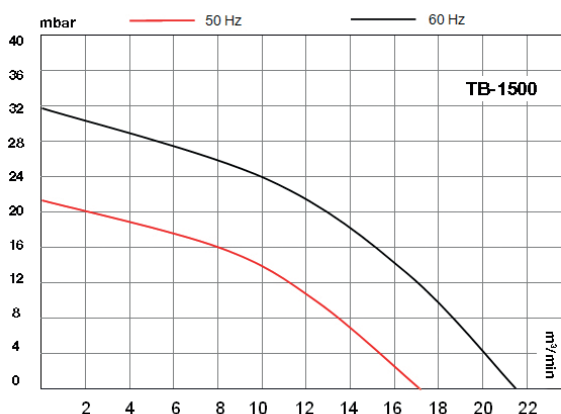
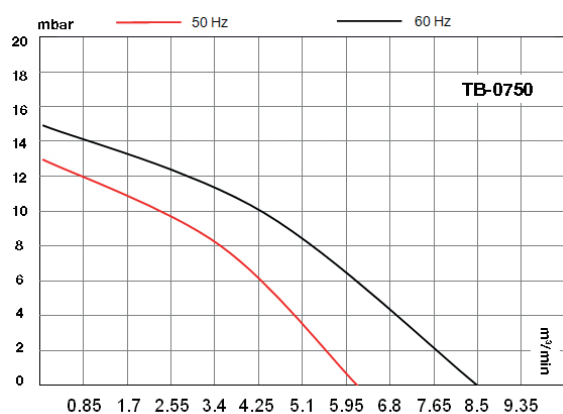




# Specifications (TB)

## Turboblowers TB-0400/0750/1500

| Type no.                    |       | TB-0400  | TB-0400  | TB-0750   | TB-0750   | TB-1500   | TB-1500   |
|-----------------------------|-------|----------|----------|-----------|-----------|-----------|-----------|
| Phases                      |       | 3        | 1        | 3         | 1         | 3         | 1         |
| Output kW                   | 50 Hz | 0.4      | 0.4      | 0.75      | 0.75      | 1.75      | 1.75      |
|                             | 60 Hz | 0.5      | 0.5      | 0.85      | 0.85      | 1.9       | 1.9       |
| Frequency                   |       | 50/60    | 50/60    | 50/60     | 50/60     | 50/60     | 50/60     |
| Voltage V ( $\Delta/Y$ )    |       | 230/400  | 230      | 230/400   | 230       | 230/400   | 230       |
| Current Amp ( $\Delta/Y$ )  |       | 2.1/1.2  | 3.6      | 3.3/1.9   | 5.7       | 6.5/3.8   | 11.2      |
| Pressure mbar               | 50 Hz | 13.0     | 13.0     | 18.5      | 18.5      | 21.5      | 21.5      |
|                             | 60 Hz | 15.0     | 15.0     | 26.5      | 26.5      | 32.0      | 32.0      |
| Airflow m <sup>3</sup> /min | 50 Hz | 6        | 6        | 15        | 15        | 17        | 17        |
|                             | 60 Hz | 8        | 8        | 18        | 18        | 21        | 21        |
| Outlet                      |       | 3" (Ø75) | 3" (Ø75) | 4" (Ø100) | 4" (Ø100) | 4" (Ø100) | 4" (Ø100) |
| Noise level dB              | 50 Hz | 57       | 57       | 65        | 65        | 74        | 74        |
|                             | 60 Hz | 70       | 70       | 80        | 80        | 90        | 90        |
| Weight kg                   |       | 18       | 18       | 30        | 30        | 40        | 40        |

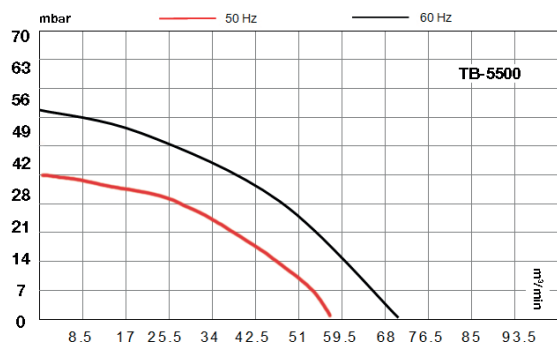
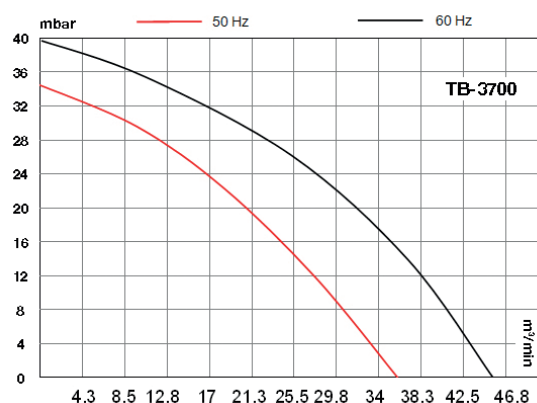
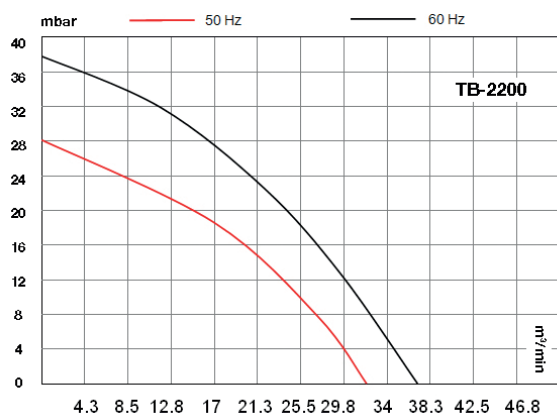


# Specifications (TB)

## Turboblowers TB-2200/3700/5500

| Type no.                    |       | TB-2200   | TB-3700   | TB-5500   |
|-----------------------------|-------|-----------|-----------|-----------|
| Phases                      |       | 3         | 3         | 3         |
| Output kW                   | 50 Hz | 1.9       | 3.4       | 5.5       |
|                             | 60 Hz | 2.2       | 3.7       | 6.3       |
| Frequency                   |       | 50/60     | 50/60     | 50/60     |
| Voltage V (Δ/Y)             |       | 230/400   | 230       | 230/400   |
| Current Amp (Δ/Y)           |       | 8.7/5     | 14/8      | 18/10.4   |
| Pressure m/bar              | 50 Hz | 28.5      | 35.0      | 42        |
|                             | 60 Hz | 38.0      | 40.0      | 50        |
| Airflow m <sup>3</sup> /min | 50 Hz | 33        | 35        | 58        |
|                             | 60 Hz | 38        | 45        | 70        |
| Outlet                      |       | 5" (Ø125) | 6" (Ø150) | 6" (Ø150) |
| Noise level dB              | 50 Hz | 77        | 80        | 70        |
|                             | 60 Hz | 96        | 100       | 90        |
| Weight kg                   |       | 60        | 74        | 82        |

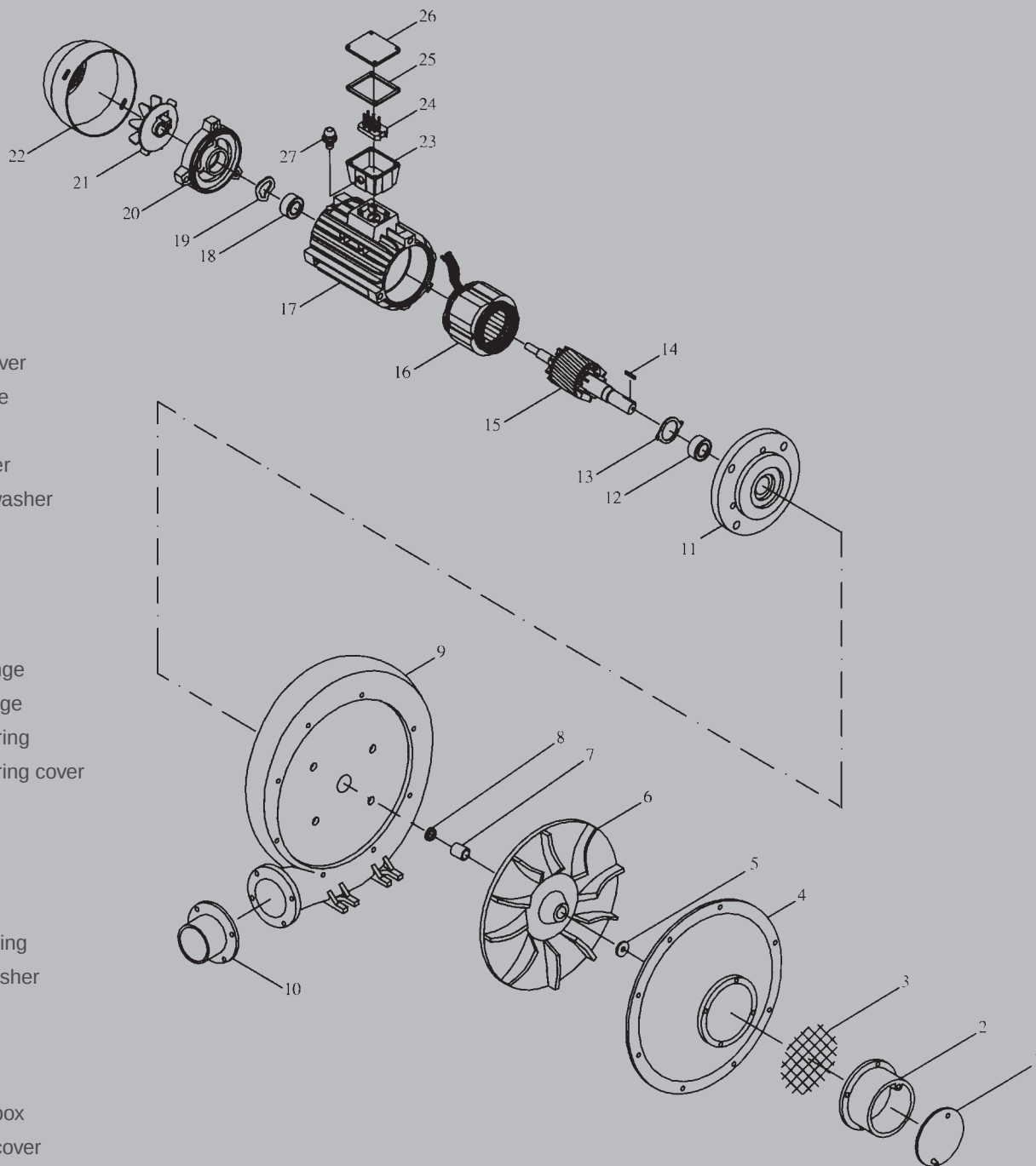
Type TB-1500/1.5 kW, TB2200/2.2 kW and TB-5500/5.5 kW can be supplied on request with 3-phase IEC-motor in IE2 version.





# Turboblower

# Exploded view and parts list



- |     |                      |
|-----|----------------------|
| 01. | Flange cover         |
| 02. | Inlet flange         |
| 03. | Filter               |
| 04. | Front cover          |
| 05. | Impeller washer      |
| 06. | Impeller             |
| 07. | Sealing              |
| 08. | Sleeve               |
| 09. | Housing              |
| 10. | Outlet flange        |
| 11. | Motor flange         |
| 12. | Front bearing        |
| 13. | Inner bearing cover  |
| 14. | Key                  |
| 15. | Rotor                |
| 16. | Stator               |
| 17. | Housing              |
| 18. | Rear bearing         |
| 19. | Spring washer        |
| 20. | B-shield             |
| 21. | Fan                  |
| 22. | Fan cover            |
| 23. | Terminal box         |
| 24. | Terminal cover       |
| 25. | Terminal box sealing |
| 26. | Terminal box cover   |
| 27. | Cable gland          |



**KLEE blower®**

**KB-120L** 

1 PHASE 2 POLES IP54

ISO cl. F

SER. NO. 1200123456

230V 1.7A

50Hz  
2820 rpm

0.20kW COSφ

230V 1.8A

60Hz  
3320 rpm

0.25kW COSφ



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