Oil-free Reciprocating Compressors
DENTAL Series
Delivery 65 to 950 l/min – Pressure 10 bar

www.kaeser.com
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:

• 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

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

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.

KAESER – Quality Guaranteed

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.

Inlet filter
Compressor block
Aftercooler
Pre-separator
Desiccant dryer (SECCOMAT)
Fine filter (integrated)
Air receiver
Pressure switch
Compressed air take-off point
DENTAL — Compressed air for every need

- Reciprocating compressor
- Air filter
- Compressor block
- Cooling
- Condensate separation
- Drying
- Filters
- Air receiver
- Air treatment

Dental clinics
Dental practices
Dental laboratories

Reciprocating compressor
Air filters
Compressor block
Cooling
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Air filters
Compressor block
Cooling
Condensate drains
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Dental practices
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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 requirements. 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.

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.

Technical Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>For treatment units</th>
<th>Permanent Power System PPS</th>
<th>%</th>
<th>Max. delivery volume at 5 bar l/min</th>
<th>Delivery with continuous operation at 5 bar l/min</th>
<th>Max. operating pressure bar</th>
<th>Pressure dew point</th>
<th>Number of cylinders</th>
<th>Air receiver capacity l</th>
<th>Motor power kW 230 V Single phase</th>
<th>Motor power kW 400 V 3 phase</th>
<th>Dimensions W x D x H mm</th>
<th>Weight kg</th>
<th>Sound level dB(A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENTAL 1T**</td>
<td>1 1</td>
<td>●</td>
<td>Continuous operation possible</td>
<td>65</td>
<td>52</td>
<td>7</td>
<td>Reduction Δ 10° C</td>
<td>1</td>
<td>24</td>
<td>0.75</td>
<td>—</td>
<td>490 x 430 x 740</td>
<td>51</td>
<td>64</td>
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<tr>
<td>DENTAL 3T**</td>
<td>3 2</td>
<td>●</td>
<td></td>
<td>158</td>
<td>135</td>
<td>7</td>
<td>Reduction Δ 10° C</td>
<td>2</td>
<td>24</td>
<td>1.4 (2.2)*</td>
<td>1.4 (2.2)*</td>
<td>500 x 500 x 750</td>
<td>73</td>
<td>69</td>
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<tr>
<td>DENTAL 5T**</td>
<td>5 3</td>
<td>●</td>
<td></td>
<td>262</td>
<td>225</td>
<td>7</td>
<td>Reduction Δ 10° C</td>
<td>2</td>
<td>65</td>
<td>2.2</td>
<td>2.2</td>
<td>510 x 510 x 960</td>
<td>85</td>
<td>69</td>
</tr>
<tr>
<td>DENTAL 5/2T</td>
<td>10-12 7</td>
<td>●</td>
<td></td>
<td>524</td>
<td>472</td>
<td>7</td>
<td>Reduction Δ 10° C</td>
<td>2 x 2</td>
<td>90</td>
<td>—</td>
<td>2 x 2.2</td>
<td>1200 x 540 x 840</td>
<td>141</td>
<td>71</td>
</tr>
</tbody>
</table>

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

Models without dryer

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<tr>
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<tr>
<td>DENTAL 1</td>
<td>1 — —</td>
<td>70</td>
<td>65</td>
<td>—</td>
<td>7</td>
<td>—</td>
<td>1</td>
<td>24</td>
<td>0.75</td>
<td>—</td>
<td>490 x 430 x 740</td>
<td>51</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>DENTAL 3</td>
<td>3 — —</td>
<td>70</td>
<td>158</td>
<td>—</td>
<td>7</td>
<td>—</td>
<td>2</td>
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<td>69</td>
<td></td>
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<tr>
<td>DENTAL 5</td>
<td>5 — —</td>
<td>70</td>
<td>262</td>
<td>—</td>
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<td>—</td>
<td>2</td>
<td>65</td>
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<td>10-12 7 — —</td>
<td>70</td>
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<td>—</td>
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<td>—</td>
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For compressors without an integrated compressed air dryer, we recommend on-site installation of a KAESER refrigeration dryer

DENTAL Series: 1T - 5T
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: 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 requirements. 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.

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</tr>
</thead>
<tbody>
<tr>
<td>AIRBOX CENTER 400 DENTAL</td>
<td>5-6 4</td>
<td>—</td>
<td>100</td>
<td>280</td>
<td>280</td>
<td>10</td>
<td>3°C</td>
<td>2</td>
<td>200</td>
<td>—</td>
<td>2.4</td>
<td>1480 x 730 x 1500</td>
<td>360</td>
<td>59</td>
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<tr>
<td>AIRBOX CENTER 550 DENTAL</td>
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<td>10</td>
<td>3°C</td>
<td>2</td>
<td>200</td>
<td>—</td>
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<td>550</td>
<td>10</td>
<td>3°C</td>
<td>2</td>
<td>270</td>
<td>—</td>
<td>4.4</td>
<td>1730 x 820 x 1640</td>
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<td>65</td>
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<tr>
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<td>100</td>
<td>720</td>
<td>720</td>
<td>10</td>
<td>3°C</td>
<td>2</td>
<td>270</td>
<td>—</td>
<td>7.5</td>
<td>1730 x 820 x 1640</td>
<td>550</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>AIRBOX CENTER 1500 DENTAL</td>
<td>19-21 14 — —</td>
<td>100</td>
<td>950</td>
<td>950</td>
<td>7</td>
<td>3°C</td>
<td>2</td>
<td>270</td>
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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.