

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 blower investment: It's the total costs that count

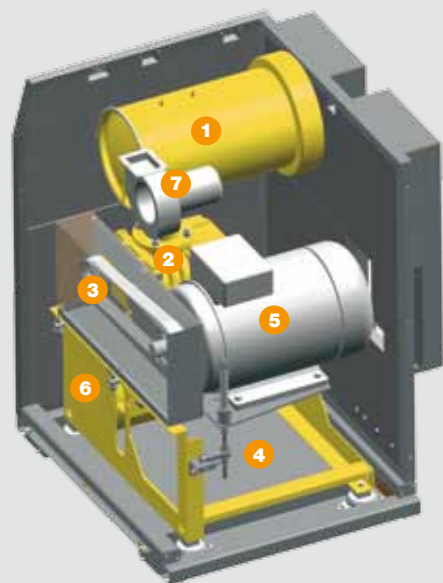
Those who consider the total life cycle costs of a rotary blower system – this includes everything from initial investment to installation, maintenance and the vast majority of energy costs – can take advantage of significant savings.

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.

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 & optimised system efficiency.

COMPACT blower design



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

Compact Rotary Blowers

Quiet and efficient



Innovative blower technology from KAESER

Designed for maximum ease-of-use and dependability, "Compact" series blowers from Kaeser can be installed directly next to one another and ensure low operating & maintenance costs. Furthermore, blowers equipped with an integrated control system and star-delta starter, or frequency converter (for flexible speed control), significantly reduce the amount of work required for planning, installation, certification, documentation and commissioning.



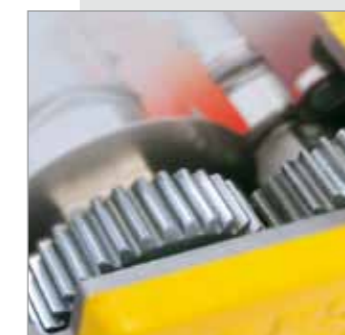
Three-lobe KAESER OMEGA blower block

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.



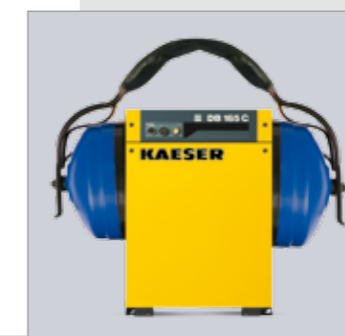
Heavy duty cylinder roller bearings

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



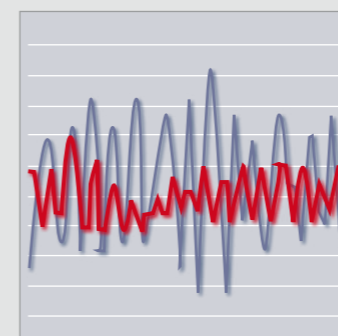
Long-term efficiency

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.



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.

Compact Blowers – Also available with soundproof enclosure



Blowers with sound enclosures

On COMPACT series blowers the cover 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.



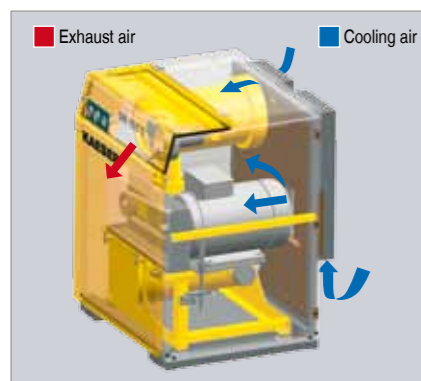
OFC Frequency Control

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.



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.



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.



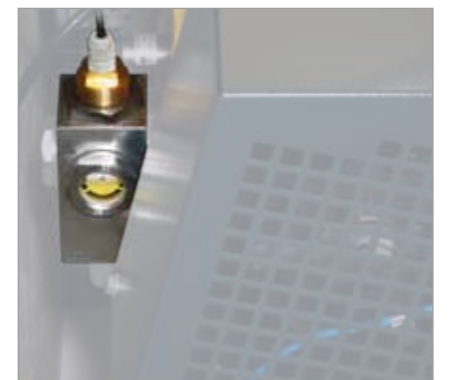
Maximum safety

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)



Sensors

A wide range of sensors and switches for monitoring pressure, temperature, speed, oil level and filters ensures dependable blower operation and enables remote monitoring and visualisation of operational status.



OMEGA CONTROL

The OMEGA CONTROL monitors all operational parameters, displays data in plain text and is able to communicate both with master control systems (SIGMA AIR MANAGER) and centralised control systems.



Equipment and accessories

OFC Frequency Control



The „Omega Frequency Control“ (OFC) not only enables infinite blower speed adjustment, but also allows precise pressure regulation as required.

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).

ACA after-coolers



KAESER's high-efficiency ACA aftercoolers were 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.

Technical Specifications

Model	Pressure		Vacuum		Max. rated motor power kW	Pipe connection DN	Dimensions with sound enclosure D x W1/W2 x H1/H2 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 111 C	800	9.5	500	9.8	18.5	80	1150 x 980 x 1300 **)
CB 131C	1000	12.3	500	12.4	30	80	1150 x 980 x 1300 **)
DB 166 C	1000	15.6	500	15.7	37	100	1160 x 1110 / 1540 x 1300
DB 236 C	1000	22.1	500	22.3	45	100	1160 x 1540 / 1540 x 1300
EB 290 C	1000	28.6	500	28.8	75	150	1560 x 1485 x 1780 / 2280
EB 420 C	1000	40.1	500	40.4	75	150	1560 x 1485 x 1780 / 2280
FB 440 C	1000	39.0	500	39.0	90	200	1750 x 1600 x 1900 / 2480
FB 620 C	1000	59.0	500	55.0	110	200	1750 x 1600 x 1900 / 2480
FB 790 C	800	74.0	500	72.0	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

*) Sound pressure level as per ISO 2151 and the basic standard ISO 9614-2, tolerance: ± 3 dB(A); **) With switch cabinet as per DBC

Dimensions

	Front view	Rear view	View from left	View from right	3-D view
BB 52 C					
BB 68 + BB 88 C					
CB C					
DB C					
EB C + FB C					
HB 950 C					

KAESER – The world is our home

As one of the world's largest manufacturers of rotary screw compressors, KAESER KOMPRESSOREN is represented throughout the world by a comprehensive network of branches, subsidiary companies and authorised partners in over 90 countries.

With innovative products and services, KAESER KOMPRESSOREN's experienced consultants and engineers help customers to enhance their competitive edge by working in close partnership to develop progressive system concepts that continuously push the boundaries of performance and compressed air efficiency. Moreover, the decades of knowledge and expertise from this industry-leading system provider are made available to each and every customer via the Kaeser group's global computer network.

These advantages, coupled with KAESER's worldwide service organisation, ensure that all products operate at the peak of their performance at all times and provide maximum availability.

