

## Rotary Screw Compressors SX-HSD Series

### With the world-renowned SIGMA PROFILE $\mathbf{\hat{P}}^{\mathbf{\hat{x}}}$

Free air delivery: 0.26 to 86 m<sup>3</sup>/min – Pressure 5.5 to 15 bar

# **KAESER KOMPRESSOREN –** The global compressed air systems provider

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I COLEES

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

MARSHIE .....

The KAESER headquarters in Coburg currently employs approx. 1900 people. The facility covers an area of over 150,000 m<sup>2</sup> 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.

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# 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 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

costs.

### Save additional costs and benefit the environment with heat recovery:



### **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 cost savings through system optimisation





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

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<sub>2</sub> 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.







### **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/m<sup>3</sup>, 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.

Compressed air system Energy costs investment



Maintenance costs



Energy cost saving potential



### **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 maintenancefree 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.

E 11 U RAFE 100 SIGMACA **HSD 831** East 1 122 ESER 5 CSD 105 SIEMA 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 Intake air (Compressor) Fluid cooling Motor cooling air



### Save energy with the KAESER SIGMA PROFILE 🌣

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Compressed air system Energy costs investment



Maintenance costs



Potential energy cost savings



### **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.



### 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 maintenancefree. 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 m<sup>3</sup>/min Standard pressure: 8/11/15bar(g) Equipped with SIGMA CONTROL BASIC

Series: AIRCENTER Motor power: 2.2 to 15 kW FAD: 0.26 to 2.2 m<sup>3</sup>/mi Standard pressure: 8/11/15bar(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/mir 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<sub>2</sub> 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.













### **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.





### 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.

Compressed air system Energy costs





Energy cost saving potential



### **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.



### **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 levelcontrolled 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.











### 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.

### Image:

Series: SM SFC to HSD SFC Motor power: 7.5 to 515 kW FAD: 0.30 to 86 m<sup>3</sup>/min Standard pressure: 6 to 15 bar (g) SFC = SIGMA FREQUENCY CONTROL







### **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.

### **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  $\pm 0.1$  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.



## **SIGMA CONTROL 2 – The function keys in detail**



## **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 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

# COMPRESSORS

UP key scrolls the display text downwards



Info key - Access to current event information.

DOWN key scrolls through

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

Return key initiates jump to next submenu or accepts value.

Acknowledgement key acknowledges alarms and - when permitted - resets the



**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 I ED – indicates 'Compressor running, no air supply'

# 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 (patentpending) 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).



### **Compressed Air System**

### 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

· For clean compressed air Minimal pressure drop

### Centrifugal separator

Consistent degree of separation

 Galvanised both internally and externally as per DIN 50976 · Long service life

### Condensate drain

· Automatic electronic-controlled condensate drain

· Unrivalled reliability

No compressed air losses

### Oil / water separation system

· Treats compressor condensate · Complies with applicable water regulations · Approved by the Berlin Structural Engineering Institute Saves disposal costs

### **1** Air-main charging system

· Treated compressed air even when network is depressurised Significantly reduced leakage losses

### 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.

# **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).



### **Future-oriented**

Efficiency, reliability and exceptional user-friendliness are longstanding 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.













### **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.



### **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.

# 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.





### 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.



### **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.

# More and more users choose KAESER





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NA P







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### **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 compress 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<br>pressure | FAD*)<br>Overall package<br>at working<br>pressure | Max.<br>operating<br>pressure | Rated<br>motor<br>power | Dimensions<br>W x D x H | Air<br>connection               | Sound pressure<br>level **) | Weight | Image | Model       | Working<br>pressure | FAD*)<br>Overall package<br>at working<br>pressure | Max.<br>operating<br>pressure | Rated<br>motor<br>power | Dimensions<br>W x D x H | Air<br>connection | Sound pressure<br>level **) | Weight |
|--------------|---------------|---------------------|--|-------------------------------|-------------------------|-------------------------|---------------------------------|-----------------------------|--------|-------|-------------|---------------------|--|-------------------------------|-------------------------|-------------------------|-------------------|-----------------------------|--------|
|              | 0¥ 0¥ 1       | bar                 | m³/min   | bar                           | KW                      | mm                      |                                 | dB(A)                       | kg     |       |             | bar                 | m³/min   | bar                           | kW                      | mm                      |                   | dB(A)                       | kg     |
|              | SX – SK serie | <b>S</b>            | 0.24   | Q                             |                         |                         |                                 |                             |        |       | CSD-HSD sei | 75                  | 8 26   | 8.5                           |                         |                         |                   |                             |        |
|              | SX 3          | 10                  | 0.34   | o<br>11                       | 2.2                     | 590 x 632 x 970         |                                 | 59                          | 140    |       | CSD 85      | 10<br>13            | 6.89<br>5.50                                       | 12<br>15                      | 45                      | 1760 x 1110 x 1900      |                   | 70                          | 1250   |
|              | SX 4          | 7.5<br>10<br>13     | 0.45<br>0.36<br>0.26                               | 8<br>11<br>15                 | 3                       | 590 x 632 x 970         | G 3/.                           | 60                          | 140    |       | CSD 105     | 7.5<br>10<br>13     | 10.14<br>8.18<br>6.74                              | 8.5<br>12<br>15               | 55                      | 1760 x 1110 x 1900      | G 2               | 71                          | 1290   |
|              | SX 6          | 7.5<br>10<br>13     | 0.60<br>0.48<br>0.37                               | 8<br>11<br>15                 | 4                       | 590 x 632 x 970         | G 14                            | 61                          | 145    |       | CSD 125     | 7.5<br>10<br>13     | 12.02<br>10.04<br>8.06                             | 8.5<br>12<br>15               | 75                      | 1760 x 1110 x 1900      |                   | 72                          | 1320   |
|              | SX 8          | 7.5<br>10<br>13     | 0.80<br>0.67<br>0.54                               | 8<br>11<br>15                 | 5.5                     | 590 x 632 x 970         |                                 | 64                          | 155    |       | CSDX 140    | 7.5<br>10<br>13     | 13.74<br>11.83<br>9.86                             | 8.5<br>12<br>15               | 75                      | 2110 x 1290 x 1950      |                   | 71                          | 1830   |
|              | SM 9          | 7.5<br>10<br>13     | 0.90<br>0.75<br>0.56                               | 8<br>11<br>15                 | 5.5                     | 630 x 762 x 1100        |                                 | 64                          | 200    |       | CSDX 165    | 7.5<br>10<br>13     | 16.16<br>13.53<br>11.49                            | 8.5<br>12<br>15               | 90                      | 2110 x 1290 x 1950      | G 2               | 72                          | 1925   |
|              | SM 12         | 7.5<br>10           | 1.20<br>1.01                                       | 8<br>11                       | 7.5                     | 630 x 762 x 1100        | G 3/4                           | 65                          | 210    |       | DSD 142     | 7.5                 | 13.62  | 9                             | 75                      | 2350 x 1730 x 2040      |                   | 68                          | 2700   |
|              | 01145         | 7.5                 | 1.50   | 8                             | 0                       | 000 700 1100            |                                 | 00                          | 000    |       | DSD 172     | 7.5<br>10           | 16.12<br>13.20                                     | 8.5<br>12                     | 90                      | 2350 x 1730 x 2040      |                   | 69                          | 2850   |
|              | SM 15         | 10<br>13<br>7.5     | 1.26<br>1.00<br>2.00                               | 15<br>8                       | 9                       | 630 X 762 X 1100        |                                 | 00                          | 220    |       | DSD 202     | 7.5<br>10           | 20.46<br>15.52<br>12.68                            | 8.5<br>12<br>15               | 110                     | 2350 x 1730 x 2040      | DN 65             | 70                          | 3200   |
|              | SK 22         | 10<br>13            | 1.68<br>1.32                                       | 11<br>15                      | 11                      | 750 x 895 x 1260        | G 1                             | 66                          | 312    |       | DSD 238     | 7.5                 | 23.80  | 8.5<br>12                     | 132                     | 2350 x 1730 x 2040      |                   | 71                          | 3400   |
|              | SK 25         | 7.5<br>10<br>13     | 2.50<br>2.11<br>1.72                               | 8<br>11<br>15                 | 15                      | 750 x 895 x 1260        |                                 | 67                          | 320    |       | 202 200     | 13                  | 14.80  | 15                            |                         | 2000 x 1100 x 2010      |                   |                             | 0.00   |
|              | ASK series    |                     |  |                               |                         |                         |                                 |                             |        |       | DSDX 243    | 10<br>13            | 20.12<br>14.90                                     | 12<br>15                      | 132                     | 2600 x 1980 x 2040      | DN 80             | 70<br>78 ***)               | 3650   |
|              | ASK 27        | 7.5<br>10<br>13     | 2.60<br>2.18<br>1.70                               | 8<br>11<br>15                 | 15                      | 1130 x 780 x 1255       |                                 | 65                          | 390    |       | DSDX 302    | 7.5<br>10<br>13     | 30.20<br>23.50<br>19.52                            | 8.5<br>12<br>15               | 160                     | 2600 x 1980 x 2040      |                   | 71<br>78 ***)               | 4100   |
|              | ASK 32        | 7.5<br>10<br>13     | 3.15<br>2.66<br>2.05                               | 8<br>11<br>15                 | 18.5                    | 1130 x 780 x 1255       | G 1 <sup>1</sup> / <sub>4</sub> | 67                          | 405    |       | ESD 352     | 7.5<br>10<br>13     | 36.2<br>29.72<br>23.1                              | 8.5<br>12<br>15               | 200                     | 2800 x 2000 x 2140      | DN 125            | 75                          | 4836   |
| <b>Final</b> | ASK 35        | 7.5<br>10<br>13     | 3.50<br>2.96<br>2.37                               | 8<br>11<br>15                 | 22                      | 1130 x 780 x 1255       |                                 | 69                          | 420    |       | ESD 442     | 7.5<br>10<br>13     | 42.2<br>35.4<br>28.92                              | 8.5<br>12<br>15               | 250                     | 2800 x 2000 x 2140      | DN 125            | 76                          | 5000   |
|              | Rotary screv  | v compre            | essors with 1                                      | l:1 drive                     | e – to 50               | 0 kW                    |                                 |                             |        |       | FSD 471     | 7.5<br>10<br>12     | 47.1<br>40.5<br>35.5                               | 8<br>10<br>12                 | 250                     | 3000 x 2143 x 2360      |                   | 79                          | 6625   |
| Image        | Model         | Working<br>pressure | FAD*)<br>Overall package<br>at working             | Max.<br>operating<br>pressure | Rated<br>motor<br>power | Dimensions<br>W x D x H | Air<br>connection               | Sound pressure level **)    | Weight |       | FSD 571     | 7.5<br>10<br>13     | 57.2<br>46.4<br>39.45                              | 8<br>12<br>15                 | 315                     | 3000 x 2143 x 2360      | DN 125            | 79                          | 6900   |
|              |               | bar                 | pressure<br>m³/min                                 | bar                           | kW                      | mm                      |                                 | dB(A)                       | kg     |       | HSD 651     | 7.5<br>10           | 66.1<br>53.4                                       | 8.5<br>12                     | 360                     | 3470 x 2145 x 2350      |                   | 71                          | 8100   |
|              | ASD-BSD seri  | ies                 |  |                               |                         |                         |                                 | . ,                         |        |       |             | 13<br>7.5           | 43.0<br>71.8                                       | 15<br>8.5                     |                         |                         |                   |                             |        |
|              | ASD 32        | 7.5<br>10           | 3.16<br>2.72                                       | 8<br>11                       | 18.5                    | 1350 x 921 x 1505       |                                 | 65                          | 580    |       | HSD 711     | 10<br>13            | 59.4<br>46.2                                       | 12<br>15                      | 400                     | 3470 x 2145 x 2350      | DN 150            | 72                          | 8500   |
|              | ASD 37        | 13<br>7.5<br>10     | 2.09<br>3.90<br>3.12                               | 15<br>8<br>11                 | 22                      | 1350 x 921 x 1505       |                                 | 66                          | 655    |       | HSD 761     | 7.5<br>10<br>13     | 65.1<br>52.3                                       | 0.5<br>12<br>15               | 450                     | 3470 x 2145 x 2350      |                   | 72                          | 8600   |
|              |               | 13<br>7.5           | 2.65<br>4.57                                       | 15<br>8                       |                         |                         | G 1 <sup>1</sup> / <sub>4</sub> |                             |        |       | HSD 831     | 7.5<br>10<br>13     | 83.4<br>70.8<br>58.4                               | 8.5<br>12<br>15               | 500                     | 3470 x 2145 x 2350      |                   | 73                          | 8700   |

| Image | Model        | Working<br>pressure | FAD*)<br>Overall package<br>at working<br>pressure | Max.<br>operating<br>pressure | Rated<br>motor<br>power | Dimensions<br>W x D x H | Air<br>connection | Sound pressure<br>level **) | Weight |
|-------|--------------|---------------------|--|-------------------------------|-------------------------|-------------------------|-------------------|-----------------------------|--------|
|       |              | bar                 | m³/min   | bar                           | kW                      | mm                      |                   | dB(A)                       | kg     |
|       | ASD-BSD seri | ies                 |  |                               |                         |                         |                   |                             |        |
|       | ASD 32       | 7.5<br>10<br>13     | 3.16<br>2.72<br>2.09                               | 8<br>11<br>15                 | 18.5                    | 1350 x 921 x 1505       |                   | 65                          | 580    |
|       | ASD 37       | 7.5<br>10<br>13     | 3.90<br>3.12<br>2.65                               | 8<br>11<br>15                 | 22                      | 1350 x 921 x 1505       | G 11/.            | 66                          | 655    |
|       | ASD 47       | 7.5<br>10<br>13     | 4.57<br>3.84<br>2.99                               | 8<br>11<br>15                 | 25                      | 1350 x 921 x 1505       | GT /4             | 66                          | 665    |
|       | ASD 57       | 7.5<br>10<br>13     | 5.51<br>4.44<br>3.67                               | 8<br>11<br>15                 | 30                      | 1350 x 921 x 1505       |                   | 69                          | 720    |
|       | BSD 62       | 7.5<br>10<br>13     | 5.65<br>4.45<br>3.60                               | 8<br>11<br>15                 | 30                      | 1530 x 1005 x 1700      |                   | 69                          | 980    |
|       | BSD 72       | 7.5<br>10<br>13     | 7.00<br>5.59<br>4.40                               | 8<br>11<br>15                 | 37                      | 1530 x 1005 x 1700      | G 1 1/2           | 70                          | 1015   |
|       | BSD 81       | 7.5<br>10<br>13     | 8.16<br>6.79<br>5.43                               | 8<br>11<br>15                 | 45                      | 1530 x 1005 x 1700      |                   | 72                          | 1100   |

| Image | Model        | Working<br>pressure | FAD*)<br>Overall package<br>at working<br>pressure | Max.<br>operating<br>pressure | Rated<br>motor<br>power | Dimensions<br>W x D x H | Air<br>connection | Sound pressure<br>level **) | Weight |
|-------|--------------|---------------------|--|-------------------------------|-------------------------|-------------------------|-------------------|-----------------------------|--------|
|       |              | bar                 | m³/min   | bar                           | kW                      | mm                      |                   | dB(A)                       | kg     |
|       | CSD-HSD seri | ies                 |  |                               |                         |                         |                   |                             |        |
|       | CSD 85       | 7.5<br>10<br>13     | 8.26<br>6.89<br>5.50                               | 8.5<br>12<br>15               | 45                      | 1760 x 1110 x 1900      |                   | 70                          | 1250   |
|       | CSD 105      | 7.5<br>10<br>13     | 10.14<br>8.18<br>6.74                              | 8.5<br>12<br>15               | 55                      | 1760 x 1110 x 1900      | G 2               | 71                          | 1290   |
|       | CSD 125      | 7.5<br>10<br>13     | 12.02<br>10.04<br>8.06                             | 8.5<br>12<br>15               | 75                      | 1760 x 1110 x 1900      |                   | 72                          | 1320   |
|       | CSDX 140     | 7.5<br>10<br>13     | 13.74<br>11.83<br>9.86                             | 8.5<br>12<br>15               | 75                      | 2110 x 1290 x 1950      |                   | 71                          | 1830   |
|       | CSDX 165     | 7.5<br>10<br>13     | 16.16<br>13.53<br>11.49                            | 8.5<br>12<br>15               | 90                      | 2110 x 1290 x 1950      | G 2               | 72                          | 1925   |
|       | DSD 142      | 7.5                 | 13.62  | 9                             | 75                      | 2350 x 1730 x 2040      |                   | 68                          | 2700   |
|       | DSD 172      | 7.5<br>10           | 16.12<br>13.20                                     | 8.5<br>12                     | 90                      | 2350 x 1730 x 2040      |                   | 69                          | 2850   |
|       | DSD 202      | 7.5<br>10<br>13     | 20.46<br>15.52<br>12.68                            | 8.5<br>12<br>15               | 110                     | 2350 x 1730 x 2040      | DN 65             | 70                          | 3200   |
| •     | DSD 238      | 7.5<br>10<br>13     | 23.80<br>19.92<br>14.80                            | 8.5<br>12<br>15               | 132                     | 132 2350 x 1730 x 2040  |                   | 71                          | 3400   |
|       | DSDX 243     | 7.5<br>10<br>13     | 24.10<br>20.12<br>14.90                            | 8.5<br>12<br>15               | 132                     | 2600 x 1980 x 2040      | DN 00             | 70<br>78 ***)               | 3650   |
|       | DSDX 302     | 7.5<br>10<br>13     | 30.20<br>23.50<br>19.52                            | 8.5<br>12<br>15               | 160                     | 2600 x 1980 x 2040      | DIN 80            | 71<br>78 ***)               | 4100   |
|       | ESD 352      | 7.5<br>10<br>13     | 36.2<br>29.72<br>23.1                              | 8.5<br>12<br>15               | 200                     | 2800 x 2000 x 2140      | DN 125            | 75                          | 4836   |
|       | ESD 442      | 7.5<br>10<br>13     | 42.2<br>35.4<br>28.92                              | 8.5<br>12<br>15               | 250                     | 2800 x 2000 x 2140      | Divizo            | 76                          | 5000   |
|       | FSD 471      | 7.5<br>10<br>12     | 47.1<br>40.5<br>35.5                               | 8<br>10<br>12                 | 250                     | 3000 x 2143 x 2360      | DN 125            | 79                          | 6625   |
|       | FSD 571      | 7.5<br>10<br>13     | 57.2<br>46.4<br>39.45                              | 8<br>12<br>15                 | 315                     | 3000 x 2143 x 2360      | Divies            | 79                          | 6900   |
|       | HSD 651      | 7.5<br>10<br>13     | 66.1<br>53.4<br>43.0                               | 8.5<br>12<br>15               | 360                     | 3470 x 2145 x 2350      |                   | 71                          | 8100   |
|       | HSD 711      | 7.5<br>10<br>13     | 71.8<br>59.4<br>46.2                               | 8.5<br>12<br>15               | 400                     | 3470 x 2145 x 2350      | D                 | 72                          | 8500   |
|       | HSD 761      | 7.5<br>10<br>13     | 77.6<br>65.1<br>52.3                               | 8.5<br>12<br>15               | 450                     | 3470 x 2145 x 2350      | DN 150            | 72                          | 8600   |
|       | HSD 831      | 7.5<br>10<br>13     | 83.4<br>70.8<br>58.4                               | 8.5<br>12<br>15               | 500                     | 3470 x 2145 x 2350      |                   | 73                          | 8700   |

<sup>7</sup> Performance data in accordance with ISO 1217:2009, Annex C. <sup>7</sup> Sound pressure level as per ISO 2151 and basic standard ISO 9614-2, tolerance: ± 3 dB(A); <sup>77</sup> At high fan speed

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

### Modular rotary screw compressors with refrigeration dryer - to 132kW

| Image     | Model         | Working<br>pressure | FAD*) overall<br>package<br>at working<br>pressure | Max.<br>operating<br>pressure | Rated<br>motor<br>power | Dryer power consumption | Refrige-<br>rant | Pressure<br>dew<br>point | Air<br>receiver<br>capacity | Dimensions<br>W x D x H | Air<br>connec-<br>tion        | Sound<br>pressure<br>level<br>**) | Weight |
|-----------|---------------|---------------------|--|-------------------------------|-------------------------|-------------------------|------------------|--------------------------|-----------------------------|-------------------------|-------------------------------|-----------------------------------|--------|
|           |               | bar                 | m³/min   | bar                           | kW                      | kW                      | Туре             | °C                       | I                           | mm                      |                               | dB(A)                             | kg     |
|           | SXC series    |                     |  |                               |                         |                         |                  |                          |                             |                         |                               |                                   |        |
|           | SXC 3         | 7.5<br>10           | 0.34<br>0.26                                       | 8<br>11                       | 2.2                     | 0.25                    | R 134a           | + 6                      | 215                         | 620 x 980 x 1480        |                               | 68                                | 285    |
|           | SXC 4         | 7.5<br>10<br>13     | 0.45<br>0.36<br>0.26                               | 8<br>11<br>15                 | 3.0                     | 0.25                    | R 134a           | + 6                      | 215                         | 620 x 980 x 1480        |                               | 69                                | 285    |
|           | SXC 6         | 7.5<br>10<br>13     | 0.60<br>0.48<br>0.37                               | 8<br>11<br>15                 | 4.0                     | 0.30                    | R 134a           | + 6                      | 215                         | 620 x 980 x 1480        | G <sup>3</sup> / <sub>4</sub> | 69                                | 290    |
|           | SXC 8         | 7.5<br>10<br>13     | 0.80<br>0.67<br>0.54                               | 8<br>11<br>15                 | 5.5                     | 0.30                    | R 134a           | + 6                      | 215                         | 620 x 980 x 1480        |                               | 69                                | 300    |
|           | AIRCENTER S   | eries               |  |                               |                         |                         |                  |                          |                             |                         |                               |                                   |        |
|           | AIRCENTER 3   | 7.5<br>10           | 0.34<br>0.26                                       | 8<br>11                       | 2.2                     | 0.25                    | R 134a           | + 3                      | 200                         | 590 x 1090 x 1560       |                               | 59                                | 285    |
|           | AIRCENTER 4   | 7.5<br>10<br>13     | 0.45<br>0.36<br>0.26                               | 8<br>11<br>15                 | 3                       | 0.25                    | R 134a           | + 3                      | 200                         | 590 x 1090 x 1560       | G 3/.                         | 60                                | 285    |
|           | AIRCENTER 6   | 7.5<br>10<br>13     | 0.60<br>0.48<br>0.37                               | 8<br>11<br>15                 | 4                       | 0.27                    | R 134a           | + 3                      | 200                         | 590 x 1090 x 1560       | U 74                          | 61                                | 290    |
|           | AIRCENTER 8   | 7.5<br>10<br>13     | 0.80<br>0.67<br>0.54                               | 8<br>11<br>15                 | 5.5                     | 0.27                    | R 134a           | + 3                      | 200                         | 590 x 1090 x 1560       |                               | 64                                | 300    |
|           | AIRCENTER 9   | 7.5<br>10<br>13     | 0.90<br>0.75<br>0.56                               | 8<br>11<br>15                 | 5.5                     | 0.35                    | R 134a           | + 3                      | 270                         | 630 x 1200 x 1716       |                               | 64                                | 390    |
| <b>F1</b> | AIRCENTER 12  | 7.5<br>10<br>13     | 1.20<br>1.01<br>0.77                               | 8<br>11<br>15                 | 7.5                     | 0.35                    | R 134a           | + 3                      | 270                         | 630 x 1200 x 1716       | G 3/4                         | 65                                | 400    |
| <u> </u>  | AIRCENTER 15  | 7.5<br>10<br>13     | 1.50<br>1.26<br>1.00                               | 8<br>11<br>15                 | 9                       | 0.60                    | R 134a           | + 3                      | 270                         | 630 x 1200 x 1716       |                               | 66                                | 410    |
| <b> _</b> | AIRCENTER 22  | 7.5<br>10<br>13     | 2.00<br>1.68<br>1.32                               | 8<br>11<br>15                 | 11                      | 0.52                    | R 134a           | + 3                      | 350                         | 750 x 1370 x 1880       | 61                            | 66                                | 579    |
|           | AIRCENTER 25  | 7.5<br>10<br>13     | 2.50<br>2.11<br>1.72                               | 8<br>11<br>15                 | 15                      | 0.52                    | R 134a           | + 3                      | 350                         | 750 x 1370 x 1880       | uı                            | 67                                | 587    |
|           | SX T-SK T ser | ries, m             | odular w   | vith re                       | frige                   | ration dr               | yer –            | to 15                    | kW                          |                         |                               |                                   |        |
|           | SX 3 T        | 7.5<br>10           | 0.34<br>0.26                                       | 8<br>11                       | 2.2                     | 0.25                    | R 134a           | + 3                      |                             | 590 x 900 x 970         |                               | 59                                | 185    |
| <b>F1</b> | SX 4 T        | 7.5<br>10<br>13     | 0.45<br>0.36<br>0.26                               | 8<br>11<br>15                 | 3                       | 0.25                    | R 134a           | + 3                      |                             | 590 x 900 x 970         | G <sup>3</sup> /.             | 60                                | 185    |
|           | SX 6 T        | 7.5<br>10<br>13     | 0.60<br>0.48<br>0.37                               | 8<br>11<br>15                 | 4                       | 0.27                    | R 134a           | + 3                      |                             | 590 x 900 x 970         | G 74                          | 61                                | 190    |
|           | SX 8 T        | 7.5<br>10<br>13     | 0.80<br>0.67<br>0.54                               | 8<br>11<br>15                 | 5.5                     | 0.27                    | R 134a           | + 3                      | -                           | 590 x 900 x 970         |                               | 64                                | 200    |
| (84       | SM 9 T        | 7.5<br>10<br>13     | 0.90<br>0.75<br>0.56                               | 8<br>11<br>15                 | 5.5                     | 0.35                    | R 134a           | + 3                      |                             | 630 x 1074 x 1100       |                               | 64                                | 275    |
|           | SM 12 T       | 7.5<br>10<br>13     | 1.20<br>1.01<br>0.77                               | 8<br>11<br>15                 | 7.5                     | 0.35                    | R 134a           | + 3                      |                             | 630 x 1074 x 1100       | G 3/4                         | 65                                | 285    |
|           | SM 15 T       | 7.5<br>10<br>13     | 1.50<br>1.26<br>0.99                               | 8<br>11<br>15                 | 9                       | 0.60                    | R 134a           | + 3                      |                             | 630 x 1074 x 1100       |                               | 66                                | 295    |
|           | SK 22 T       | 7.5<br>10<br>13     | 2.00<br>1.68<br>1.32                               | 8<br>11<br>15                 | 11                      | 0.52                    | R 134a           | + 3                      |                             | 750 x 1240 x 1260       | 61                            | 66                                | 387    |
|           | SK 25 T       | 7.5<br>10<br>13     | 2.50<br>2.11<br>1.72                               | 8<br>11<br>15                 | 15                      | 0.52                    | R 134a           | + 3                      |                             | 750 x 1240 x 1260       | ar                            | 67                                | 395    |

| Image | Model       | Working pressure | FAD*) overall<br>package<br>at working<br>pressure | Max.<br>operating<br>pressure | Rated<br>motor<br>power | Dryer power consumption | Refrige-<br>rant | Pressure<br>dew<br>point | Air<br>receiver<br>capacity | Dimensions<br>W x D x H | Air<br>connec-<br>tion | Sound<br>pressure<br>level<br>**) | Weight |
|-------|-------------|------------------|--|-------------------------------|-------------------------|-------------------------|------------------|--------------------------|-----------------------------|-------------------------|------------------------|-----------------------------------|--------|
|       |             | bar              | m³/min   | bar                           | kW                      | kW                      | Туре             | °C                       | I                           | mm                      |                        | dB(A)                             | kg     |
|       | ASK T-DSD T | series           | ;  |                               |                         |                         |                  |                          |                             |                         |                        |                                   |        |
|       | ASK 27 T    | 7.5<br>10<br>13  | 2.60<br>2.18<br>1.70                               | 8<br>11<br>15                 | 15                      | 0.68                    | R 134a           | + 3                      | -                           | 1480 x 780 x 1255       |                        | 65                                | 467    |
|       | ASK 32 T    | 7.5<br>10<br>13  | 3.15<br>2.66<br>2.05                               | 8<br>11<br>15                 | 18.5                    | 0.68                    | R 134a           | + 3                      |                             | 1480 x 780 x 1255       | G 1 1/4                | 67                                | 482    |
|       | ASK 35 T    | 7.5<br>10<br>13  | 3.50<br>2.96<br>2.37                               | 8<br>11<br>15                 | 22                      | 0.68                    | R 134a           | + 3                      | -                           | 1480 x 780 x 1255       |                        | 69                                | 487    |
|       | ASD 32 T    | 7.5<br>10<br>13  | 3.16<br>2.72<br>2.09                               | 8<br>11<br>15                 | 18.5                    | 0.53                    | R 134a           | + 3                      |                             | 1850 x 921 x 1505       |                        | 65                                | 740    |
|       | ASD 37 T    | 7.5<br>10<br>13  | 3.90<br>3.12<br>2.65                               | 8<br>11<br>15                 | 22                      | 0.53                    | R 134a           | + 3                      |                             | 1850 x 921 x 1505       | 0.11/                  | 66                                | 820    |
|       | ASD 47 T    | 7.5<br>10<br>13  | 4.57<br>3.84<br>2.99                               | 8<br>11<br>15                 | 25                      | 0.8                     | R 134a           | + 3                      |                             | 1850 x 921 x 1505       | G T 74                 | 66                                | 830    |
|       | ASD 57 T    | 7.5<br>10<br>13  | 5.51<br>4.44<br>3.67                               | 8<br>11<br>15                 | 30                      | 0.8                     | R 134a           | + 3                      | -                           | 1850 x 921 x 1505       |                        | 69                                | 890    |
|       | BSD 62 T    | 7.5<br>10<br>13  | 5.65<br>4.45<br>3.60                               | 8<br>11<br>15                 | 30                      | 0.8                     | R 134a           | + 3                      |                             | 2080 x 1005 x 1700      | 6.11/                  | 69                                | 1200   |
|       | BSD 72 T    | 7.5<br>10<br>13  | 7.00<br>5.59<br>4.40                               | 8<br>11<br>15                 | 37                      | 0.8                     | R 134a           | + 3                      | -                           | 2080 x 1005 x 1700      | Gi 1 '/2               | 70                                | 1250   |
|       | BSD 81 T    | 7.5<br>10<br>13  | 8.16<br>6.79<br>5.43                               | 8<br>11<br>15                 | 45                      | 1.1                     | R 134a           | + 3                      |                             | 2080 x 1005 x 1700      | G 2                    | 72                                | 1350   |
|       | CSD 85 T    | 7.5<br>10<br>13  | 8.26<br>6.89<br>5.50                               | 8.5<br>12<br>15               | 45                      | 0.8                     | R 134a           | + 3                      |                             | 2160 x 1110 x 1900      |                        | 70                                | 1410   |
|       | CSD 105 T   | 7.5<br>10<br>13  | 10.14<br>8.18<br>6.74                              | 8.5<br>12<br>15               | 55                      | 0.8                     | R 134a           | + 3                      | -                           | 2160 x 1110 x 1900      | G 2                    | 71                                | 1450   |
|       | CSD 125 T   | 7.5<br>10<br>13  | 12.02<br>10.04<br>8.06                             | 8.5<br>12<br>15               | 75                      | 1.1                     | R 134a           | + 3                      | -                           | 2160 x 1110 x 1900      |                        | 72                                | 1510   |
|       | CSDX 140 T  | 7.5<br>10<br>13  | 13.74<br>11.83<br>9.86                             | 8.5<br>12<br>15               | 75                      | 1.2                     | R 134a           | + 3                      | -                           | 2510 x 1290 x 1950      | 62                     | 71                                | 2045   |
|       | CSDX 165 T  | 7.5<br>10<br>13  | 16.16<br>13.53<br>11.49                            | 8.5<br>12<br>15               | 90                      | 1.2                     | R 134a           | + 3                      | -                           | 2510 x 1290 x 1950      | άz                     | 72                                | 2140   |
|       | DSD 142 T   | 7.5              | 13.62  | 9                             | 75                      | 2.1                     | R 134a           | + 3                      | -                           | 3310 x 1730 x 2040      |                        | 68                                | 3100   |
|       | DSD 172 T   | 7.5<br>10        | 16.12<br>13.20                                     | 8.5<br>12                     | 90                      | 2.1                     | R 134a           | + 3                      |                             | 3310 x 1730 x 2040      |                        | 69                                | 3250   |
|       | DSD 202 T   | 7.5<br>10<br>13  | 20.46<br>15.52<br>12.68                            | 8.5<br>12<br>15               | 110                     | 2.35                    | R 134a           | + 3                      | -                           | 3310 x 1730 x 2040      | DN 65                  | 70                                | 3650   |
|       | DSD 238 T   | 7.5<br>10<br>13  | 23.80<br>19.92<br>14.80                            | 8.5<br>12<br>15               | 132                     | 2.35                    | R 134a           | + 3                      | -                           | 3310 x 1730 x 2040      |                        | 71<br>79***)                      | 3850   |

<sup>9</sup> Performance data in accordance with ISO 1217: 2009, Annex C. <sup>9</sup> Sound pressure level as per ISO 2151 and basic standard ISO 9614-2, tolerance: ± 3 dB(A); <sup>9</sup> At high fan speed

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

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

<sup>\*)</sup> Pe

|            |              | -                   |  |                               |                         |                               |   | -                                   |                         |                               |                                   |        |
|------------|--------------|---------------------|--|-------------------------------|-------------------------|-------------------------------|---|-------------------------------------|-------------------------|-------------------------------|-----------------------------------|--------|
| Image      | Model        | Working<br>pressure | FAD*) overall<br>package<br>at working pressure              | Max.<br>operating<br>pressure | Rated<br>motor<br>power | min.<br>pressure<br>bandwidth | Speed range<br>minmax.                    | Frequency<br>range<br>min.– max.    | Dimensions<br>W x D x H | Air<br>connec-<br>tion        | Sound<br>pressure<br>level<br>**) | Weight |
|            |              | bar                 | m³/min   | bar                           | kW                      | bar                           | rpm                                       | Hz                                  | mm                      |                               | dB(A)                             | kg     |
|            | SM SFC-CSD   | X SFC               | series   |                               |                         |                               |   |                                     |                         |                               |                                   |        |
|            | SM 12 SFC    | 7.5<br>10<br>13     | 0.34 - 1.24<br>0.34 - 1.04<br>0.30 - 0.78                    | 8<br>11<br>15                 | 7.5                     | ± 0,1                         | 1200 - 3780<br>1500 - 3780<br>1800 - 3780 | 20 - 63<br>25 - 63<br>30 - 63       | 630 x 762 x 1100        | G <sup>3</sup> / <sub>4</sub> | 67                                | 220    |
| <b>[</b> ] | SK 22 SFC    | 7.5<br>10<br>13     | 0.62 - 1.98<br>0.63 - 1.67<br>0.57 - 1.37                    | 8<br>11<br>15                 | 11                      | ± 0,1                         | 1200 - 3510<br>1500 - 3552<br>1800 - 3660 | 20 - 58.5<br>25 - 59.2<br>30 - 61.0 | 750 x 895 x 1260        | G 1                           | 67                                | 329    |
|            | SK 25 SFC    | 7.5<br>10<br>13     | 0.81 - 2.55<br>0.84 - 2.25<br>0.83 - 1.90                    | 8<br>11<br>15                 | 15                      | ± 0,1                         | 1200 - 3660<br>1500 - 3696<br>1800 - 3872 | 20 - 61.0<br>25 - 61.6<br>30 - 64.5 | 750 x 895 x 1260        | G 1                           | 68                                | 337    |
|            | ASK 32 SFC   | 7.5<br>10<br>13     | 0.77 - 2.90<br>0.59 - 2.38<br>0.67 - 1.84                    | 8<br>11<br>15                 | 18.5                    | ± 0,1                         | 1200 - 3900<br>1200 - 3960<br>1800 - 3780 | 20 - 65<br>20 - 66<br>30 - 63       | 1130 x 850 x 1255       | G 1 1/4                       | 68                                | 425    |
|            | ASD 32 SFC   | 7.5<br>10           | 0.69 - 3.32<br>0.90 - 2.86                                   | 10                            | 18.5                    | ± 0,1                         | 900 - 3690<br>1200 - 3240                 | 15 - 61.5<br>20 - 54                | 1850 x 921 x 1505       |                               | 67                                | 715    |
|            | ASD 37 SFC   | 7.5<br>10<br>13     | 0.82 - 4.05<br>0.61 - 3.58<br>0.56 - 3.17                    | 8.5<br>15<br>15               | 22                      | ± 0,1                         | 900 - 3840<br>900 - 4050<br>900 - 3600    | 15 - 64<br>15 - 67.5<br>15 - 60     | 1850 x 921 x 1505       | G 1 1/4                       | 68                                | 790    |
|            | ASD 47 SFC   | 7.5<br>10<br>13     | 1.07 - 4.92<br>0.79 - 4.12<br>0.60 - 3.60                    | 8.5<br>11<br>15               | 25                      | ± 0,1                         | 900 - 3780<br>900 - 3960<br>900 - 4200    | 15 - 63<br>15 - 66<br>15 - 70       | 1850 x 921 x 1505       |                               | 68                                | 800    |
|            | BSD 72 SFC   | 7.5<br>10<br>13     | 1.57 - 6.25<br>1.16 - 5.34<br>0.87 - 4.45                    | 8.5<br>11<br>15               | 37                      | ± 0,1                         | 900 - 3330<br>900 - 3600<br>900 - 3720    | 15 - 55.5<br>15 - 60<br>15 - 62     | 2080 x 1005 x 1700      | G 1 1/2                       | 72                                | 1220   |
|            | CSD 85 SFC   | 7.5<br>10<br>13     | 1.95 - 8.08<br>1.48 - 6.91<br>1.07 - 5.92                    | 8.5<br>12<br>15               | 45                      | ± 0,1                         | 900 - 3492<br>900 - 3730<br>900 - 4020    | 15 - 58.2<br>15 - 62.2<br>15 - 67   | 1760 x 1110 x 1900      |                               | 71                                | 1260   |
|            | CSD 105 SFC  | 7.5<br>10<br>13     | 2.19 - 9.85<br>1.90 - 8.35<br>1.36 - 6.88                    | 8.5<br>12<br>15               | 55                      | ± 0,1                         | 900 - 3606<br>900 - 3690<br>900 - 3840    | 15 - 60.1<br>15 - 61.5<br>15 - 64   | 1760 x 1110 x 1900      | G 2                           | 72                                | 1380   |
|            | CSD 125 SFC  | 7.5<br>10<br>13     | 2.84 - 12.00<br>2.05 - 10.53<br>1.79 - 8.75                  | 8.5<br>12<br>15               | 75                      | ± 0,1                         | 900 - 3624<br>900 - 3900<br>900 - 4020    | 15 - 60.4<br>15 - 65<br>15 - 67     | 1760 x 1110 x 1900      |                               | 73                                | 1400   |
|            | CSDX 140 SFC | 7.5<br>10<br>13     | 3.39 - 13.17<br>2.81 - 11.33<br>1.90 - 9.73                  | 8.5<br>12<br>15               | 75                      | ± 0,1                         | 900 - 3330<br>900 - 3410<br>900 - 3660    | 15 - 55.5<br>15 - 56.8<br>15 - 61   | 2110 x 1290 x 1950      | • •                           | 72                                | 1835   |
|            | CSDX 165 SFC | 7.5<br>10<br>13     | 3.84 - 15.84<br>3.29 - 13.84<br>2.70 - 11.70                 | 8.5<br>12<br>15               | 90                      | ± 0,1                         | 900 - 3486<br>900 - 3590<br>900 - 3660    | 15 - 58.1<br>15 - 59.8<br>15 - 61   | 2110 x 1290 x 1950      | G2                            | 73                                | 2025   |
|            | DSC SFC-HSI  | D 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      |                               | 69                                | 3100   |
|            | DSD 172 SEC  | 7.5                 | 3.60 - 16.33   | 10                            | 90                      | + 0.1                         | 450 - 1815                                | 15 - 60.5                           | 2905 x 1730 x 2040      |                               | 70                                | 3230   |
|            | DSD 202 SFC  | 10<br>7.5<br>10     | 3.55 - 14.20<br>4.25 - 20.30<br>4.00 - 17.30<br>2.25 - 14.05 | 10<br>10<br>10                | 110                     | ± 0.1                         | 450 - 1590<br>450 - 1905<br>450 - 1680    | 15 - 53<br>15 - 63.5<br>15 - 56     | 2905 x 1730 x 2040      | DN 65                         | 71                                | 3730   |
|            | DSD 238 SFC  | 7.5<br>10<br>13     | 5.93 - 22.5<br>5.80 - 20.0<br>3.56 - 16.0                    | 10<br>10<br>15                | 132                     | ± 0.1                         | 450 - 1650<br>450 - 1500<br>450 - 1620    | 15 - 55<br>15 - 50<br>15 - 54       | 2905 x 1730 x 2040      |                               | 72<br>(79***)                     | 3870   |
|            | DSDX 243 SFC | 7.5<br>10<br>13     | 6.62 - 26.90<br>5.60 - 23.73<br>3.56 - 19.00                 | 8.5<br>12<br>15               | 132                     | ± 0.1                         | 450 - 1680<br>450 - 1770<br>450 - 1920    | 15 - 56<br>15 - 59<br>15 - 64       | 3155 x 1945 x 2040      |                               | 71<br>(78***)                     | 4150   |
|            | DSDX 302 SFC | 7.5<br>10<br>13     | 6.62 - 30.60<br>5.60 - 26.70<br>3.56 - 21.10                 | 8.5<br>12<br>15               | 160                     | ± 0.1                         | 450 - 1920<br>450 - 2010<br>450 - 2160    | 15 - 64<br>15 - 67<br>15 - 72       | 3155 x 1945 x 2040      | DN 80                         | 72<br>(78***)                     | 4600   |
|            | ESD 352 SFC  | 7.5<br>10<br>13     | 8.58 - 33.38<br>6.43- 27.43<br>5.17 - 23.70                  | 8.5<br>12<br>15               | 200                     | ± 0.1                         | 450 - 1668<br>450 - 1730<br>450 - 1800    | 15 - 55.6<br>15 - 57.7<br>15 - 60   | 3100 x 2000 x 2140      | DU 100                        | 76                                | 4848   |
|            | ESD 442 SFC  | 7.5<br>10<br>13     | 10.14 - 52.00<br>8.33 - 36.00<br>6.13 - 29.50                | 8.5<br>12<br>15               | 250                     | ± 0.1                         | 450 - 1746<br>450 - 1870<br>450 - 1920    | 15 - 58.2<br>15 - 62.3<br>15 - 64.0 | 3100 x 2000 x 2140      | UN 125                        | 77                                | 4876   |
|            | FSD 571 SFC  | 7.5<br>10<br>13     | 13.30 - 52.10<br>9.80 - 45.10<br>9.40 - 39.70                | 8.5<br>15<br>15               | 315                     | ± 0.1                         | 450 - 1665<br>450 - 1920<br>450 - 1710    | 15 - 55.5<br>15 - 64<br>15 - 57     | 3610 x 2143 x 2360      | DN 125                        | 80                                | 7610   |
|            | HSD 651 SFC  | 7.5<br>10           | 10.1 - 66.0<br>8.4 - 56.1                                    | 8.5<br>12                     | 382                     | ± 0.1                         | 450 - 1770<br>450 - 1830                  | 15 - 59<br>15 - 61                  | 4370 x 2145 x 2350      |                               | 73                                | 9100   |
|            | HSD 761 SFC  | 7.5<br>10<br>13     | 11.7 - 75.9<br>9.8 - 63.8<br>8.0 - 54.0                      | 8.5<br>12<br>15               | 410                     | ± 0.1                         | 450 - 1650<br>450 - 1710<br>450 - 1770    | 15 - 55<br>15 - 57<br>15 - 59       | 4370 x 2145 x 2350      | DN 150                        | 74                                | 9600   |
|            | HSD 831 SFC  | 7.5<br>10<br>13     | 11.8 - 86.0<br>9.8 - 73.6<br>9.4 - 62.6                      | 8<br>12<br>15                 | 515                     | ± 0.1                         | 450 - 1830<br>450 - 1890<br>450 - 1710    | 15 - 61<br>15 - 63<br>15 - 57       | 4370 x 2145 x 2350      |                               | 75                                | 10100  |

|                             |                          |                     |  |                                 |                         |   |                                     | geradio                 |                  |                               |                         |                                 |                                 |        |
|-----------------------------|--------------------------|---------------------|--|---------------------------------|-------------------------|---|-------------------------------------|-------------------------|------------------|-------------------------------|-------------------------|---------------------------------|---------------------------------|--------|
| Image                       | Model                    | Working<br>pressure | FAD*) overall<br>package<br>at working<br>pressure | Max.<br>opera-<br>ting<br>pres- | Rated<br>motor<br>power | Speed range<br>minmax.                    | Frequency<br>range<br>min.–<br>max. | Dryer power consumption | Refrige-<br>rant | Pres-<br>sure<br>dew<br>point | Dimensions<br>W x D x H | Air<br>connec-<br>tion          | Sound<br>pres-<br>sure<br>level | Weight |
|                             |                          | bar                 | m³/min   | bar                             | kW                      | rpm                                       | Hz                                  | kW                      | Туре             | °C                            | mm                      |                                 | dB(A)                           | kg     |
|                             | AIRCENTER S              | FC se               | ries   |                                 |                         |   |                                     |                         |                  |                               |                         |                                 |                                 |        |
|                             | AIRCENTER 12 SFC         | 7.5<br>10<br>13     | 0.34 - 1.24<br>0.34 - 1.04<br>0.30 - 0.78          | 8<br>11<br>15                   | 7.5                     | 1200 - 3780<br>1500 - 3780<br>1800 - 3780 | 20 - 63<br>25 - 63<br>30 - 63       | 0.35                    | R 134a           | + 3                           | 630 x 1200 x 1716       | G <sup>3</sup> /4               | 67                              | 410    |
| <b>[</b> ]                  | AIRCENTER 22 SFC         | 7.5<br>10<br>13     | 0.62 - 1.98<br>0.63 - 1.67<br>0.57 - 1.37          | 8<br>11<br>15                   | 11                      | 1200 - 3510<br>1500 - 3552<br>1800 - 3660 | 20 - 58.5<br>25 - 59.2<br>30 - 61.0 | 0.52                    | R 134a           | + 3                           | 750 x 1370 x 1880       | G 1                             | 67                              | 596    |
|                             | AIRCENTER 25 SFC         | 7.5<br>10<br>13     | 0.81 - 2.55<br>0.84 - 2.25<br>0.83 - 1.90          | 8<br>11<br>15                   | 15                      | 1200 - 3660<br>1500 - 3696<br>1800 - 3872 | 20 - 61.0<br>25 - 61.6<br>30 - 64.5 | 0.52                    | R 134a           | + 3                           | 750 x 1370 x 1880       | G 1                             | 68                              | 604    |
|                             | SM T SFC-DS              | D T SI              | C serie  | 5                               |                         |   |                                     |                         |                  |                               |                         |                                 |                                 |        |
|                             | SM 12 T SFC              | 7.5<br>10<br>13     | 0.34 - 1.24<br>0.34 - 1.04<br>0.30 - 0.78          | 8<br>11<br>15                   | 7.5                     | 1200 - 3780<br>1500 - 3780<br>1800 - 3780 | 20 - 63<br>25 - 63<br>30 - 63       | 0.35                    | R 134a           | + 3                           | 630 x 1074 x 1100       | G 3/4                           | 67                              | 295    |
| <b>(</b> ]                  | SK 22 T SFC              | 7.5<br>10<br>13     | 0.62 - 1.98<br>0.63 - 1.67<br>0.57 - 1.37          | 8<br>11<br>15                   | 11                      | 1200 - 3510<br>1500 - 3652<br>1800 - 3660 | 20 - 58.5<br>25 - 58.2<br>30 - 61.0 | 0.52                    | R 134a           | + 3                           | 750 x 1240 x 1260       | G 1                             | 67                              | 404    |
|                             | SK 25 T SFC              | 7.5<br>10<br>13     | 0.81 - 2.55<br>0.84 - 2.25<br>0.83 - 1.90          | 8<br>11<br>15                   | 15                      | 1200 - 3660<br>1500 - 3696<br>1800 - 3872 | 20 - 61.0<br>25 - 61.6<br>30 - 64.5 | 0.52                    | R 134a           | + 3                           | 750 x 1240 x 1260       | G 1                             | 68                              | 412    |
|                             | ASK 32 T SFC             | 7.5<br>10<br>13     | 0.77 - 2.90<br>0.59 - 2.38<br>0.67 - 1.84          | 8<br>11<br>15                   | 18.5                    | 1200 - 3900<br>1200 - 3960<br>1800 - 3780 | 20 - 65<br>20 - 66<br>30 - 63       | 0.68                    | R 134a           | + 3                           | 1480 x 850 x 1255       | G 1 ¼                           | 68                              | 500    |
|                             | ASD 32 T SFC             | 7.5<br>10           | 0.69 - 3.32<br>0.90 - 2.86                         | 10                              | 18.5                    | 900 - 3690<br>1200 - 3240                 | 15 - 61.5<br>20 - 54                | 0.53                    | R 134a           | + 3                           | 1850 x 921 x 1505       |                                 | 67                              | 825    |
|                             | ASD 37 T SFC             | 7.5<br>10<br>13     | 0.82 - 4.05<br>0.61 - 3.58<br>0.56 - 3.17          | 8.5<br>15<br>15                 | 22                      | 900 - 3840<br>900 - 4050<br>900 - 3600    | 15 - 64<br>15 - 67.5<br>15 - 60     | 0.53                    | R 134a           | + 3                           | 1850 x 921 x 1505       | G 1 <sup>1</sup> / <sub>4</sub> | 68                              | 900    |
|                             | ASD 47 T SFC             | 7.5<br>10<br>13     | 1.07 - 4.92<br>0.79 - 4.12<br>0.60 - 3.60          | 8.5<br>11<br>15                 | 25                      | 900 - 3780<br>900 - 3960<br>900 - 4200    | 15 - 63<br>15 - 66<br>15 - 70       | 0.8                     | R 134a           | + 3                           | 1850 x 921 x 1505       |                                 | 68                              | 910    |
|                             | BSD 72 T SFC             | 7.5<br>10<br>13     | 1.57 - 6.25<br>1.16 - 5.34<br>0.87 - 4.45          | 8.5<br>11<br>15                 | 37                      | 900 - 3330<br>900 - 3600<br>900 - 3720    | 15 - 55.5<br>15 - 60<br>15 - 62     | 0.8                     | R 134a           | + 3                           | 2080 x 1005 x 1700      | G 1 1/2                         | 72                              | 1340   |
|                             | CSD 85 T SFC             | 7.5<br>10<br>13     | 1.95 - 8.08<br>1.48 - 6.91<br>1.07 - 5.92          | 8.5<br>12<br>15                 | 45                      | 900 - 3492<br>900 - 3730<br>900 - 4020    | 15 - 58.2<br>15 - 62.2<br>15 - 67   | 0.8                     | R 134a           | + 3                           | 2160 x 1110 x 1900      |                                 | 71                              | 1420   |
|                             | CSD 105 T SFC            | 7.5<br>10<br>13     | 2.19 - 9.85<br>1.90 - 8.35<br>1.36 - 6.88          | 8.5<br>12<br>15                 | 55                      | 900 - 3606<br>900 - 3690<br>900 - 3840    | 15 - 60.1<br>15 - 61.5<br>15 - 64   | 0.8                     | R 134a           | + 3                           | 2160 x 1110 x 1900      | G 2                             | 72                              | 1540   |
|                             | CSD 125 T SFC            | 7.5<br>10<br>13     | 2.84 - 12.00<br>2.05 - 10.53<br>1.79 - 8.75        | 8.5<br>12<br>15                 | 75                      | 900 - 3624<br>900 - 3900<br>900 - 4020    | 15 - 60.4<br>15 - 65<br>15 - 67     | 1.1                     | R 134a           | + 3                           | 2160 x 1110 x 1900      |                                 | 73                              | 1590   |
|                             | CSDX 140 T SFC           | 7.5<br>10<br>13     | 3.39 - 13.17<br>2.81 - 11.33<br>1.90 - 9.73        | 8.5<br>12<br>15                 | 75                      | 900 - 3330<br>900 - 3410<br>900 - 3660    | 15 - 55.5<br>15 - 56.8<br>15 - 61   | 1.2                     | R 134a           | + 3                           | 2510 x 1290 x 1950      |                                 | 72                              | 2050   |
|                             | CSDX 165 T SFC           | 7.5<br>10<br>13     | 3.84 - 15.84<br>3.29 - 13.84<br>2.70 - 11.70       | 8.5<br>12<br>15                 | 90                      | 900 - 3486<br>900 - 3590<br>900 - 3660    | 15 - 58.1<br>15 - 59.8<br>15 - 61   | 1.2                     | R 134a           | + 3                           | 2510 x 1290 x 1950      | G 2                             | 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      |                                 | 69                              | 3400   |
|                             | DSD 172 T SFC            | 7.5<br>10           | 3.60 - 16.33<br>3.55 - 14.20                       | 10                              | 90                      | 450 - 1815<br>450 - 1590                  | 15 - 60.5<br>15 - 53                | 2.1                     | R 134a           | + 3                           | 3310 x 1730 x 2040      |                                 | 70                              | 3530   |
|                             | DSD 202 T SFC            | 7.5<br>10<br>13     | 4.25 - 20.30<br>4.00 - 17.30<br>3.25 - 14.95       | 10<br>10<br>15                  | 110                     | 450 - 1905<br>450 - 1680<br>450 - 1770    | 15 - 63.5<br>15 - 56<br>15 - 59     | 2.35                    | R 134a           | + 3                           | 3310 x 1730 x 2040      | DN 65                           | 71                              | 4080   |
| •                           | DSD 238 T SFC            | 7.5<br>10<br>13     | 5.93 - 22.5<br>5.80 - 20.0<br>3.56 - 16.0          | 10<br>10<br>15                  | 132                     | 450 - 1650<br>450 - 1500<br>450 - 1620    | 15 - 55<br>15 - 50<br>15 - 54       | 2.35                    | R 134a           | + 3                           | 3310x 1730 x 2040       |                                 | 72<br>79***)                    | 4220   |
| eformanaa data in aaaaedana | o with ISO 1017-0000 Apr |                     | und propouro la                                    |                                 | or ISO 01               | E1 and basis                              | atondard IC                         | 0 0014 0 tolo           |                  |                               | ***) At high fan anaad  |                                 |                                 |        |





### Explanation THNF Bag filter ZK Centrifugal separator ECO DRAIN ED FB/FC Pre-filter FD Particulate filter FF / FF Microfilter FG Activated carbon filter FFG Activated carbon and microfilter combination RD Refrigeration dryer חח 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<br>particle size with d [μm]* |   |                     |  |  |  |  |  |  |  |  |
|-------|---|---|---------------------|--|--|--|--|--|--|--|--|
|       | $0.1 \le d \le 0.5$   | 0.5 ≤ d ≤ 1.0   | $1.0 \le d \le 5.0$ |  |  |  |  |  |  |  |  |
| 0     | e.g. Co<br>pure air   | onsult KAESER rec<br>and cleanroom teo                      | garding<br>hnology  |  |  |  |  |  |  |  |  |
| 1     | ≤ 20.000  | ≤ 400   | ≤ 10                |  |  |  |  |  |  |  |  |
| 2     | ≤ 400.000   | ≤ 6.000   | ≤ 100               |  |  |  |  |  |  |  |  |
| 3     | Not defined   | Not defined ≤ 90.000 ≤ 1.000                                |                     |  |  |  |  |  |  |  |  |
| 4     | Not defined   | Not defined   | ≤ 10.000            |  |  |  |  |  |  |  |  |
| 5     | Not defined   | Not defined   | ≤ 100.000           |  |  |  |  |  |  |  |  |
| Class | Particle of   | Particle concentration C <sub>p</sub> in mg/m <sup>3*</sup> |                     |  |  |  |  |  |  |  |  |
| 6     |   | 0 < C <sub>n</sub> ≤ 5                                      |                     |  |  |  |  |  |  |  |  |
| 7     |   | 5 < C ≤ 10  |                     |  |  |  |  |  |  |  |  |
| Х     |   | C <sub>p</sub> > 10   |                     |  |  |  |  |  |  |  |  |

| water |  |
|-------|--|
| Class | Pressure dew point, in °C  |
| 0     | e.g. Consult KAESER regarding<br>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 <sub>w</sub> in g/m <sup>3*</sup>  |
| 7     | C <sub>w</sub> ≤ 0.5   |
| 8     | 0.5 < C <sub>w</sub> ≤ 5   |
| 9     | 5 < C <sub>w</sub> ≤ 10  |
| Х     | C <sub>w</sub> ≤ 10  |
|       |  |

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

P-650ED.19/12 Specifications are subject to change without notice.

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



KAESER KOMPRESSOREN AG

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

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