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KAESER COMPRESSORS

HPC | Compressed Air Systems

Rotary Screw Compressors SX–HSD Series

With the world-renowned SIGMA PROFILE

Free air delivery: 0.26 to 86 m³/min – Pressure 5.5 to 15 bar

KAESER KOMPRESSOREN –
The global compressed air systems provider

KAESER was established in 1919 as a machine workshop, but started on the road to becoming one of the world's leading compressed air system providers in the 1950s when founder, Carl Kaeser Snr, made the decision to start manufacturing reciprocating compressors.

The breakthrough on the road to today's market-leading position among the world's top compressed air system suppliers came when KAESER developed the rotary screw airend featuring the SIGMA PROFILE.

With expertise and commitment from 4000 dedicated employees worldwide, KAESER now ranks amongst the world's largest and most successful compressor manufacturers, exporting compressed air system equipment to almost every corner of the planet.

Main plant, Coburg

The KAESER headquarters in Coburg currently employs approx. 1900 people. The facility covers an area of over 150,000 m² and produces KAESER's extensive range of compressors. All companies in the international KAESER group are linked using the very latest information- and network-technology.

Contents

More air, more savings...

KAESER SIGMA PROFILE

Developed by KAESER and continuously enhanced ever since, the KAESER SIGMA PROFILE achieves power savings of up to 15 percent compared with conventional screw airend rotor profiles.

All KAESER rotary screw airends feature this energy-saving rotor profile and are designed to ensure maximum energy efficiency.

The generously-sized, precision-aligned roller bearings and close-tolerance machining guarantee long service life and outstanding reliability.

Energy-saving compressor airend with SIGMA PROFILE rotors

A specific drive power can be used to turn a smaller airend at high speed or a larger airend at slow speed. Larger, slower running airends are more efficient and deliver more compressed air for the same drive power.

This is why KAESER builds airends with the slowest drive speeds possible and optimised screw profiles. Every KAESER rotary screw compressor equipped with one of these highly efficient airends quickly pays for itself through power cost savings.

Energy saving controllers: SIGMA CONTROL 2 and SIGMA CONTROL BASIC

The SIGMA CONTROL 2 features a highly flexible modular design, yet its standard construction means that this versatile control system can be matched to suit the needs of any rotary screw compressor from KAESER KOMPRESSOREN's extensive range. Comprising a main control unit and separate input/output modules, this modular concept therefore enhances communication and user-friendliness.

Internet capability

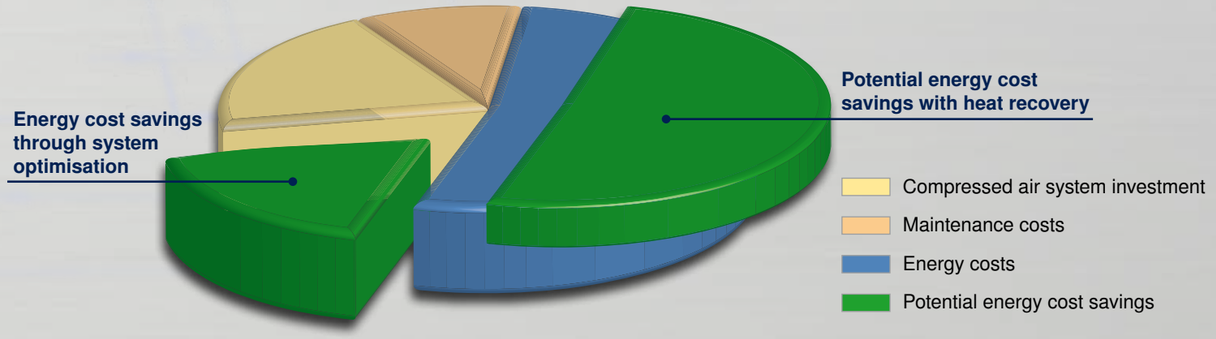
The SIGMA CONTROL 2 is equipped with its own web server, making it possible to communicate with the compressor via intranet/Internet. There is no need for additional costly software, as settings can be remotely accessed and adjusted, with password protection, from any PC running a standard Internet browser. This feature greatly simplifies operation and maintenance for example.

Lower life-cycle costs

Energy costs taken over the lifetime of any compressor add up to many times that of the initial capital cost, which can make any purchase price difference a false economy. Efficiency and reliability are vital in the production of compressed air and KAESER achieves these objectives with quality, durable components that are built to last. Energy-saving KAESER rotary screw compressors can help users to significantly reduce their compressed air costs.

Save additional costs and benefit the environment with heat recovery:

Reusable heat generated during compressed air production represents a considerable potential saving, since 100 percent of the energy fed to a compressor is converted into heat. This is energy that can be utilised. In fact, up to 94 % of the energy that is used to produce compressed air remains available for reuse. This not only enables huge annual financial savings, but also helps to considerably reduce CO_2 emissions. The scale of the savings effect depends on the size of the compressors and the primary energy source that is used (electricity, gas, fuel oil). Moreover, many older compressor models can even be retrofitted to provide heat recovery.



KAESER rotary screw compressors
with belt drive – to 22 kW

Efficient KAESER V-belt drive

KAESER screw compressors with V-belt drive provide outstanding efficiency and reliability. KAESER was one of the first compressor manufacturers to introduce the V-belt drive system. The KAESER drive is characterised by an automatic tensioning device* that ensures constant transmission efficiency. This, of course, reduces maintenance costs.

*) SX series models are equipped with a flat drive belt that does not require additional tensioning.

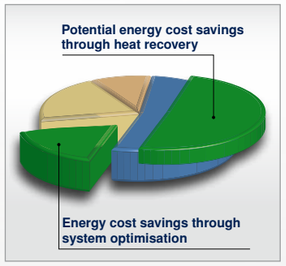
Image:

Series: SX–ASK
Motor power: 2.2 to 22 kW
FAD: 0.26 to 3.5 m³/min
Standard pressure: 8 / 11 / 15 bar$_{(g)}$

How KAESER rotary screw compressors work

Atmospheric air is drawn through the inlet air filter, cleaned, and then passes into the airend where it is compressed. Specially developed SIGMA FLUID is injected into the airend to serve as coolant, lubricant and sealant. Under normal conditions the air reaches a temperature of only approx. 80 °C during compression.

The compressed air emerges from the separator with a remaining fluid content of less than 2 mg/m³, passes through the minimum pressure check valve and into the aftercooler. The separated, cooled and filtered cooling fluid is reinjected into the airend. In the aftercooler the air is cooled down to between 5 and 10K above ambient and most of the moisture carried in the air is consequently removed before the air finally leaves the compressor at the outlet.

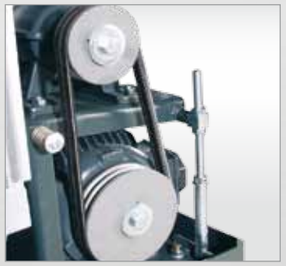


Save energy with the KAESER SIGMA PROFILE

Every KAESER rotary screw airend is equipped with energy-saving SIGMA PROFILE rotors. Components manufactured to the highest standards and precision aligned roller-bearings ensure long service life with maximum reliability.

SIGMA CONTROL 2

The control unit features an easy to read display and durable input keys. All relevant information can be viewed at a glance and user-friendliness is further enhanced by the logical menu structure coupled with the ability to display data in any one of 30 selectable languages.



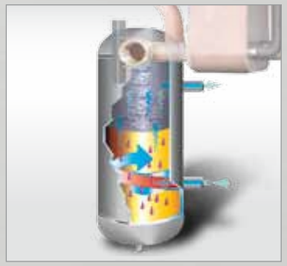
Automatic belt tensioning

The automatic belt tensioning device* ensures consistent transmission efficiency and excellent drive system reliability.

*) Excluding SX series models

Cooling air filter mats

Ambient air used for cooling is contaminated to some degree, but the high performance filter mats through which the air is drawn into the cabinet prevent the cooler from clogging.



Optimised separation system

The combination of optimum flow separation and the special separator cartridge* results in a minimal fluid content of less than 2 mg/m³ in the discharged compressed air. The separator system also requires minimal maintenance.

*) SX series models feature an external separator cartridge.

KAESER rotary screw compressors
with 1:1 drive – up to 500 kW

Why 1:1 drive?

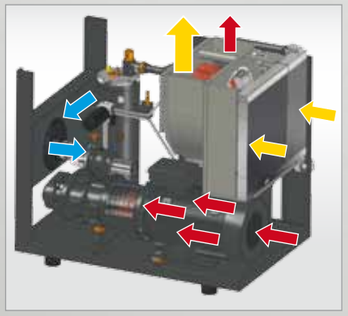
In compressed air packages featuring 1:1 drive the motor drives the airend directly without transmission loss via a maintenance-free coupling. Direct drive rotary screw compressors provide outstanding performance and enable significant savings. KAESER's comprehensive range of specially designed airends are manufactured and developed to meet every compressed air user's needs.

Triple savings with 1:1 drive:

- No power transmission losses.
- Large, low speed airends provide more air for less energy consumption.
- Reduced maintenance costs.

Image:

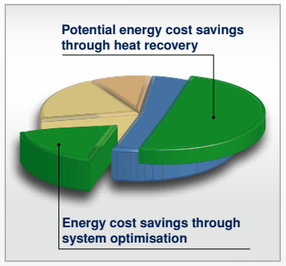
Series: ASD – HSD
Motor power: 18.5 to 500 kW
FAD: 2.09 to 86 m³/min
Standard pressure: 5.5 to 15 bar (g)



Unique cooling air flow

Kaeser's unique cooling air flow concept provides significant advantages compared to conventional systems: The air is drawn in via the cooler to the cooler cabinet and is directly exhausted upwards. Consequently, the inside of the unit remains untouched by the main cooling air flow and contaminant particles contained in the air collect on the air intake side of the cooler. Any accumulation is easily recognised and can be conventiently cleared away without having to disassemble the dryer. Operational reliability is improved and maintenance requirement is significantly reduced. (DSD Series)

After-cooling
Fluid cooling
Intake air (Compressor)
Motor cooling air



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Compressed air system investment
Energy costs
Maintenance costs
Potential energy cost savings

SIGMA CONTROL 2

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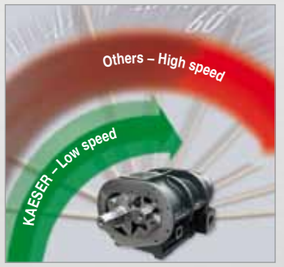


Low speed operation

Large, low speed airends are more efficient than small high speed airends because they supply more air for the same drive power. Low speeds mean less wear and consequently less maintenance costs.

Energy-saving 1:1 drive

The motor and airend are joined by the coupling and its housing to form a compact and durable unit that is virtually maintenance-free. Furthermore, reliability and service life are increased through elimination of wear and transmission losses, as 1:1 drive reduces the number of components needed in comparison with gear drive.

Quiet and efficient radial fan

The quiet and powerful radial fan draws in cool ambient air through the cooler. Its high residual thrust can deal with partial clogging of the cooler and still have enough reserve to allow connection of a long exhaust duct. In addition, the radial fan consumes significantly less drive power than conventional axial fans, saving even more energy.

KAESER rotary screw compressors
All-in-one systems – up to 22 kW

Space-saving combination of rotary screw compressor and refrigeration dryer

With KAESER's intelligent system design, the compressor and refrigeration dryer are both completely separate, independently functioning modules. This protects the dryer from exposure to heat from the compressor package thereby enhancing reliability.

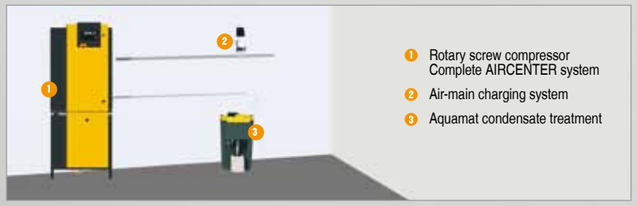
Energy saving refrigeration dryers

The dryer shut-down feature*, which can be selected via the compressor controller, is linked to compressor operation and significantly reduces energy consumption. All components are generously sized yet are easily accessible for maintenance and servicing work.

*) Not applicable to SXC models.

Compressed air supply system with separate components

Compressed air supply system with AIRCENTER



Aircenter and SXC: Compact compressed air systems

The KAESER AIRCENTER is a complete, turnkey system for the production of dry compressed air.

The arrangement of a KAESER screw compressor with its highly efficient SIGMA-Profile airend, together with an energy-efficient refrigeration dryer mounted on an air receiver creates a compact and highly economical package. Furthermore, AIRCENTER and SXC units are far less work-intensive to install than conventional compressed air systems.

Image:

All-in-one systems:
Series: SXC
Motor power: 2.2 to 5.5 kW
FAD: 0.26 to 0.8 m³/min
Standard pressure: 8 / 11 / 15 bar(g)
Equipped with SIGMA CONTROL BASIC

Series: AIRCENTER
Motor power: 2.2 to 15 kW
FAD: 0.26 to 2.2 m³/min
Standard pressure: 8 / 11 / 15 bar(g)

Version with refrigeration dryer only:
Series: SX T, SM T, SK T and ASK T
Motor power: 2.2 to 22 kW
FAD: 0.26 to 3.5 m³/min
Standard pressure: 8 / 11 / 15 bar(g)

SIGMA CONTROL 2

The control unit features an easy to read display and durable input keys. All relevant information can be viewed at a glance and user-friendliness is further enhanced by the logical menu structure coupled with the ability to display data in any one of 30 selectable languages.

Maintenance friendly

All maintenance work can be carried out from one side of the unit. The left housing cover is easily removed to allow excellent component accessibility. Furthermore, there's no need to remove the housing cover to inspect fluid levels or drive belt tension, as these can be checked via a convenient inspection window.

The all-in-one solution with energy-saving rotary screw compressor

There are also significant benefits to saving energy even with smaller rotary screw compressors. For example, a 20 % reduction in energy consumption with a 5.5 kW machine and 1000 operating hours per year translates into an annual saving of 1100 kWh and to a 660 kg reduction in CO_2 emissions.

The all-in-one solution with refrigeration dryer

The thermally shielded refrigeration dryer is installed beneath the rotary screw compressor. At the heart of the system is a stainless steel plate heat exchanger with an integrated condensate separator.

The all-in-one solution with integrated air receiver

SXC units are equipped with an internally coated compressed air receiver. The receiver performs 3 important functions: It cools the compressed air, stores it and pre-separates condensate. Accumulating condensate is reliably and efficiently removed via an electronically controlled condensate drain.

KAESER rotary screw compressors
Modular design with refrigeration dryer – up to 132 kW

The innovative ASD T to DSD T series

These advanced rotary screw compressors are versatile, reliable and highly efficient.

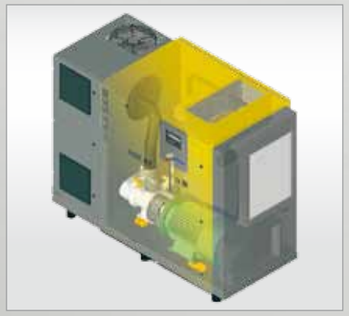
With an integrated refrigeration dryer module, these complete air systems provide a dependable source of quality compressed air.

The air compressor and refrigeration dryer are installed in separate cabinets, which protects the dryer from exposure to heat from the compressor package thereby enhancing reliability.

Energy saving refrigeration dryers

The dryer shut-down feature, which is linked to compressor operation, significantly reduces energy consumption.

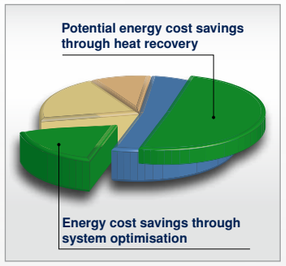
Image:
Series: ASD T to DSD T
Motor power: 18.5 to 132 kW
FAD: 2.09 to 23.8 m³/min
Standard pressure: 8/11/15 bar(g)



Turnkey operation

Attached to the compressor unit, the refrigeration dryer module is delivered fully connected and ready for operation. The separate cabinet design allows the dryer components to be generously sized yet easily accessible and shields the dryer from exposure to heat arising from the compression process.

The high performance cooling system ensures reliable air package operation up to an ambient temperature of +45 °C.



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Efficient centrifugal separator

Installed upstream from the refrigeration dryer, the centrifugal separator ensures dependable and efficient condensate removal even under conditions with high ambient temperatures and relative humidity. An electronic level-sensing ECO DRAIN provides effective condensate drainage without pressure loss.

Dependable refrigeration drying

The refrigeration dryer is also equipped with an electronic ECO DRAIN. The level-controlled condensate drain eliminates the compressed air losses associated with solenoid valve control, which not only saves energy, but also enhances operational reliability.

Space-saving modular design

The refrigeration dryer module turns a standard rotary screw compressor into a compact compressed air supply system. All components are easily accessible, both simplifying and speeding up all maintenance work.

KAESER rotary screw compressors with SIGMA FREQUENCY CONTROL

Uncompromising efficiency

SM SFC to HSD SFC series compressors from Kaeser are exceptionally efficient variable speed rotary screw compressors. SM, SK and ASK SFC models use Kaeser's minimal maintenance belt drive system, which features automatic belt tensioning to ensure optimum power transmission. Larger models from the ASD SFC upwards are equipped with KAESER's premium efficiency 1:1 direct drive system.

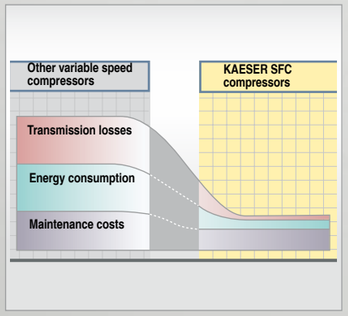
The large, slow-speed KAESER airends with energy-saving SIGMA PROFILE rotors provide outstanding performance throughout the entire control range.

Every Kaeser SFC compressor model from the SM SFC to the HSD SFC series is capable of 100 percent duty cycles without any increase in maintenance requirement.

Image:

Series: SM SFC to HSD SFC
Motor power: 7.5 to 515 kW
FAD: 0.30 to 86 m³/min
Standard pressure: 6 to 15 bar (g)

SFC = SIGMA FREQUENCY CONTROL



Ultimate efficiency with 1:1 drive

Significantly increasing reliability and service life, 1:1 drive (available with ASD SFC upwards) reduces the number of components needed in comparison with gear drive and eliminates the associated transmission losses. Sound levels are also considerably lower.

The benefits speak for themselves: efficient power transmission, optimal energy consumption and reduced servicing / downtime costs.

SIGMA CONTROL 2

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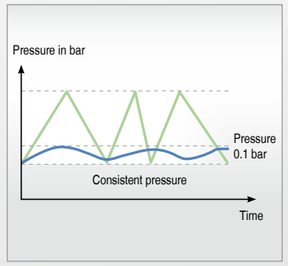


Precision pressure control

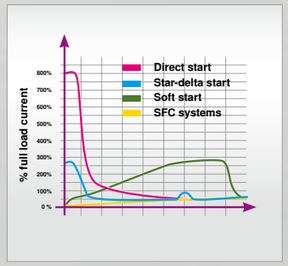
SFC compressors are able to control air flow to match actual demand by continuously adjusting the airend speed within the given control range. Pressure can be maintained to within ±0.1 bar, consequently enabling the maximum system pressure to be reduced. This can lead to significant savings, as each 1 bar pressure decrease results in a six percent reduction in energy consumption.

Maximum dependability even at high ambient temperatures

Contained in its own separately cooled cabinet, the generously sized SFC module enables perfect performance at ambient temperatures of up to +45 °C.

Complete package EMC certified

The electro-magnetic compatibility (EMC) of components and of the complete machine has been tested and certified in accordance with all applicable regulations.



Soft start with no damaging current spikes

The soft rise in motor starting current from zero to full load without current spikes leads to an almost unlimited motor starting frequency (the number of possible motor starts within a given time period without overheating occurring). The continuously variable acceleration and deceleration significantly reduces component stress.

SIGMA CONTROL 2 and SIGMA CONTROL BASIC
Tailored intelligence

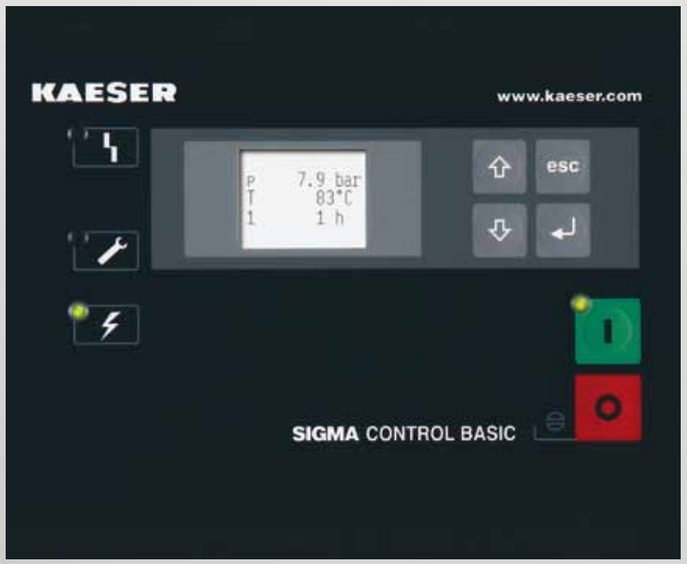
SIGMA CONTROL 2

...for SX to HSD series compressors

With its versatile control, monitoring and communication abilities, the industrial PC-based SIGMA CONTROL 2 is the perfect choice for applications requiring sophisticated communication functionality. It is therefore fitted as standard on all KAESER ASD to HSD series rotary screw compressors and is optionally available for SX, SM, SK and ASK series compressors.

Series: SX – HSD

SIGMA CONTROL BASIC



...for SXC, SX, SM, SK and ASK

The SIGMA CONTROL BASIC is available with KAESER's SX, SM, SK and ASK series rotary screw compressors. It is the perfect solution for users who initially require a single compressor for their air supply, but who also may wish to expand the compressed air system in the future. Furthermore, KAESER's modular control and compressed air management concept ensures trouble-free system compatibility.

Series: SXC, SX – ASK

SIGMA CONTROL 2 – The function keys in detail

Basic functions

ON key switches the compressor 'ON' -> automatic self control operation. Green LED indicates 'Compressor ON'.

OFF key
Switches the compressor 'OFF'.

‚Traffic light' functions

Alarm icon red LED indicates 'Compressor alarm'. Compressor is shut down on alarm.

Communication alarm icon red LED indicates 'Data communication to other systems interrupted'.

Maintenance icon – Yellow LED – indicates 'Maintenance due' or 'Maintenance counter expired' or 'Warning'.

Power ON icon green LED indicates 'Main switch ON, power supply available'.

Menu functions

UP key scrolls the display text downwards line for line.

DOWN key scrolls through text line for line.

RIGHT key scrolls through text line-by-line to the right.

LEFT key scrolls through text line-by-line to the left.

Escape key returns to next higher menu level.

Return key initiates jump to next sub-menu or accepts value.

Acknowledgement key acknowledges alarms and – when permitted – resets the alarm memory.

Info key – Access to current event information.

Additional functions

Idle key switches the compressor from load to idle.

Remote ON key (green LED) switches remote control 'ON' and 'OFF'.

Timer ON/OFF key – Green LED – switches the set timer function 'ON' and 'OFF'.

Load icon – Green LED – indicates 'Compressor on load, air being supplied'.

Idle icon – Green LED – indicates 'Compressor running, no air supply'.

SIGMA CONTROL BASIC – Functions

- Quick and simple operation with clear icons and large display
- Fully automatic DUAL control (full load/ idle/ on/ off control)
- Monitoring of air network pressure parameters, airend temperature and direction of rotor rotation
- Counter for service, load and operation hours
- Adjustable maintenance intervals and choice of pressure and temperature units (bar/ psi/ MPa/ °C/°F)
- Adjustable nominal system pressure
- Adjustable switching range
- Group alarm floating contact
- Electronic pressure transducer

Information technology –
Tailored system solutions

SIGMA AIR MANAGER – Tomorrow's technology, today

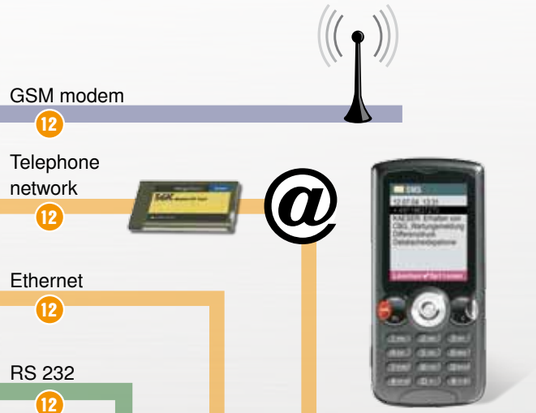
The SIGMA AIR MANAGER from KAESER is a ground-breaking PC-based master compressed air management system that combines cutting edge Internet and web server technology within a single unit. The SIGMA AIR MANAGER optimises compressor system operation: It minimises power requirement by automatically selecting the most favourable machine configuration from up to 16 compressors. The SAM uses Kaeser's adaptive 3-D-Control (patent-pending) which considers the three crucial factors that affect energy-efficient compressor control within a compressed air station, namely: switching losses, control losses and pressure flexibility. In order to ensure optimum performance, the SAM constantly analyses the relationship between these factors, calculates the best possible result and controls the compressors accordingly. Moreover, this approach enables required system pressure to be reduced thereby achieving further significant savings - each 1 bar decrease in pressure results in a 6 percent energy saving.

The SIGMA AIR CONTROL data visualisation feature, integrated as standard in every SIGMA AIR MANAGER master controller, allows current operational data, messages and alarms to be viewed at any time via the Internet simply by using a standard browser and requires no additional software.

Long-term data storage and compressed air auditing is also available if required (SIGMA AIR CONTROL PLUS).

3

The internal SIGMA CONTROL 2 compressor controller forms the basis for comprehensive system monitoring and management. Data exchange between the SIGMA CONTROL 2 and SIGMA AIR MANAGER is carried out via the Profibus DP interface.



Compressed Air System

1 Rotary screw compressor
- With energy-saving motor for minimised energy costs
- Highly efficient SIGMA PROFILE ensures more air for less energy consumption

2 SIGMA CONTROL compressor controller
- Proven industrial PC
- Future compatible with update capability
- Exceptional versatility, even allows connection of external components (e.g. refrigeration dryer)
- Prepared for Teleservice and connection of control and communication systems (Profibus DP) as standard
- Powerful multi-function timer

3 SIGMA AIR MANAGER compressed air management system

4 Refrigeration dryer
- Ensures quality, dry compressed air
- Condensate-free compressed air
- +3 °C pressure dew point
- SECOTEC cycling control enables up to 90 % energy savings

5 Air filters
- For clean compressed air
- Minimal pressure drop

6 Centrifugal separator
- Consistent degree of separation

7 Air receiver
- Galvanised both internally and externally as per DIN 50976
- Long service life

8 Condensate drain
- Automatic electronic-controlled condensate drain
- Unrivalled reliability
- No compressed air losses

9 Oil / water separation system
- Treats compressor condensate
- Complies with applicable water regulations
- Approved by the Berlin Structural Engineering Institute
- Saves disposal costs

10 Air-main charging system
- Treated compressed air even when network is depressurised
- Significantly reduced leakage losses

11 Visualisation and long-term analysis with SIGMA AIR CONTROL basic and SIGMA AIR CONTROL plus (Optional)
- Long-term data measurement for reporting, analysis, control and audits
- Enables targeted compressed air cost reduction
- Highly informative energy cost summaries
- Additional cost pools can be added
- No additional software required (system uses standard Internet browser)
- Visualisation via RS 232 / Intranet / telephone network
- Real-time data online

12 Compressed air
System data stored and processed in the SIGMA AIR MANAGER can be transferred via telephone or computer network (Ethernet). SMS messages, for example, can be forwarded to a service technician's mobile telephone.

KAESER COMPRESSORS

Premium quality, precision machined

Production and quality assurance

To achieve maximum precision, components for KAESER rotary screw compressors are machined in climate-controlled rooms using the very latest tool machines. Dedicated and highly qualified personnel draw on years of engineering experience to ensure unrivalled product quality and consistency. Production tolerances are continuously monitored using precision 3-D measuring equipment that detects variations to within micron accuracy (large photo right).

Precision milling and grinding

The SIGMA PROFILE rotors are machined on CNC profile grinders to micron accuracy.

Meticulous assembly

All airends and compressor packages are assembled to the highest standards by KAESER‘s qualified specialists in accordance with KAESER‘s Quality Management System.

Continuous quality control

Precision machining tolerance inspection via state-of-the-art 3-D coordinate measuring equipment ensures consistent product quality and component characteristics.

Detailed inspection

Each rotor pair undergoes detailed inspection for fitting accuracy and interplay.

Future-oriented

Efficiency, reliability and exceptional user-friendliness are long-standing trademarks of KAESER products. The company‘s state-of-the-art Research and Development Centre houses the very latest equipment and is designed to provide the research engineers with unrivalled working conditions, to maintain and extend KAESER’s competitive edge and to deliver continuous product innovation.

Flexible machining centres

Modern machining centres installed in specially air conditioned rooms produce the rotors and casings for KAESER airends. Quality management to DIN/ISO 9001 ensures unrivalled product quality.

KAESER COMPRESSORS

Expert advice and professional customer care: KAESER AIR SERVICE

Global service and advice

KAESER is represented throughout the world by in-country subsidiaries and qualified partners. No matter where, our customers can rely on fast and dependable customer support.

Optimised air supplies

After carrying out a computer-aided Air Demand Analysis (ADA), we will quickly determine your business's compressed air demand and provide an exact itemised air-cost analysis. With help from KAESER's Energy Saving System (KESS), the ADA data forms the basis for determining a cost-optimised air supply system.

Worldwide Teleservice

KAESER Teleservice, a cost-saving service solution based on global networking and data communication, enables remote diagnosis and demand-oriented maintenance. The service provides improved availability and optimised overall air supply efficiency.

Outstanding customer service

Our goal is total customer satisfaction, which is why we have created a worldwide service network providing global customer support. Expert service technicians and engineers are available throughout the world to give fast, reliable help where you need it, when you need it.

Genuine KAESER parts

KAESER's service personnel use only genuine maintenance and spare parts with proven long-term quality to ensure unrivalled reliability and long service life. Only Kaeser original parts guarantee tested quality.

SIGMA AIR UTILITY

SIGMA AIR UTILITY – Just buy the air you need. Now you can buy compressed air at a fixed price per unit, just like electricity, or any other utility.

LGA InterCert
Certified QM/EM System
ISO 9001:2008 / ISO 14001:2004

Certified Quality Management System

KAESER's QM system to DIN/ISO 9001 is under constant development to ensure our high standards – now and in the future.

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KAESER COMPRESSORS

More and more users choose KAESER

Trade and industry

The majority of industrial compressed air requirements are met by rotary screw compressors, which are also being increasingly used in trade and workshop applications. KAESER screw compressors with SIGMA PROFILE rotor airends reflect this growing trend, as more than 200,000 of these economical and reliable systems are currently in service throughout the world.

Dust evacuation, packaging, filtration

KAESER rotary screw vacuum packages with the special KAESER vacuum airend are just as suited to evacuating, testing, drying, and degassing processes as they are to filtration applications or filling bottles and tubes. These units are also equipped with the advanced PC-based SIGMA CONTROL compressor controller.

PET bottle production

KAESER has developed a remarkably economical system solution for this growing field of application. The SIGMA PET AIR bottle production system comprises a low pressure stage (rotary screw compressor, control air), a high pressure stage (booster, blow moulding) and efficient refrigeration drying. In addition to outstanding system performance, air users benefit from low investment and operating costs.

Pressure and vacuum applications

KAESER rotary blowers with OMEGA PROFILE are used in pressure / vacuum applications for drying, aerating waste water clarifiers, conveying powder or granular material, cleaning by suction, inspection and packaging.

Compressed air for maritime applications

KAESER KOMPRESSOREN also offers a specialised range of compressed air products customised especially for the needs of maritime users. Rotary screw compressors, for example, are used to produce work air and supply compressed air for special applications, such as nitrogen production. Rotary blowers are also used to treat waste water on large cruise liners.

Rotary screw compressors with V-belt drive – to 22 kW

Image	Model	Working pressure bar	FAD*) Overall package at working pressure m³/min	Max. operating pressure bar	Rated motor power kW	Dimensions W x D x H mm	Air connection	Sound pressure level **) dB(A)	Weight kg
SX – SK series									
	**SX 3**	7.5 10	0.34 0.26	8 11	2.2	590 x 632 x 970	G ¾	59	140
	SX 4	7.5 10 13	0.45 0.36 0.26	8 11 15	3	590 x 632 x 970		60	140
	SX 6	7.5 10 13	0.60 0.48 0.37	8 11 15	4	590 x 632 x 970		61	145
	SX 8	7.5 10 13	0.80 0.67 0.54	8 11 15	5.5	590 x 632 x 970		64	155
	**SM 9**	7.5 10 13	0.90 0.75 0.56	8 11 15	5.5	630 x 762 x 1100	G ¾	64	200
	SM 12	7.5 10 13	1.20 1.01 0.77	8 11 15	7.5	630 x 762 x 1100		65	210
	SM 15	7.5 10 13	1.50 1.26 1.00	8 11 15	9	630 x 762 x 1100		66	220
	**SK 22**	7.5 10 13	2.00 1.68 1.32	8 11 15	11	750 x 895 x 1260	G 1	66	312
	SK 25	7.5 10 13	2.50 2.11 1.72	8 11 15	15	750 x 895 x 1260		67	320
ASK series									
	**ASK 27**	7.5 10 13	2.60 2.18 1.70	8 11 15	15	1130 x 780 x 1255	G 1 ¼	65	390
	ASK 32	7.5 10 13	3.15 2.66 2.05	8 11 15	18.5	1130 x 780 x 1255		67	405
	ASK 35	7.5 10 13	3.50 2.96 2.37	8 11 15	22	1130 x 780 x 1255		69	420

Rotary screw compressors with 1:1 drive – to 500 kW

Image	Model	Working pressure bar	FAD*) Overall package at working pressure m³/min	Max. operating pressure bar	Rated motor power kW	Dimensions W x D x H mm	Air connection	Sound pressure level **) dB(A)	Weight kg
ASD–BSD series									
	**ASD 32**	7.5 10 13	3.16 2.72 2.09	8 11 15	18.5	1350 x 921 x 1505	G 1 ¼	65	580
	ASD 37	7.5 10 13	3.90 3.12 2.65	8 11 15	22	1350 x 921 x 1505		66	655
	ASD 47	7.5 10 13	4.57 3.84 2.99	8 11 15	25	1350 x 921 x 1505		66	665
	ASD 57	7.5 10 13	5.51 4.44 3.67	8 11 15	30	1350 x 921 x 1505		69	720
	**BSD 62**	7.5 10 13	5.65 4.45 3.60	8 11 15	30	1530 x 1005 x 1700	G 1 ½	69	980
	BSD 72	7.5 10 13	7.00 5.59 4.40	8 11 15	37	1530 x 1005 x 1700		70	1015
	BSD 81	7.5 10 13	8.16 6.79 5.43	8 11 15	45	1530 x 1005 x 1700		72	1100

Image	Model	Working pressure bar	FAD*) Overall package at working pressure m³/min	Max. operating pressure bar	Rated motor power kW	Dimensions W x D x H mm	Air connection	Sound pressure level **) dB(A)	Weight kg
CSD–HSD series									
	**CSD 85**	7.5 10 13	8.26 6.89 5.50	8.5 12 15	45	1760 x 1110 x 1900	G 2	70	1250
	CSD 105	7.5 10 13	10.14 8.18 6.74	8.5 12 15	55	1760 x 1110 x 1900		71	1290
	CSD 125	7.5 10 13	12.02 10.04 8.06	8.5 12 15	75	1760 x 1110 x 1900		72	1320
	**CSDX 140**	7.5 10 13	13.74 11.83 9.86	8.5 12 15	75	2110 x 1290 x 1950	G 2	71	1830
	CSDX 165	7.5 10 13	16.16 13.53 11.49	8.5 12 15	90	2110 x 1290 x 1950		72	1925
	**DSD 142**	7.5	13.62	9	75	2350 x 1730 x 2040	DN 65	68	2700
	DSD 172	7.5 10	16.12 13.20	8.5 12	90	2350 x 1730 x 2040		69	2850
	DSD 202	7.5 10 13	20.46 15.52 12.68	8.5 12 15	110	2350 x 1730 x 2040		70	3200
	DSD 238	7.5 10 13	23.80 19.92 14.80	8.5 12 15	132	2350 x 1730 x 2040		71	3400
	**DSDX 243**	7.5 10 13	24.10 20.12 14.90	8.5 12 15	132	2600 x 1980 x 2040	DN 80	70 78 ***)	3650
	DSDX 302	7.5 10 13	30.20 23.50 19.52	8.5 12 15	160	2600 x 1980 x 2040		71 78 ***)	4100
	**ESD 352**	7.5 10 13	36.2 29.72 23.1	8.5 12 15	200	2800 x 2000 x 2140	DN 125	75	4836
	ESD 442	7.5 10 13	42.2 35.4 28.92	8.5 12 15	250	2800 x 2000 x 2140		76	5000
	**FSD 471**	7.5 10 12	47.1 40.5 35.5	8 10 12	250	3000 x 2143 x 2360	DN 125	79	6625
	FSD 571	7.5 10 13	57.2 46.4 39.45	8 12 15	315	3000 x 2143 x 2360		79	6900
	**HSD 651**	7.5 10 13	66.1 53.4 43.0	8.5 12 15	360	3470 x 2145 x 2350	DN 150	71	8100
	HSD 711	7.5 10 13	71.8 59.4 46.2	8.5 12 15	400	3470 x 2145 x 2350		72	8500
	HSD 761	7.5 10 13	77.6 65.1 52.3	8.5 12 15	450	3470 x 2145 x 2350		72	8600
	HSD 831	7.5 10 13	83.4 70.8 58.4	8.5 12 15	500	3470 x 2145 x 2350		73	8700

*) Performance data in accordance with ISO 1217: 2009, Annex C. **) Sound pressure level as per ISO 2151 and basic standard ISO 9614-2, tolerance: ± 3 dB(A); ***) At high fan speed

Modular rotary screw compressors with refrigeration dryer & air receiver – to 15 kW

Image	Model	Working pressure bar	FAD*) overall package at working pressure m³/min	Max. operating pressure bar	Rated motor power kW	Dryer power consumption kW	Refrige-rant Type	Pressure dew point °C	Air receiver capacity l	Dimensions W x D x H mm	Air connec-tion	Sound pressure level **) dB(A)	Weight kg
SXC series													
	**SXC 3**	7.5 10	0.34 0.26	8 11	2.2	0.25	R 134a	+ 6	215	620 x 980 x 1480	G ¾	68	285
	SXC 4	7.5 10 13	0.45 0.36 0.26	8 11 15	3.0	0.25	R 134a	+ 6	215	620 x 980 x 1480		69	285
	SXC 6	7.5 10 13	0.60 0.48 0.37	8 11 15	4.0	0.30	R 134a	+ 6	215	620 x 980 x 1480		69	290
	SXC 8	7.5 10 13	0.80 0.67 0.54	8 11 15	5.5	0.30	R 134a	+ 6	215	620 x 980 x 1480		69	300
AIRCENTER Series													
	**AIRCENTER 3**	7.5 10	0.34 0.26	8 11	2.2	0.25	R 134a	+ 3	200	590 x 1090 x 1560	G ¾	59	285
	AIRCENTER 4	7.5 10 13	0.45 0.36 0.26	8 11 15	3	0.25	R 134a	+ 3	200	590 x 1090 x 1560		60	285
	AIRCENTER 6	7.5 10 13	0.60 0.48 0.37	8 11 15	4	0.27	R 134a	+ 3	200	590 x 1090 x 1560		61	290
	AIRCENTER 8	7.5 10 13	0.80 0.67 0.54	8 11 15	5.5	0.27	R 134a	+ 3	200	590 x 1090 x 1560		64	300
	**AIRCENTER 9**	7.5 10 13	0.90 0.75 0.56	8 11 15	5.5	0.35	R 134a	+ 3	270	630 x 1200 x 1716	G ¾	64	390
	AIRCENTER 12	7.5 10 13	1.20 1.01 0.77	8 11 15	7.5	0.35	R 134a	+ 3	270	630 x 1200 x 1716		65	400
	AIRCENTER 15	7.5 10 13	1.50 1.26 1.00	8 11 15	9	0.60	R 134a	+ 3	270	630 x 1200 x 1716		66	410
	AIRCENTER 22	7.5 10 13	2.00 1.68 1.32	8 11 15	11	0.52	R 134a	+ 3	350	750 x 1370 x 1880	G 1	66	579
	AIRCENTER 25	7.5 10 13	2.50 2.11 1.72	8 11 15	15	0.52	R 134a	+ 3	350	750 x 1370 x 1880		67	587

SX T–SK T series, modular with refrigeration dryer – to 15 kW

	**SX 3 T**	7.5 10	0.34 0.26	8 11	2.2	0.25	R 134a	+ 3	-	590 x 900 x 970	G ¾	59	185
	SX 4 T	7.5 10 13	0.45 0.36 0.26	8 11 15	3	0.25	R 134a	+ 3	-	590 x 900 x 970		60	185
	SX 6 T	7.5 10 13	0.60 0.48 0.37	8 11 15	4	0.27	R 134a	+ 3	-	590 x 900 x 970		61	190
	SX 8 T	7.5 10 13	0.80 0.67 0.54	8 11 15	5.5	0.27	R 134a	+ 3	-	590 x 900 x 970		64	200
	**SM 9 T**	7.5 10 13	0.90 0.75 0.56	8 11 15	5.5	0.35	R 134a	+ 3	-	630 x 1074 x 1100	G ¾	64	275
	SM 12 T	7.5 10 13	1.20 1.01 0.77	8 11 15	7.5	0.35	R 134a	+ 3	-	630 x 1074 x 1100		65	285
	SM 15 T	7.5 10 13	1.50 1.26 0.99	8 11 15	9	0.60	R 134a	+ 3	-	630 x 1074 x 1100		66	295
	**SK 22 T**	7.5 10 13	2.00 1.68 1.32	8 11 15	11	0.52	R 134a	+ 3	-	750 x 1240 x 1260	G 1	66	387
	SK 25 T	7.5 10 13	2.50 2.11 1.72	8 11 15	15	0.52	R 134a	+ 3	-	750 x 1240 x 1260		67	395

Modular rotary screw compressors with refrigeration dryer – to 132kW

Image	Model	Working pressure bar	FAD*) overall package at working pressure m³/min	Max. operating pressure bar	Rated motor power kW	Dryer power consumption kW	Refrige-rant Type	Pressure dew point °C	Air receiver capacity l	Dimensions W x D x H mm	Air connec-tion	Sound pressure level **) dB(A)	Weight kg
ASK T–DSD T series													
	**ASK 27 T**	7.5 10 13	2.60 2.18 1.70	8 11 15	15	0.68	R 134a	+ 3	-	1480 x 780 x 1255	G 1 ¼	65	467
	ASK 32 T	7.5 10 13	3.15 2.66 2.05	8 11 15	18.5	0.68	R 134a	+ 3	-	1480 x 780 x 1255		67	482
	ASK 35 T	7.5 10 13	3.50 2.96 2.37	8 11 15	22	0.68	R 134a	+ 3	-	1480 x 780 x 1255		69	487
	**ASD 32 T**	7.5 10 13	3.16 2.72 2.09	8 11 15	18.5	0.53	R 134a	+ 3	-	1850 x 921 x 1505	G 1 ¼	65	740
	ASD 37 T	7.5 10 13	3.90 3.12 2.65	8 11 15	22	0.53	R 134a	+ 3	-	1850 x 921 x 1505		66	820
	ASD 47 T	7.5 10 13	4.57 3.84 2.99	8 11 15	25	0.8	R 134a	+ 3	-	1850 x 921 x 1505		66	830
	ASD 57 T	7.5 10 13	5.51 4.44 3.67	8 11 15	30	0.8	R 134a	+ 3	-	1850 x 921 x 1505		69	890
	**BSD 62 T**	7.5 10 13	5.65 4.45 3.60	8 11 15	30	0.8	R 134a	+ 3	-	2080 x 1005 x 1700	G 1 ½	69	1200
	BSD 72 T	7.5 10 13	7.00 5.59 4.40	8 11 15	37	0.8	R 134a	+ 3	-	2080 x 1005 x 1700		70	1250
	BSD 81 T	7.5 10 13	8.16 6.79 5.43	8 11 15	45	1.1	R 134a	+ 3	-	2080 x 1005 x 1700	G 2	72	1350
	**CSD 85 T**	7.5 10 13	8.26 6.89 5.50	8.5 12 15	45	0.8	R 134a	+ 3	-	2160 x 1110 x 1900	G 2	70	1410
	CSD 105 T	7.5 10 13	10.14 8.18 6.74	8.5 12 15	55	0.8	R 134a	+ 3	-	2160 x 1110 x 1900		71	1450
	CSD 125 T	7.5 10 13	12.02 10.04 8.06	8.5 12 15	75	1.1	R 134a	+ 3	-	2160 x 1110 x 1900		72	1510
	**CSDX 140 T**	7.5 10 13	13.74 11.83 9.86	8.5 12 15	75	1.2	R 134a	+ 3	-	2510 x 1290 x 1950	G 2	71	2045
	CSDX 165 T	7.5 10 13	16.16 13.53 11.49	8.5 12 15	90	1.2	R 134a	+ 3	-	2510 x 1290 x 1950		72	2140
	**DSD 142 T**	7.5	13.62	9	75	2.1	R 134a	+ 3	-	3310 x 1730 x 2040	DN 65	68	3100
	DSD 172 T	7.5 10	16.12 13.20	8.5 12	90	2.1	R 134a	+ 3	-	3310 x 1730 x 2040		69	3250
	DSD 202 T	7.5 10 13	20.46 15.52 12.68	8.5 12 15	110	2.35	R 134a	+ 3	-	3310 x 1730 x 2040		70	3650
	DSD 238 T	7.5 10 13	23.80 19.92 14.80	8.5 12 15	132	2.35	R 134a	+ 3	-	3310 x 1730 x 2040		71 79***)	3850

*) Performance data in accordance with ISO 1217:2009, Annex C. **) Sound pressure level as per ISO 2151 and basic standard ISO 9614-2, tolerance: ± 3 dB(A); ***) At high fan speed

Modular rotary screw compressors with SIGMA FREQUENCY CONTROL – to 515 kW

Image	Model	Working pressure bar	FAD*) overall package at working pressure m³/min	Max. operating pressure bar	Rated motor power kW	min. pressure bandwidth bar	Speed range min.–max. rpm	Frequency range min.– max. Hz	Dimensions W x D x H mm	Air connection	Sound pressure level **) dB(A)	Weight kg
SM SFC–CSDX SFC series												
	**SM 12 SFC**	7.5 10 13	0.34 - 1.24 0.34 - 1.04 0.30 - 0.78	8 11 15	7.5	± 0,1	1200 - 3780 1500 - 3780 1800 - 3780	20 - 63 25 - 63 30 - 63	630 x 762 x 1100	G ¾	67	220
	**SK 22 SFC**	7.5 10 13	0.62 - 1.98 0.63 - 1.67 0.57 - 1.37	8 11 15	11	± 0,1	1200 - 3510 1500 - 3552 1800 - 3660	20 - 58.5 25 - 59.2 30 - 61.0	750 x 895 x 1260	G 1	67	329
	SK 25 SFC	7.5 10 13	0.81 - 2.55 0.84 - 2.25 0.83 - 1.90	8 11 15	15	± 0,1	1200 - 3660 1500 - 3696 1800 - 3872	20 - 61.0 25 - 61.6 30 - 64.5	750 x 895 x 1260	G 1	68	337
	**ASK 32 SFC**	7.5 10 13	0.77 - 2.90 0.59 - 2.38 0.67 - 1.84	8 11 15	18.5	± 0,1	1200 - 3900 1200 - 3960 1800 - 3780	20 - 65 20 - 66 30 - 63	1130 x 850 x 1255	G 1 ¼	68	425
	**ASD 32 SFC**	7.5 10	0.69 - 3.32 0.90 - 2.86	10	18.5	± 0,1	900 - 3690 1200 - 3240	15 - 61.5 20 - 54	1850 x 921 x 1505	G 1 ¼	67	715
	ASD 37 SFC	7.5 10 13	0.82 - 4.05 0.61 - 3.58 0.56 - 3.17	8.5 15 15	22	± 0,1	900 - 3840 900 - 4050 900 - 3600	15 - 64 15 - 67.5 15 - 60	1850 x 921 x 1505		68	790
	ASD 47 SFC	7.5 10 13	1.07 - 4.92 0.79 - 4.12 0.60 - 3.60	8.5 11 15	25	± 0,1	900 - 3780 900 - 3960 900 - 4200	15 - 63 15 - 66 15 - 70	1850 x 921 x 1505		68	800
	**BSD 72 SFC**	7.5 10 13	1.57 - 6.25 1.16 - 5.34 0.87 - 4.45	8.5 11 15	37	± 0,1	900 - 3330 900 - 3600 900 - 3720	15 - 55.5 15 - 60 15 - 62	2080 x 1005 x 1700	G 1 ½	72	1220
	**CSD 85 SFC**	7.5 10 13	1.95 - 8.08 1.48 - 6.91 1.07 - 5.92	8.5 12 15	45	± 0,1	900 - 3492 900 - 3730 900 - 4020	15 - 58.2 15 - 62.2 15 - 67	1760 x 1110 x 1900	G 2	71	1260
	CSD 105 SFC	7.5 10 13	2.19 - 9.85 1.90 - 8.35 1.36 - 6.88	8.5 12 15	55	± 0,1	900 - 3606 900 - 3690 900 - 3840	15 - 60.1 15 - 61.5 15 - 64	1760 x 1110 x 1900		72	1380
	CSD 125 SFC	7.5 10 13	2.84 - 12.00 2.05 - 10.53 1.79 - 8.75	8.5 12 15	75	± 0,1	900 - 3624 900 - 3900 900 - 4020	15 - 60.4 15 - 65 15 - 67	1760 x 1110 x 1900		73	1400
	**CSDX 140 SFC**	7.5 10 13	3.39 - 13.17 2.81 - 11.33 1.90 - 9.73	8.5 12 15	75	± 0,1	900 - 3330 900 - 3410 900 - 3660	15 - 55.5 15 - 56.8 15 - 61	2110 x 1290 x 1950	G 2	72	1835
	CSDX 165 SFC	7.5 10 13	3.84 - 15.84 3.29 - 13.84 2.70 - 11.70	8.5 12 15	90	± 0,1	900 - 3486 900 - 3590 900 - 3660	15 - 58.1 15 - 59.8 15 - 61	2110 x 1290 x 1950		73	2025
DSC SFC–HSD SFC series												
	**DSD 142 SFC**	7.5	3.60 - 14.80	9	75	± 0.1	450 - 1635	15 - 54.5	2905 x 1730 x 2040	DN 65	69	3100
	DSD 172 SFC	7.5 10	3.60 - 16.33 3.55 - 14.20	10	90	± 0.1	450 - 1815 450 - 1590	15 - 60.5 15 - 53	2905 x 1730 x 2040		70	3230
	DSD 202 SFC	7.5 10 13	4.25 - 20.30 4.00 - 17.30 3.25 - 14.95	10 10 15	110	± 0.1	450 - 1905 450 - 1680 450 -1770	15 - 63.5 15 - 56 15 - 59	2905 x 1730 x 2040		71	3730
	DSD 238 SFC	7.5 10 13	5.93 - 22.5 5.80 - 20.0 3.56 - 16.0	10 10 15	132	± 0.1	450 - 1650 450 - 1500 450 - 1620	15 - 55 15 - 50 15 - 54	2905 x 1730 x 2040		72 (79***)	3870
	**DSDX 243 SFC**	7.5 10 13	6.62 - 26.90 5.60 - 23.73 3.56 - 19.00	8.5 12 15	132	± 0.1	450 - 1680 450 - 1770 450 - 1920	15 - 56 15 - 59 15 - 64	3155 x 1945 x 2040	DN 80	71 (78***)	4150
	DSDX 302 SFC	7.5 10 13	6.62 - 30.60 5.60 - 26.70 3.56 - 21.10	8.5 12 15	160	± 0.1	450 - 1920 450 - 2010 450 - 2160	15 - 64 15 - 67 15 - 72	3155 x 1945 x 2040		72 (78***)	4600
	**ESD 352 SFC**	7.5 10 13	8.58 - 33.38 6.43- 27.43 5.17 - 23.70	8.5 12 15	200	± 0.1	450 - 1668 450 - 1730 450 - 1800	15 - 55.6 15 - 57.7 15 - 60	3100 x 2000 x 2140	DN 125	76	4848
	ESD 442 SFC	7.5 10 13	10.14 - 52.00 8.33 - 36.00 6.13 - 29.50	8.5 12 15	250	± 0.1	450 - 1746 450 - 1870 450 - 1920	15 - 58.2 15 - 62.3 15 - 64.0	3100 x 2000 x 2140		77	4876
	**FSD 571 SFC**	7.5 10 13	13.30 - 52.10 9.80 - 45.10 9.40 - 39.70	8.5 15 15	315	± 0.1	450 - 1665 450 - 1920 450 - 1710	15 - 55.5 15 - 64 15 - 57	3610 x 2143 x 2360	DN 125	80	7610
	**HSD 651 SFC**	7.5 10	10.1 - 66.0 8.4 - 56.1	8.5 12	382	± 0.1	450 - 1770 450 - 1830	15 - 59 15 - 61	4370 x 2145 x 2350	DN 150	73	9100
	HSD 761 SFC	7.5 10 13	11.7 - 75.9 9.8 - 63.8 8.0 - 54.0	8.5 12 15	410	± 0.1	450 - 1650 450 - 1710 450 - 1770	15 - 55 15 - 57 15 - 59	4370 x 2145 x 2350		74	9600
	HSD 831 SFC	7.5 10 13	11.8 - 86.0 9.8 - 73.6 9.4 - 62.6	8 12 15	515	± 0.1	450 - 1830 450 - 1890 450 - 1710	15 - 61 15 - 63 15 - 57	4370 x 2145 x 2350		75	10100

Modular rotary screw compressors with SIGMA FREQUENCY CONTROL and refrigeration dryer – to 132 kW

Image	Model	Working pressure bar	FAD*) overall package at working pressure m³/min	Max. operating pressure bar	Rated motor power kW	Speed range min.–max. rpm	Frequency range min.– max. Hz	Dryer power consumption kW	Refrigerant Type	Pressure dew point ° C	Dimensions W x D x H mm	Air connection	Sound pressure level **) dB(A)	Weight kg
AIRCENTER SFC series														
	**AIRCENTER 12 SFC**	7.5 10 13	0.34 - 1.24 0.34 - 1.04 0.30 - 0.78	8 11 15	7.5	1200 - 3780 1500 - 3780 1800 - 3780	20 - 63 25 - 63 30 - 63	0.35	R 134a	+ 3	630 x 1200 x 1716	G ¾	67	410
	**AIRCENTER 22 SFC**	7.5 10 13	0.62 - 1.98 0.63 - 1.67 0.57 - 1.37	8 11 15	11	1200 - 3510 1500 - 3552 1800 - 3660	20 - 58.5 25 - 59.2 30 - 61.0	0.52	R 134a	+ 3	750 x 1370 x 1880	G 1	67	596
	AIRCENTER 25 SFC	7.5 10 13	0.81 - 2.55 0.84 - 2.25 0.83 - 1.90	8 11 15	15	1200 - 3660 1500 - 3696 1800 - 3872	20 - 61.0 25 - 61.6 30 - 64.5	0.52	R 134a	+ 3	750 x 1370 x 1880	G 1	68	604
SM T SFC–DSD T SFC series														
	**SM 12 T SFC**	7.5 10 13	0.34 - 1.24 0.34 - 1.04 0.30 - 0.78	8 11 15	7.5	1200 - 3780 1500 - 3780 1800 - 3780	20 - 63 25 - 63 30 - 63	0.35	R 134a	+ 3	630 x 1074 x 1100	G ¾	67	295
	**SK 22 T SFC**	7.5 10 13	0.62 - 1.98 0.63 - 1.67 0.57 - 1.37	8 11 15	11	1200 - 3510 1500 - 3652 1800 - 3660	20 - 58.5 25 - 58.2 30 - 61.0	0.52	R 134a	+ 3	750 x 1240 x 1260	G 1	67	404
	SK 25 T SFC	7.5 10 13	0.81 - 2.55 0.84 - 2.25 0.83 - 1.90	8 11 15	15	1200 - 3660 1500 - 3696 1800 - 3872	20 - 61.0 25 - 61.6 30 - 64.5	0.52	R 134a	+ 3	750 x 1240 x 1260	G 1	68	412
	**ASK 32 T SFC**	7.5 10 13	0.77 - 2.90 0.59 - 2.38 0.67 - 1.84	8 11 15	18.5	1200 - 3900 1200 - 3960 1800 - 3780	20 - 65 20 - 66 30 - 63	0.68	R 134a	+ 3	1480 x 850 x 1255	G 1 ¼	68	500
	**ASD 32 T SFC**	7.5 10	0.69 - 3.32 0.90 - 2.86	10	18.5	900 - 3690 1200 - 3240	15 - 61.5 20 - 54	0.53	R 134a	+ 3	1850 x 921 x 1505		67	825
	ASD 37 T SFC	7.5 10 13	0.82 - 4.05 0.61 - 3.58 0.56 - 3.17	8.5 15 15	22	900 - 3840 900 - 4050 900 - 3600	15 - 64 15 - 67.5 15 - 60	0.53	R 134a	+ 3	1850 x 921 x 1505	G 1 ¼	68	900
	ASD 47 T SFC	7.5 10 13	1.07 - 4.92 0.79 - 4.12 0.60 - 3.60	8.5 11 15	25	900 - 3780 900 - 3960 900 - 4200	15 - 63 15 - 66 15 - 70	0.8	R 134a	+ 3	1850 x 921 x 1505		68	910
	**BSD 72 T SFC**	7.5 10 13	1.57 - 6.25 1.16 - 5.34 0.87 - 4.45	8.5 11 15	37	900 - 3330 900 - 3600 900 - 3720	15 - 55.5 15 - 60 15 - 62	0.8	R 134a	+ 3	2080 x 1005 x 1700	G 1 ½	72	1340
	**CSD 85 T SFC**	7.5 10 13	1.95 - 8.08 1.48 - 6.91 1.07 - 5.92	8.5 12 15	45	900 - 3492 900 - 3730 900 - 4020	15 - 58.2 15 - 62.2 15 - 67	0.8	R 134a	+ 3	2160 x 1110 x 1900	G 2	71	1420
	CSD 105 T SFC	7.5 10 13	2.19 - 9.85 1.90 - 8.35 1.36 - 6.88	8.5 12 15	55	900 - 3606 900 - 3690 900 - 3840	15 - 60.1 15 - 61.5 15 - 64	0.8	R 134a	+ 3	2160 x 1110 x 1900		72	1540
	CSD 125 T SFC	7.5 10 13	2.84 - 12.00 2.05 - 10.53 1.79 - 8.75	8.5 12 15	75	900 - 3624 900 - 3900 900 - 4020	15 - 60.4 15 - 65 15 - 67	1.1	R 134a	+ 3	2160 x 1110 x 1900		73	1590
	**CSDX 140 T SFC**	7.5 10 13	3.39 - 13.17 2.81 - 11.33 1.90 - 9.73	8.5 12 15	75	900 - 3330 900 - 3410 900 - 3660	15 - 55.5 15 - 56.8 15 - 61	1.2	R 134a	+ 3	2510 x 1290 x 1950	G 2	72	2050
	CSDX 165 T SFC	7.5 10 13	3.84 - 15.84 3.29 - 13.84 2.70 - 11.70	8.5 12 15	90	900 - 3486 900 - 3590 900 - 3660	15 - 58.1 15 - 59.8 15 - 61	1.2	R 134a	+ 3	2510 x 1290 x 1950		73	2240
	**DSD 142 T SFC**	7.5	3.60 - 14.80	9	75	450 - 1635	15 - 54.5	2.1	R 134a	+ 3	3310 x 1730 x 2040	DN 65	69	3400
	DSD 172 T SFC	7.5 10	3.60 - 16.33 3.55 - 14.20	10	90	450 - 1815 450 - 1590	15 - 60.5 15 - 53	2.1	R 134a	+ 3	3310 x 1730 x 2040		70	3530
	DSD 202 T SFC	7.5 10 13	4.25 - 20.30 4.00 - 17.30 3.25 - 14.95	10 10 15	110	450 - 1905 450 - 1680 450 - 1770	15 - 63.5 15 - 56 15 - 59	2.35	R 134a	+ 3	3310 x 1730 x 2040		71	4080
	DSD 238 T SFC	7.5 10 13	5.93 - 22.5 5.80 - 20.0 3.56 - 16.0	10 10 15	132	450 - 1650 450 - 1500 450 - 1620	15 - 55 15 - 50 15 - 54	2.35	R 134a	+ 3	3310x 1730 x 2040		72 79***)	4220

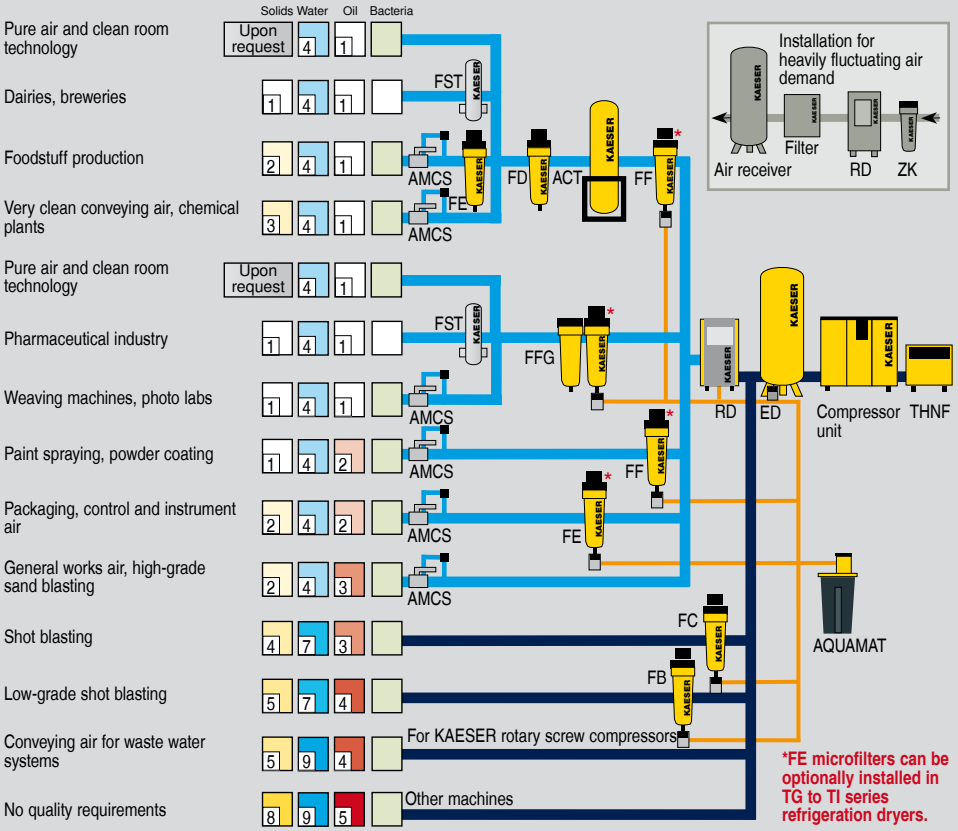
*) Performance data in accordance with ISO 1217:2009, Annex C. **) Sound pressure level as per ISO 2151 and basic standard ISO 9614-2, tolerance: ± 3 dB(A); ***) At high fan speed

HPC Compressed Air Systems

Choose the required grade of treatment according to your field of application:

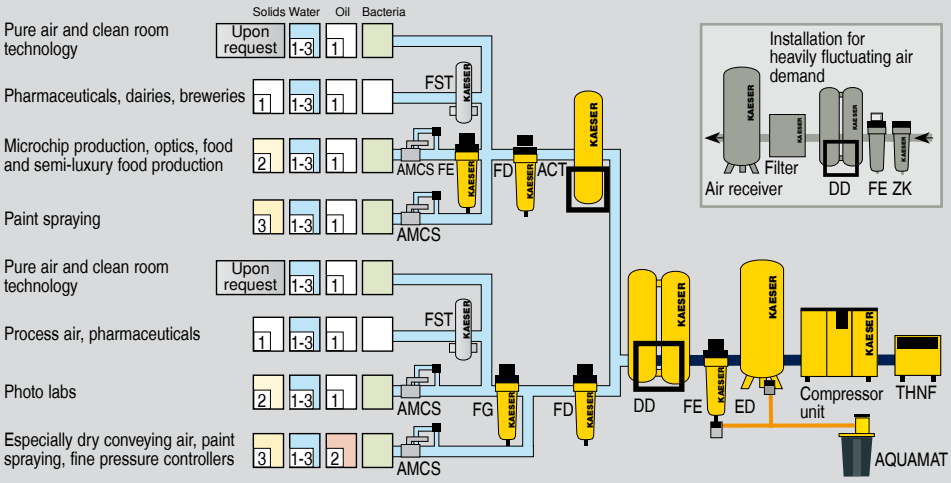
Air treatment using a refrigeration dryer (pressure dew point +3 °C)

Application examples: Selection of treatment classes to ISO 8573-1 (2010)



*FE microfilters can be optionally installed in TG to TI series refrigeration dryers.

For non frost protected air systems: Compressed air treatment with a desiccant dryer (down to -70 °C pressure dew point)



Explanation	
THNF	Bag filter
ZK	Centrifugal separator
ED	ECO DRAIN
FB / FC	Pre-filter
FD	Particulate filter
FE / FF	Microfilter
FG	Activated carbon filter
FFG	Activated carbon and microfilter combination
RD	Refrigeration dryer
DD	Desiccant dryers
ACT	Activated carbon adsorber
FST	Sterile filter, upon request
Aquamat	Aquamat
AMCS	Air-main charging system

Compressed air quality classes to ISO 8573-1(2010):

Solid particles/dust

Class	max. particle count per m³ of a particle size with d [µm]*		
	0.1 ≤ d ≤ 0.5	0.5 ≤ d ≤ 1.0	1.0 ≤ d ≤ 5.0
0	e.g. Consult KAESER regarding pure air and cleanroom technology		
1	≤ 20.000	≤ 400	≤ 10
2	≤ 400.000	≤ 6.000	≤ 100
3	Not defined	≤ 90.000	≤ 1.000
4	Not defined	Not defined	≤ 10.000
5	Not defined	Not defined	≤ 100.000
Class	Particle concentration C_p in mg/m³*		
6	$0 < C_p \leq 5$		
7	$5 < C_p \leq 10$		
X	$C_p > 10$		

Water

Class	Pressure dew point, in °C
0	e.g. Consult KAESER regarding pure air and cleanroom technology
1	≤ – 70 °C
2	≤ – 40 °C
3	≤ – 20 °C
4	≤ + 3 °C
5	≤ + 7 °C
6	≤ + 10 °C
Class	Concentration of liquid water C_W in g/m³*
7	$C_W \leq 0.5$
8	$0.5 < C_W \leq 5$
9	$5 < C_W \leq 10$
X	$C_W \leq 10$

Oil

Class	Total oil concentration (fluid, aerosol + gaseous) [mg/m³]*
0	e.g. Consult KAESER regarding pure air and cleanroom technology
1	≤ 0.01
2	≤ 0.1
3	≤ 1.0
4	≤ 5.0
X	> 5.0

*) At reference conditions 20 °C, 1 bar(a), 0% humidity

HPC Compressed Air Systems

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P-650HPC.5/12 Specifications are subject to change without notice.