

HPC

 | Compressed
Air Systems

Rotary Blowers COMPACT Series

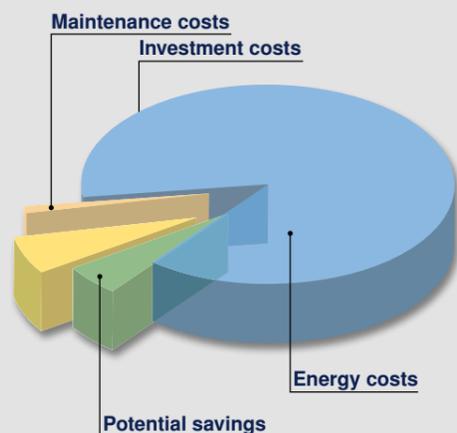
With the world-renowned OMEGA PROFILE 

Air delivery 0.5 to 93 m³/min – Pressure up to 1000 mbar, Vacuum to 500 mbar



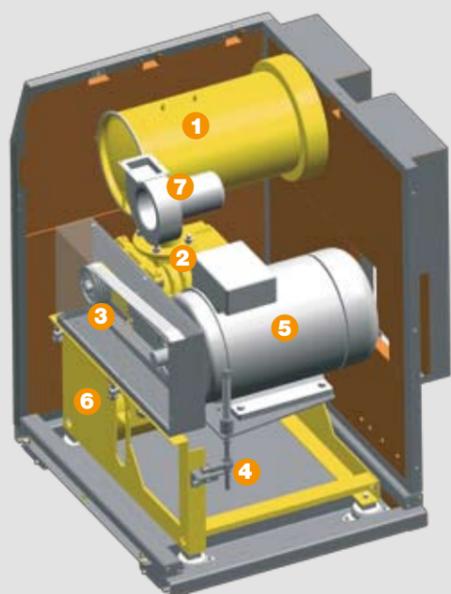
Rotary blowers: It's the total costs that count

Those who consider the total life cycle costs of a rotary blower system – this includes everything from initial investment to installation, maintenance and the vast majority of energy costs – can take advantage of significant savings. Over an operating period of 40,000 hours for example, energy will have accounted for approximately 90% of a rotary blower system's total operating costs. Therefore, it makes sense to invest in a high quality system that has been designed to provide optimum energy efficiency and which requires minimal maintenance.



Even the little things you take for granted contribute to ensuring low total operating costs, for example: pre-installed valves, equipment filled as standard with high quality oil for the roller bearings and pre-assembled ready-to-run V-belt drive systems. Needless to say, all of the above apply to Kaeser rotary blowers.

Effective blower system optimisation requires close cooperation and teamwork between the user and compressed air system provider – therefore use KAESER's expertise to your advantage and benefit from significant savings and optimised system efficiency.



Compact Rotary Blowers Quiet and Efficient

Ground-breaking blower technology

First introduced back in 2000, the revolutionary design of KAESER's COMPACT series rotary blowers set the new standard for the entire blower sector. Logical component layout makes maintenance work simple, as all serviceable components and maintenance points on COMPACT series blowers are accessed from the front, whilst all pipe connections & ventilation openings are located at the rear of the units. This not only significantly reduces maintenance costs, but also means that several units can be placed right next to each other to save even more space.



- 1 Intake silencer with integrated filter and contamination indicator
- 2 Blower block V-belt drive
- 3 Automatic belt tensioning
- 4 Electric motor
- 5 Discharge silencer
- 6 Check flap and compensator
- 7 Speed-independent enclosure fan



Three-lobe KAESER OMEGA blower block

For pressures up to 1000 mbar(g), discharge temperatures up to 155 °C, wide control range with frequency-controlled operation, Q 2.5 rotor balancing for quieter operation, extended service life and minimal maintenance requirement.



Heavy duty cylinder roller bearings

The cylinder roller bearings used in KAESER rotary blower blocks avoid the springing effect of self-aligning bearings and last up to ten times longer (100,000 hours) with the same loading. The result: Maximum system availability and minimal maintenance costs.



Long-term efficiency

High precision 5f 21-rated spur-ground timing gears have minimal flank clearance and a play major role in contributing to the block's outstanding volumetric efficiency. As the spur-ground gearing is not subjected to continuously changing radial gas-forces, heavy-duty cylinder roller bearings can be used.



Even quieter

KAESER rotary blower set the standard when it comes to quiet operation – this includes machine noise AND conveying air. Variable speed blowers with frequency converters are fitted with absorption soundproofing right from the outset.

Reliable and efficient

Installation of KAESER Compact series blowers couldn't be easier, as all units are ready filled with oil ex-works, drive belts are installed and adjusted and all valves are ready for immediate operation. The belt cover beneath the soundproof enclosure enables access to the motor bearings, which can be safely lubricated whilst the unit is in operation. Drive belt tensioning is carried out automatically and a tension indicator enables at-a-glance belt inspection. Belt changes are also made simple, as the motor can be raised / lowered quickly and safely via a threaded bolt.



Compact Blowers – Also available with soundproof enclosure



Blowers with sound enclosures

The cover on COMPACT series blowers covers all sides of the unit and acts as a sealed sound enclosure, whilst inlet and outlet openings are lined with soundproofing material. The result: Exceptionally quiet performance. Super-soundproofed models and versions suited to outside installation are also available. The ventilation fan for the sound enclosure has its own separate motor to ensure optimum blower and main-motor cooling.



OFC Frequency Control

COMPACT series blowers provide even greater versatility when equipped with Kaeser's Omega Frequency Control (OFC). Infinite control of pressure - via sensor - and speed enables blower performance to be precisely adjusted to meet actual demand. The control unit co-ordinates operation of the frequency controller and the blower unit. Signal inputs and outputs, as well as the Profibus connection, enhance flexibility still further.



Integrated system solutions for vacuum

KAESER also provides integrated system solutions for the growing field of vacuum conveying. Soundproofing is further enhanced via the pre-installed discharge silencer, which absorbs the airflow noise, which is often overlooked, and eliminates much of the need to install piping for blow-off air or to reduce sound levels.



EFF1
motor

Easy maintenance – Maximum availability

The key to the COMPACT blowers' small footprint lies in intelligent component layout, as the design allows all maintenance to be carried out from the front of the unit. Oil-drain plugs conveniently located on the front of each unit and easily accessible oil-filling ports make gear-oil changes simple, whilst large, easy to view sight-glasses enable quick and easy oil level inspection. KAESER COMPACT series blowers are ready for operation again within minutes.



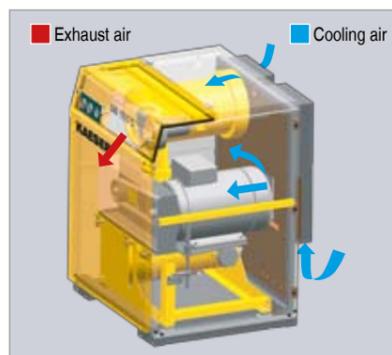
Automatic belt-tensioning

Irrespective of motor weight, the pivoting motor base with tensioning spring automatically ensures optimum belt tension and, as a result, transmission efficiency. The system therefore also reduces servicing and maintenance costs. The belt-tensioning indicator allows visual belt inspection even when the machine is in operation, which makes preventative maintenance possible and consequently enhances system availability.



Maximum safety

Naturally, Kaeser rotary blowers with sound enclosures are also equipped with all of the safety features you would expect, such as safety guards for drive belts and enclosure fans. The motor is raised / lowered reliably and safely via a threaded bolt. (Jack not necessary)

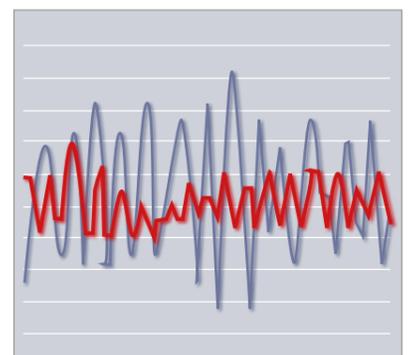


Cooling system with independent fan

Only KAESER rotary blowers draw in ambient air for conveying use and motor cooling from outside the unit's enclosure. The conveying air therefore enters the blower without being pre-warmed, which – for the same drive power – significantly increases the volume of usable air. Maintenance costs are also further reduced, as the use of ambient air for motor cooling allows extended motor bearing lubrication intervals. The ventilation fan for the sound enclosure has its own separate motor to ensure optimum cooling performance, which is especially important for frequency controlled units, as they can use the maximum frequency range and still benefit from the corresponding energy savings.

Minimal pulsation and quiet operation

As pulsations from the conveying air can cause the connected pipework to generate noise, the soundproofing on KAESER rotary blowers is designed to minimise sound emissions from both the machine itself and from the conveying air. The three-lobe blower blocks in KAESER Compact series blower units minimise conveying air pulsation, whilst remaining noise emissions are absorbed by the units' highly effective soundproofing enclosure which uses heat-resistant Trevira® polyester wool.



Equipment and accessories

Rotary blower unit



Complete unit pre-installed with optional sound enclosure; blower unit and sound enclosure installed on base-plate.

Sound enclosure



Powder-coated panels, thick-walled with highly effective soundproofing material. All openings equipped with sound-damping.

Rotary blower block

Renowned throughout the world for their efficiency and durability, KAESER's compact blower blocks are the result of decades of experience in blower manufacture and design.



Silencer



Broad spectrum absorption soundproofing – effective over a wide control range – with wear-free, heat-resistant lining.

Electric motor

Energy-saving EFF1-rated motor manufactured by Siemens, IP55 compliant, Class Fe equipped with PTC sensors



Power transmission

V-belt drive with automatic belt tensioning via motor pivot and tensioning system. Belt protection fitted as standard.

ACA after-coolers

KAESER's high-efficiency ACA aftercoolers are specially designed for use with rotary blowers. They are able to reduce blowing air temperature to max. 10 °C above ambient without the complication and expense associated with water-cooled systems.



OFC Frequency Control

Frequency control enables infinite blower speed adjustment and, with the addition of a pressure sensor, also allows pressure regulation. The control unit co-ordinates operation of the frequency controller and the blower unit. Flexibility is further enhanced by the provided signal outputs / inputs and Profibus connection.



STC Start Control

Installed within the control cabinet are: a star-delta starter (with remote operation capability), a sound enclosure ventilator control, an operating hours counter and KAESER CONTROL (the interface for KAESER's service facility).



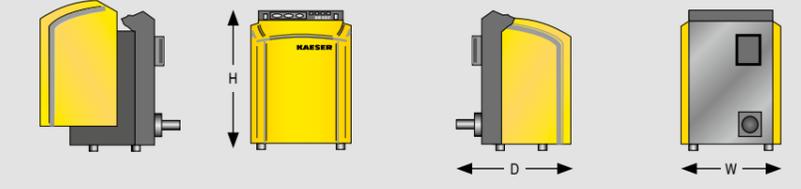
Technical specifications

Model	Pressure		Vacuum		Max. rated motor power kW	Pipe connection DN	Dimensions with sound enclosure D x W x H1 / H2 in mm
	Max. working pressure mbar (g)	Max. air delivery at 300 mbar(g)* m ³ /min	Max. vacuum mbar(a)	Max. intake at 800 mbar(a)* m ³ /min			
BB 52 C	1000	4.8	500	4.8	7.5	50	720 x 800 x 1120
BB 68 C	1000	5.9	500	5.9	15	65	967 x 780 x 1160
BB 88 C	1000	8.2	500	8.3	15	65	967 x 780 x 1160
CB 110 C	800	9.5	500	9.6	18.5	80	1040 x 980 x 1300
CB 130 C	1000	12.3	500	12.4	30	80	1040 x 980 x 1300
DB 165 C	1000	15.6	500	15.7	37	100	1190 x 1130 x 1450 / 1980
DB 235 C	1000	22.1	500	22.3	45	100	1190 x 1130 x 1450 / 1980
EB 290 C	1000	28.6	500	28.8	75	150	1560 x 1485 x 1780 / 2280
EB 420 C	1000	40.2	500	40.5	75	150	1560 x 1485 x 1780 / 2280
FB 440 C	1000	41.3	500	41.6	90	200	1750 x 1600 x 1900 / 2480
FB 620 C	1000	58.5	500	58.9	110	200	1750 x 1600 x 1900 / 2480
FB 790 C	800	73.7	500	74.2	110	250	2000 x 1860 x 2110 / 2240
HB 950 C	1000	93.1	500	93.6	200	250	2170 x 1860 x 2110 / 2240

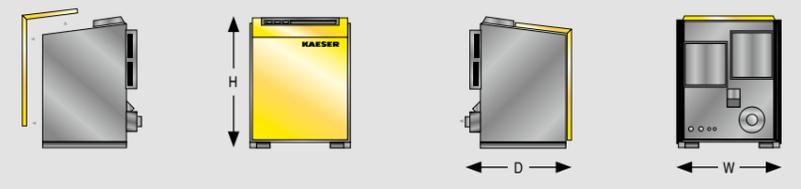
*Air flow in accordance with ISO 1217: 1996, Annex C

Dimensions

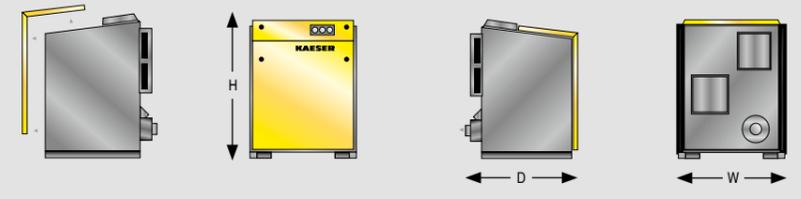
BB 52 C



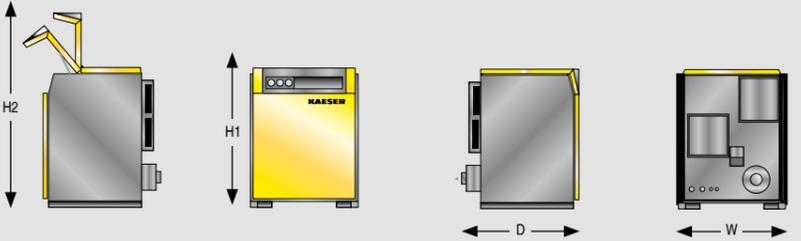
BB 68 + BB 88 C



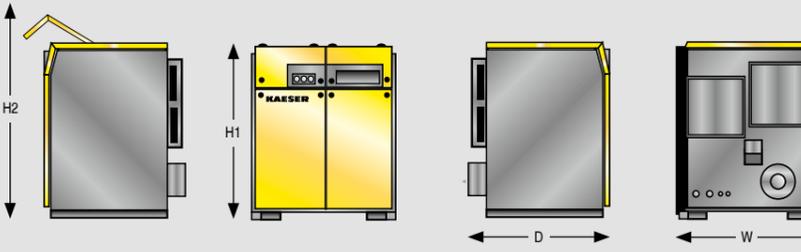
CB C



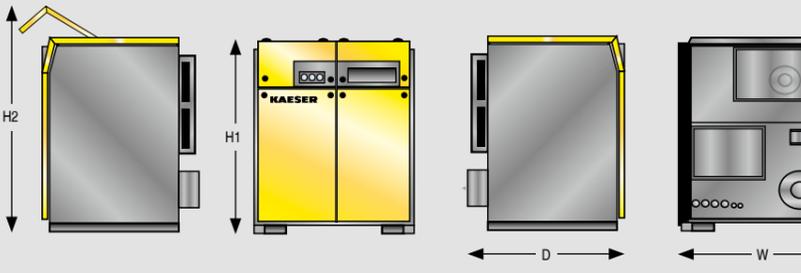
DB C



EB C + FB C



HB 950 C





Worldwide sales and service network: KAESER – Always there

With over 3500 employees worldwide, Kaeser is one of the world's foremost compressor manufacturers and providers of compressed air systems. Kaeser is represented in every major industrial nation throughout the world by 38 subsidiary companies and 48 authorised partners.



Algeria	Columbia	Greece	Korea				
Argentina	Costa Rica	Guatemala	Latvia				
Australia	Croatia	Honduras	Lithuania				
Austria	Cyprus	Hungary	Luxemburg				
Bangladesh	Czech Republic	Iceland	Malaysia				
Bahrain	Denmark	India	Mauritania				
Belarus	Ecuador	Indonesia	Mauritius	Peru	Saudi Arabia	Spain	Turkey
Belgium	Egypt	Ireland	Mexico	Philippines	Sweden	South Africa	Ukraine
Brazil	El Salvador	Italy	Morocco	Poland	Switzerland	Sri Lanka	United Kingdom
Bulgaria	Estonia	Japan	Norway	Portugal	Serbia and Montenegro	Taiwan	Uruguay
Canada	Finland	Jordan	Oman	Qatar	Singapore	Thailand	USA
Chile	France	Kazakhstan	Pakistan	Romania	Slovakia	The Netherlands	U.A.E.
China	Germany	Kenya	Panama	Russia	Slovenia	Tunisia	Vietnam

