

## SCROLL COMPRESSORS AIRPOL SRK WITH POWER FROM 2.2 TO 7.5 kW

OIL-FREE AIR FOR DEMANDING APPLICATIONS

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

Airpol SRK 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 SRK 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.

### 01 PRODUCT WITH PZH CERTIFICATION

Airpol SRK 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.



## WIDE RANGE OF APPLICATIONS



Chemical industry



Food industry



Water treatment stations



Laboratories



Pharmaceutical industry



Medicine



Electronics industry

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## SCROLL COMPRESSORS

OIL-FREE AIR FOR DEMANDING APPLICATIONS

### 04 A COMPRESSOR DESIGNED FOR HIGH PERFORMANCE AND USER COMFORT

#### COMPACT DESIGN – READY FOR OPERATION

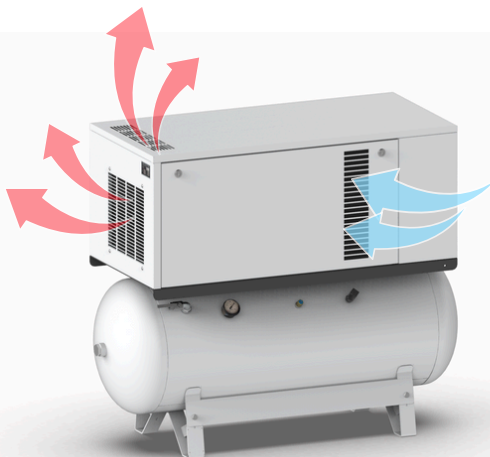
The Airpol SRK compressor is a complete unit with an air receiver, ready for immediate connection and operation. Its compact design facilitates transport and installation while ensuring optimal use of space.

#### EASE TO SERVICE

Quick access to consumables and components reduces downtime while lowering maintenance costs.

#### OPTIMIZATION OF COOLING AIR FLOW – GREATER EFFICIENCY AND RELIABILITY

The advanced heat dissipation system stabilizes operating temperature, extends the service life of components, reduces noise, and lowers energy consumption.



#### ELECTRIC MOTOR FROM RELIABLE EUROPEAN MANUFACTURERS

Airpol SRK scroll compressors are equipped with electric motors from reputable European manufacturers — because quality matters to us.

#### PRESSURE VESSELS – DESIGNED AND MANUFACTURED BY AIRPOL

The pressure vessels used in Airpol SRK compressors are designed with reliability and operational safety in mind. Each air receiver meets the strict requirements of Directive 2014/68/EU, and the use of high-strength, corrosion-resistant structural steel ensures long-lasting performance.

Airpol pressure vessels are supplied with complete documentation required for registering the pressure equipment with the Office of Technical Inspection (UDT).

#### QUIET OPERATION – COMFORT IN ANY ENVIRONMENT

Airpol scroll compressors stand out for their exceptionally low noise levels thanks to the low rotational speed and soundproof casing. The internal sound insulation, with up to 80% sound absorption efficiency, ensures their operation is incredibly quiet and environmentally friendly.

# SCROLL COMPRESSOR

OIL-FREE AIR FOR DEMANDING APPLICATIONS

## 05 SCROLL TECHNOLOGY - MAXIMUM EFFICIENCY

In the innovative Airpol SRK 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.

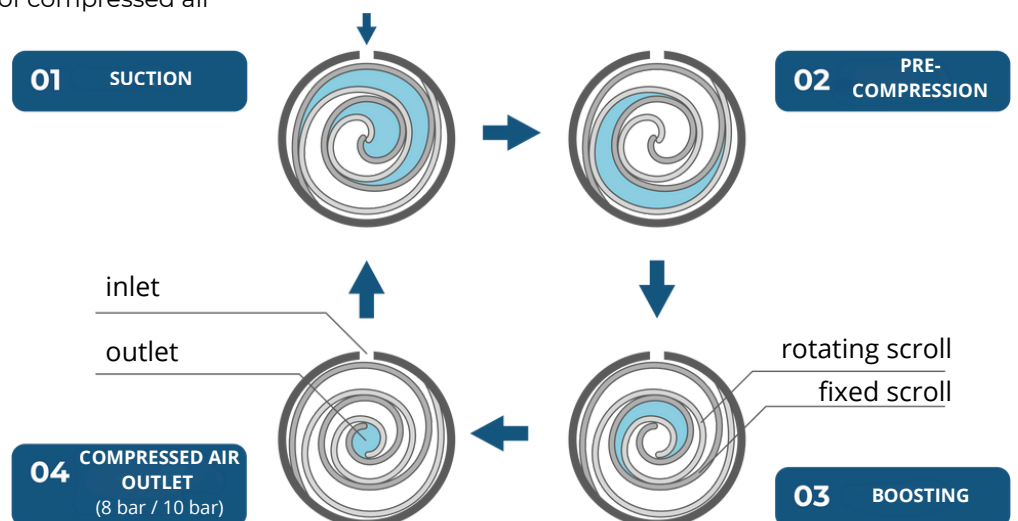
## 06 MODERN DESIGN - RELIABILITY FOR YEARS

The modern design of the spiral air ends used in Airpol SRK 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.



## OPTI Airpol Power Control

COMPLIANT WITH CYBERSECURITY STANDARDS



### 08 SECURE REMOTE MONITORING

The controller complies with cybersecurity standards that eliminate the use of external servers, which could otherwise become potential targets for attacks on critical production infrastructure.

- Web server hosted directly on the controller (without the cloud), independent of internet access.
- No need to send data outside the LAN structure.
- Reduction of exposure to espionage and cyberattacks.

### 07 EASY OPERATION

The **OPTI AIRPOL POWER CONTROL** controller has been designed with data and system integrity in mind.

It ensures efficient operation and safe system, as well as continuous monitor of the compressor's operating parameters.

#### THE USER HAS THE OPTION

- select the operating mode (including operation),
- control of the entire system's parameters,
- schedule operation with both recurring and one-time events (according to the calendar),
- select one of four language options,
- update the software via the USB port,
- modify the basic operating parameters of the compressors.



#### INTUITIVE INTERFACE

#### CONTROL OF SYSTEM OPERATING PARAMETERS

#### NETWORK OPERATION WITH SUPPORT FOR UP TO 4 COMPRESSORS

## TECHNICAL DATA

### SCROLL COMPRESSOR

Scroll compressor

Type	<b>Airpol SRK2</b>	
Overpressure (design options)	MPa	0.8 / 1.0
Capacity [0.8 MPa]	m <sup>3</sup> /h	15
Capacity [1.0 MPa]	m <sup>3</sup> /h	12.8
Overall dimensions (L x W x H)	mm	1450x590x1180
Compressed air connection		G ½
Weight	kg	210
Tank capacity	l	240
Ambient temperature	°C	from +5 to +40
Cooling air demand	m <sup>3</sup> /h	400
Compressed air temperature	°C	15 degrees above ambient temperature
Sound level	dB(A)	54
Power transmission system		belt drive
Nominal motor power	kW	2.2
Motor energy efficiency class		IE3
Motor IP code		IP55
Power supply	V/Ph/Hz	400/3/50
Recommended power feed cable	mm <sup>2</sup>	4x2.5
Protection fuse	A	16
Microprocessor controller		OPTI Airpol Power Control



## TECHNICAL DATA

### SCROLL COMPRESSOR

Scroll compressor

Type	<b>Airpol SRK2</b>	
Overpressure (design options)	MPa	0.8 / 1.0
Capacity [0.8 MPa]	m <sup>3</sup> /h	15
Capacity [1.0 MPa]	m <sup>3</sup> /h	12.8
Overall dimensions (L x W x H)	mm	1915x590x1270
Compressed air connection		G ½
Weight	kg	275
Tank capacity	l	500
Ambient temperature	°C	from +5 to +40
Cooling air demand	m <sup>3</sup> /h	400
Compressed air temperature	°C	15 degrees above ambient temperature
Sound level	dB(A)	54
Power transmission system		belt drive
Nominal motor power	kW	2.2
Motor energy efficiency class		IE3
Motor IP code		IP55
Power supply	V/Ph/Hz	400/3/50
Recommended power feed cable	mm <sup>2</sup>	4x2.5
Protection fuse	A	16
Microprocessor controller		OPTI Airpol Power Control



## TECHNICAL DATA

### SCROLL COMPRESSOR

Scroll compressor

Type	<b>Airpol SRK4</b>	
Overpressure (design options)	MPa	0.8 / 1.0
Capacity [0.8 MPa]	m <sup>3</sup> /h	25
Capacity [1.0 MPa]	m <sup>3</sup> /h	21
Overall dimensions (L x W x H)	mm	1450x590x1180
Compressed air connection		G ½
Weight	kg	255
Tank capacity	l	240
Ambient temperature	°C	from +5 to +40
Cooling air demand	m <sup>3</sup> /h	600
Compressed air temperature	°C	15 degrees above ambient temperature
Sound level	dB(A)	54
Power transmission system		belt drive
Nominal motor power	kW	3.7
Motor energy efficiency class		IE3
Motor IP code		IP55
Power supply	V/Ph/Hz	400/3/50
Recommended power feed cable	mm <sup>2</sup>	4x2.5
Protection fuse	A	16
Microprocessor controller		OPTI Airpol Power Control



## TECHNICAL DATA

### SCROLL COMPRESSOR

Scroll compressor

Type	<b>Airpol SRK4</b>	
Overpressure (design options)	MPa	0.8 / 1.0
Capacity [0.8 MPa]	m <sup>3</sup> /h	25
Capacity [1.0 MPa]	m <sup>3</sup> /h	21
Overall dimensions (L x W x H)	mm	1915x590x1270
Compressed air connection		G ½
Weight	kg	300
Tank capacity	l	500
Ambient temperature	°C	from +5 to +40
Cooling air demand	m <sup>3</sup> /h	600
Compressed air temperature	°C	15 degrees above ambient temperature
Sound level	dB(A)	54
Power transmission system		belt drive
Nominal motor power	kW	3.7
Motor energy efficiency class		IE3
Motor IP code		IP55
Power supply	V/Ph/Hz	400/3/50
Recommended power feed cable	mm <sup>2</sup>	4x2.5
Protection fuse	A	16
Microprocessor controller		OPTI Airpol Power Control



## TECHNICAL DATA

### SCROLL COMPRESSOR

Scroll compressor

Type	<b>Airpol SRK5</b>	
Overpressure (design options)	MPa	0.8 / 1.0
Capacity [0.8 MPa]	m <sup>3</sup> /h	36.8
Capacity [1.0 MPa]	m <sup>3</sup> /h	27
Overall dimensions (L x W x H)	mm	1450x590x1180
Compressed air connection		G ½
Weight	kg	280
Tank capacity	l	240
Ambient temperature	°C	from +5 to +40
Cooling air demand	m <sup>3</sup> /h	800
Compressed air temperature	°C	15 degrees above ambient temperature
Sound level	dB(A)	58
Power transmission system		belt drive
Nominal motor power	kW	5.5
Motor energy efficiency class		IE3
Motor IP code		IP55
Power supply	V/Ph/Hz	400/3/50
Recommended power feed cable	mm <sup>2</sup>	4x2.5
Protection fuse	A	25
Microprocessor controller		OPTI Airpol Power Control



## TECHNICAL DATA

### SCROLL COMPRESSOR

Scroll compressor

Type	<b>Airpol SRK5</b>	
Overpressure (design options)	MPa	0.8 / 1.0
Capacity [0.8 MPa]	m <sup>3</sup> /h	36.8
Capacity [1.0 MPa]	m <sup>3</sup> /h	27
Overall dimensions (L x W x H)	mm	1915x590x1270
Compressed air connection		G ½
Weight	kg	320
Tank capacity	l	240
Ambient temperature	°C	from +5 to +40
Cooling air demand	m <sup>3</sup> /h	800
Compressed air temperature	°C	15 degrees above ambient temperature
Sound level	dB(A)	58
Power transmission system		belt drive
Nominal motor power	kW	5.5
Motor energy efficiency class		IE3
Motor IP code		IP55
Power supply	V/Ph/Hz	400/3/50
Recommended power feed cable	mm <sup>2</sup>	4x2.5
Protection fuse	A	25
Microprocessor controller		OPTI Airpol Power Control



## TECHNICAL DATA

### SCROLL COMPRESSOR

Scroll compressor

Type	<b>Airpol SRK7</b>	
Overpressure (design options)	MPa	0.8 / 1.0
Capacity [0.8 MPa]	m <sup>3</sup> /h	51
Capacity [1.0 MPa]	m <sup>3</sup> /h	41.2
Overall dimensions (L x W x H)	mm	1915x590x1270
Compressed air connection		G ½
Weight	kg	330
Tank capacity	l	500
Ambient temperature	°C	from +5 to +40
Cooling air demand	m <sup>3</sup> /h	1200
Compressed air temperature	°C	15 degrees above ambient temperature
Sound level	dB(A)	59
Power transmission system		belt drive
Nominal motor power	kW	7.5
Motor energy efficiency class		IE3
Motor IP code		IP55
Power supply	V/Ph/Hz	400/3/50
Recommended power feed cable	mm <sup>2</sup>	4x4
Protection fuse	A	32
Microprocessor controller		OPTI Airpol Power Control

