

## **Oil-free Reciprocating Compressors DENTAL Series**

Delivery 65 to 950l/min – Pressure 10 bar



**Why choose a KAESER dental compressor?**

Because you expect your dental compressor to provide oil-free, dry and hygienic compressed air, especially in times of drastically increased air demand.

This is one of the most important requirements for satisfied patients, dental laboratory partners and successful clinical work.

KAESER dental compressors provide the perfect technical solution and offer the following benefits:

- A dependable compressed air supply that complies with EN ISO 7494-2:2003, Dentistry - Dental Units - Part 2: Water and Air Supply (ISO 7494-2:2003)
- Reliable compliance with the requirements and recommendations of dental material manufacturers
- Significant contribution to the high quality-assurance standards of dentists and dental technicians
- Protection of patients from increased risk of infection
- Enhanced reliability of integrated components in dental equipment such as air motors, multi-function syringes, air scalers, air abrasion systems, micro air-dryers etc.
- Dependable air supplies for dental laboratories which use a wide variety of equipment ranging from simple air nozzles to modern CAD/CAM systems that require large volumes of compressed air
- A reliable compressed air supply enables professors and students alike to focus on research and learning
- Kaeser dental systems ensure long, dependable service life



**KAESER – Quality Guaranteed**



**Advantages through innovation**

- The KAESER "Permanent Power System" ensures exceptional performance
- Each system is designed to meet the growing compressed air demands of dental practices and laboratories
- Highly efficient and reliable air treatment with SECCOMAT dryers
- User-friendly design and easy to operate
- Simple installation
- Unrivalled energy efficiency
- Long service life

- 1 Inlet 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 take-off point



**Durable KAESER compressor block**

KAESER compressor blocks are made from materials of the highest quality. 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 unrivalled energy efficiency.



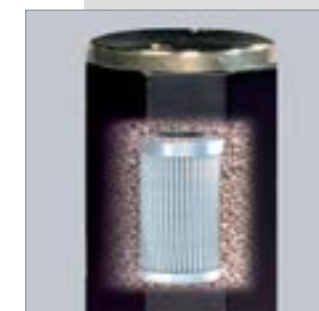
**Replaceable Teflon seals**

Both piston rings and the guide ring for each piston are Teflon-coated to ensure maximum durability. Moreover, they are easy and inexpensive to replace should the need arise and, as a result, further extend the exceptionally long service life of KAESER Dental compressed air systems.



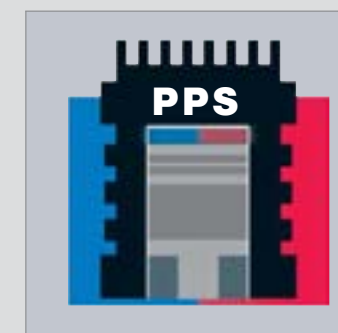
**Compact PPS control unit**

The "Permanent Power System" controls switching via a 4/2-way solenoid valve.



**Dependable: SECCOMAT dental dryers**

Dryer power is significantly increased if condensate droplets are pre-separated from the air before it reaches the dryer. By using warm air, the "Permanent Power System" is able to regenerate the desiccant faster and more reliably.



**Exceptional Performance: Permanent-Power-System**

Providing unrivalled performance, KAESER's "Permanent Power System" (PPS) enables up to 90 percent compressed air availability. To regenerate the desiccant in the SECCOMAT dryer, the PPS uses a highly efficient process whereby fresh ambient air is drawn in and warmed via the compressor and then passed through the dryer. This technique has several key advantages: Firstly, the resulting internal cooling of the compressor block increases efficiency and service life. Secondly, the warmed air is perfect for purge air as it can carry far more moisture than cool air. This process is also much faster than conventional regeneration methods which use diverted compressed air that is cooled as a result of subsequent expansion. Consequently, the KAESER "Permanent Power System" significantly extends the compressed air system's power phases and enables unprecedented compressed air availability.

# DENTAL — Compressed air for every need



University hospitals



## DENTAL Series – 1T, 3T and 5T

These proven dental compressors combine high 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 five treatment units and for medical and dental laboratory uses.



## DENTAL Series: 5/2T

This dependable range of dual compressor block dental compressors enables quiet and efficient production of large volumes of oil-free dental air with minimal maintenance requirement. They provide sufficient air for a larger dental practice equipped with an additional prophylaxis treatment unit or integrated dental facilities with a CAD/CAM system.



## Soundproof enclosure installation set

A soundproof enclosure is available for Dental 1T, Dental 3T and Dental 5T series compressors as a retrofit installation set. The associated reduction in operational sound levels consequently makes selection of an installation location far easier: Compressors placed as closely to the point of use require less installation work and deliver better performance as a result of shorter pipe runs.

## DENTAL Series: 1T - 5T



## Cost-effective and hygienic compressed air for every dental need

Whether in a dental practice, laboratory or a hospital clinic, the demands on compressed air supply systems are becoming ever greater. Not only are larger air delivery volumes required, but best possible compressed air quality is also needed. This is essential to ensure that the very latest treatment methods are carried out correctly with maximum hygiene and that the advanced materials involved are able to perform effectively.

With an extensive range of powerful energy-saving compressors and highly efficient compressed air treatment and filter systems, KAESER KOMPRESSOREN is able to provide comprehensive compressed air solutions that meet the needs of any application.

## Soundproof enclosure installation set

Model	Compressor sound level with enclosure	Weight	Dimensions W* x D x H
	db(A)		mm
DENTAL 1T	52	40	740 x 660 x 790
DENTAL 3T	60	40	740 x 660 x 790
DENTAL 5T	60	55	790 x 700 x 1040

\*) 30 cm clearance is required to the left and right for ventilation purposes.

## Technical Specifications

Model	For treatment units		Permanent Power System	Max. duty cycle	Max. delivery volume at 5 bar	Delivery with continuous operation at 5 bar	Max. operating pressure	Pressure dew point	Number of cylinders	Air receiver capacity	Motor power 230 V Single phase	Motor power 400 V 3-phase	Dimensions W x D x H	Weight	Sound level
	Max.	Simultaneously													
DENTAL 1T**	1	1	•	Continuous operation possible	65	52	7	Reduction Δ 10° C	1	24	0.75	—	490 x 430 x 740	51	64
DENTAL 3T**	3	2	•		158	135	7	Reduction Δ 10° C	2	24	1.4 (2.2)*	1.4 (2.2)*	500 x 500 x 730	73	69
DENTAL 5T**	5	3	•		262	225	7	Reduction Δ 10° C	2	65	2.2	2.2	510 x 510 x 960	95	69
DENTAL 5/2T	10-12	7	•		524	472	7	Reduction Δ 10° C	2 x 2	90	—	2 x 2.2	1200 x 540 x 840	141	71

\*) Installed power \*\*) Appropriate sound-enclosures are available for compressors equipped with an integrated compressed air dryer

## Models without dryer

DENTAL 1	1	—	—	70	65	—	7	—	1	24	0.75	—	430 x 430 x 750	47	64
DENTAL 3	3	—	—	70	158	—	7	—	2	24	1.4 (2.2)*	1.4 (2.2)*	500 x 500 x 730	69	69
DENTAL 5	5	—	—	70	262	—	7	—	2	65	2.2	2.2	510 x 510 x 960	82	69
DENTAL 5/2	10-12	—	—	70	524	—	7	—	2 x 2	90	—	2 x 2.2	1200 x 540 x 840	125	71

For compressors without an integrated compressed air dryer, we recommend on-site installation of a KAESER refrigeration dryer

AIRBOX CENTER 400 DENTAL	5-6	4	—	100	280	280	10	3°C	2	200	—	2.4	1490 x 730 x 1500	360	59
AIRBOX CENTER 550 DENTAL	7-8	5	—	100	350	350	10	3°C	2	200	—	3.0	1490 x 730 x 1500	370	61
AIRBOX CENTER 840 DENTAL	11-12	8	—	100	550	550	10	3°C	2	270	—	4.4	1730 x 820 x 1640	490	65
AIRBOX CENTER 1000-2 DENTAL	14-16	10	—	100	720	720	10	3°C	2	270	—	7.5	1730 x 820 x 1640	550	66
AIRBOX CENTER 1500 DENTAL	19-21	14	—	100	950	950	7	3°C	2	270	—	7.5	1730 x 820 x 1640	550	66

## DENTAL Series: 5/2T



## AIRBOX CENTER DENTAL



# 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 100 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.



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