



# **KLEEblower**

Side channel- & turboblowers

## **More than 80 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. 75 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





# KLEEblower

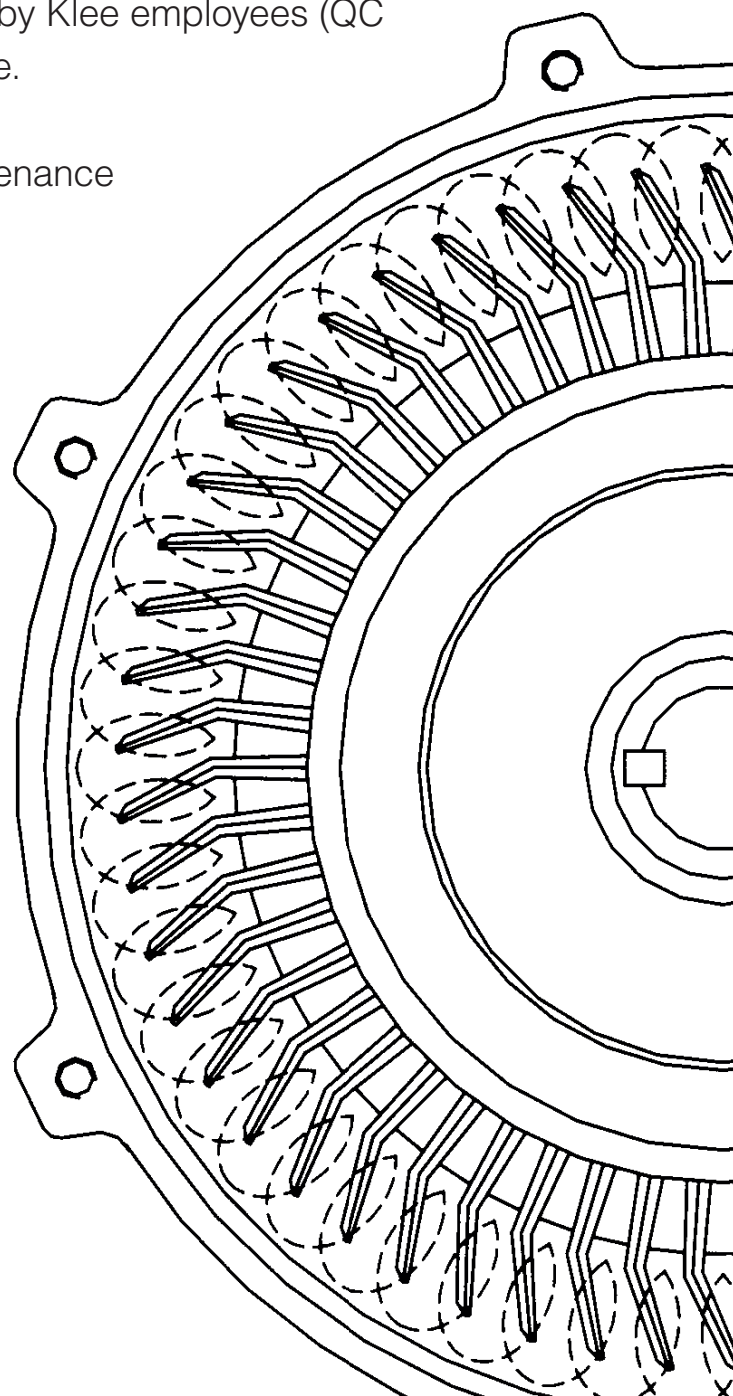
## A reliable and durable solution

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

- IP54
- 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
- Option: Ceramic bearings and anodized housing and impeller

#### 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.

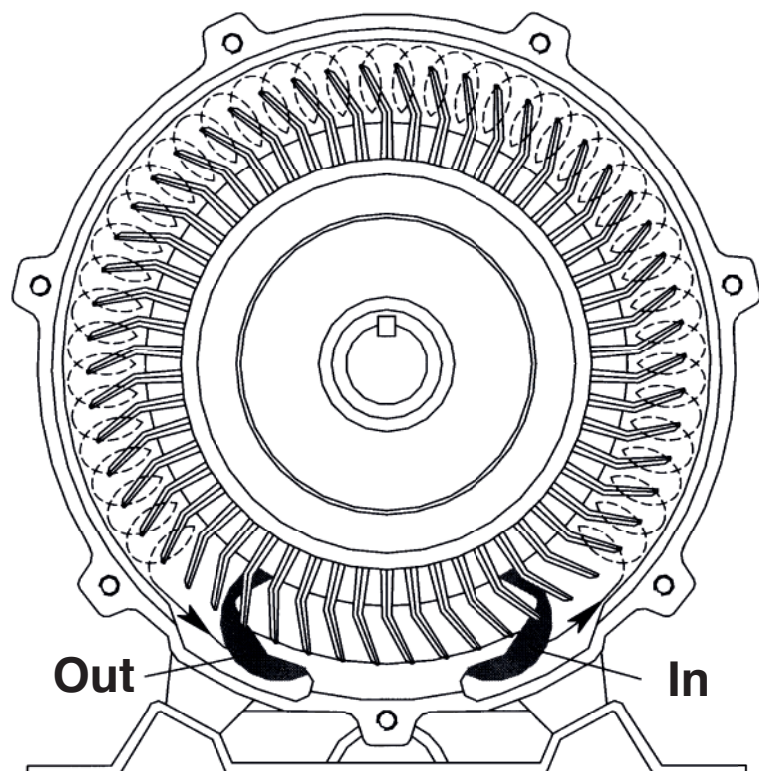


Illustration A. Example of the working principle of a side channel blower.





# Applications

## Vacuum, KLEEblower type KB

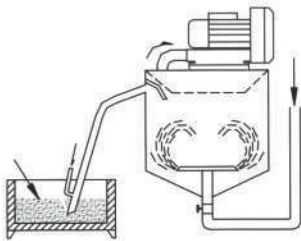
KLEEblower type KB provides up to 1344 m<sup>3</sup>/h and differential vacuum down to 650 mbar.

Please refer to page 54-55 for more information.

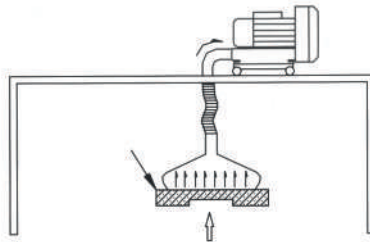
It is advised to secure the blower against overheating. Avoid exceeding the allowable vacuum limit.



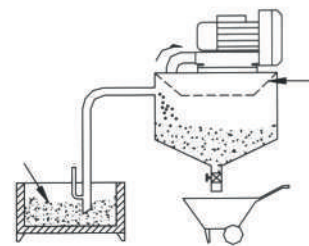
**1. Food washing equipment**



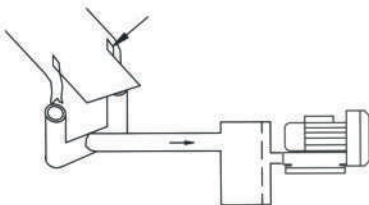
**2. Exhaust gases**



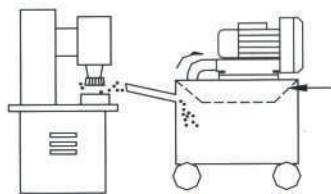
**3. Power & granule conveyor**



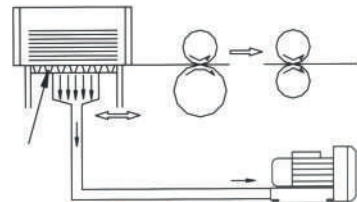
**4. Paper cutting equipment**



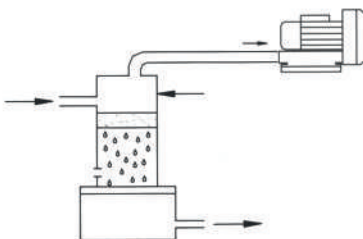
**5. Industrial vacuuming**



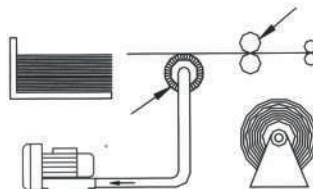
**6. Paperboard conveyor**



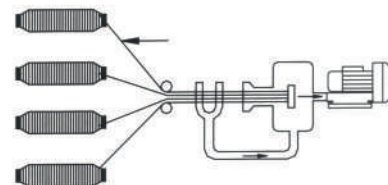
**7. Degasification**



**8. Printing machine**



**9. Automatic weaving machine**





# Applications

## Pressure, KLEEblower type KB

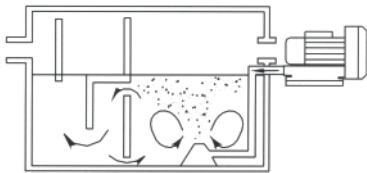
KLEEblower type KB provides up to 1344 m<sup>3</sup>/h and differential pressure up to 780 mbar.

Please refer to page 54-55 for more information.

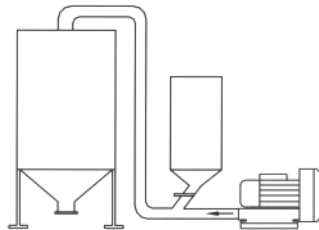
It is advised to secure the blower against overheating. Avoid exceeding the allowable pressure limit.



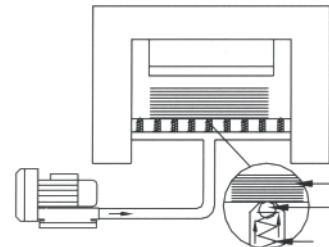
**1. Sewage Treatment Plants**



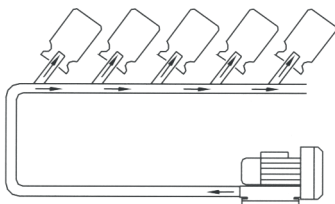
**2. Powder & granule conveyor**



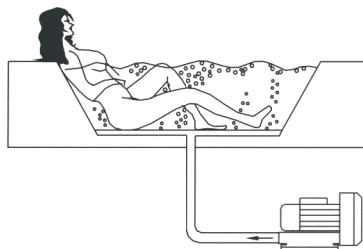
**3. Air cushioned paper knife**



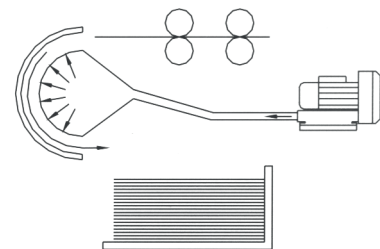
**4. Air drying of containers**



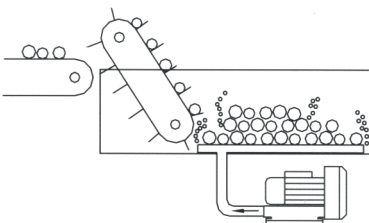
**5. Jacuzzi**



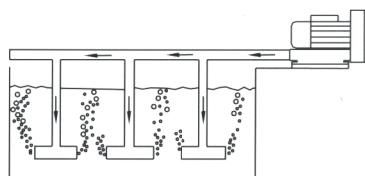
**6. Air drying for offset printing**



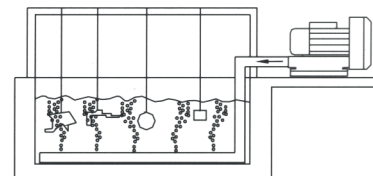
**7. Vegetable washer**



**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 m<sup>3</sup>/h and max. air pressure of 450 mbar

– Double-stage side channel blower (high pressure) with max. air flow of 575 m<sup>3</sup>/h max. air pressure of 780 mbar.

– Double-stage side channel blower (large flow) with max. air flow of 990 m<sup>3</sup>/h and max. air pressure of 270 mbar.

Type	Curve no.	Output [kW]	Voltage star/delta [V]	Maximum airflow [m <sup>3</sup> /min]	Safety limit Vacuum / pressure [mbar]	Noise level [dB]	Vacuum / pressure valve PVC/ALU	
<b>Single-stage</b>								
KB-129	22F	0.2	3 x 230/400 (1 x 230) (different voltage on request)	0.8	70/70	53	RV-03	RVA-03
KB-129-1	22F	0.2		0.8	70/70	53	RV-03	RVA-03
KB-229	31F	0.4		1.4	110/130	58	RV-03	RVA-03
KB-229-1	31F	0.4		1.4	110/130	58	RV-03	RVA-03
KB-229L	32F	0.4		1.4	110/130	58	RV-03	RVA-03
KB-229L-1	32F	0.4		1.4	110/130	58	RV-03	RVA-03
KB-329	41F	0.75		2.4	140/140	63	RV-03	RVA-03
KB-329-1	41F	0.75		2.4	140/140	63	RV-03	RVA-03
KB-329L	42F	0.75		2.4	140/140	63	RV-03	RVA-03
KB-329L-1	42F	0.75		2.4	140/140	63	RV-03	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	52F	1.3	3 x 230/400 (1 x 220/240) (different voltage on request)	3.6	180/180	70	RV-03	RVA-03
KB-429L	52F	1.3		3.6	180/180	70	RV-03	RVA-03
KB-429-1	52F	1.3		3.6	180/180	70	RV-03	RVA-03
KB-429-1	53F	1.5		3.6	210/220	70	RV-03	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		4.50	180/180	70	RV-03	RVA-03
KB-429HF	57HF	1.75		4.50	210/220	70	RV-03	RVA-03
KB-429HF	58HF	2.2		4.50	220/270	70	RV-03	RVA-03
KB-529	61F	2.2		5.2	230/230	72	ATV-20	ATV-20
KB-529-1	61F	2.2		5.2	230/230	72	ATV-20	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	61HF	2.2	6.8	230/230	72	RV-03	RVA-03	
KB-629HF	62HF	3.4	6.8	260/300	72	RV-03	RVA-03	
KB-639HF	63HF	4.0	6.8	270/330	72	RV-03	RVA-03	
KB-729	81F	5.5	3 x 230/400 or (3 x 400/690) (different voltage on request)	9.2	270/300	74	-- --	ATV-25
KB-829	82F	7.5		9.2	300/400	74	-- --	ATV-25*
KB-919	91F	9	3 x 230/400 or (3 x 400/690) (different voltage on request)	18.9	200/200	76	-- --	ATV-25
KB-929	92F	13		18.9	300/300	76	-- --	ATV-25
KB-939	93F	20		18.9	350/450	76	-- --	ATV-25*

\* With special spring > 350 mbar

50 Hz



Type	Curve no.	Output [kW]	Voltage star/delta [V]	Maximum airflow [m <sup>3</sup> /min]	Safety limit Vacuum / pressure [mbar]	Noise level [dB]	Vacuum / pressure valve PVC/ALU	
<b>Double-stage</b>								
KB-2308	101F	0.75	3 x 230/400 or (3 x 400/690) (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 x 230/400 or (3 x 400/690) (different voltage on request)	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		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	3 x 230/400 or (3 x 400/690) (different voltage on request)	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

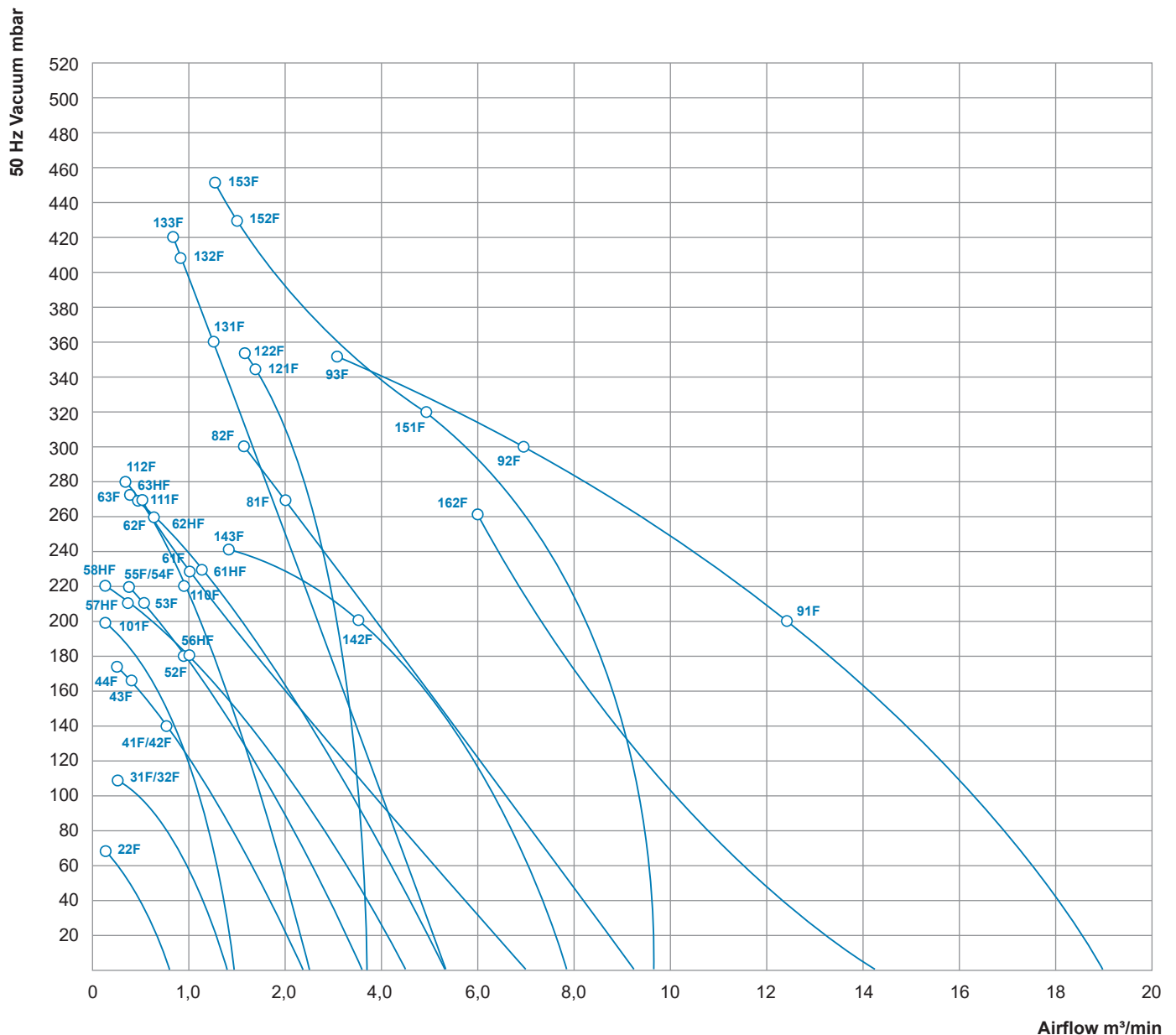
The technical data is based on 1 bar (abs) free atmosphere and 20 °C with inlet air density 1.2 kg/m<sup>3</sup>, incl. 10% variance. All rights reserved for technical specification changes without prior approval from any source outside Brd. Klee, when considered necessary based on our research and development.

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.

\* With special spring > 350 mbar

# Vacuum diagram

## KB-series 50 Hz

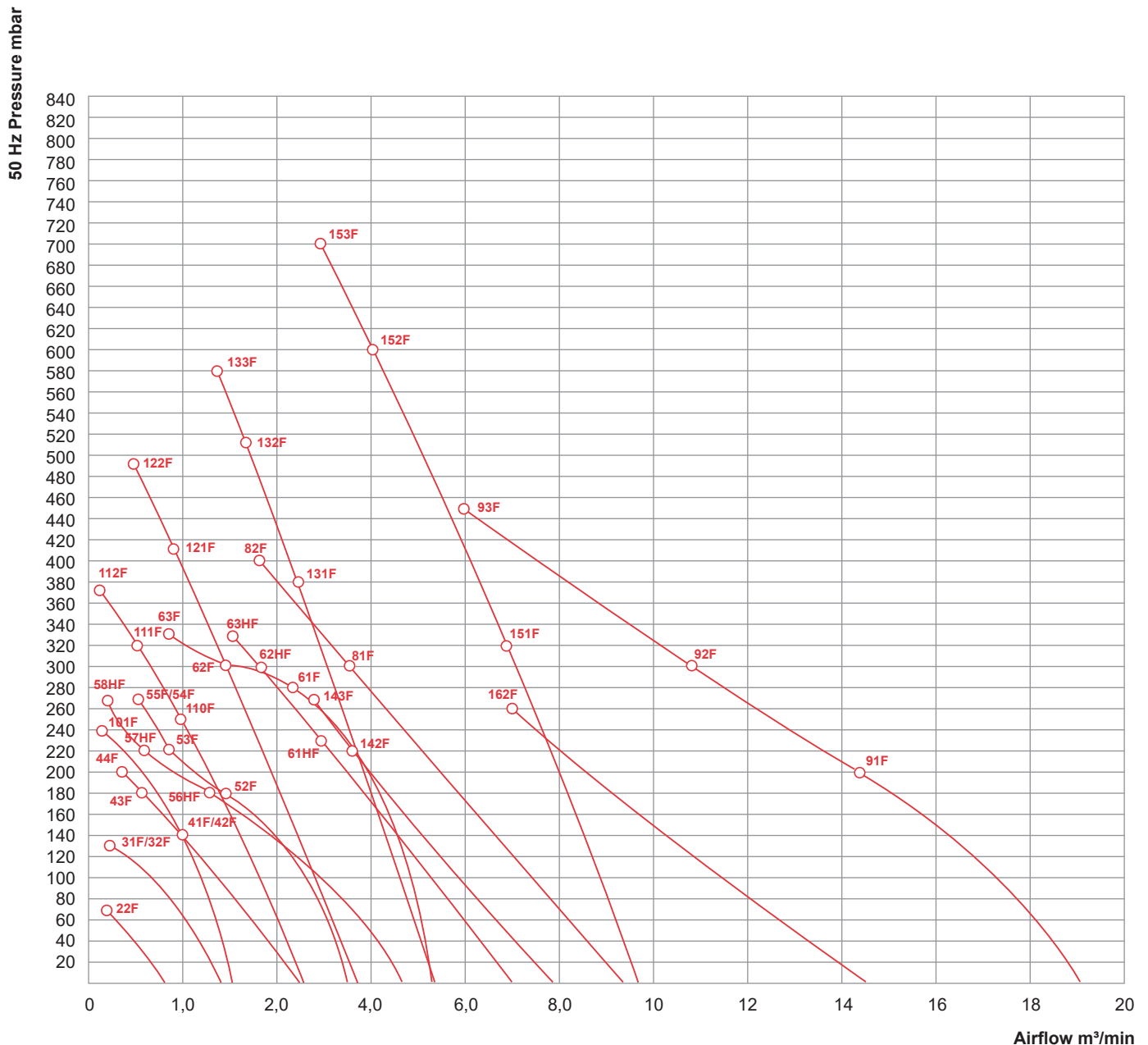


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# Pressure diagram

## KB-series 50 Hz



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# Technical data “vacuum”

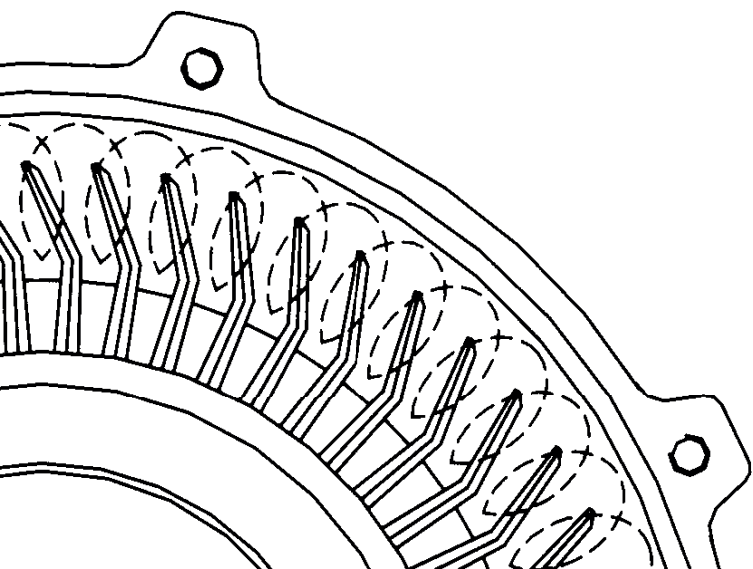
## KB-series 50 Hz single-stage

Models		Single-stage vacuum										
<b>Series 1</b>	<b>mbar</b>	<b>0</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>40</b>	<b>50</b>	<b>60</b>	<b>70</b>	<b>80</b>	<b>90</b>	<b>100</b>
KB-129 0.2 kW	m <sup>3</sup> /min	0.8	0.72	0.66	0.56	0.48	0.38	0.25	0.12	-	-	-
KB-129-1 0.2 kW	m <sup>3</sup> /min	0.8	0.72	0.66	0.56	0.48	0.38	0.25	0.12	-	-	-
<b>Series 2</b>	<b>mbar</b>	<b>0</b>	<b>20</b>	<b>40</b>	<b>60</b>	<b>80</b>	<b>100</b>	<b>110</b>	<b>120</b>	<b>130</b>	<b>140</b>	<b>150</b>
KB-229 0.4 kW	m <sup>3</sup> /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	-	-	-	-
<b>Series 3</b>	<b>mbar</b>	<b>0</b>	<b>20</b>	<b>40</b>	<b>60</b>	<b>80</b>	<b>100</b>	<b>120</b>	<b>140</b>	<b>165</b>	<b>175</b>	<b>185</b>
KB-329 0.75 kW	m <sup>3</sup> /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	-
<b>Series 4</b>	<b>mbar</b>	<b>0</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>130</b>	<b>160</b>	<b>180</b>	<b>200</b>	<b>210</b>	<b>220</b>
KB-429 1.3 kW	m <sup>3</sup> /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 1.3 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
<b>Series 4 HF</b>	<b>mbar</b>	<b>0</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>130</b>	<b>160</b>	<b>180</b>	<b>200</b>	<b>210</b>	<b>220</b>
KB-429 1.3 kW HF	m <sup>3</sup> /min	4.50	3.83	3.17	2.67	2.17	1.67	1.33	1.00	-	-	-
KB-429 1.75 kW HF		4.50	3.83	3.17	2.67	2.17	1.67	1.33	1.00	0.67	0.33	-
KB-429 2.2 kW HF		4.50	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	m <sup>3</sup> /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	m <sup>3</sup> /min	6.8	5.8	4.0	3.5	3.0	2.6	1.7	1.33	1.00	-	-
KB-629 3.4 kW HF		6.8	5.8	4.0	3.5	3.0	2.6	1.7	1.33	1.00	0.67	-
KB-639 4.0 kW HF		6.8	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	m <sup>3</sup> /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	m <sup>3</sup> /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										
<b>Series 23</b>	<b>mbar</b>	<b>0</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>210</b>	<b>220</b>
KB-2308 0.75 kW	m <sup>3</sup> /min	1.5	1.4	1.25	1.1	0.9	0.8	0.7	0.45	0.25	-	-
<b>Series 33</b>	<b>mbar</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>130</b>	<b>160</b>	<b>180</b>	<b>200</b>	<b>220</b>	<b>250</b>	<b>275</b>	<b>280</b>
KB-3315 1.75 kW	m <sup>3</sup> /min	2.6	2.2	1.8	1.65	1.35	1.22	0.95	0.88	-	-	-
KB-3319 1.75 kW		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
<b>Series 43</b>	<b>mbar</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>200</b>	<b>250</b>	<b>275</b>	<b>300</b>	<b>325</b>	<b>345</b>	<b>355</b>
KB-4337 3.4 kW	m <sup>3</sup> /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
<b>Series 63</b>	<b>mbar</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>330</b>	<b>360</b>	<b>410</b>	<b>420</b>
KB-6346 4.0 kW	m <sup>3</sup> /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
<b>Series 64</b>	<b>mbar</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>180</b>	<b>200</b>	<b>220</b>	<b>240</b>	<b>250</b>
KB-6455 5.5 kW	m <sup>3</sup> /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	-
<b>Series 83</b>	<b>mbar</b>	<b>0</b>	<b>75</b>	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>320</b>	<b>350</b>	<b>400</b>	<b>430</b>	<b>450</b>
KB-8310 7.5 kW	m <sup>3</sup> /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
<b>Series 84</b>	<b>mbar</b>	<b>0</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>230</b>	<b>260</b>
KB-8415 11.0 kW	m <sup>3</sup> /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”

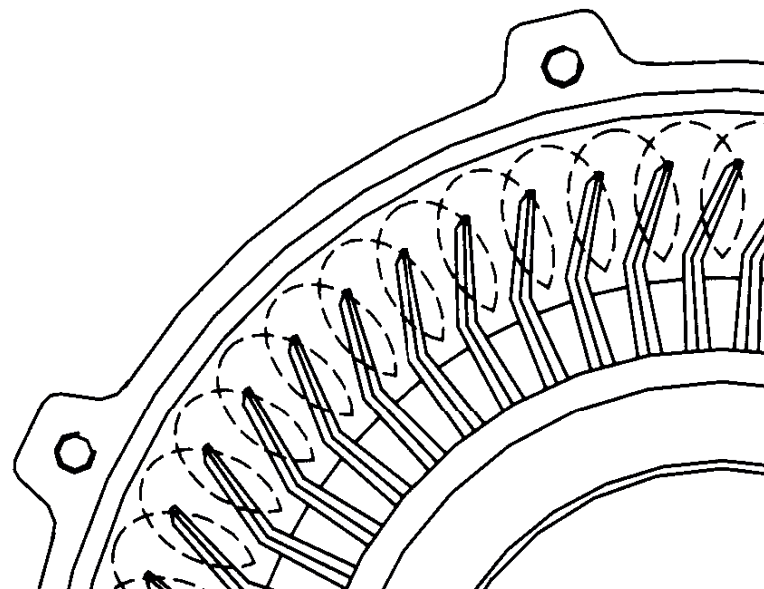
## KB-series 50 Hz single-stage

Models		Single-stage pressure										
<b>Series 1</b>	<b>mbar</b>	<b>0</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>40</b>	<b>50</b>	<b>60</b>	<b>70</b>	<b>80</b>	<b>90</b>	<b>100</b>
KB-129 0.2 kW	m <sup>3</sup> /min	0.8	0.72	0.66	0.56	0.48	0.38	0.25	0.12	-	-	-
KB-129-1 0.2 kW	m <sup>3</sup> /min	0.8	0.72	0.66	0.56	0.48	0.38	0.25	0.12	-	-	-
<b>Series 2</b>	<b>mbar</b>	<b>0</b>	<b>20</b>	<b>40</b>	<b>60</b>	<b>80</b>	<b>100</b>	<b>110</b>	<b>120</b>	<b>130</b>	<b>140</b>	<b>150</b>
KB-229 0.4 kW	m <sup>3</sup> /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	-	-
<b>Series 3</b>	<b>mbar</b>	<b>0</b>	<b>20</b>	<b>40</b>	<b>60</b>	<b>80</b>	<b>100</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>180</b>	<b>200</b>
KB-329 0.75 kW	m <sup>3</sup> /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
<b>Series 4</b>	<b>mbar</b>	<b>0</b>	<b>40</b>	<b>80</b>	<b>100</b>	<b>130</b>	<b>150</b>	<b>180</b>	<b>200</b>	<b>220</b>	<b>250</b>	<b>270</b>
KB-429 1.3 kW	m <sup>3</sup> /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 1.3 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
<b>Series 4 HF</b>	<b>mbar</b>	<b>0</b>	<b>40</b>	<b>80</b>	<b>100</b>	<b>130</b>	<b>150</b>	<b>180</b>	<b>200</b>	<b>220</b>	<b>250</b>	<b>270</b>
KB-429 1.3 kW HF	m <sup>3</sup> /min	4.33	3.50	2.83	2.00	2.00	1.67	1.33	-	-	-	-
KB-429 1.75 kW HF		4.33	3.50	2.83	2.00	2.00	1.67	1.33	1.00	0.67	-	-
KB-429 2.2 kW HF		4.33	3.50	2.83	2.00	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	m <sup>3</sup> /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	m <sup>3</sup> /min	7.0	6.0	5.0	4.0	3.7	3.2	2.9	-	-	-	-
KB-629 3.4 kW HF		7.0	6.0	5.0	4.0	3.7	3.2	2.9	2.5	2.2	1.8	-
KB-639 4.0 kW HF		7.0	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	m <sup>3</sup> /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	m <sup>3</sup> /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



# Technical data “pressure”

## KB-series 50 Hz double-stage

Models		Double-stage pressure										
<b>Series 23</b>	<b>mbar</b>	<b>0</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>220</b>	<b>240</b>
KB-2308 0.75 kW	m <sup>3</sup> /min	1.5	1.35	1.18	1.0	0.9	0.75	0.65	0.53	0.4	0.25	0.13
<b>Series 33</b>	<b>mbar</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>200</b>	<b>250</b>	<b>275</b>	<b>300</b>	<b>320</b>	<b>350</b>	<b>375</b>
KB-3315 1.75 kW	m <sup>3</sup> /min	2.6	2.2	1.18	1.0	0.9	0.75	-	-	-	-	-
KB-3319 1.75 kW		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
<b>Series 43</b>	<b>mbar</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>350</b>	<b>410</b>	<b>450</b>	<b>495</b>
KB-4337 3.4 kW	m <sup>3</sup> /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
<b>Series 63</b>	<b>mbar</b>	<b>0</b>	<b>100</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>380</b>	<b>400</b>	<b>450</b>	<b>515</b>	<b>550</b>	<b>580</b>
KB-6346 4.0 kW	m <sup>3</sup> /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
<b>Series 64</b>	<b>mbar</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>180</b>	<b>200</b>	<b>220</b>	<b>250</b>	<b>270</b>
KB-6455 5.5 kW	m <sup>3</sup> /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
<b>Series 83</b>	<b>mbar</b>	<b>0</b>	<b>75</b>	<b>150</b>	<b>250</b>	<b>320</b>	<b>400</b>	<b>500</b>	<b>550</b>	<b>600</b>	<b>650</b>	<b>700</b>
KB-8310 7.5 kW	m <sup>3</sup> /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
<b>Series 84</b>	<b>mbar</b>	<b>0</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>230</b>	<b>260</b>
KB-8415 11.0 kW	m <sup>3</sup> /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 m<sup>3</sup>/h and max. air pressure of 430 mbar.
- Double-stage side channel blower (high pressure) with max. air flow of 654 m<sup>3</sup>/h max. air pressure of 780 mbar.
- Double-stage side channel blower (large flow) with max. air flow of 990 m<sup>3</sup>/h and max. air pressure of 270 mbar.

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

\* With special spring > 350 mbar

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
<b>Double-stage</b>							
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-3315	110S	1.5		3.0	225/250	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	3 x 276/480 or (3 x 480/-) (different voltage on request)	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	3 x 276/480 or (3 x 480/-) (different voltage on request)	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	3 x 276/480 or (3 x 480/-) (different voltage on request)	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.

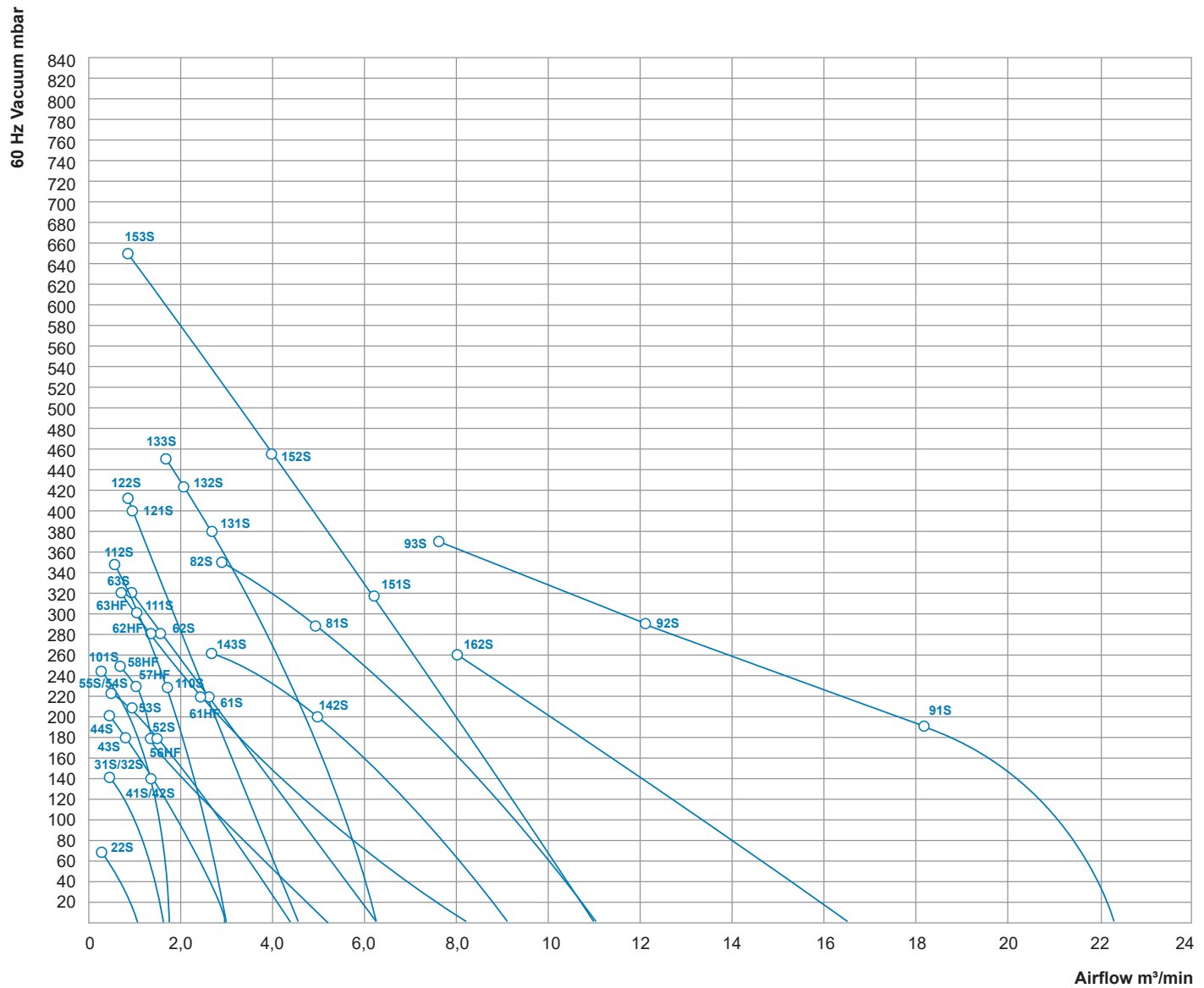
It is recommended to use a pressure/vacuum safety valve to protect the fan from overheating and exceeding the permissible pressure/vacuum. Please see page 54-55 for further information. Bi-metal switch is standard on motors from 5.5 kW and all 1-phase models.

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

\*\* With special spring > 350 mbar

# Vacuum diagram

## KB-series 60 Hz

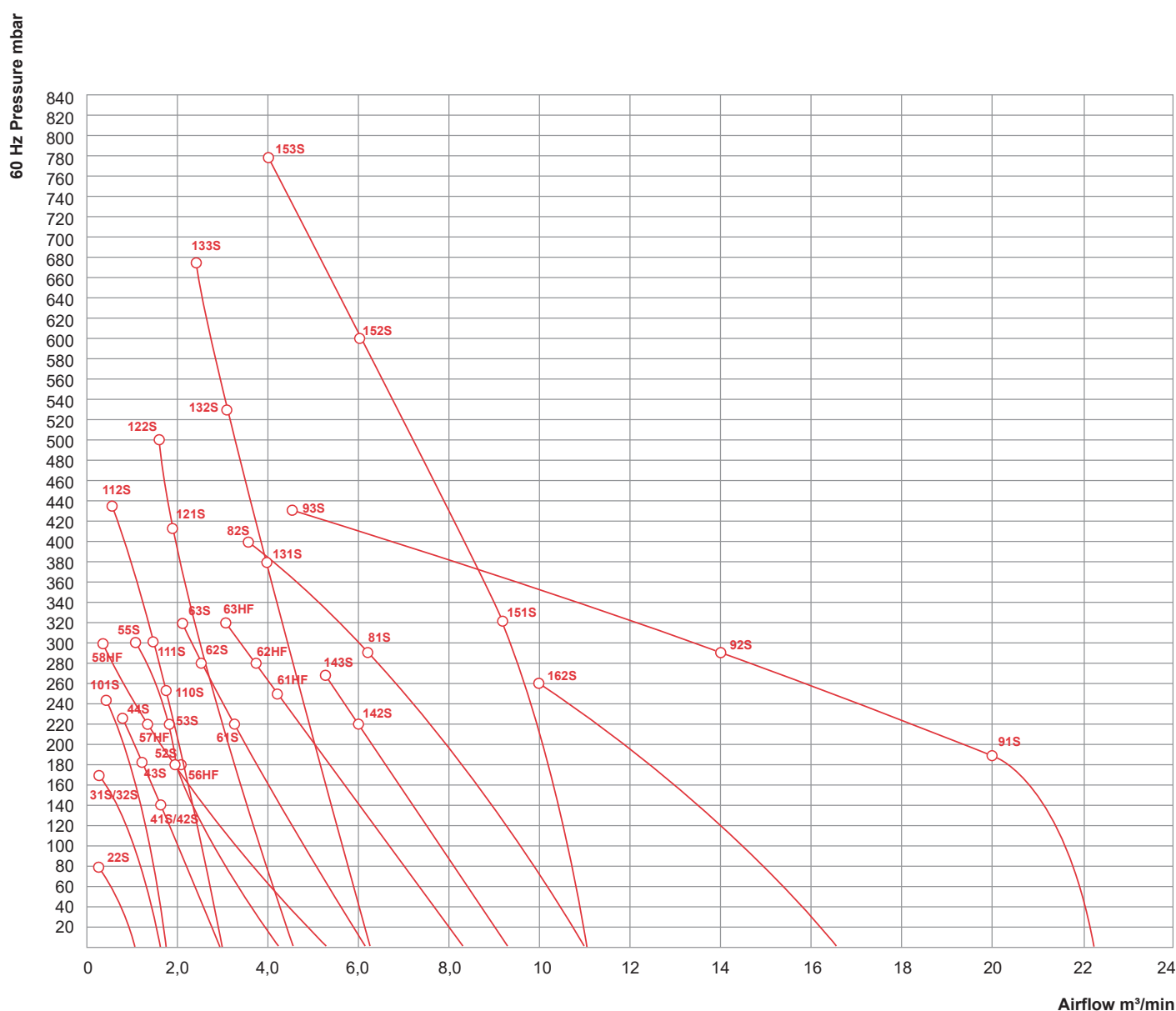


The technical data is based on 1 bar (abs) free atmosphere and 20 °C with inlet air density 1.2 kg/m<sup>3</sup>, incl. 10% variance. All rights reserved for technical specification changes without prior approval from any source outside Brd. Klee, when considered necessary based on our research and development.

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 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/m<sup>3</sup>, 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”

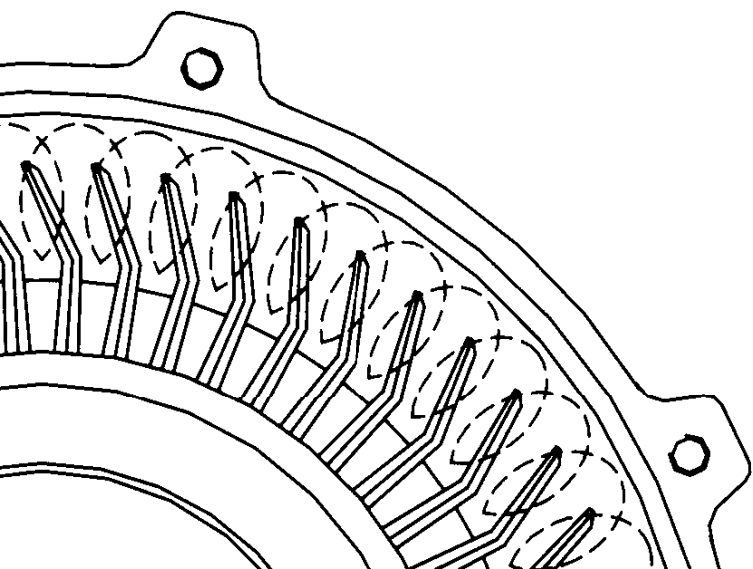
## KB-series 60 Hz single-stage

Models		Single-stage vacuum										
<b>Series 1</b>	<b>mbar</b>	<b>0</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>40</b>	<b>50</b>	<b>60</b>	<b>70</b>	<b>75</b>	<b>80</b>	<b>90</b>
KB-129 0.25 kW	m <sup>3</sup> /min	1.0	0.92	0.85	0.8	0.7	0.62	0.47	0.28	0.15	-	-
KB-129-1 0.25 kW	m <sup>3</sup> /min	1.0	0.92	0.85	0.8	0.7	0.62	0.47	0.28	0.15	-	-
<b>Series 2</b>	<b>mbar</b>	<b>0</b>	<b>20</b>	<b>40</b>	<b>60</b>	<b>80</b>	<b>100</b>	<b>110</b>	<b>120</b>	<b>130</b>	<b>140</b>	<b>150</b>
KB-229 0.5 kW	m <sup>3</sup> /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	-
<b>Series 3</b>	<b>mbar</b>	<b>0</b>	<b>20</b>	<b>40</b>	<b>60</b>	<b>80</b>	<b>100</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>180</b>	<b>205</b>
KB-329 0.85 kW	m <sup>3</sup> /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
<b>Series 4</b>	<b>mbar</b>	<b>0</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>140</b>	<b>180</b>	<b>210</b>	<b>230</b>	<b>255</b>	<b>280</b>
KB-429 1.5 kW	m <sup>3</sup> /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 1.5 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	-
<b>Series 4 HF</b>	<b>mbar</b>	<b>0</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>140</b>	<b>180</b>	<b>210</b>	<b>230</b>	<b>255</b>	<b>280</b>
KB-429 1.5 kW HF	m <sup>3</sup> /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										
<b>Series 23</b>	<b>mbar</b>	<b>0</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>220</b>	<b>245</b>
KB-2308 0.85 kW	m <sup>3</sup> /min	1.8	1.7	1.51	1.38	1.25	1.07	0.9	0.78	0.63	0.46	0.28
<b>Series 33</b>	<b>mbar</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>200</b>	<b>220</b>	<b>225</b>	<b>275</b>	<b>300</b>	<b>325</b>	<b>350</b>
KB-3315 1.9 kW	m <sup>3</sup> /min	3.0	2.9	2.4	2.0	1.65	1.35	1.2	-	-	-	-
KB-3319 1.9 kW		3.0	2.9	2.4	2.0	1.65	1.35	1.2	0.91	0.8	-	-
KB-3326 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
<b>Series 43</b>	<b>mbar</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>200</b>	<b>250</b>	<b>275</b>	<b>300</b>	<b>350</b>	<b>405</b>	<b>410</b>
KB-4337 3.7 kW	m <sup>3</sup> /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
<b>Series 63</b>	<b>mbar</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>350</b>	<b>380</b>	<b>400</b>	<b>425</b>	<b>450</b>
KB-6346 4.6 kW	m <sup>3</sup> /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
<b>Series 64</b>	<b>mbar</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>180</b>	<b>200</b>	<b>220</b>	<b>240</b>	<b>260</b>
KB-6455 6.3 kW	m <sup>3</sup> /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
<b>Series 83</b>	<b>mbar</b>	<b>0</b>	<b>75</b>	<b>150</b>	<b>200</b>	<b>320</b>	<b>400</b>	<b>455</b>	<b>500</b>	<b>550</b>	<b>600</b>	<b>650</b>
KB-8310 8.6 kW	m <sup>3</sup> /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
<b>Series 84</b>	<b>mbar</b>	<b>0</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>230</b>	<b>260</b>
KB-8415 13.0 kW	m <sup>3</sup> /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”

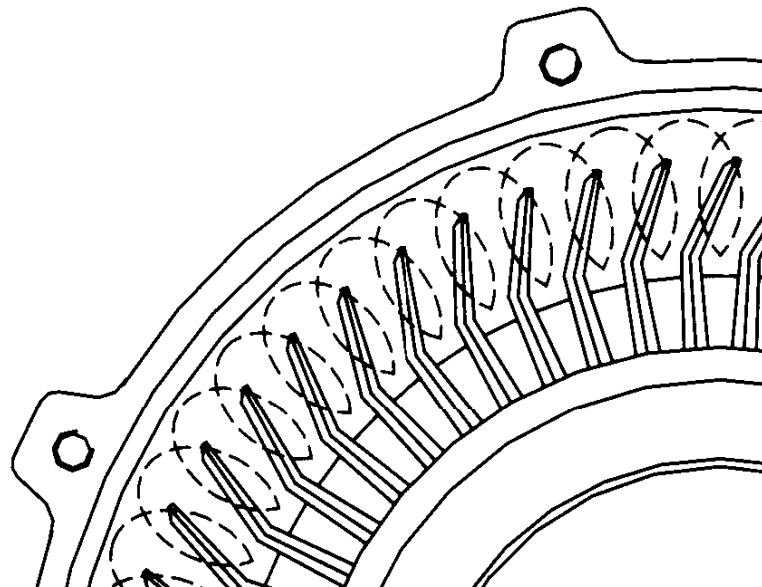
## KB-series 60 Hz single-stage

Models		Single-stage pressure										
<b>Series 1</b>	<b>mbar</b>	<b>0</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>40</b>	<b>50</b>	<b>60</b>	<b>70</b>	<b>80</b>	<b>90</b>	<b>100</b>
KB-129 0.25 kW	m <sup>3</sup> /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	m <sup>3</sup> /min	1.0	0.95	0.9	0.85	0.75	0.68	0.51	0.4	0.2	-	-
<b>Series 2</b>	<b>mbar</b>	<b>0</b>	<b>20</b>	<b>40</b>	<b>60</b>	<b>80</b>	<b>100</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>170</b>	<b>180</b>
KB-229 0.5 kW	m <sup>3</sup> /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	-
<b>Series 3</b>	<b>mbar</b>	<b>0</b>	<b>30</b>	<b>60</b>	<b>80</b>	<b>100</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>180</b>	<b>200</b>	<b>230</b>
KB-329 0.85 kW	m <sup>3</sup> /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
<b>Series 4</b>	<b>mbar</b>	<b>0</b>	<b>40</b>	<b>80</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>180</b>	<b>200</b>	<b>220</b>	<b>250</b>	<b>300</b>
KB-429 1.5 kW	m <sup>3</sup> /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 1.5 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
<b>Series 4 HF</b>	<b>mbar</b>	<b>0</b>	<b>40</b>	<b>80</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>180</b>	<b>200</b>	<b>220</b>	<b>250</b>	<b>300</b>
KB-429 1.5 kW HF	m <sup>3</sup> /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	m <sup>3</sup> /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	m <sup>3</sup> /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	m <sup>3</sup> /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	m <sup>3</sup> /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**

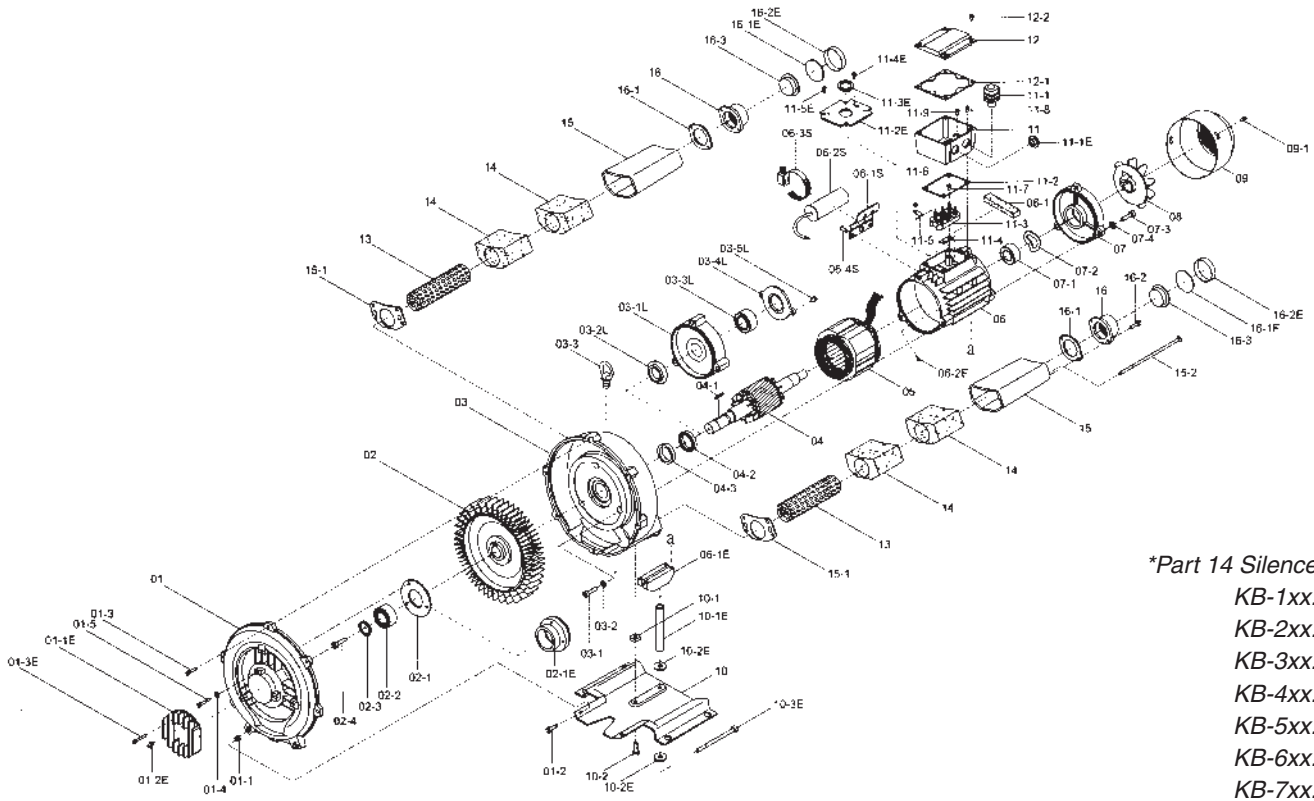
# Technical data “pressure”

## KB-series 60 Hz double-stage

Models		Double-stage pressure										
<b>Series 23</b>	<b>mbar</b>	<b>0</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>220</b>	<b>245</b>
KB-2308 0.85 kW	m <sup>3</sup> /min	1.8	1.75	1.65	1.55	1.4	1.22	1.05	0.9	0.75	0.65	0.5
<b>Series 33</b>	<b>mbar</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>325</b>	<b>350</b>	<b>400</b>	<b>435</b>
KB-3319 1.9 kW	m <sup>3</sup> /min	3.0	2.8	2.5	2.1	1.8	1.6	-	-	-	-	-
KB-3319 1.9 kW		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
<b>Series 43</b>	<b>mbar</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>350</b>	<b>415</b>	<b>450</b>	<b>500</b>
KB-4337 3.7 kW	m <sup>3</sup> /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
<b>Series 63</b>	<b>mbar</b>	<b>0</b>	<b>75</b>	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>380</b>	<b>450</b>	<b>530</b>	<b>600</b>	<b>675</b>
KB-6346 4.6 kW	m <sup>3</sup> /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
<b>Series 64</b>	<b>mbar</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>180</b>	<b>200</b>	<b>220</b>	<b>250</b>	<b>270</b>
KB-6455 6.3 kW	m <sup>3</sup> /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
<b>Series 83</b>	<b>mbar</b>	<b>0</b>	<b>100</b>	<b>200</b>	<b>320</b>	<b>400</b>	<b>500</b>	<b>550</b>	<b>600</b>	<b>650</b>	<b>700</b>	<b>780</b>
KB-8310 8.6 kW	m <sup>3</sup> /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
<b>Series 84</b>	<b>mbar</b>	<b>0</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>230</b>	<b>260</b>
KB-8415 13.0 kW	m <sup>3</sup> /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



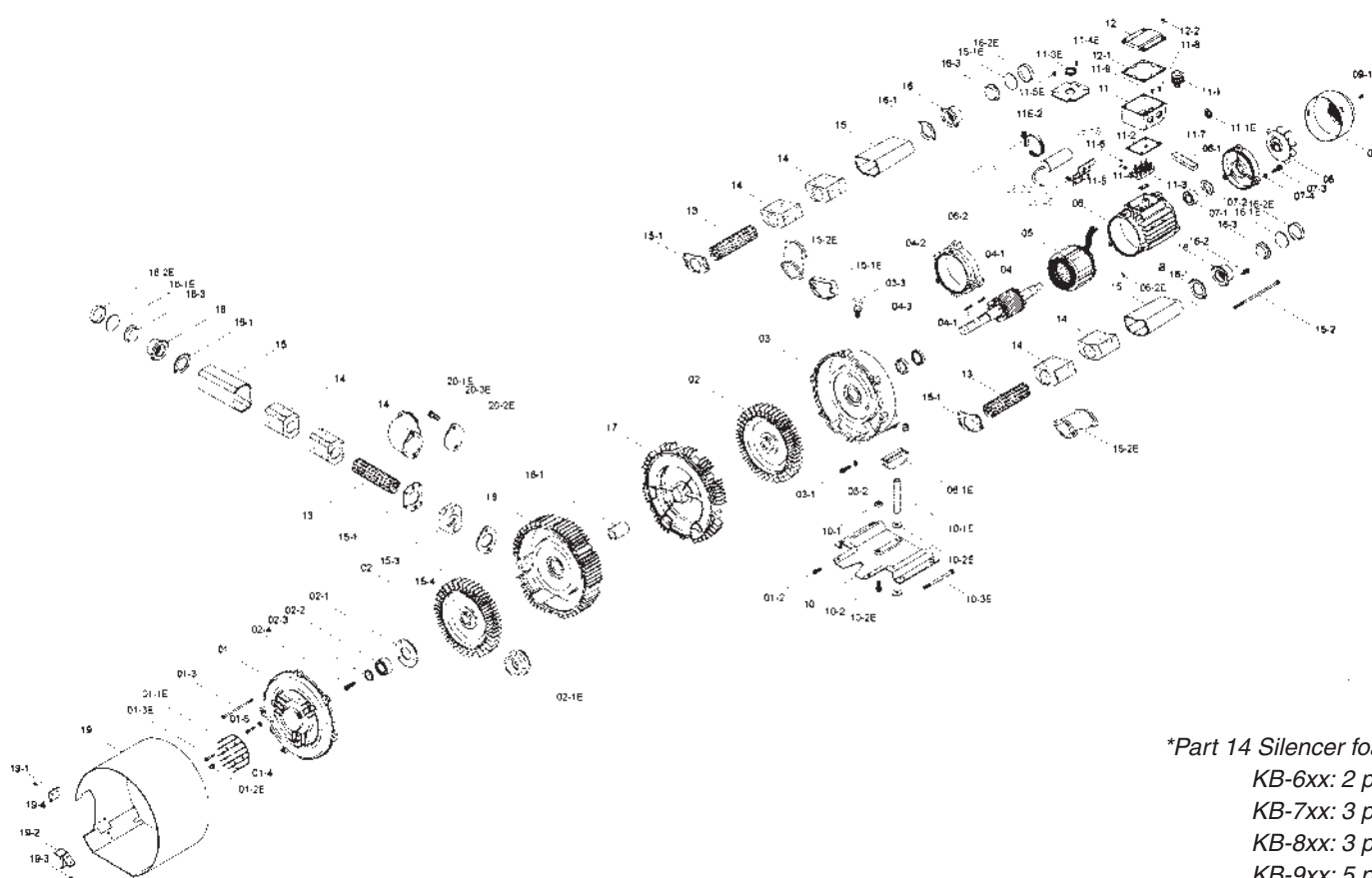
*\*Part 14 Silencer foam*  
 KB-1xx: 1 pcs.  
 KB-2xx: 1 pcs.  
 KB-3xx: 1 pcs.  
 KB-4xx: 2 pcs.  
 KB-5xx: 2 pcs.  
 KB-6xx: 2 pcs.  
 KB-7xx: 3 pcs.  
 KB-8xx: 3 pcs.  
 KB-9xx: 5 pcs.

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 sealing	16.	Inlet/outlet *
02-1E.	Bearing socket	06-1E.	Bracket	11-3.	Terminal board	16-1.	Inlet (outlet) gasket
03.	Compreasure 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		

\*) See page 57

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

\*) See page 57

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

# Specifications type KB 1..

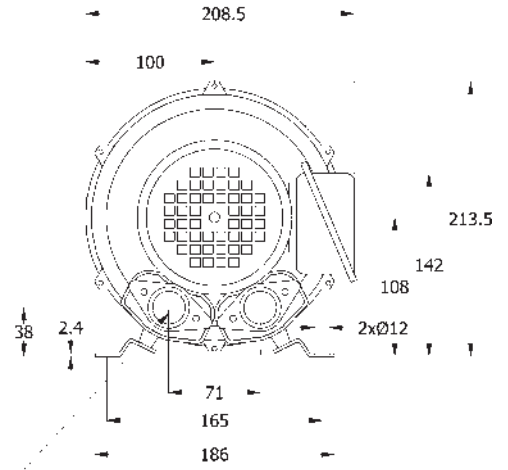
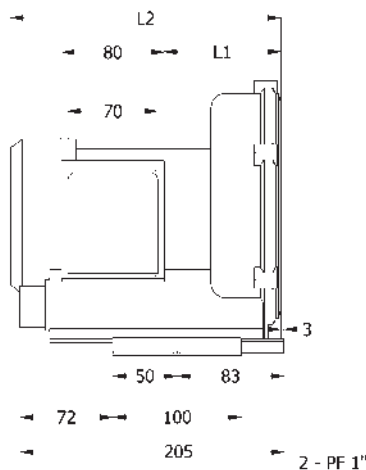
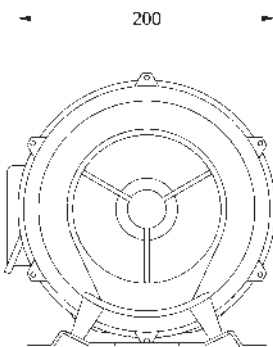
## Single-stage (side channel blowers)

- 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 m <sup>3</sup> /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..

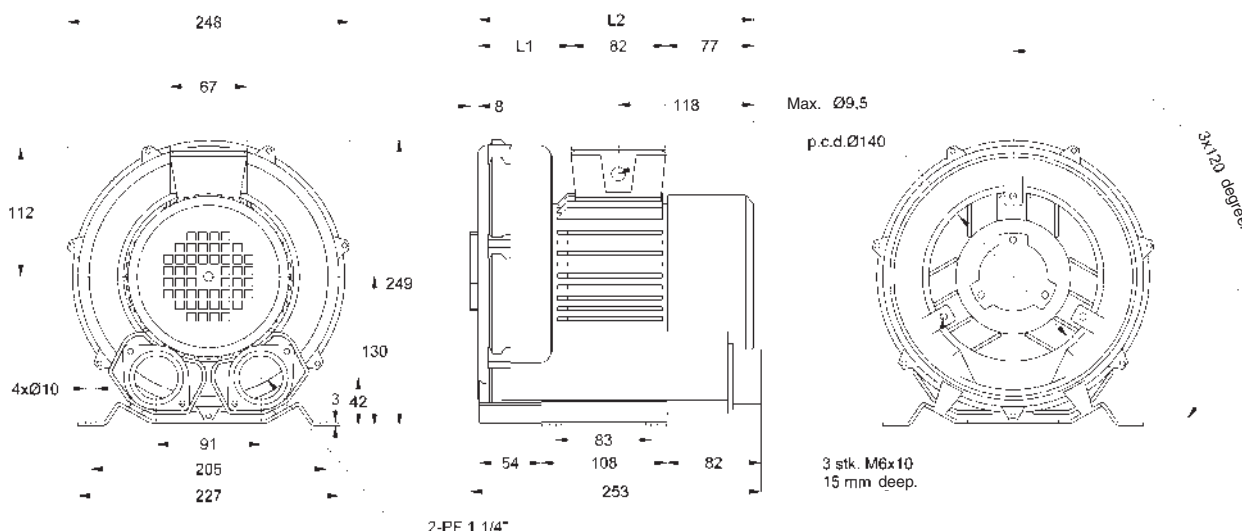
## Single-stage (side channel blowers)

- 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	230	276/480	230
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



2-PF 1 1/4"

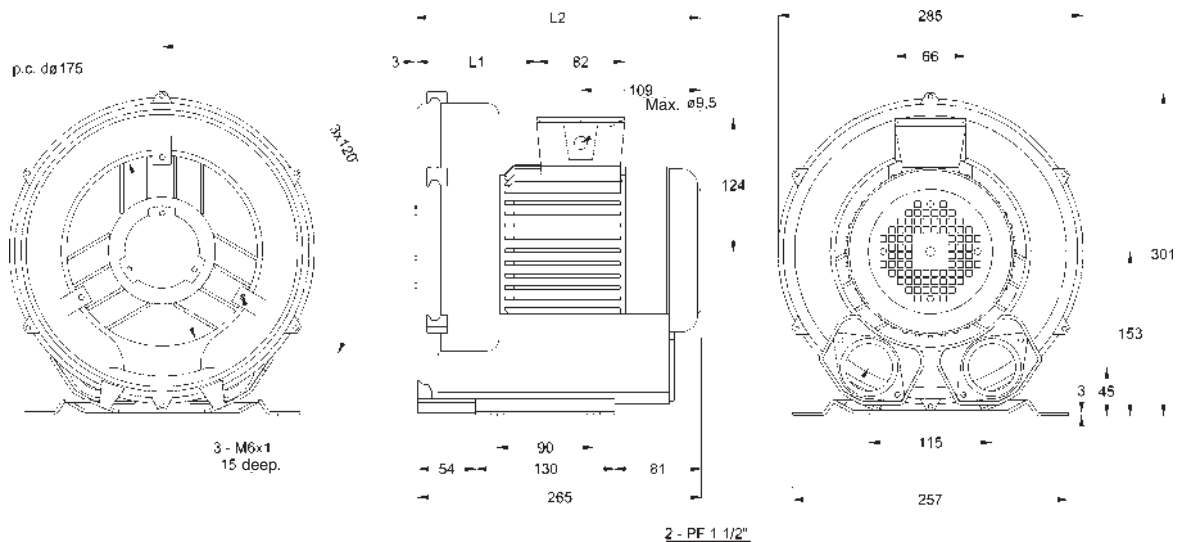
# Specifications type KB 3..

## 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
<b>Phases</b>		<b>3</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>3</b>
<b>Output kW</b>	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
<b>Voltage Volt</b>	50 Hz	230/400	230	230/400	230	230/400	230/400
	60 Hz	276/480	230	276/480	230	276/480	276/480
<b>Current Amp</b>	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
<b>Vacuum mbar</b>	50 Hz	140	140	140	140	165	175
	60 Hz	140	140	140	140	180	205
<b>Pressure mbar</b>	50 Hz	140	140	140	140	180	200
	60 Hz	140	140	140	140	180	230
<b>Airflow m<sup>3</sup>/min</b>	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
<b>Insulation class</b>		F	F	F	F	F	F
<b>L1</b>		129	129	161	161	129	129
<b>L2</b>		279	279	311.5	311.5	279	279
<b>Weight Kg</b>		14.5	15	15.5	15	15.5	16



# Specifications type KB 4..

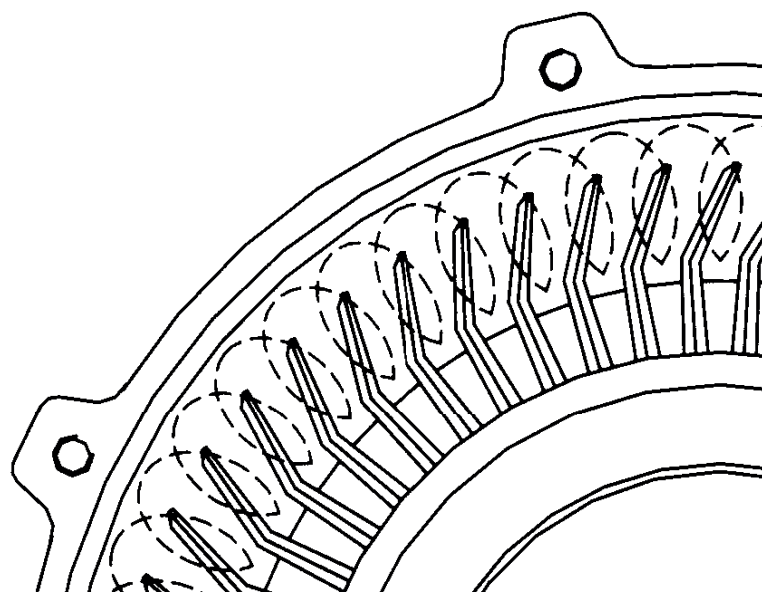
## Single-stage (side channel blowers)

- 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



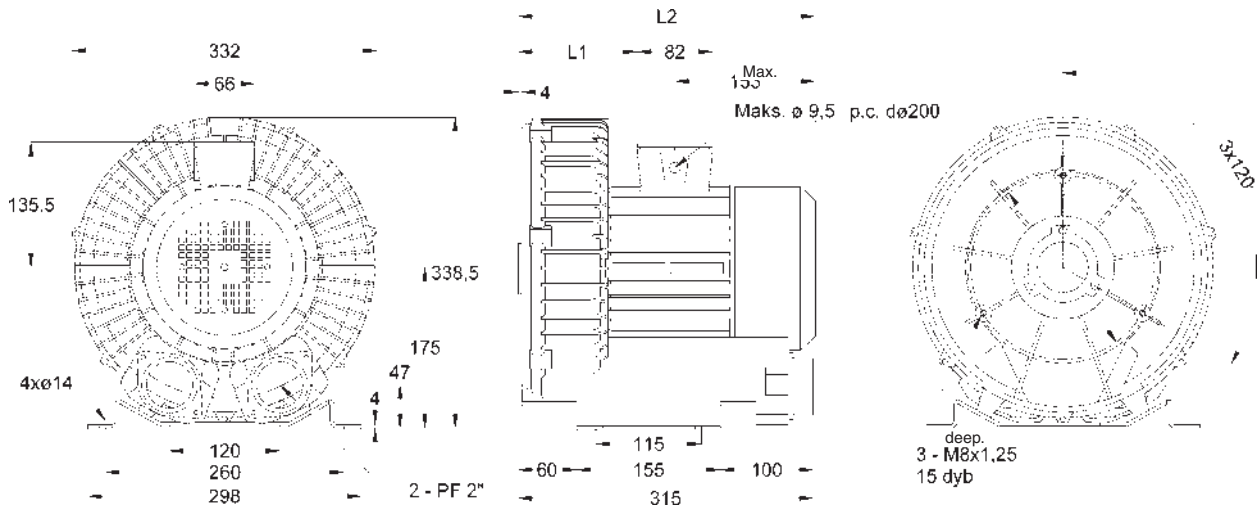
Type no.		KB-429	KB-429-1	KB-429L	KB-429L-1	KB-429HF
Phases		3	1	3	1	3
Output kW	50 Hz	1.3	1.3	1.3	1.3	1.3
	60 Hz	1.5	1.5	1.5	1.5	1.5
Voltage Volt	50 Hz	230/400	230	230/400	230	230/400
	60 Hz	276/480	230	276/480	230	276/480
Current Amp	50 Hz	5.7/3.3	10	5.7/3.3	10	5.7/3.3
	60 Hz	6.0/3.5	11	6.0/3.5	11	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
Weight Kg		22	22.5	22.5	22.5	22.8

*Continues on the next page.*



Continued type KB 4.. (single-stage side channel blowers).

Type no.		KB-429-1	KB-429	KB-429L	KB-429	KB-429HF	KB-429HF
<b>Phases</b>		<b>1</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
<b>Output kW</b>	50 Hz	1.5	1.75	1.75	2.2	1.75	2.2
	60 Hz	1.75	1.9	1.9	2.6	1.9	2.6
<b>Voltage Volt</b>	50 Hz	230	230/400	230/400	230/400	230/400	230/400
	60 Hz	230	276/480	276/480	276/480	276/480	276/480
<b>Current Amp</b>	50 Hz	11,5	6.7/3.9	6.7/3.9	7.8/4.5	6.7/3.9	7.8/4.5
	60 Hz	12	7/4	7/4	9.5/5.5	7/4	9.5/5.5
<b>Vacuum mbar</b>	50 Hz	210	210	210	220	210	220
	60 Hz	210	210	210	255	210	255
<b>Pressure mbar</b>	50 Hz	220	220	220	270	220	270
	60 Hz	220	220	220	300	220	300
<b>Airflow m<sup>3</sup>/min</b>	50 Hz	3.6	3.6	3.6	3.6	4.40	4.40
	60 Hz	4.2	4.2	4.2	4.2	5.25	5.25
<b>Insulation class</b>		F	F	F	F	F	F
<b>L1</b>		126	126	167.5	126	126	126
<b>L2</b>		320	320	361.5	320	320	320
<b>Weight Kg</b>		23	23	23.5	26	26.3	26.3





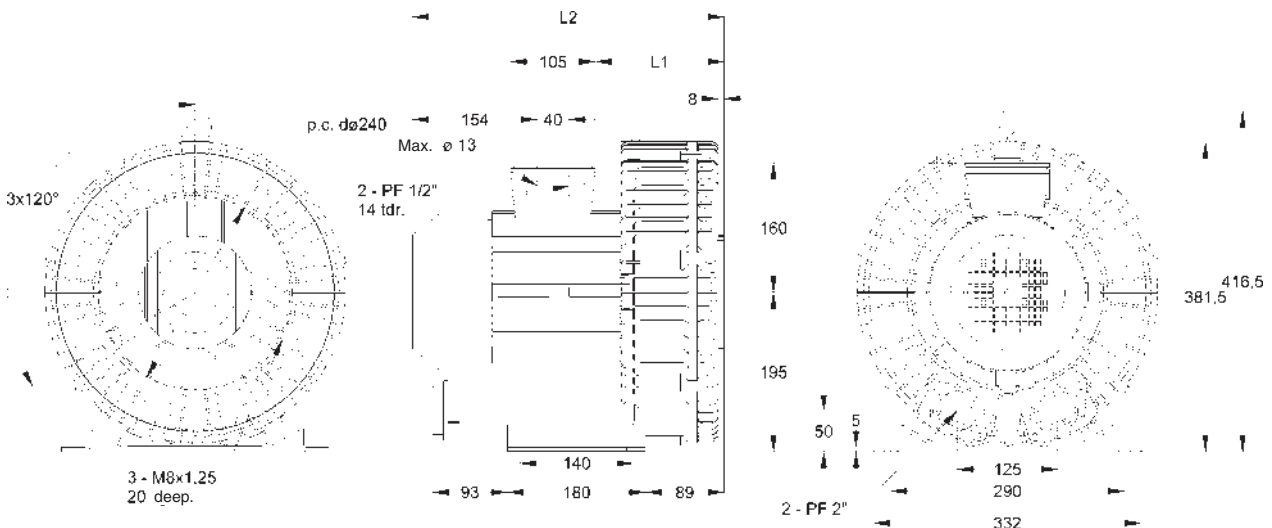
# Specifications type KB 6..

## 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	230	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 m <sup>3</sup> /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
Weight Kg		33	36.5	36	38	38.3	38.9



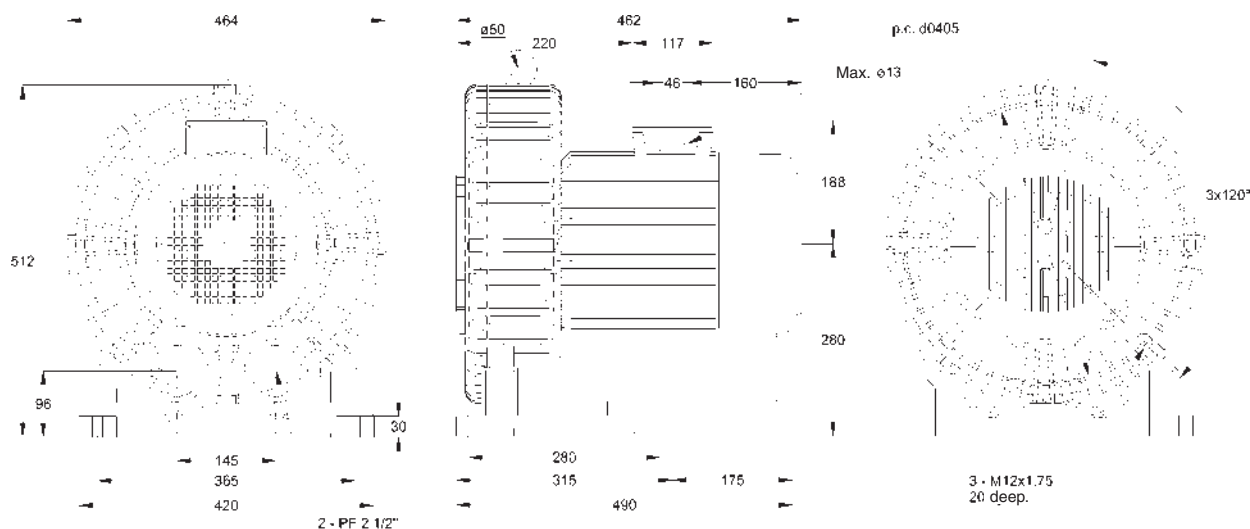
# Specifications type KB 7/8..

## 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	480/828
Current Amp	50 Hz	11.7/6.8	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



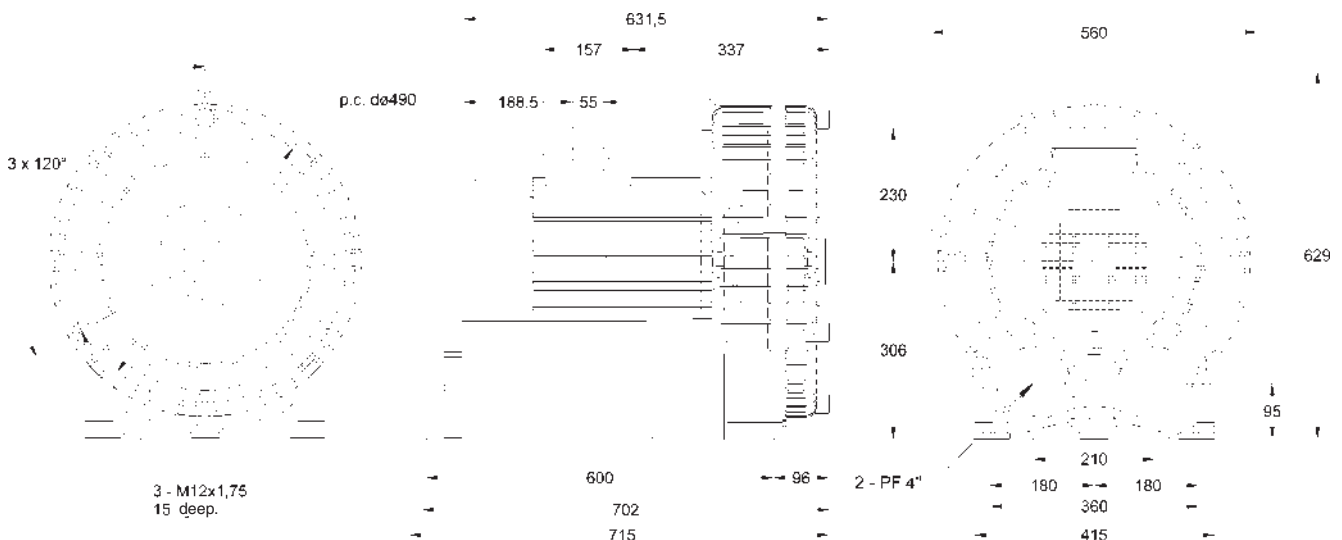
# Specifications type KB 9..

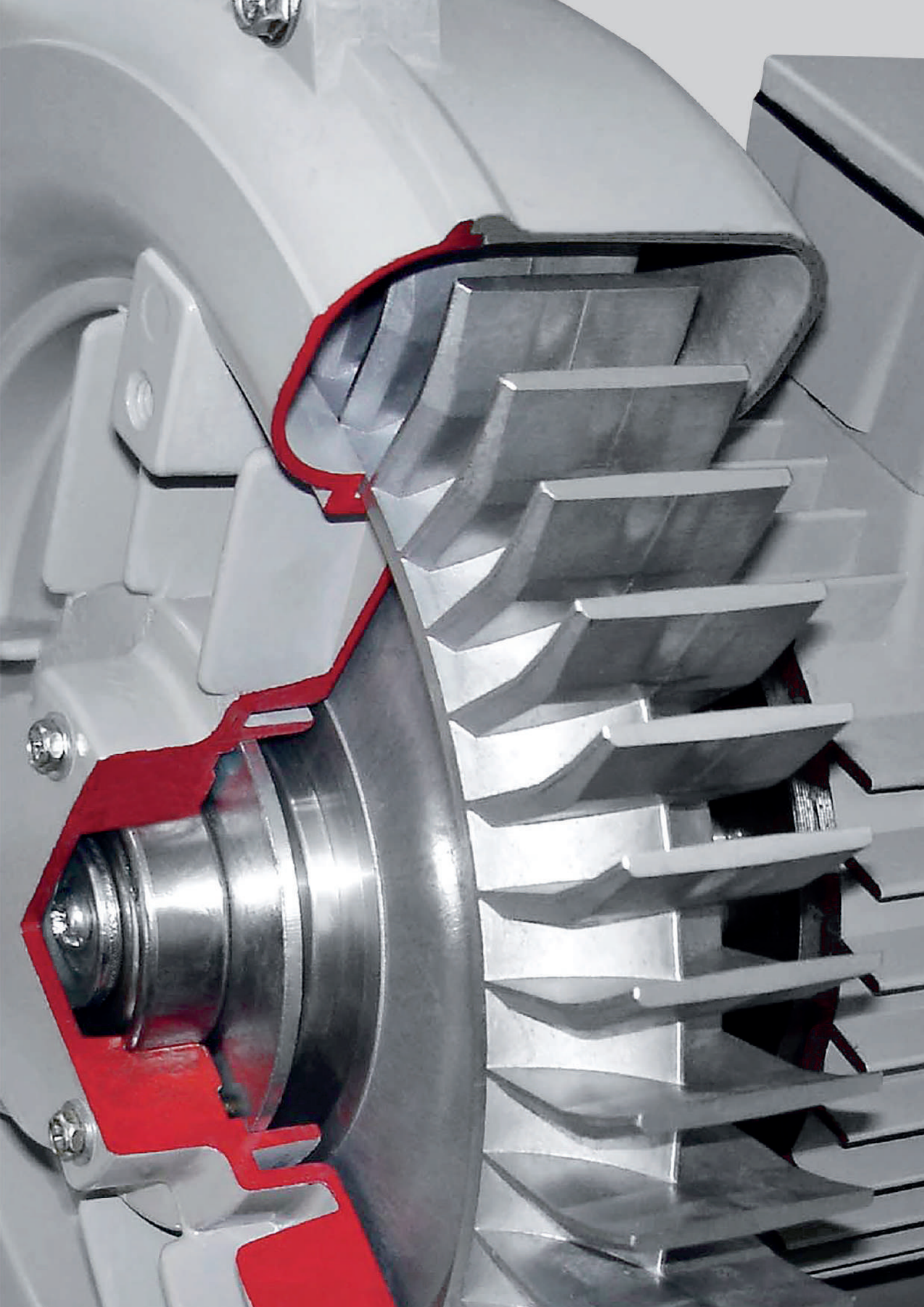
## Single-stage (side channel blowers)

- 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 m <sup>3</sup> /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

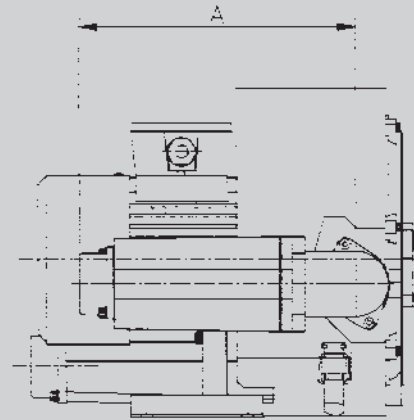
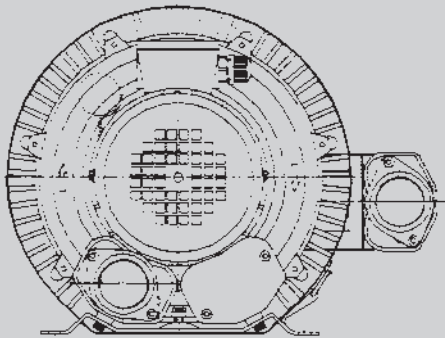
## Double-stage (side channel blowers)

**Description for maximum pressure:**

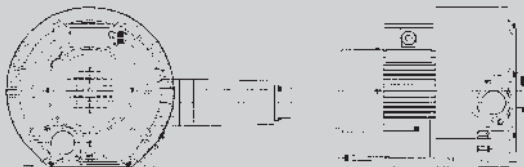
KB (x)3.. = Serially connected impeller

**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

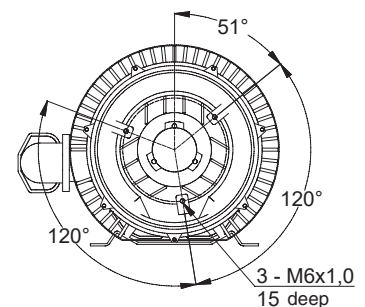
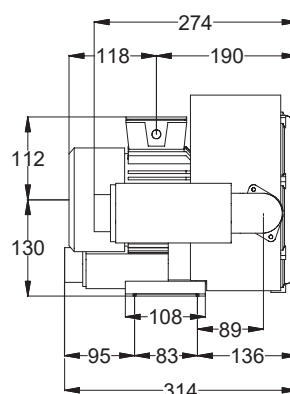
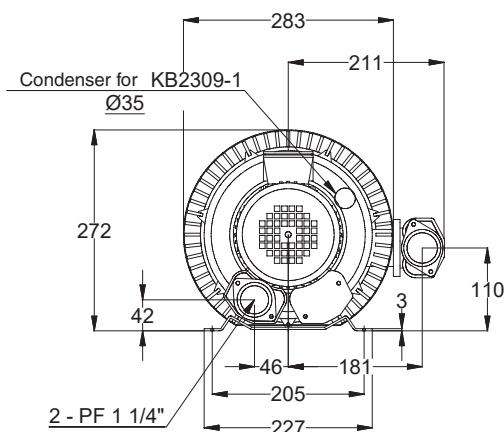
# Specifications type KB 23..

## 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..

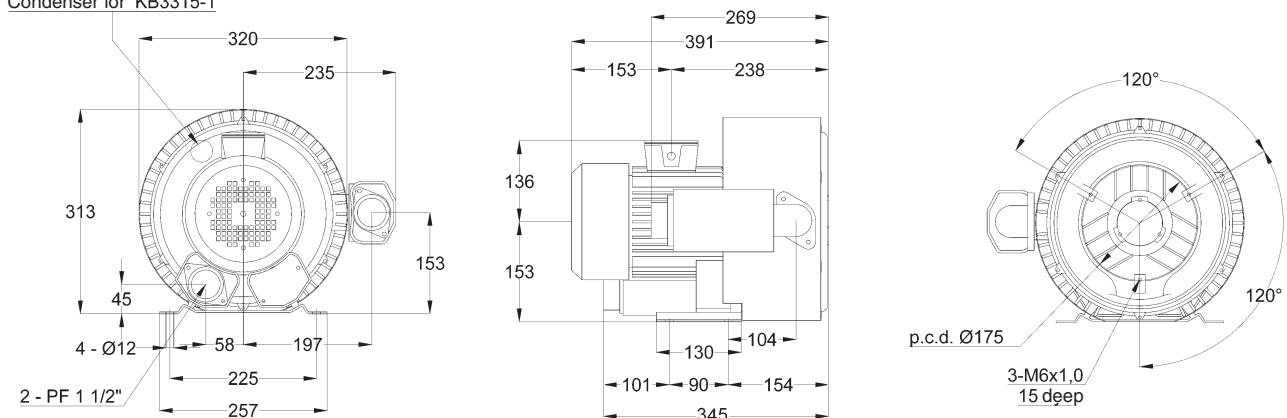
## Double-stage (side channel blowers)

- 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
<b>Phases</b>		<b>1</b>	<b>3</b>	<b>3</b>
<b>Output kW</b>	50 Hz	1.3	1.75	2.2
	60 Hz	1.5	1.9	2.6
<b>Voltage Volt</b>	50 Hz	230	230/400	230/400
	60 Hz	276	276/480	276/480
<b>Current Amp</b>	50 Hz	12.3	6.7/3.9	7.8/4.5
	60 Hz	13	7/4	9.5/5.5
<b>Vacuum mbar</b>	50 Hz	220	275	280
	60 Hz	235	300	350
<b>Pressure mbar</b>	50 Hz	250	320	375
	60 Hz	250	300	435
<b>Airflow m<sup>3</sup>/min</b>	50 Hz	2.6	2.6	2.6
	60 Hz	3.0	3.0	3.0
<b>Insulation class</b>		F	F	F
<b>Weight Kg</b>		24	25	28

Condenser for KB3315-1



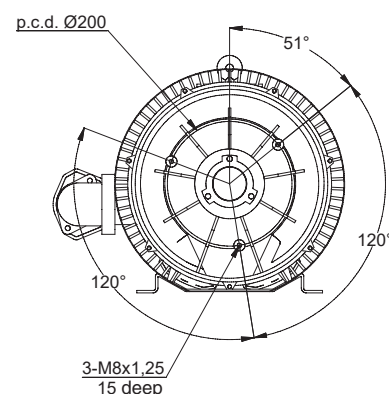
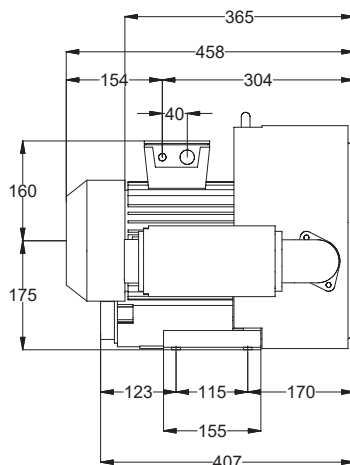
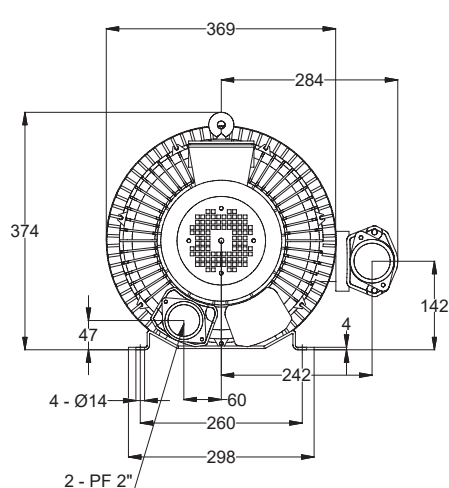
# Specifications type KB 43..

## 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



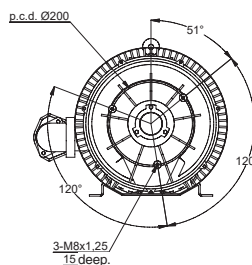
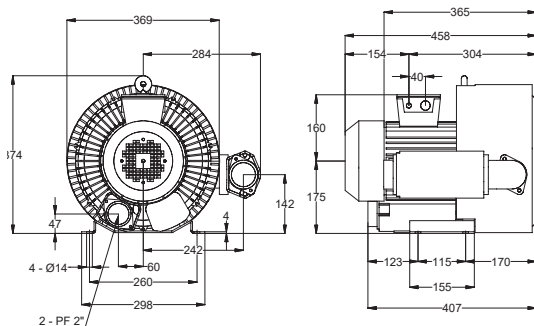
# Specifications type KB 63..

## Double-stage (side channel blowers)

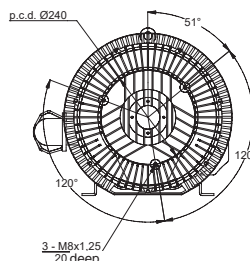
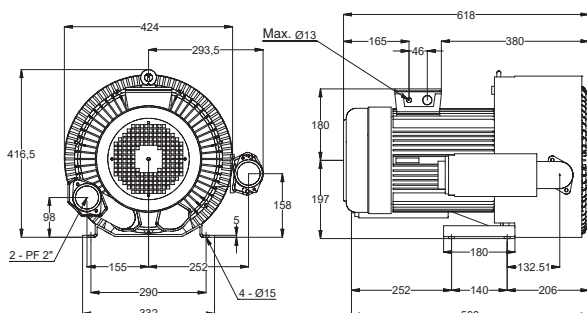
- NSK bearings with high temperature grease
- CE, UL and CSA approved
- All units are QC inspected by Klee
- Built-in bi-metal switch for 1-phase models from 5.5 kW
- Available with 3-phase IE2/IE3 motor



Type no.		KB-6346	KB-6355	KB-6375
<b>Phases</b>		<b>3</b>	<b>3</b>	<b>3</b>
<b>Output kW</b>	50 Hz	4.0	5.5	7.5
	60 Hz	4.6	6.3	8.6
<b>Voltage Volt</b>	50 Hz	230/400	230/400	400/690
	60 Hz	276/480	276/480	480/828
<b>Current Amp</b>	50 Hz	14.3/8.2	21/12	15.1/8.7
	60 Hz	16.2/9.3	26.5/15.3	19.1/11.0
<b>Vacuum mbar</b>	50 Hz	360	410	420
	60 Hz	380	425	450
<b>Pressure mbar</b>	50 Hz	380	515	580
	60 Hz	380	530	675
<b>Airflow m<sup>3</sup>/min</b>	50 Hz	5.2	5.2	5.2
	60 Hz	6.2	6.2	6.2
<b>Insulation class</b>		F	H	H
<b>Weight Kg</b>		55	72	81



Type KB-6346.



Type KB-6355 and Type KB-6375.

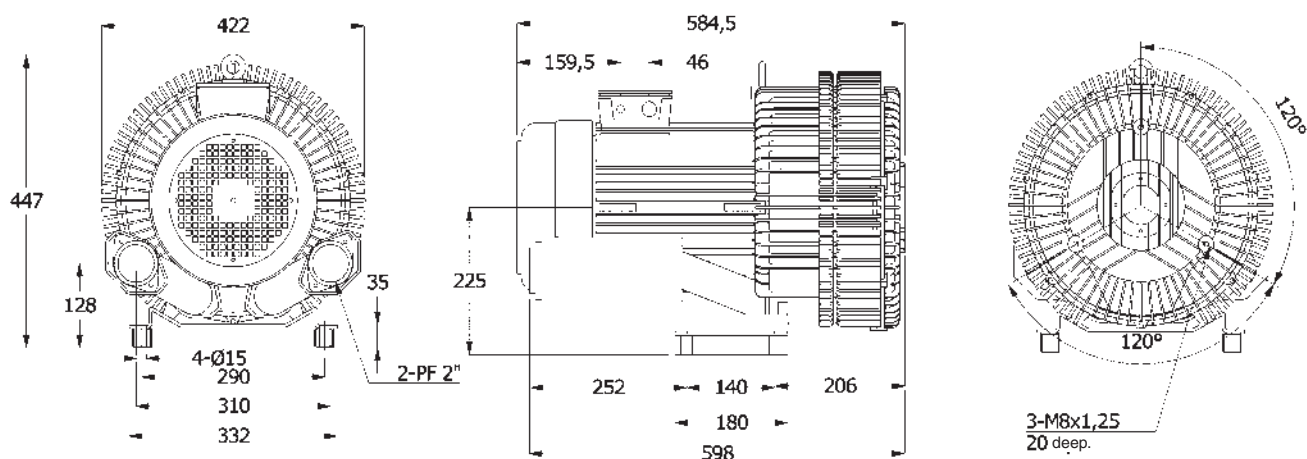
# Specifications type KB 64..

## 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	8.6
Voltage Volt	50 Hz	230/400	400/690
	60 Hz	276/480	480/828
Current Amp	50 Hz	12/6.9	15.1/8.7
	60 Hz	15.3/8.8	19.1/11.0
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



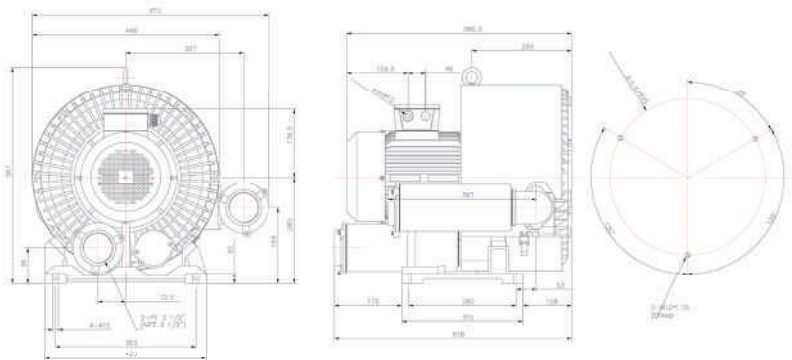
# Specifications type KB 83..

## Double-stage (side channel blowers)

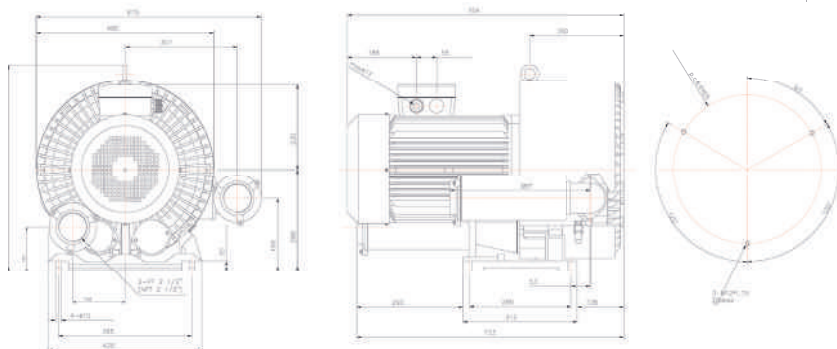
- NSK bearings with high temperature grease
- CE, UL and CSA approved
- All units are QC inspected by Klee
- Built-in bi-metal switch for 1-phase models
- Available with 3-phase IE2/IE3 motor



Type no.		KB-8310	KB-8315	KB-8320
<b>Phases</b>		<b>3</b>	<b>3</b>	<b>3</b>
<b>Output kW</b>	50 Hz	7.5	11	16
	60 Hz	8.6	13	19
<b>Voltage Volt</b>	50 Hz	400/690	400/690	400/690
	60 Hz	480/828	480/828	480/828
<b>Current Amp</b>	50 Hz	15.1/8.7	27/15.6	34.5/20.0
	60 Hz	19.1/11.0	30/17.3	39.0/22.6
<b>Vacuum mbar</b>	50 Hz	320	430	450
	60 Hz	320	455	650
<b>Pressure mbar</b>	50 Hz	320	600	700
	60 Hz	320	600	780
<b>Airflow m<sup>3</sup>/min</b>	50 Hz	9.6	9.6	9.6
	60 Hz	10.9	10.9	10.9
<b>Insulation class</b>		H	H	H
<b>Weight Kg</b>		112	142	160



Type KB-8310.

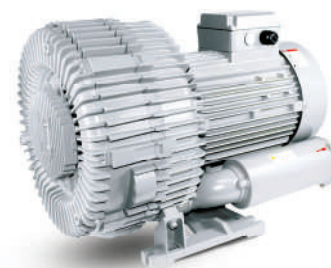


Type KB-8315 and Type KB-8320.

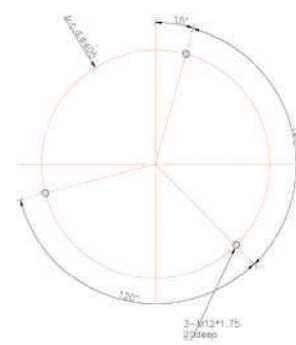
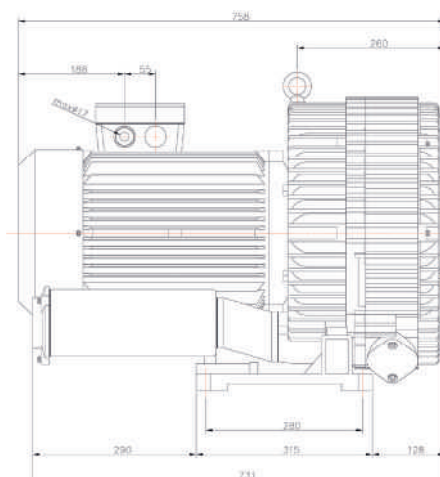
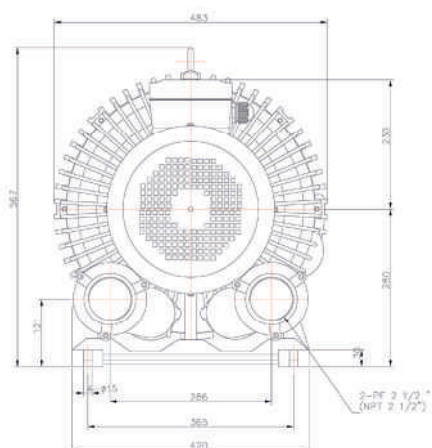
# Specifications type KB 84..

## 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	

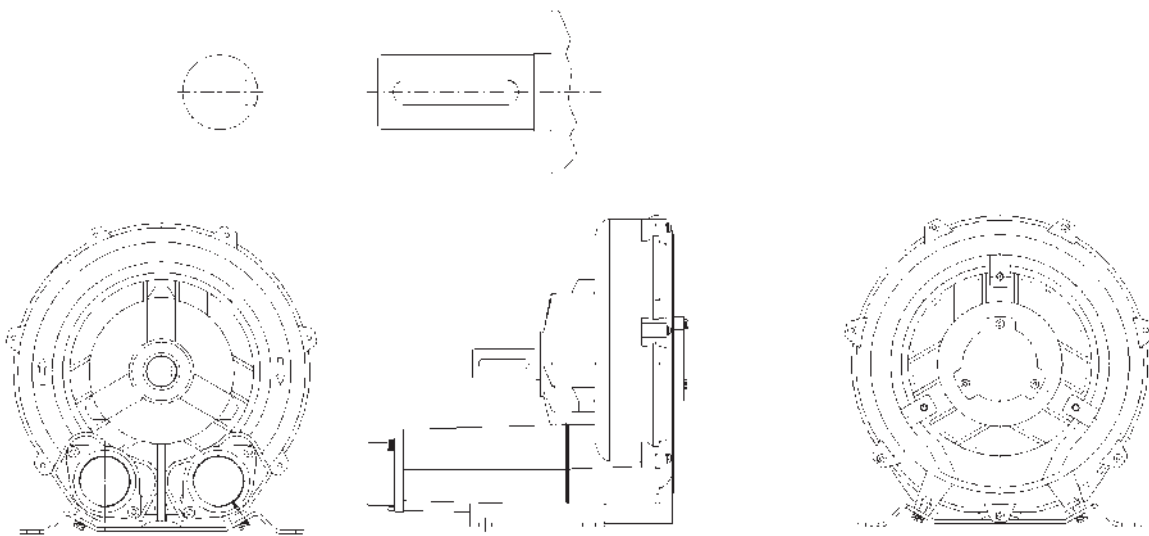


# Bare shaft

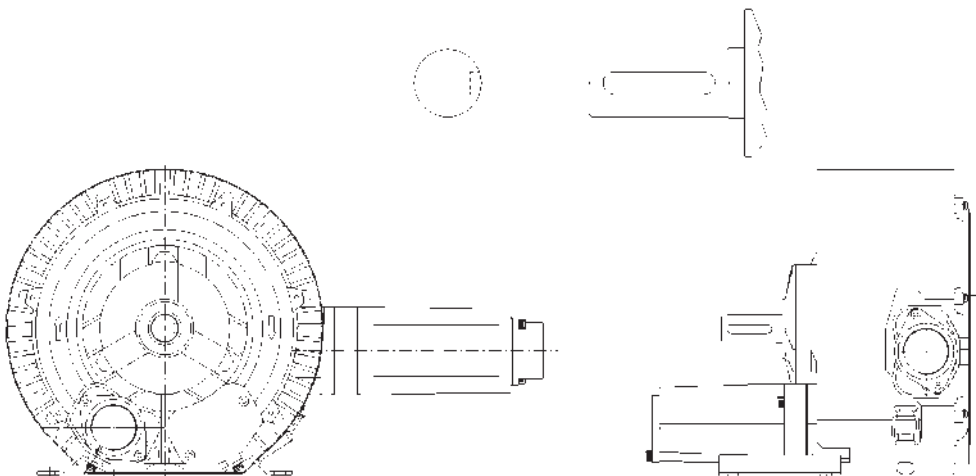
## Information page

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 KPB

## IE3 for higher efficiency

New: KLEEblower type KPB 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

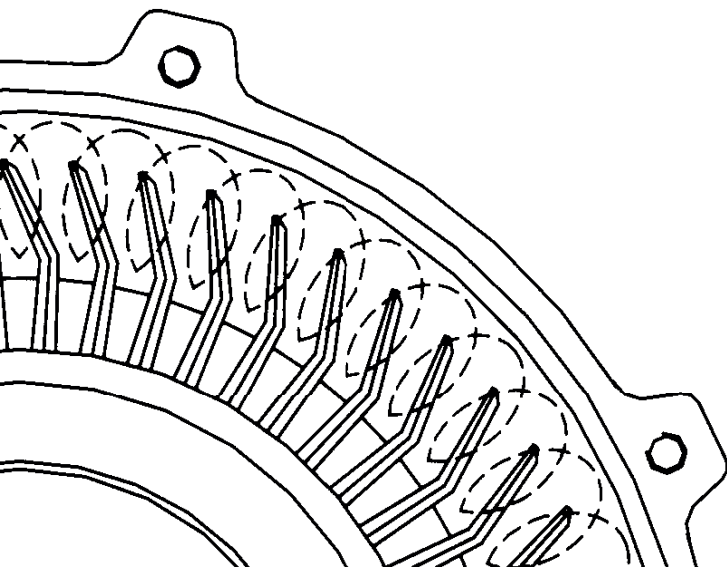
### Silencer

#### 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...

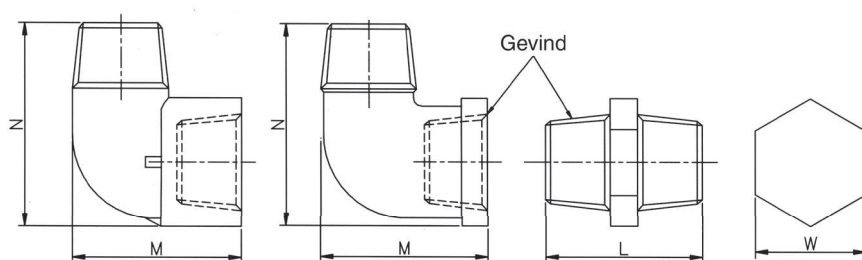


# Pipe bend & inlet air filter

## Accessories for side channel blowers

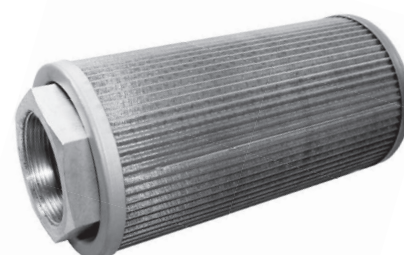
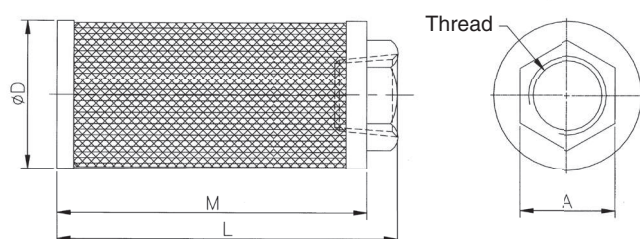
### Pipe bend

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-7..., KB-8...
MF-32	4"	142	208	380	357	100	KB-9..

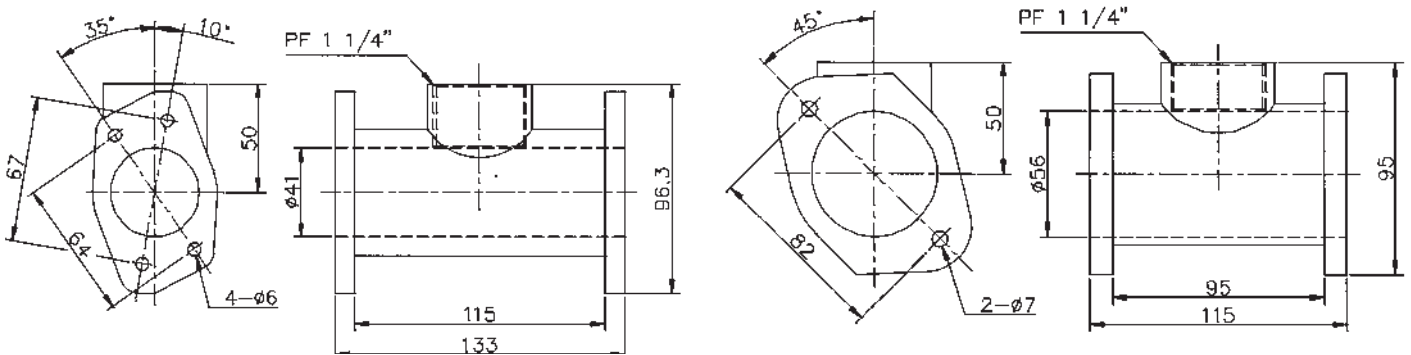


# T-angle, pressure/vacuum valve

## 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.

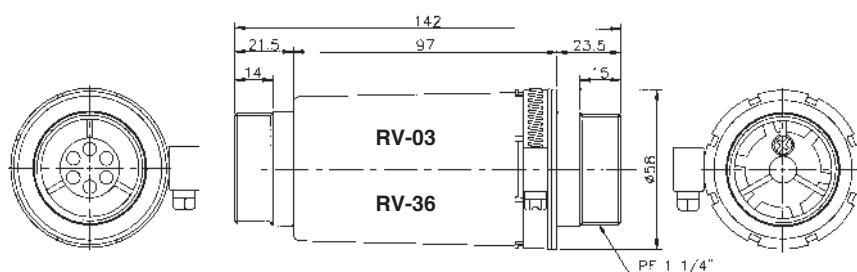


# Pressure- & vacuum relief valve

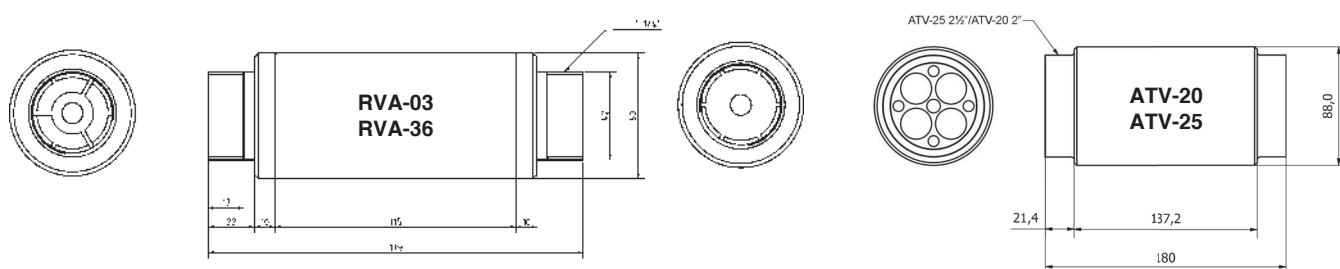
## Accessories for side channel blowers



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





**KLEE**

Technical specifications table with multiple columns and rows of data.



Additional text or a URL at the bottom of the label.

# 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...

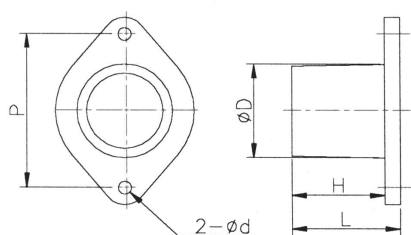


Fig. 1

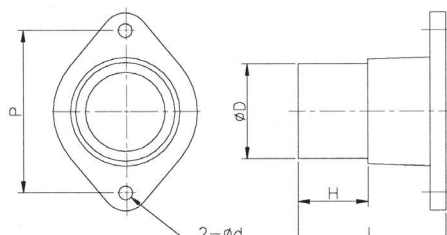


Fig. 2



### Threaded inlet/outlet (part 16 in drawing on page 30-31)

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...

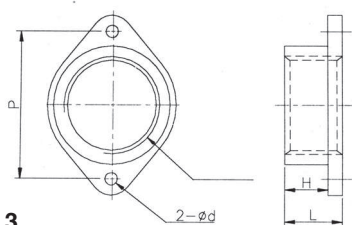


Fig. 3

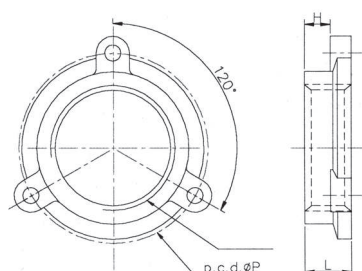


Fig. 4

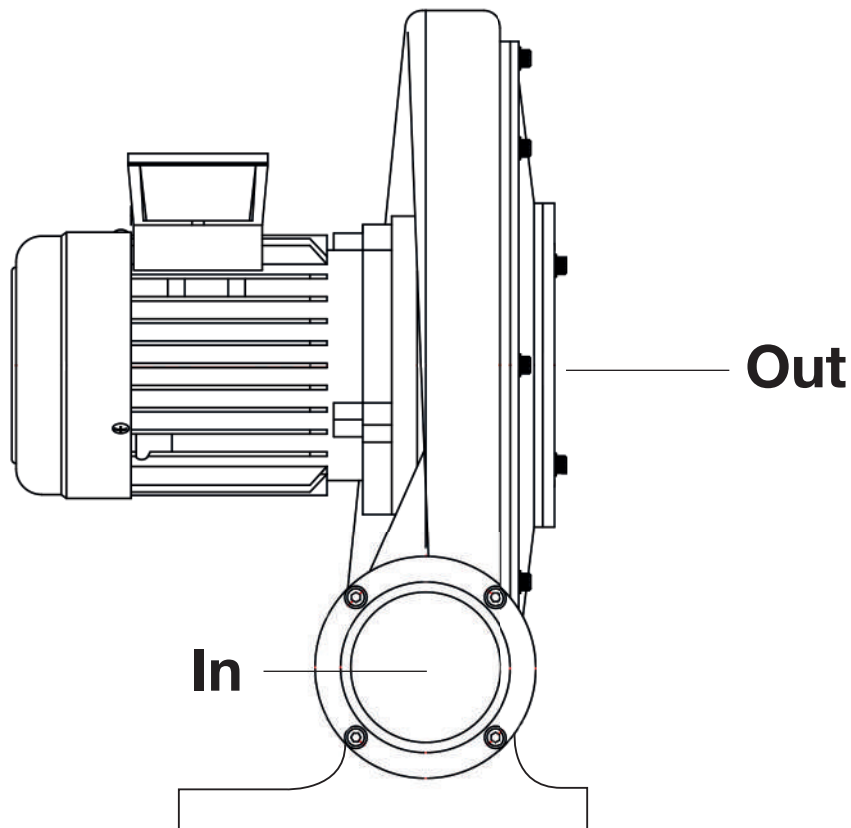


# Turboblowers

## 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.

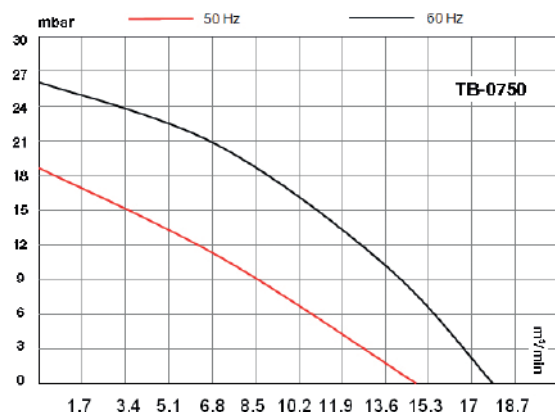
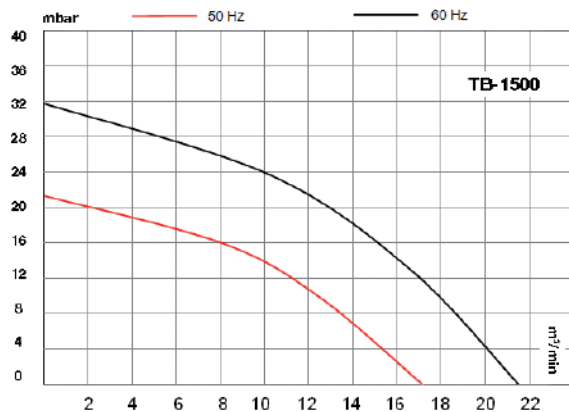
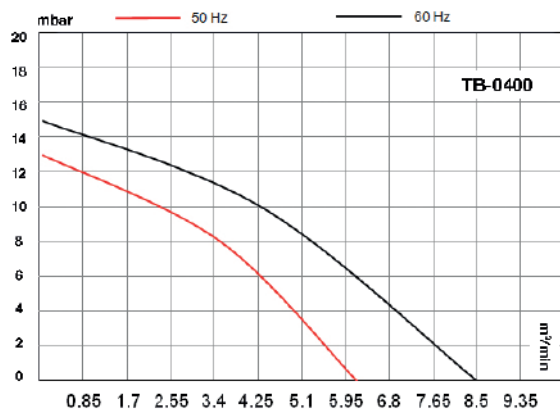




# Specifications (TB)

## 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	0,37	0,37	0,65	0,65	1,3	1,3
	60 Hz	0,4	0,4	0,85	0,85	1,5	1,5
Frequency		50/60	50/60	50/60	50/60	50/60	50/60
Voltage [V] ( $\Delta/Y$ )	50 Hz, 60 Hz	230/400, 277/480	230, 230	230/400, 277/480	230, 230	230/400, 277/480	230, 230
Current [A] ( $\Delta/Y$ )	50 Hz, 60 Hz	1,5/0,9, 1,7/1,0	1,6, 1,7	2,3/1,3, 3,4/1,9	3,8, 5,7	4,5/2,6, 5,5/3,2	9,0, 12,0
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

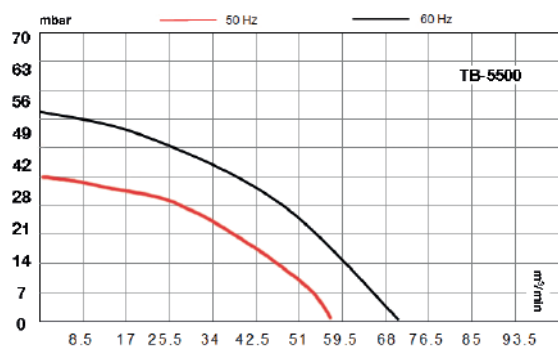
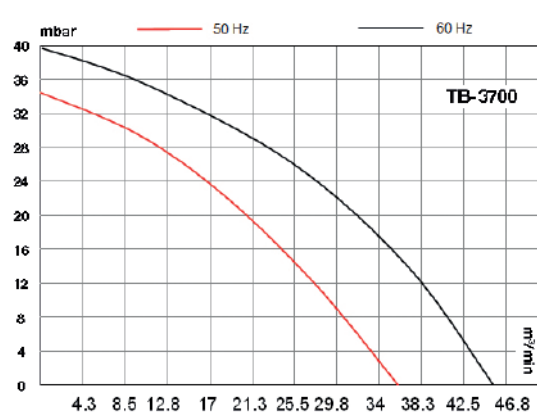
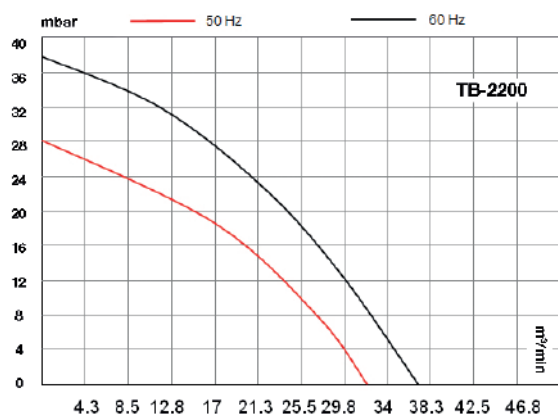


# Specifications (TB)

## 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	5,0
	60 Hz	2,2	3,7	5,5
Frequency		50/60	50/60	50/60
Voltage [V] ( $\Delta/Y$ ) 50 Hz, 60 Hz		230/400, 277/480	230/400, 277/480	230/400, 277/480
Current [A] ( $\Delta/Y$ ) 50 Hz, 60 Hz		6,5/3,8, 9,2/5,3	11,5/6,6, 14,5/8,4	18,0/10,4, 23,0/13,3
Pressure [mbar]	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

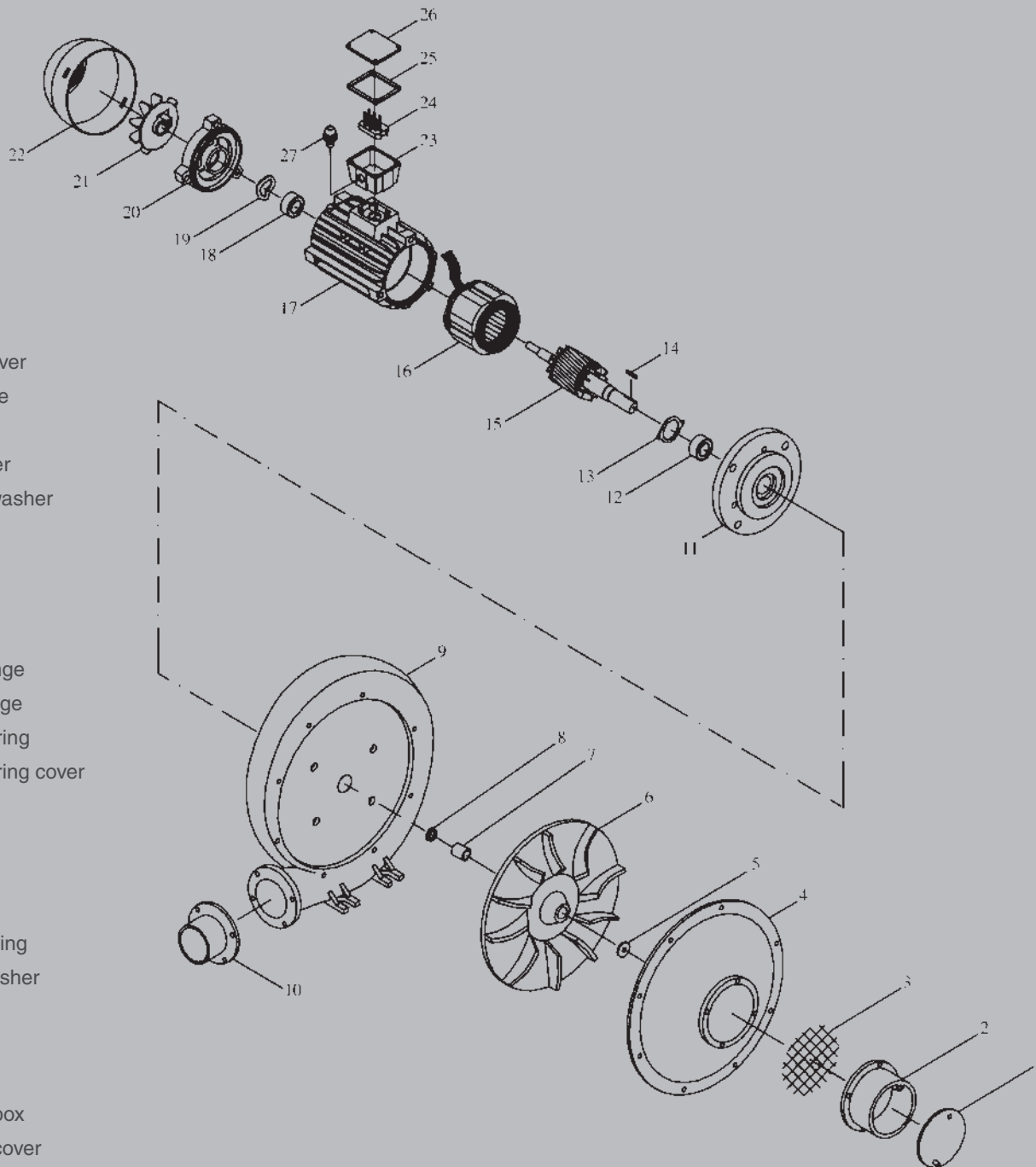
Type TB-1500/1.5 kW, TB2200/2.2 kW and TB-5500/5.5 kW can be supplied on request with 3-phase IEC-motor in IE2 version.






# 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. 1000000000

230V 1.7A

50Hz  
2820 rpm

0.20kW COSφ

230V 1.8A

60Hz  
3320 rpm

0.25kW COSφ



Danish



5.000.000  
Design

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