AIRPOL SR SCROLL COMPRESSORS WITH POWER FROM 22 TO 45 kW

OIL-FREE AIR FOR DEMANDING APPLICATIONS

01 PRODUCT WITH NIH CERTIFICATION

Airpol SR scroll compressors have a Hygienic Certificate from the National Institute of Public Health (NIH) confirming their suitability for use in potable water treatment and distribution systems, as well as in installations where completely oil-free compressed air is required. This guarantees the highest quality and safety in the most demanding applications.

02 NO COMPROMISES ON QUALITY – 100% OIL-FREE AIR

Airpol SR scroll compressors are a synonym for purity and reliability.
They deliver compressed air completely free from any oil traces, making them suitable for use in the most demanding industries – from medicine and pharmaceuticals, through to the food and chemical industries, and even potable water treatment technologies.

Where air quality matters – choose Airpol.

03 CLEAR AIR POWERED BY ADVANCED SCROLL TECHNOLOGY

The modern scroll compression technology in Airpol SR compressors guarantees the production of 100% oil-free compressed air. The unique design of the scroll air end, where the metal surfaces of the compressing scrolls do not come into contact, completely eliminates the need for lubrication in the compression chamber.

The result? High-purity air, ideal for applications where the key criterion for selecting equipment is the quality of compressed air that is completely free of oil particles.

WIDE RANGE OF APPLICATIONS

- Chemical industry
- Food industry
- Water treatment stations
- Laboratories
- Pharmaceutical industry
- Medicine
- Electronics industry

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SCROLL COMPRESSOR

OIL-FREE AIR FOR DEMANDING APPLICATIONS

04 SCROLL TECHNOLOGY - MAXIMUM EFFICIENCY

In the innovative Airpol SR line of scroll compressors, the compression process is achieved through the precise interaction of two scroll elements.

One scroll remains stationary while the other moves in a circular orbit, completing 2.5 rotations. As a result of this motion, compression chambers are formed, which gradually decrease in volume, pushing the air from the suction port to the discharge port.

During the operation of the compressor, air is drawn in and then trapped in one of the scroll chambers, where it is smoothly and evenly compressed toward the center of the scroll — the outlet location with a check valve. This mode of operation guarantees a continuous airflow without pulsations, ensuring a high level of operational smoothness for the device.

Importantly, during compression, there is no contact between the metal surfaces of the scrolls, which eliminates the need for oil lubrication in the compression chamber.
The result is completely oil-free air — ideal for the most demanding applications.

Scroll technology is synonymous with innovation and purity, raising the quality of compressed air to a higher level.

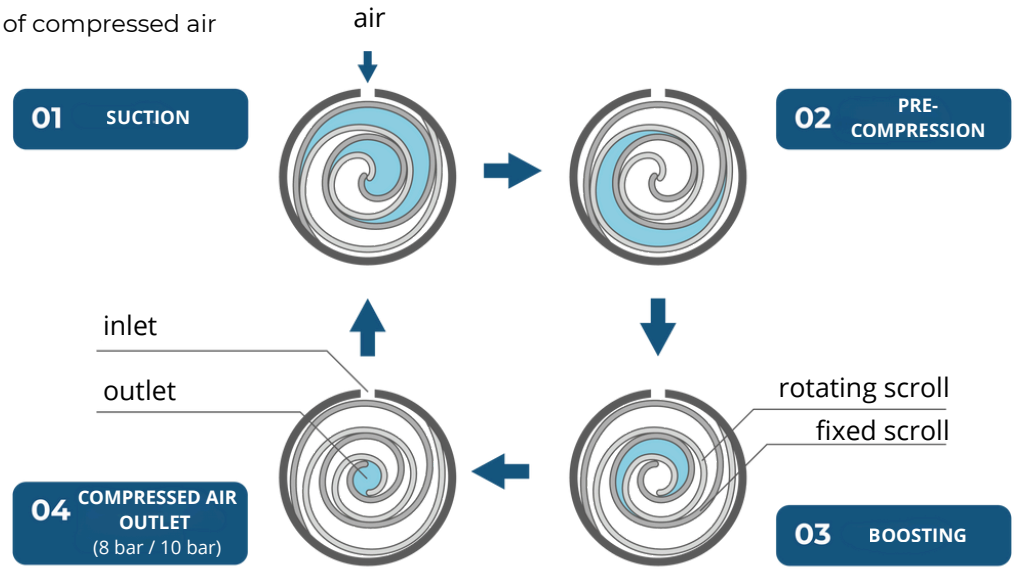
05 MODERN DESIGN - RELIABILITY FOR YEARS

The modern design of the spiral air ends used in Airpol SR compressors ensures extended service life, reduced vibration levels, and minimal compressed air pulsation.

Thanks to the well-thought-out design of the spiral compression air end, the number of moving parts has been reduced to the absolute minimum, while the symmetrical components ensure excellent balance and quiet operation of the entire system.

The compression process runs smoothly and continuously, resulting in an exceptionally stable airflow without sudden pulsations.
The use of oversized rolling bearings further enhances the durability of the design and ensures reliable compressor operation for many years.

The spiral air end design combines engineering precision, exceptional durability, and user comfort — engineered to deliver reliable performance even in conditions requiring superior air quality.



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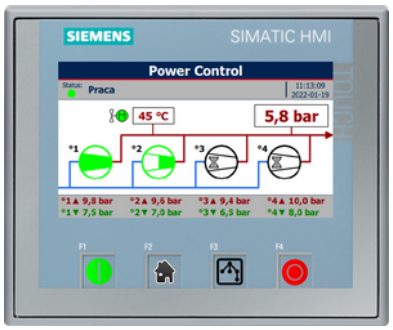
OIL-FREE AIR FOR DEMANDING APPLICATIONS

EFFICIENT OPERATION OF THE COMPRESSION SYSTEM WITH SIEMENS CONTROLLER



06 EASY OPERATION

The Siemens controller ensures intuitive operation, provides a clear and user-friendly overview of the compressor's operating status, and allows for fast and precise adjustment of the working pressure within the manufacturer-approved range.

07 REMOTE MONITORING

The compressor controller is equipped with a built-in web server enabling remote monitoring of the compressor's operating status. This allows users to conveniently access real-time compressor data directly from a web browser when the controller is connected to a local network.

THE USER CAN:

- Monitor real-time compressor parameter values.
- Track compressor performance trends through clear graphical charts.
- Adjust and fine-tune a wide range of operating settings.
- Review detailed event logs and system notifications.
- Check current operating hour counters, energy consumption data, and other key performance indicators.

FULL CONTROL OF YOUR COMPRESSOR PERFORMANCEDIRECTLY FROM THE OPERATOR PANEL

- Operating time.
- Controller operating time.
- Electrical energy consumption.
- Time remaining until the next service interval.
- Number of compressor start-ups and switch-on cycles.
- Total volume of compressed air produced.

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TECHNICAL DATA

SCROLL COMPRESSOR

Scroll compressor		
Type		**Airpol SR 22**
Overpressure (design options)	MPa	0.8 / 1.0
Capacity [0.8 MPa]	m^3/h	147.2
Capacity [1.0 MPa]	m^3/h	108
Overall dimensions (L x W x H)	mm	1420x1050x1310
Compressed air connection		G ¾
Weight	kg	750
Ambient temperature	°C	from +5 to +40
Cooling air demand	m^3/h	3500
Compressed air temperature	°C	15 degrees above ambient temperature
Sound level	dB(A)	64
Power transmission system		belt drive
Nominal motor power	kW	4x5.5
Motor energy efficiency class		IE3
Motor IP code		IP55
Power supply	V/Ph/Hz	400/3/50
Recommended power feed cable	mm^2	3x16+PE
Protection fuse	A	63
Microprocessor controller		Siemens

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TECHNICAL DATA

SCROLL COMPRESSOR

Scroll compressor		
Type		**Airpol SR 30**
Overpressure (design options)	MPa	0.8 / 1.0
Capacity [0.8 MPa]	m^3/h	204
Capacity [1.0 MPa]	m^3/h	165
Overall dimensions (L x W x H)	mm	1620x1150x1410
Compressed air connection		G 1¼
Weight	kg	900
Ambient temperature	°C	from +5 to +40
Cooling air demand	m^3/h	4800
Compressed air temperature	°C	15 degrees above ambient temperature
Sound level	dB(A)	66
Power transmission system		belt drive
Nominal motor power	kW	4x7.5
Motor energy efficiency class		IE3
Motor IP code		IP55
Power supply	V/Ph/Hz	400/3/50
Recommended power feed cable	mm^2	3x25+PE
Protection fuse	A	80
Microprocessor controller		Siemens

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TECHNICAL DATA

SCROLL COMPRESSOR

Scroll compressor		
Type		**Airpol SR 45**
Overpressure (design options)	MPa	0.8 / 1.0
Capacity [0.8 MPa]	m^3/h	306
Capacity [1.0 MPa]	m^3/h	247
Overall dimensions (L x W x H)	mm	2020x1050x1610
Compressed air connection		G 1½
Weight	kg	1200
Ambient temperature	°C	from +5 to +40
Cooling air demand	m^3/h	7000
Compressed air temperature	°C	15 degrees above ambient temperature
Sound level	dB(A)	68
Power transmission system		belt drive
Nominal motor power	kW	6x7.5
Motor energy efficiency class		IE3
Motor IP code		IP55
Power supply	V/Ph/Hz	400/3/50
Recommended power feed cable	mm^2	3x50+PE
Protection fuse	A	125
Microprocessor controller		Siemens

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