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KAESER COMPRESSORS®

HPC | Compressed Air Systems

Rotary Screw Compressors SXC »Compact« Series

With the world-renowned SIGMA PROFILE

Free air delivery 0.26 to 0.80 m³/min, Pressure 8 – 11 – 15 bar

SXC Series

The compact integrated air system

SXC – integrated compressed air packages with minimal space requirement: The turnkey SXC rotary screw compressor range from Kaeser Kompressoren combines exceptional efficiency and cost-effective performance with super-quiet compressed air production, treatment and storage. Under the SXC's double-skinned roto-moulded polyethylene enclosure hides a complete compressed air supply system. The perfect choice for workshops and smaller production facilities, these advanced compressor systems combine exceptional efficiency, ease of maintenance, durability and perfectly matched components to ensure years of dependable, efficient performance.

Efficiency as standard

Every SXC compact compressed air package features a rotary screw compressor airend equipped with high-efficiency SIGMA profile rotors to ensure more air and more savings.

Optimum performance

Featuring energy-saving start-stop control, the "Sigma Control basic" compressor control system ensures that SXC all-in-one packages operate at the peak of their performance.

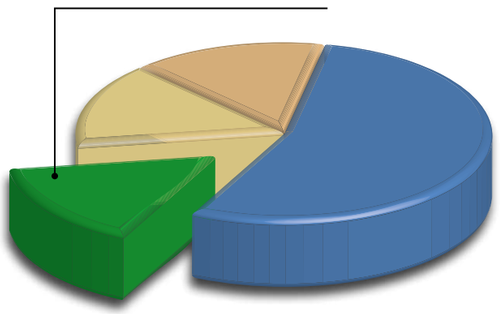
Versatile and compact

With available drive powers from 2.2 to 5.5 kW, you'll always find the right model to meet your specific needs. Belying their impressive performance, the four SXC models measure only 61.5 cm wide and have a compact footprint of only 0.62 square metres.

Clean and quiet

With a maximum sound level of 69 dB(A), SXC integrated packages are exceptionally quiet. Equipped with an integrated refrigeration dryer, they deliver dry, clean compressed air at all times. The electronically-controlled condensate drain reliably removes condensate from the air receiver and refrigeration dryer without energy loss.

Energy cost savings through system optimisation



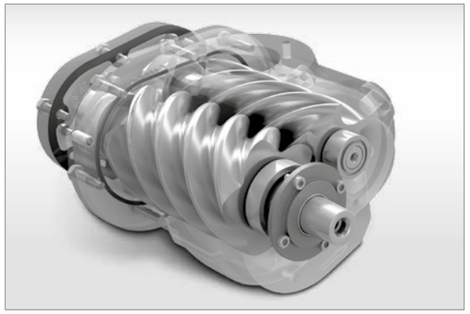
- Compressed air system investment
- Maintenance costs
- Energy costs
- Potential energy cost savings

The all-in-one compact compressed air package

Fig.: SXC 4

SXC Series

KAESER quality in every detail



Energy saving Sigma Profile

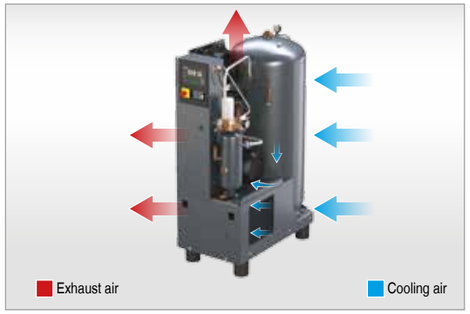
Each Kaeser rotary screw airend uses Sigma Profile rotors, specially developed by Kaeser, that consume approximately 10-20 % less energy than conventional rotors with the same air delivery capacity. This makes a significant contribution to impressive overall efficiency.

The Sigma Control basic

With its efficient start-stop control, the “Sigma Control basic” ensures optimised compressed air system performance at all times and constantly monitors the entire SXC package.

Maintenance friendly

All maintenance and service points are easily accessible once the SXC’s removable enclosure is effortlessly lifted away. The electronic condensate drain can be inspected via a grille. Needless to say, the SXC is designed for maximum ease of maintenance.



Efficient cooling

Kaeser compressors are renowned for their innovative cooling systems and SXC packages are no exception: Three fans are installed to ensure optimum cooling. A dedicated fan with independent drive motor provides dependable fluid cooling.

Equipment

Complete unit

Ready for operation, fully automatic, super-silenced, vibration damped, double-walled roto-moulded polyethylene enclosure.

Sound insulation

Soundproof enclosure, anti-vibration mounts, double vibration damped.

Airend

Genuine KAESER single-stage rotary screw airend with SIGMA PROFILE rotors and cooling-fluid injection for optimised rotor cooling.

Electric motor

German made high efficiency (IE2) electric motor to IP 54 and insulation class F for additional reserve.

V-belt drive

Maintenance-free elasticised V-belt. No adjustment necessary.

Fluid and air flow

Honeycombed dry-air filter, check valve at inlet, pneumatic vent valve, cooling fluid reservoir with dedicated separator cartridge, pressure release valve, minimum pressure/ check valve, microfilter in cooling fluid system.

Cooling

Air cooled; aluminium cooler for cooling fluid with separate fan motor, second fan on drive motor shaft. Automatic warm-up control (active only with very low load).

Air receiver

Internally coated, electronically controlled condensate drain.

SIGMA CONTROL BASIC

Measured data displayed: network pressure, shut-off pressure, airend discharge temperature. Status data displayed: system status, error alert, maintenance due. Also displayed: hours counter for service, on-load and compressor run time, adjustable service interval, pressure and temperature unit selection (bar/ psi/ MPa, °C/°F). Adjustable nominal system pressure. Emergency-off switch, floating contact for motor running. Electronic pressure transducer.

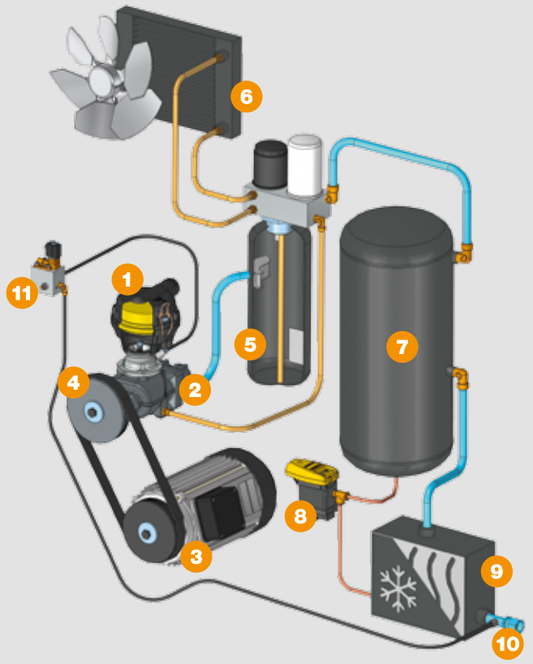
Electrical components

Control cabinet to IP 54, automatic star-delta starter (from 3 kW); motor-overload protection; control transformer.

Refrigeration dryer

Equipped with stainless steel plate heat exchangers, integrated condensate separator, electronically controlled condensate drain, insulated refrigerant loop.

Component layout for SXC systems



1. Air filter
2. Airend
3. Drive motor
4. Auto. belt tensioning system
5. Fluid separator tank
6. Cooler
7. Air receiver
8. ECO-Drain condensate drain
9. Refrigeration dryer
10. Compressed air outlet
11. Control valve

Technical Specifications

Model	Working pressure bar	FAD *) Complete package at working pressure m³/min	Max. operating pressure bar	Rated motor power kW	Refrigeration dryer power consumption kW	Refrige-rant	Pressure dew point °C	Dryer differential pressure bar	Air receiver l	Dimensions W x D x H mm	Sound pressure level **) dB(A)	Weight kg
SXC 3	7.5 10	0.34 0.26	8 11	2.2	0.25	R 134 a	+6	0.2	215	620 x 980 x 1480	68	285
SXC 4	7.5 10 13	0.45 0.36 0.26	8 11 15	3.0	0.25	R 134 a	+6	0.2	215	620 x 980 x 1480	69	285
SXC 6	7.5 10 13	0.60 0.48 0.37	8 11 15	4.0	0.30	R 134 a	+6	0.2	215	620 x 980 x 1480	69	290
SXC 8	7.5 10 13	0.80 0.67 0.54	8 11 15	5.5	0.30	R 134 a	+6	0.2	215	620 x 980 x 1480	69	300

*) FAD complete system as per ISO 1217 : 2009, Annex C: absolute inlet pressure 1 bar (a), cooling and air inlet temperature 20 °C
**) Sound pressure level as per ISO 2151 and the basic standard ISO 9614-2, operation at maximum operating pressure; tolerance: ± 3 dB(A)

Views

Front view

View from left

3-D view

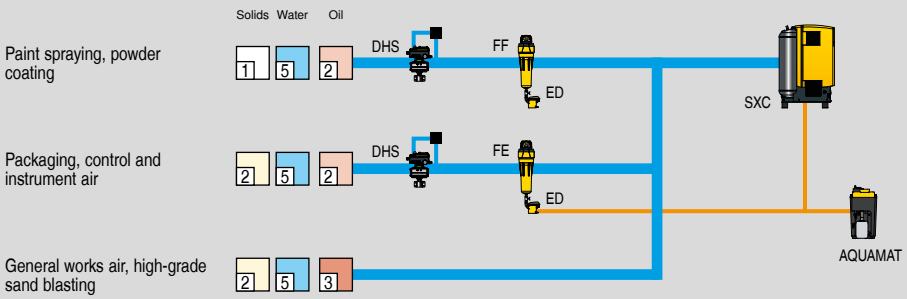
Rear view

View from right

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

Air treatment using a refrigeration dryer (pressure dew point + 6 °C)

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



Explanation	
AQUAMAT	Condensate treatment system
DHS	Air-main charging system
ED	ECO DRAIN (condensate drain)
FE / FF	Microfilter

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

Solid particles/dust

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

Water

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

Oil

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

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

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