

# Rotary Screw Compressors With Fluid Cooling

With Belt Drive

**SK SERIES**

Flow rate 0.53 to 2.70 m<sup>3</sup>/min, Pressure 5.5 to 15 bar



## SK series

Discerning compressed air users expect maximum availability and efficiency, even from smaller compressors. It will come as no surprise therefore that KAESER's SK series rotary screw compressors go far beyond meeting these key expectations. Not only do they deliver more compressed air for less power consumption, but they also combine ease of use and maintenance with exceptional versatility and environmentally responsible design.

### More air for your money

KAESER's engineers have managed to significantly boost the performance of the new SK series compressors compared to previous models. This impressive feat has been achieved both through airend optimisation and the minimisation of internal pressure losses.

### Energy-saving performance

The efficiency of a machine depends on the total costs incurred throughout the equipment's entire service life. With compressors, energy costs account for the lion's share of total expenditure. KAESER therefore designed its SM series compressors with optimum energy efficiency in mind. Refinements to the energy-saving SIGMA PROFILE airend rotors and the use of Super Premium Efficiency IE4 motors (Premium Efficiency IE3 motor in the SM 10) have significantly contributed to the increased performance of these versatile compressors. The combination of the SIGMA CONTROL 2 internal controller, low airend speeds, minimised internal pressure losses and KAESER's unique cooling system has helped to push the boundaries of efficiency even further.

### Optimised design

All SK series models share logical and user-friendly design throughout. For example, the left-hand enclosure panel can be removed in a few simple steps and allows excellent visibility of the system's intelligently laid out components. Needless to say, the SK series was designed to ensure best possible access to all service points. When closed, the sound-absorbing compressor enclosure keeps operational sound levels to a minimum thereby ensuring a pleasantly quiet work environment. Moreover, with its three intake openings, the enclosure provides separate air flow for high efficiency cooling of the compressor, the drive motor and switching cabinet. Last, but not least, SK series compressors are impressively compact, which makes them the perfect choice for applications where space is at a premium.

### Modular system concept

SK series compressors are available as standard versions, as so-called "T" models that are equipped with an integrated, thermally shielded refrigeration dryer and as AIRCENTER models that additionally include an underslung air receiver. KAESER's intelligent modular design therefore offers incredible flexibility. Moreover, all versions are available with an integrated frequency converter for infinitely variable speed control.

Energy-efficiency: the essential requirement

Investment and service costs account for only a small part of a compressor's total life-cycle costs – energy accounts for the lion's share. KAESER has been committed to minimising your energy costs for compressed air production for over 40 years. We also have the bigger picture in clear focus when it comes to service and maintenance, as well as maximum compressed air supply availability.

### Complete unit

1. Ready-to-run.
2. Fully automatic.
3. Super silenced.
4. Vibration-damped.
5. All panels powder-coated.
6. For ambient temperatures up to +45 °C.

### Rotary screw airend

1. Single stage with cooling fluid injection for optimal rotor cooling.
2. Genuine KAESER screw compressor airend with the SIGMA Profile.

### Electric motor

1. IE3 premium efficiency motor.
2. Quality German manufacture.
3. IP 54.

### Rotary screw airend

1. SIGMA Profile rotors require approximately 10 to 20 percent less energy than conventional rotors of the same air delivery capacity.
2. IP 54.

### Efficient cooling

1. Dual flow fan and separate air flow channels for cooling of the motor, the fluid/compressed air cooler and the control cabinet.
2. Fluid and air flow: 'Honeycomb' air intake filter, pneumatic inlet and venting valves, cooling fluid separator tank with triple separation system.
3. Pressure relief valve.
4. Minimum pressure check valve.
5. Thermostatic valve and fluid filter in coolant circuit.
6. Fluid / compressed air combination cooler.

### Refrigeration dryer (with T version)

1. With electronically-controlled condensate drain.
2. Refrigerant compressor with energy-saving, cycling shut-down feature.
3. Linked to operational status of the compressor when inactive.
4. Alternatively, continuous operation can be selected on site.
5. Contains fluorinated greenhouse gas R-134a.

### Electrical components

1. Control cabinet to IP 54.
2. Control cabinet ventilation.
3. Automatic star-delta starter.
4. Overload relays.
5. Control transformer.