

# HPC

Compressed  
Air Systems

# KAESER COMPRESSORS®



# DENTAL Compressed Air

**Compressors, refrigeration dryers, filters, controllers**

Demand-oriented compressed air production, drying and filtration.

All pressures and flow rates available.

[www.hpccompressors.co.uk](http://www.hpccompressors.co.uk)

# DENTAL Compressed Air

As a user, what you expect above all from your dental compressor and compressed air treatment system is a dependable supply of oil-free, dry and hygienic compressed air around the clock, including weekends. These are the most important requirements for satisfied patients and dental laboratory partners, as well as for successful clinical work in university settings.

KAESER KOMPRESSOREN provides the perfect technical solutions for your dental compressed air needs with significant advantages:

- Reliable compliance with the requirements and recommendations of dental material manufacturers.
- Effective contribution to meeting the high quality assurance standards of dentists and dental technicians.
- Long, dependable service life.

## Dentists

KAESER dental compressors ensure a reliable and effective compressed air supply in compliance with ISO 7494-2:2003, Dentistry and Dental Units, part 2, and Water and Air Supplies (ISO 7494-2:2003). As a result, patients are also protected against elevated infection risks. The dependable compressed air supply in compliance with applicable standards ensures that your treatment units and instruments such as pneumatic motors, turbine and powder blast handpieces, multifunctional spray guns, air scalars, air abrasion systems and accessories work reliably and last a long time.

## Universities

At universities, a reliable and safe compressed air supply enables professors and students alike to focus on research and learning. A central compressor station ensures a cost-effective and dependable compressed air supply. This kind of well-designed station can deliver a reliable supply of compressed air to hundreds of fully operational treatment chairs, student training chairs and large dental technology laboratories.

## Dental laboratories

A dependable air supply for dental laboratories with equipment ranging from simple air nozzles to modern CAD/CAM systems that require large volumes of compressed air is essential to your success – without that, nothing works. It is also possible to retrofit an existing compressed air system with a refrigeration dryer and filters – with no loss of compressed air output in the form of purge air. This allows you to adjust the quality of the compressed air to meet actual requirement.

## CAD/CAM

Modern CAD/CAM\* milling and grinding machines require large volumes of oil-free, dry and clean compressed air. For rapid amortisation of investments, the systems should run around the clock, and if possible even at weekends. This imposes heavy demands on the compressed air supply. KAESER compressors and compressed air treatment components are more than up to the challenge.

\*Computer Aided Design / Computer Aided Manufacturing

## Made in Germany

Made in Germany: these words aren't just a slogan, but are a continued commitment from KAESER. At our main plant in Coburg, Germany, we apply state-of-the-art manufacturing standards. For all components such as pressure switches, solenoid valves and air receivers, we select only specialist manufacturers that meet our uncompromising quality standards. Logical, modular designs and clever details enable us to offer an individual, customised and cost-effective solution for every compressed air application. That's because KAESER is dedicated to producing specifically tailored compressed air solutions that deliver unrivalled customer satisfaction.



# We all need compressed air







DENTAL series

## DENTAL series reciprocating compressors

These proven dental compressors combine exceptional performance with compact design. Highly durable and reliable, each unit is virtually maintenance-free and provides oil-free air with minimal power consumption. They are the perfect choice for dental practices with up to 12 treatment units and for medical and dental laboratory uses.

Turn to page 22 for technical specifications

### The advantages:

- KAESER Permanent Power System offers huge gains in performance.
- The model sizes are adapted to the increased air consumption levels in practices and laboratory applications.
- SECCOMAT for efficient and dependable compressed air treatment.
- Attractive, user-friendly design.
- Simple installation.
- Outstanding energy efficiency.
- Long service life.



Image: DENTAL 1 T with sound enclosure

Image: DENTAL 3 T

Image: DENTAL 5/2 T

### Exceptional performance: Permanent Power System (PPS)

Up to 90 percent continuous compressed air availability: it's not a dream, but a reality, with KAESER's Permanent Power System (PPS).

To regenerate the desiccant in the SECCOMAT dryer, the PPS uses a highly efficient process whereby ambient air is drawn in and warmed via the compressor and then passed through the dryer. A heat exchange takes place in the compressor. The ambient air flowing through the system cools the cylinder, the valve plate and even the Teflon-insulated piston and is therefore heated as a result. This has important benefits: this warmed air is ideal for use as regeneration air, as it can carry far more water than cool air. This technique is also much faster than conventional regeneration methods, which use diverted compressed air that is cooled as a result of subsequent expansion.

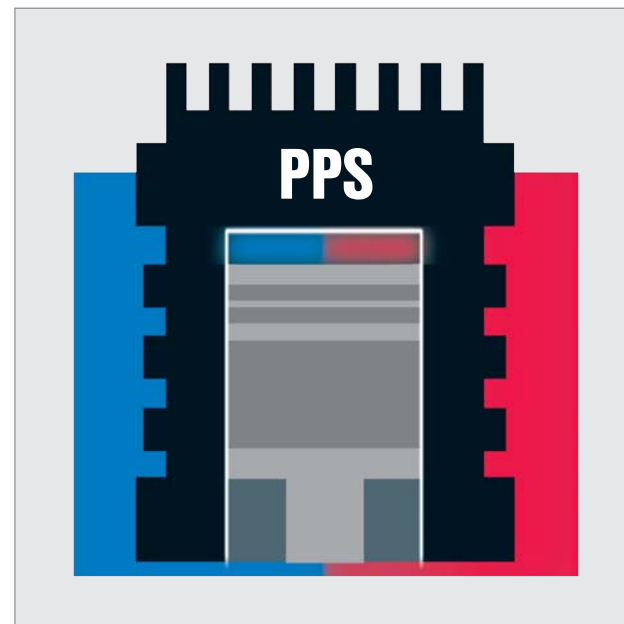


Image: PPS control unit



Image: PPS control unit

Another highly desirable side effect is that the compressors can run continuously if needed. Together with the internal cooling of the compressor components, the entire system cools down during the regeneration phase, which can be seen as an idle state. Since no heat is produced in this phase, the fan keeps running and cooling performance is enhanced.

The Permanent Power System controls switching via a 4/2-way solenoid valve. This allows the cost/benefit balance of full-load/off-load operation to be adjusted for every model.



Source: Dentsply Sirona

DENTAL series

## DENTAL systems in detail



### Sound enclosure

All of the compressor models DENTAL 1 T, DENTAL 3 T and DENTAL 5 T are available with a sound enclosure, including for retrofit. The resulting reduction in sound levels makes selection of a suitable installation location far simpler: the nearer a compressor is installed to its point of use, the lower the installation effort and the higher the compressor's efficiency thanks to the shorter air pipelines.

Fully enclosed installation is also possible, as the compressors are virtually maintenance-free. An opening is provided to access the pressure switch. The compressors are not physically attached to the enclosure and are placed on firm ground, ensuring that the enclosure is entirely free of vibrations. The powder-coated steel enclosure is resistant to disinfectants.



### Dental compressor design

- 1) Intake filter
- 2) Compressor block
- 3) Aftercooler
- 4) Pre-separator
- 5) Desiccant dryer (SECCOMAT)
- 6) Fine filter (integrated)
- 7) Air receiver
- 8) Pressure switch
- 9) Compressed air outlet

Image: DENTAL 5 T



### KAESER compressor block

KAESER compressor blocks are made from the highest quality materials. Produced in Coburg, Germany, each component is manufactured, inspected and assembled with meticulous care and precision. Together with KAESER's innovative "Permanent Power System", these durable compressors provide outstanding performance and a long service life.



### Weekly cleaning is sufficient

A KAESER compressor with attached dryer needs to be handled only once a year to change the filter. There is no need for manual or automatic condensate drains, collection tanks or for connection to a wastewater line.





KRYOSEC refrigeration dryers – TAH series

## Exceptional reliability in a highly compact package

KRYOSEC refrigeration dryers deliver outstanding “Made in Germany” quality. They provide dependable drying at ambient temperatures up to +50 °C. That’s 10 °C better than required for compressed air in dental applications. Lower pressure loss in the heat exchanger system and a low-maintenance design ensure economical operation. Its small footprint makes the TAH series an excellent choice for dental practices where space is often at a premium.

[Turn to page 22 for technical specifications](#)

### The advantages:

- Straightforward replacement of integrated dryer.
- No compressed air required for drying.
- After dryer installation, compressed air supply remains constant or increases.
- Viruses and bacteria are removed from the moist environment in the compressed air pipelines.
- Material adhesion is not affected by moisture.
- Reliable moisture protection for instruments and equipment.
- Longer service life for instruments.
- Future-proof compressed air quality.



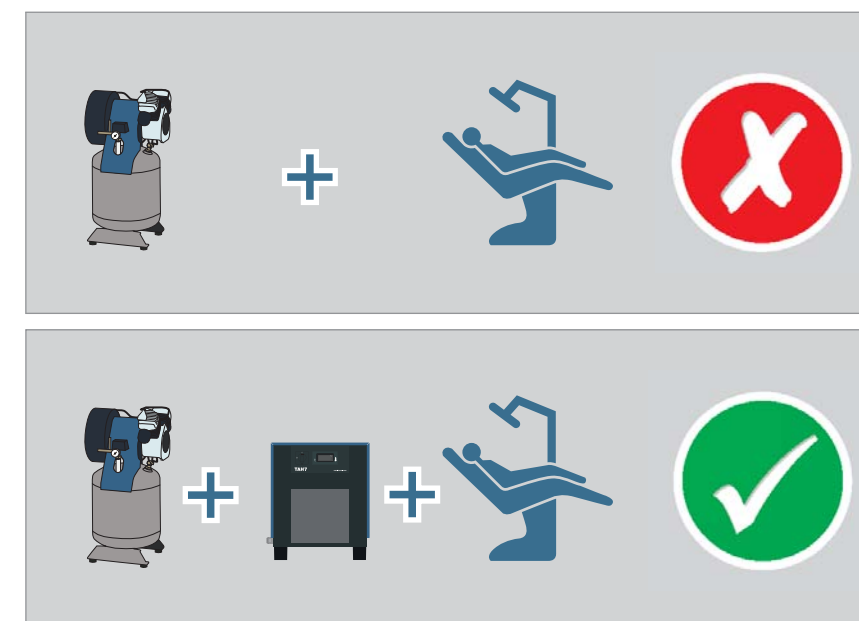
### Why is dry compressed air needed for dental applications?

This requirement has emerged from decades of experience by dentists and dental technicians. Compressed air is a key energy source and working medium in dental practices and laboratories. It is used for applications such as cementing bridges and crowns in place, or for drying purposes when filling teeth.

If the multifunctional gun suddenly discharges condensed water when performing these tasks, there’s no choice but to start over – an all-too-familiar nuisance for many dentists. The user manuals for compressed air equipment used in dental practices are also very clear on this point: dry air is essential. There is good reason for this: the specialised equipment used in dental practices contains many components that depend on dry air in order to function properly.

And if moisture should cause a control valve to fail, the user may be forced to dismantle most of the affected treatment unit. This means high costs as well as lengthy downtime.

Furthermore, moist air in the air receiver and the adjoining air pipelines, heated through compression, offers bacteria and viruses ideal conditions to thrive. This in turn can create a potentially serious health hazard for patients.



### Fully compliant compressed air for dental applications

Moist air is detrimental to the quality of your work as a dentist or in the dental laboratory. Apart from offering ideal conditions for viruses and bacteria to thrive, moisture in the system leads to premature repairs for your valuable instruments and treatment units, which in turn leads to increased costs and downtime. This was the reason behind the requirement for compressed air in the Technical Specification ISO/TS 22595-2:2008, namely a pressure dew point of +3 °C.

## Where and why does condensate form?

How does moisture arise in the compressed air system of a dental practice or laboratory? Ultimately it is attributable to the fact that air that is 100% or “absolutely” dry does not exist in nature. Atmospheric air, whether it’s in the tropical rainforest or the desert, always contains a certain amount of water vapour. The ability of the air to absorb water depends on the temperature and the available volume.

The following examples illustrate the volumes of condensate that maybe encountered. For example, 1000 l of air (sufficient to feed a turbine for 20 minutes) contains about 23 g of water vapour at a temperature of 25 °C and 100% relative humidity. If the temperature decreases to 20 °C, the air can then hold only about 17 grams of water. The remaining 6 grams of water is precipitated as condensate.

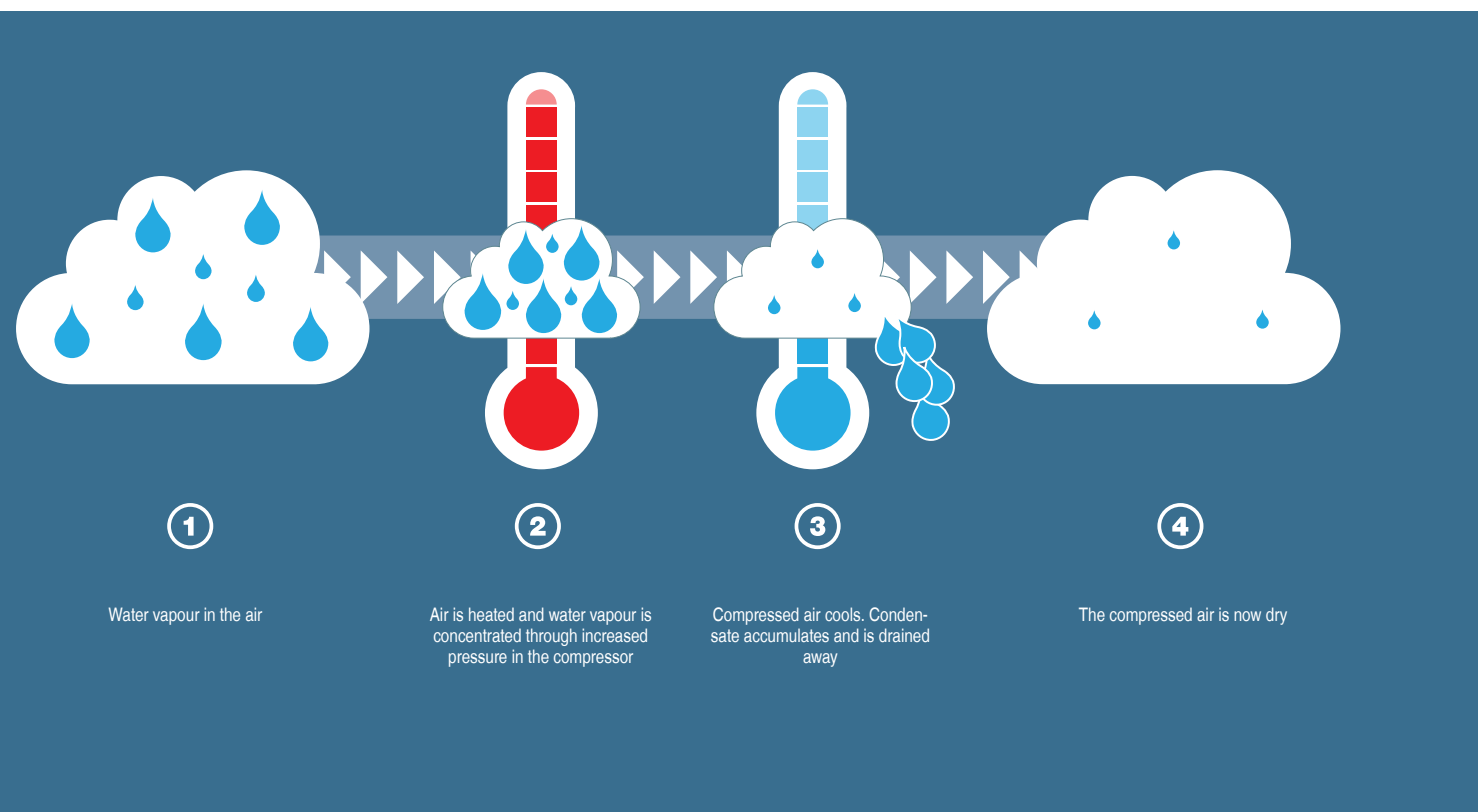
During a 12-hour day, a compressor feeds about 0.48 l of water into the compressed air network, assuming compressed air output of 65 l/min (at 25 °C, 60% relative humidity and atmospheric pressure without a dryer).



## Physics at the service of dentistry

For applications in a dental practice or dental laboratory, compressed air is needed at a gauge pressure of at least 5.5 bar. When an 8 litre volume of air at standard atmospheric pressure is compressed to 7 bar, it then has a volume of just one litre. The water vapour concentration increases. The increased pressure not only reduces the volume, however. The air is also heated, and the warm compressed air can initially hold the same amount of water. As it cools, however, its ability to hold water is reduced, and condensate forms. If this happens in the receiver, it will result in higher maintenance requirement. If condensation forms in the compressed air pipelines, the quality

of your work and/or the service life of your instruments will suffer. There is even a risk of damage to larger pieces of equipment. To eliminate this potential risk, the moist compressed air is channelled through the KRYOSEC dryer and is cooled in a high-quality heat exchanger system with stainless steel plates. The accumulating condensate is efficiently separated at all operating phases via the integrated separator. This is followed by reliable condensate removal without pressure loss via the ECO-DRAIN electronic condensate drain. The compressed air flowing out of the dryer is now dry and in full compliance with applicable standards.



KRYOSEC refrigeration dryer

## Efficient in every detail



### Special cooling air flow

The cleverly designed cooling air flow in KRYOSEC dryers is a decisive factor for their reliability. The placement of the fan in a separate enclosure immediately adjacent to the refrigerant condenser avoids reduced performance through bypass flows.



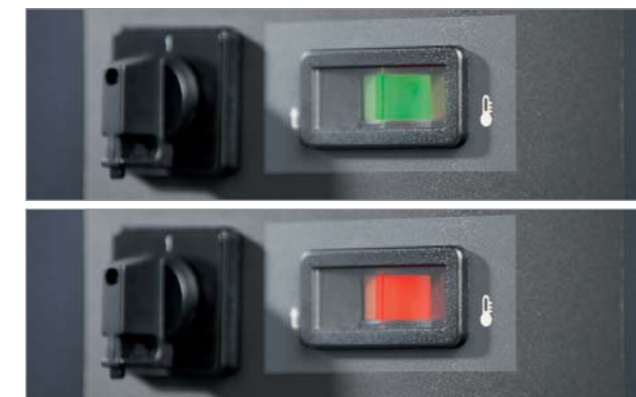
### Optimal performance adjustment

The hot-gas bypass control ensures optimised compressed air cooling and prevents harmful ice formation. Moreover, KRYOSEC dryers can automatically adapt to the influence of ambient pressure.



### Dependable condensate drainage

With the ECO-DRAIN electronic condensate drain, condensate is reliably drained away as required without pressure loss. To protect against condensation and corrosion inside the system, cold surfaces are insulated. A ball valve installed at the condensate inlet enables quick and easy maintenance.



### Simple function controls

KRYOSEC dryers feature a dew point trend indicator. The practical colour scale allows the user to check system status at a glance.





Image: AIRBOX CENTER DENTAL 1500

## AIRBOX CENTER DENTAL

# High quality compressed air production

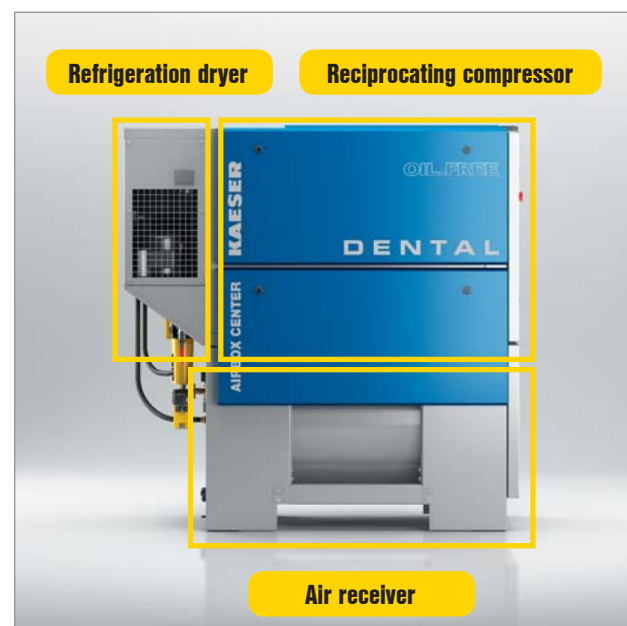
In the dentistry sector, the concept of installing an oil-free reciprocating compressor in a sound-proof enclosure is nothing new. In its AIRBOX DENTAL and AIRBOX CENTER DENTAL systems, however, KAESER has combined this time-tested concept with the latest compressor technology. This results in efficient product solutions for high-quality compressed air in large practices, dental clinics and laboratories. Up to 20 treatment chairs – or even more, depending on usage patterns – can be supplied simultaneously with compressed air meeting the highest quality standards. AIRBOX CENTER DENTAL is an efficient turnkey compressed air solution comprising a compressor, an air receiver

and air treatment components together with a refrigeration dryer and optional filters. Mounted on a 200 l or 270 l capacity air receiver, it is a perfect all-round compressed air station. AIRBOX DENTAL and AIRBOX CENTER DENTAL systems combine efficiency and sophisticated design with maximum reliability and minimal maintenance requirement.

[Turn to page 23 for technical specifications](#)

## The advantages:

- Reliable moisture protection for your work, equipment and instruments.
- The compressor keeps working reliably even when temperatures in your compressor room are high.
- Automatic, strain-relieved condensate line keeps maintenance requirement to a minimum.
- Low pressure differential in the dryer and in filters (if installed). This enables you to run the system at lower pressure and thus to save costs.
- The high-performance refrigerant condenser and quality refrigerant compressor ensure condensate-free compressed air even under the most demanding conditions.



## The all-in-one compressed air station

Combining an energy-saving reciprocating compressor, refrigeration dryer and air receiver, this system is ready for action as a plug-and-play unit.

It combines energy efficiency, ease of maintenance, durability and perfectly matched components to ensure years of dependable, cost-effective service.

All this compact compressed air package needs is to be connected to the power supply and compressed air system. That's it – no further installation work is required.



## Integrated refrigeration dryer

The integrated refrigeration dryer can dry the compressed air down to a pressure dew point of 3°C (at an ambient temperature of 20°C and 30% relative humidity).

This meets the requirements of the technical specification ISO/TS 22595-2:2008 Dentistry -- Plant area equipment -- Part 2: Compressor systems.

Ensuring even greater reliability, a separate enclosure shields the dryer from compressor exhaust heat. Moreover, the dryer shutdown feature – activated via the compressor controller – is linked to compressor operation and significantly reduces energy consumption when the compressor is at rest.



AIRBOX CENTER DENTAL

## AIRBOX CENTER DENTAL in detail



Image: Example of a DENTAL station



### Comfortably quiet

With 40 mm-thick soundproofing, innovative multi-deflected cooling air flow and an acoustically decoupled compressor block, the AIRBOX DENTAL and AIRBOX CENTER DENTAL systems are more than just quiet – the operating sound levels are actually quiet pleasant.

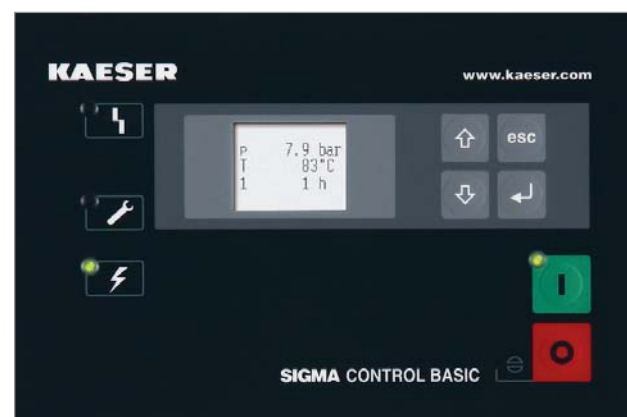
With the application-specific intake air ducting and highly effective air intake sound damping, AIRBOX DENTAL and AIRBOX CENTER DENTAL systems continue the KAESER tradition of super-quiet performance.



### 100% duty cycles

Featuring an innovative cooling solution with a powerful fan for both the drive motor and compressor block and precisely tailored cooling air ducting, AIRBOX DENTAL and AIRBOX CENTER DENTAL systems are capable of 100% duty cycles at ambient temperatures up to 30°C.

The control cabinet also features its own ventilation and is connected to the main cooling air flow to prevent overheating.



### SIGMA CONTROL BASIC controller

With a precise electronic pressure sensor, the SIGMA CONTROL BASIC compressor controller ensures energy-efficient, reliable and cost-effective operation of the system.

Optionally, the SIGMA CONTROL BASIC allows integration of AIRBOX DENTAL and AIRBOX CENTER DENTAL systems into KAESER's SIGMA AIR MANAGER 4.0 compressed air management system.



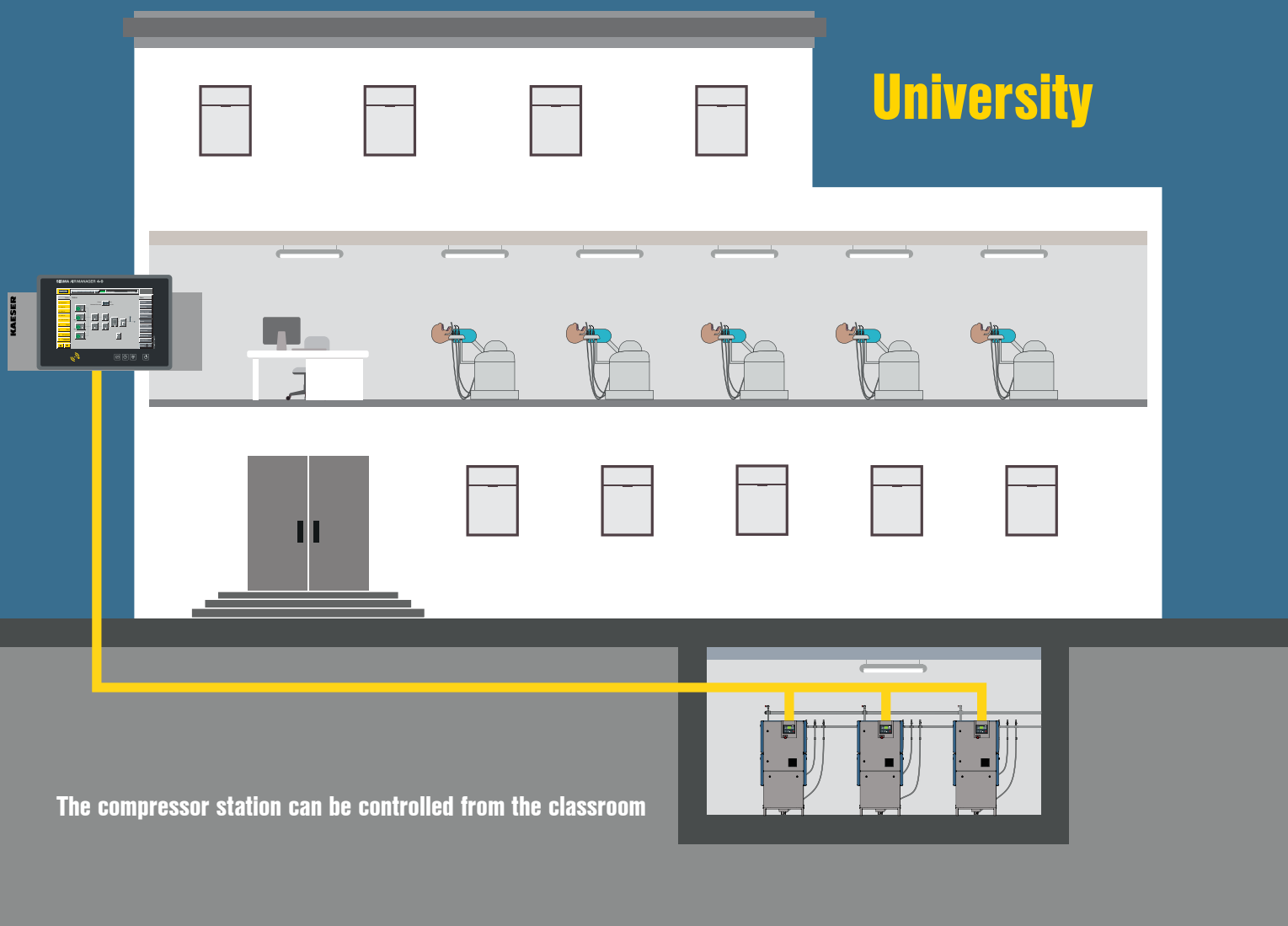
### AIRBOX CENTER DENTAL with KAESER FILTER

With an air intake filter, oil-free compression and an integrated refrigeration dryer, the AIRBOX CENTER DENTAL is ready to deliver exceptional quality compressed air as soon as it's delivered. For applications requiring maximum compressed air quality, all AIRBOX CENTER DENTAL systems can be equipped with optional mounted filters. This enables efficient compressed air delivery at precisely the required quality. A KE microfilter or KA filter must be installed for dental laboratory or dental practice applications, respectively.





## University



The compressor station can be controlled from the classroom

Perfectly adapted

## Compressed air control technology

Industry 4.0 is spreading rapidly across all industrial sectors – and universities are no exception. In addition to providing student dentists with conventional scientific knowledge and hands-on skills, universities also impart the latest insights from their own research activities and from institutions around the world. This includes information on innovative materials and techniques used in dentistry. This is a compelling reason for universities to keep their own equipment up to date. Only those who use cutting-edge technology themselves are true trailblazers. Environmental protection is one such example. This means not only proper disposal of waste from a dental practice, but also a

determined approach to conserving energy. The optimisation of the compressed air supply in a clinic is a key aspect in that regard. Perfect interplay between multiple large AIRBOX CENTER DENTAL compressor systems and the SAM 4.0 master controller not only provides a dependable compressed air supply for teaching programmes, but also ensures exceptional energy efficiency to help safeguard the environment. Up to 16 fully independent AIRBOX CENTER compressed air stations can be controlled simultaneously by the SAM 4.0, which groups the individual compressors as one large station.

### The advantages:

- A compressed air supply to meet your needs at all times.
- Minimal energy consumption and energy costs.
- The SAM 4.0 can be programmed to accommodate the university clinic's timetable.
- SAM can be used as a remote control system.
- Balancing of operating hours of the individual compressors.
- Each individual compressor can be shut down for maintenance.
- The compressed air system can be expanded as needed.

## SIGMA AIR MANAGER 4.0 (SAM 4.0)

### Best possible pressure quality, tailored to your specific needs

This is in no small part made possible by KAESER's Adaptive 3-D<sup>advanced</sup> Control, which continuously analyses the relationship between various parameters (such as switching and control differential) and predictively selects the optimum combination from the numerous available options. Not only are starts and stops taken into consideration, but so too are idling and frequency converter losses, along with pressure flexibility. Moreover, the compressed air system's pressure performance value is optimised and average pressure is reduced.

### When machines "talk"

The SAM 4.0 supports operation in 30 languages, whilst the easy-to-use 12-inch colour touchscreen shows at a glance whether the station is operating in the "green zone" from an energy management perspective. Such data as operating status, pressure trends, flow rate, performance, maintenance and fault messages – both past and present – can be displayed and analysed with ease.

The SIGMA AIR MANAGER 4.0 is a comprehensive solution that allows you to store and analyse all relevant, energy-related data from your compressed air supply, and then create specific reports for your certification under the DIN EN ISO 50001 standard – all in the blink of an eye.



### SIGMA NETWORK

The SAM 4.0 offers even greater benefits when users also take advantage of KAESER's SIGMA NETWORK. Based on proven Ethernet technology, the powerful SIGMA NETWORK is a closed and secure network

specially developed to support optimal monitoring and coordinated control of compressed air stations.

### Remote diagnostics and predictive maintenance

Other powerful features that set the SAM 4.0 apart from conventional controllers are remote diagnostics and predictive maintenance that is tailored to specific operational needs. Maintenance and error messages are immediately sent by email to a pre-selected personal address. With remote diagnostics, users can benefit from such services as preventative and on-demand maintenance, which increase compressed air availability and reliability and help keep life cycle costs to an absolute minimum.



Image: SK 25 AIRCENTER DENTAL

## CAD/CAM

# Dependable continuous operation with the AIRCENTER

Ideally, a CAD/CAM system in a laboratory should be in use around the clock, including weekends. In these cases, the best solution for the compressed air supply is provided by an AIRCENTER – a rotary screw compressor that is specifically designed for continuous operation and heavy workloads. Requiring minimal installation space, these units save on planning and installation costs and also deliver a reliable and cost-effective supply of quality compressed air. At the heart of the KAESER AIRCENTER is a rotary screw compressor from KAESER's SX, SM or SK series. SX 3 to SK 25 models provide compressed air

delivery volumes ranging from 340 to 2500 l/min at 7.5 bar. A thermally shielded refrigeration dryer and an integrated filter ensure a dependable supply of dry, clean and oil-free compressed air. The compressed air is stored in either a 200 l, 270 l or 350 l air receiver. The compressor, dryer and air receiver are integrated within a single enclosure.

[Turn to page 23 for technical specifications](#)

## The advantages:

- With an AIRCENTER compressed air supply, your CAD/CAM system can operate 24 hours a day, seven days a week.
- The compressor operates according to your schedule, as the control unit includes a timer function.
- The generously dimensioned air receiver ensures that sufficient compressed air is always available – even when compressed air demand is heavy.
- An appropriately configured AIRCENTER compressor can supply compressed air to all other equipment in a dental laboratory.
- Placement of the compressor directly in the laboratory can save on installation costs.
- There's no need to worry about condensate build-up, as it is automatically drained away.



## Adapting the compressed air supply in the dental laboratory to CAD/CAM

To be able to mill crowns and bridges themselves, dental laboratories require a CAD/CAM system. Successful integration of such a system into a laboratory necessitates review and adaptation of the compressed air supply. It generally means an increase in compressed air demand and in the required pressure in the connection line.

Minimum pressures of 7 bar and more are no longer a rarity, particularly for ensuring the secure attachment of cutting tools. Perfect tool changes, cleaning of the work area with compressed air and proper cooling of workpieces are all essential for achieving optimal results.



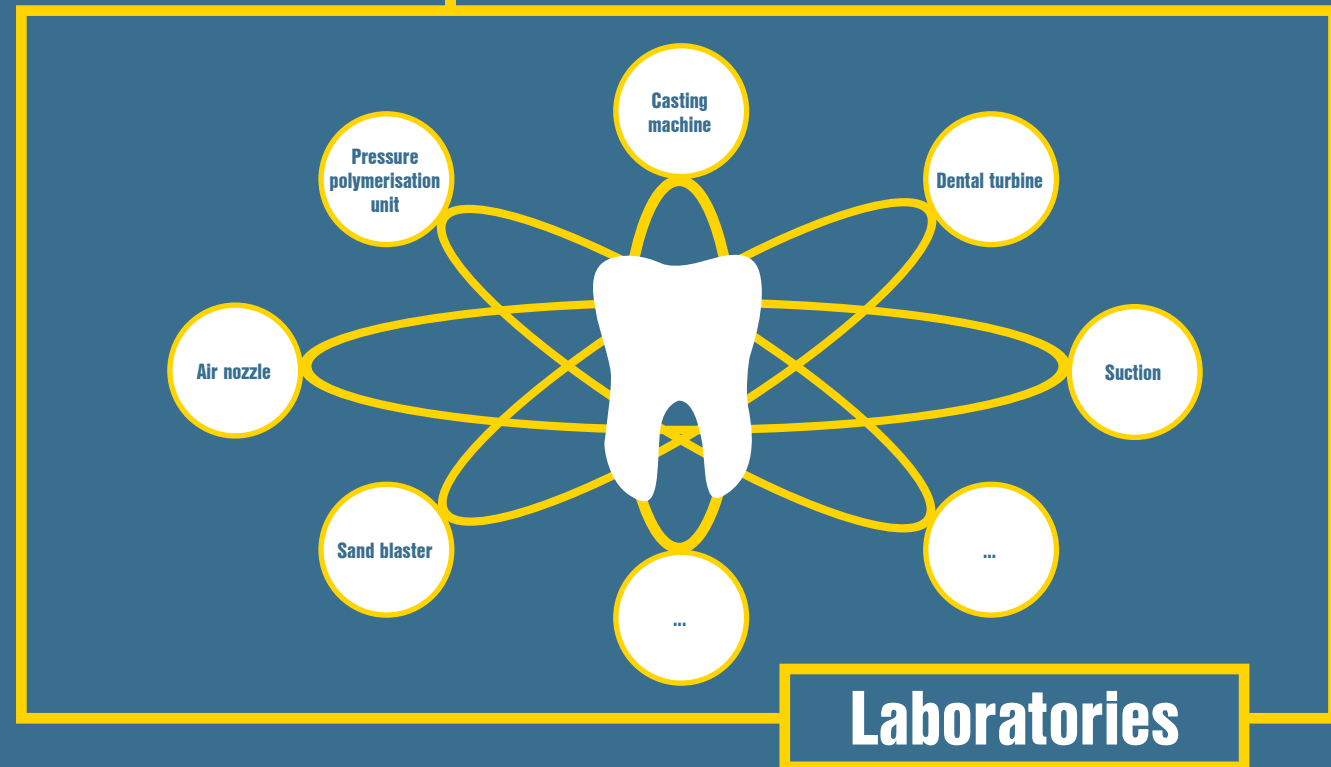
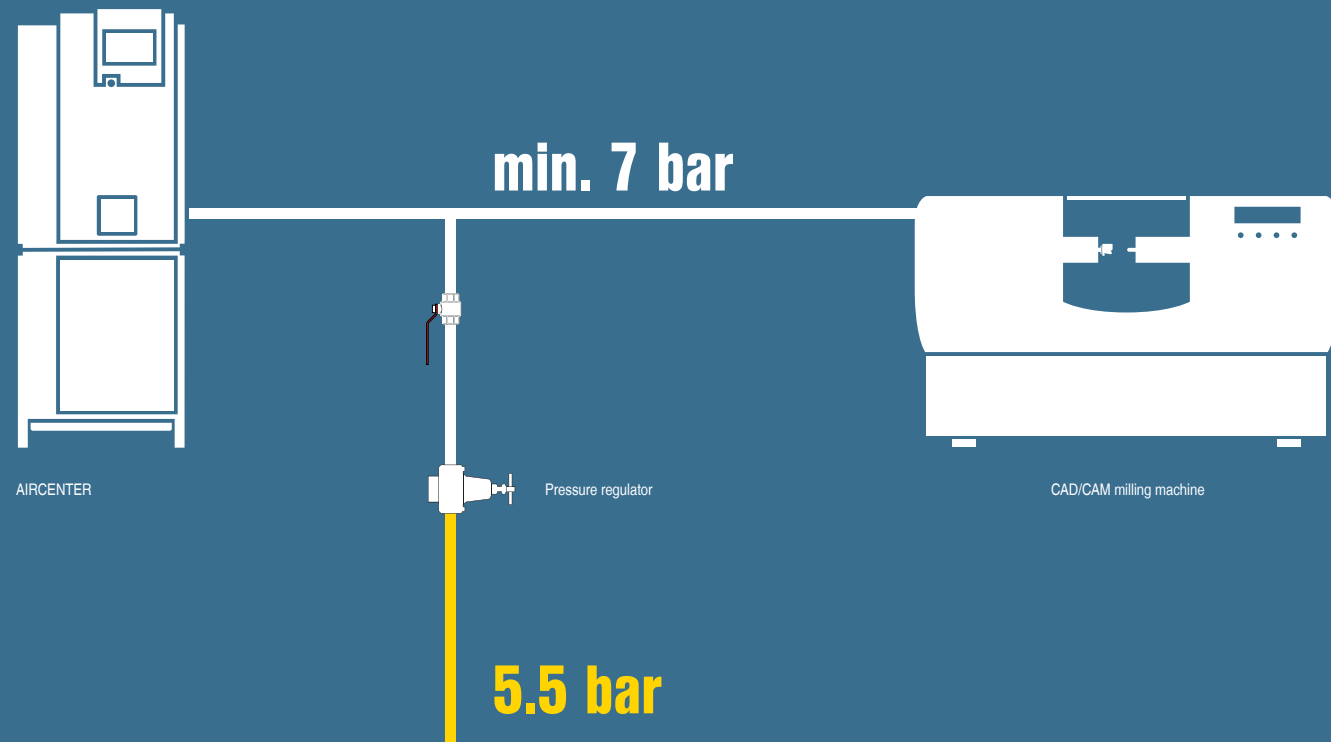
If the existing compressed air supply delivers a sufficient volume at the required pressure, the quality of the compressed air can be enhanced as needed by retrofitting a refrigeration dryer and filter. But if the current compressor falls short of those basic requirements, it's time to consider a replacement. Identifying the right solution for your specific needs will require an individual planning and decision making process.



## Correct installation

In most cases, the CAD/CAM system requires a minimum pressure of 7 bar. For all other equipment in a dental laboratory, 5.5 bar is sufficient. To minimise leakage losses in the main compressed air pipeline, it is advisable to reduce

pressure using a filter pressure regulator as shown in the schematic diagram below.



## Various compressed air options

**AIRCENTER**

The ultimate turnkey compressed air station for dental laboratories of any size. Furthermore, the milling centre, with its heavy demand for compressed air, should have a constant workload, preferably around the clock, including weekends.

These conditions leave no room for extended compressor downtime, for example for cooling and regeneration of the compressed air dryer.

All components of the modular **AIRCENTER** system are also available as stand-alone products. If an AIRCENTER cannot be installed due to transport difficulties or site restrictions, an equivalent compressed air station comprising these individual components can be installed on-site instead.

**KCT**

A turnkey compressed air station for a small dental laboratory with CAD/CAM.

**AIRBOX CENTER DENTAL**

A turnkey compressed air station for larger dental laboratories with CAD/CAM.

# Technical specifications

## DENTAL... with attached dryer

Model		DENTAL				KCT	
		1 T	3 T	5 T	5 / 2 T	230 - 65 T	420 - 65 T
Treatment units	Maximum	1	3	5	10 - 12	–	–
	Min. simultaneously	1	2	3	7	–	–
Permanent Power System	PPS	Integrated					
Max. duty cycle	%	Continuous operation possible					
Max. flow rate volume at 5 bar	l/min	65	158	262	524	158	262
Flow rate - cont. operation at 5 bar	l/min	52	135	225	472	126	210
Min. / max. gauge pressure	bar	5.5 / 7	5.5 / 7	5.5 / 7	5.5 / 7	7.5 / 9	7.5 / 9
Pressure dew point**)	°C	Reduction Δ 10 °C					
Number of cylinders		1	2	2	2 x 2	2	2
Receiver volume	l	24	24	65	90	65	65
Motor power 230 V	kW	0.75	1.4 (2.2) <sup>1)</sup>	2.2	–	1.4 (2.2) <sup>1)</sup>	2.2
Motor power 400 V	kW	–	–	2.2	2 x 2.2	–	–
Motor power 115/1/60	kW	0.75	–	–	–	–	–
Motor power 208-230/1/60	kW	–	1.4	2.2	2 x 2.2	On request	On request
Dimensions (W x D x H)	mm	490 x 430 x 740	500 x 500 x 730	510 x 510 x 960	1200 x 540 x 840	500 x 500 x 950	510 x 510 x 960
Weight	kg	51	73	95	141	89	95
Sound level	dB(A)	64	69	69	71	70	73
Permissible ambient temperature	°C	5 - 35	5 - 35	5 - 35	5 - 35	5 - 35	5 - 35
<b>Soundproof enclosure installation set</b>							
Dimensions (W x D x H)	mm	740 x 660 x 790	740 x 660 x 790	790 x 700 x 1040	–	–	–
Weight	kg	40	40	55	–	–	–
Sound pressure level	dB(A)	52	60	60	–	–	–

## DENTAL... with external dryer

Model		DENTAL				KRYOSEC		
		1	3	5	5 / 2	TAH 5	TAH 7	TAH 10
Treatment units	Max.	1	3	5	10 - 12	–	–	–
Max. duty cycle	%	70	70	70	70	100	100	100
Max. flow rate volume at 5 bar	l/min	65	158	262	524	350	600	800
Flow rate - cont. operation at 5 bar	l/min	–	–	–	–	350	600	800
Min. / max. gauge pressure	bar	5.5 / 7	5.5 / 7	5.5 / 7	5.5 / 7	3 / 16	3 / 16	3 / 16
Max. duty cycle	%	–	–	–	–			
Pressure dew point**)	°C	–	–	–	–	3	3	3
Number of cylinders		1	2	2	2 x 2	–	–	–
Receiver volume	l	24	24	65	90	–	–	–
Motor power 230 V	kW	0.75	1.4 (2.2) <sup>1)</sup>	2.2	–	0.12	0.16	0.19
Motor power 400 V	kW	–	1.4 (2.2) <sup>1)</sup>	2.2	2 x 2.2	–	–	–
Dimensions (W x D x H)	mm	430 x 430 x 750	500 x 500 x 730	510 x 510 x 960	1200 x 540 x 840	386 x 473 x 440	386 x 473 x 440	386 x 473 x 440
Weight	kg	47	69	82	125	24	24	26
Sound level	dB(A)	64	69	69	71	–	–	–
Permissible ambient temperature	°C	5 - 35	5 - 35	5 - 35	5 - 35	5 - 50	5 - 50	5 - 50

## AIRBOX CENTER DENTAL

Model		400	480	550	660	840	1000	1000-2	1200-2	1500	1800
		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
Treatment units	Max.	5 - 6	6 - 7	7 - 8	8 - 9	11 - 12	10 - 14	14 - 16	15 - 20	19 - 21	21 - 24
	Min. simultaneously	4	5	5	6	8	10	10	13	14	16
Max. duty cycle	%	100	100	100	100	100	100	100	100	100	100
Max. flow rate volume at 5 bar	l/min	280	320	350	375	550	620	720	875	950	1030
Flow rate - cont. operation at 5 bar	l/min	280	320	350	375	550	620	720	875	950	1030
Max. gauge pressure	bar	10	10	10	10	10	10	10	10	7	7
Pressure dew point <sup>1)</sup>	°C	5	5	5	5	5	5	5	5	5	5
Number of cylinders		2	2	2	2	2	2	2	2	2	2
Receiver volume	l	200				270					
Motor power 400/3/50 V 3 Ph	kW	2.2		3.0		4.0		7.5		7.5	
Motor power 400/3/60 V 3 Ph	kW		2.2		3.0		4.0		7.7		7.5
Dimensions (W x D x H)	mm	1490 x 730 x 1500				1730 x 820 x 1640					
Weight	kg	360	360	375	375	375	490	375	550	375	550
Sound level	dB(A)	59	61	61	63	65	67	66	68	66	68
Permissible ambient temperature	°C	3 - 45	3 - 45	3 - 45	3 - 45	3 - 45	3 - 45	3 - 45	3 - 45	3 - 45	3 - 45

## AIRCENTER

Model		SX				SM				SK			
		3	4	6	8	9	12	12 SFC	15	22	22 SFC	25	25 SFC
Operating pressure	bar	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Max. gauge pressure	bar	8	8	8	8	8	8	8	8	8	8	8	8
Max. duty cycle	%	100	100	100	100	100	100	100	100	100	100	100	100
Max. flow rate at working pressure	l/min	340	450	600	800	900	1200	350 - 1240	1500	2000	620 - 1980	2500	810 - 2550
Receiver capacity	l	200				270				350			
Pressure dew point <sup>1)</sup>	°C	+3	+3	+3	+3	+3	+3	+3	+3	+3	+3	+3	+3
Motor power 400V, 3 Ph	kW	2.2	3	4	5.5	5.5	7.5	7.5	9	11	11	15	15
Power use – refrigeration dryer	kW	0.2	0.2	0.2	0.2	0.31	0.31	0.31	0.31	0.41	0.41	0.41	0.41
Dimensions W x D x H	mm	590 x 1090 x 1560				630 x 1200 x 1716				750 x 1335 x 1880			
Weight	kg	285	285	290	300	390	400	410	410	579	596	587	604
Sound level	dB(A)	59	60	61	64	64	65	67	66	66	67	67	68
Permissible ambient temperature	°C	3 - 45	3 - 45	3 - 45	3 - 45	3 - 45	3 - 45	3 - 45	3 - 45	3 - 45	3 - 45	3 - 45	3 - 45

<sup>1)</sup> Rated motor power

<sup>2)</sup> At ambient temperature 20°C, 30% relative humidity



# The world is our home

As one of the world's largest compressed air systems providers and compressor manufacturers, KAESER KOMPRESSOREN is represented throughout the world by a comprehensive network of branches, subsidiary companies and authorised partners.

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 every product operates at the peak of its performance at all times and provides maximum availability.



**HPC** | Compressed  
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