

## SCROLL COMPRESSORS AIRPOL SRT WITH POWER FROM 2.2 TO 15 kW

OIL-FREE AIR FOR DEMANDING APPLICATIONS



### 01 PRODUCT WITH PZH CERTIFICATION

Airpol SRT 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 SRT 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 SRT 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 SRT 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.

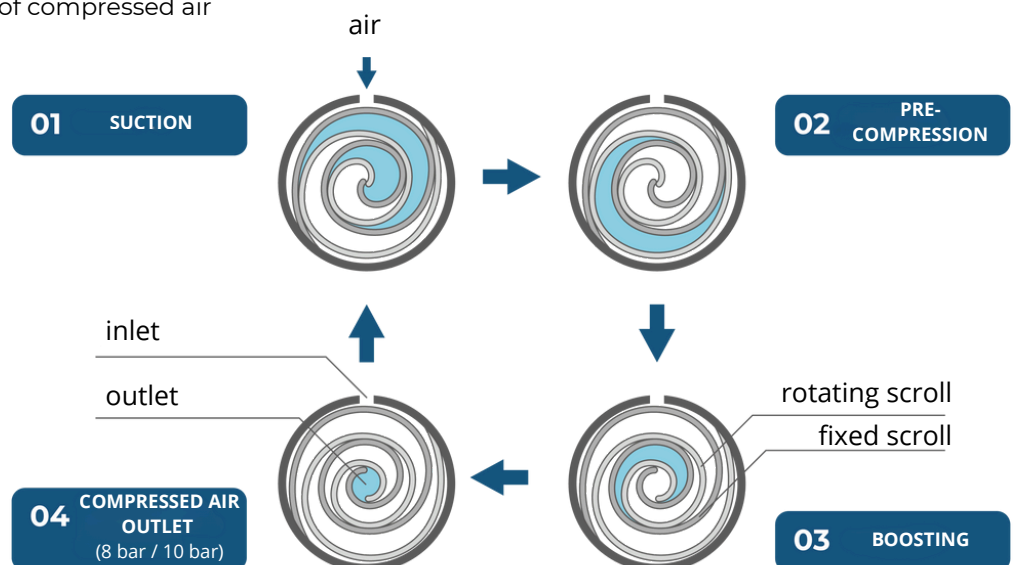
## 05 MODERN DESIGN - RELIABILITY FOR YEARS

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



# INTEGRATED COMPRESSED AIR TREATMENT SYSTEM

FILTRATION AND DRYING FOR AN EVEN HIGHER COMPRESSED AIR PURITY CLASS

## 06 COMPRESSED AIR FOR THE MOST DEMANDING APPLICATIONS

The integrated compressed air treatment system in Airpol compressors removes moisture down to a required **+3°C** pressure dew point, ensuring compressed air quality compliant with ISO 8573-1:2010 purity class **1.4.0**.

**Where air purity is essential  
- choose Airpol.**

## 08 SPACE-SAVING DESIGN

The significantly reduced footprint and the integrated dryer with filters provide a solution that allows the user to save valuable installation space, ensures easy access for operation and maintenance, and eliminates additional costs related to installing separate compressed air treatment equipment. Choosing a compressor in this configuration is driven by both economic benefits and a carefully thought-out design.

## 07 WHAT DOES THE COMPRESSED AIR TREATMENT SYSTEM CONSIST OF IN AIRPOL SRKT COMPRESSORS?

The refrigerated dryer and two compressed air filters are housed in a single enclosure together with the complete compressor unit.

### THE PRE-FILTER

removes 99% of solid and liquid particles larger than 3 µm.



### THE REFRIGERATION DRYER

removes moisture from the compressed air down to the required +3°C pressure dew point



### THE HIGH-EFFICIENCY FILTER

removes 99% of solid particles larger than 0.01 µm.

## WHY IS COMPRESSED AIR TREATMENT SO IMPORTANT?

LONGER SERVICE LIFE OF PNEUMATIC TOOLS

ELIMINATION OF UNEXPECTED PRODUCTION DOWNTIME

NO DISRUPTIONS TO TECHNOLOGICAL PROCESSES

REDUCED RISK OF CORROSION IN PNEUMATIC SYSTEMS

MINIMIZED RISK OF DAMAGE TO THE FINAL PRODUCT

RELIABLE OPERATION OF COMPRESSED-AIR-POWERED TOOLS AND MACHINES

## OPTI Airpol Power Control

COMPLIANT WITH CYBERSECURITY STANDARDS



### 10 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.

### 09 EASY OPERATION

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

It ensures efficient operation and safety of the entire system, as well as continuous monitoring of the compressor's operating parameters.

#### THE USER CAN:

- select the operating mode (including network 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 (oil-free) compressor	<ul style="list-style-type: none"> <li>with an integrated refrigerated dryer and two compressed air filters</li> </ul>	
Type	<b>Airpol SRT 2</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	590x1000x1200
Compressed air connection		G ½
Weight	kg	280
Ambient temperature	°C	from +5 to +40
Cooling air requirement	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>	5x2,5
Protection fuse	A	16
Pressure dew point of the dryer	°C	+3
Compressed air purity class according to ISO 8573-1:2010		1.4.0
Microprocessor controller		OPTI Power Control



## TECHNICAL DATA

### SCROLL COMPRESSOR

Scroll (oil-free) compressor		<ul style="list-style-type: none"> <li>with an integrated refrigerated dryer and two compressed air filters</li> </ul>
Type		<b>Airpol SRT 4</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	590x1000x1200
Compressed air connection		G ½
Weight	kg	290
Ambient temperature	°C	from +5 to +40
Cooling air requirement	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>	5x2,5
Protection fuse	A	16
Pressure dew point of the dryer	°C	+3
Compressed air purity class according to ISO 8573-1:2010		1.4.0
Microprocessor controller		OPTI Power Control



## TECHNICAL DATA

### SCROLL COMPRESSOR

Scroll (oil-free) compressor	<ul style="list-style-type: none"> <li>with an integrated refrigerated dryer and two compressed air filters</li> </ul>	
Type	<b>Airpol SRT 5</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	590x1000x1200
Compressed air connection		G ½
Weight	kg	290
Ambient temperature	°C	from +5 to +40
Cooling air requirement	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>	5x2,5
Protection fuse	A	25
Pressure dew point of the dryer	°C	+3
Compressed air purity class according to ISO 8573-1:2010		1.4.0
Microprocessor controller		OPTI Power Control



## TECHNICAL DATA

### SCROLL COMPRESSOR

Scroll (oil-free) compressor	<ul style="list-style-type: none"> <li>with an integrated refrigerated dryer and two compressed air filters</li> </ul>	
Type	<b>Airpol SRT 7</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	590x1000x1200
Compressed air connection		G ½
Weight	kg	330
Ambient temperature	°C	from +5 to +40
Cooling air requirement	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>	5x4
Protection fuse	A	32
Pressure dew point of the dryer	°C	+3
Compressed air purity class according to ISO 8573-1:2010		1.4.0
Microprocessor controller		OPTI Power Control



## TECHNICAL DATA

### SCROLL COMPRESSOR

Scroll (oil-free) compressor	<ul style="list-style-type: none"> <li>with an integrated refrigerated dryer and two compressed air filters</li> </ul>	
Type	<b>Airpol SRT 11</b>	
Overpressure (design options)	MPa	0,8 / 1,0
Capacity [0.8 MPa]	m <sup>3</sup> /h	73,6
Capacity [1.0 MPa]	m <sup>3</sup> /h	54
Overall dimensions (L x W x H)	mm	1250x620x1218
Compressed air connection		G ½
Weight	kg	420
Ambient temperature	°C	from +5 to +40
Cooling air requirement	m <sup>3</sup> /h	1800
Compressed air temperature	°C	15 degrees above ambient temperature
Sound level	dB(A)	61
Power transmission system		belt drive
Nominal motor power	kW	2x5,5
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>	5x4
Protection fuse	A	32
Pressure dew point of the dryer	°C	+3
Compressed air purity class according to ISO 8573-1:2010		1.4.0
Microprocessor controller		OPTI Power Control



## TECHNICAL DATA

### SCROLL COMPRESSOR

Scroll (oil-free) compressor	<ul style="list-style-type: none"> <li>with an integrated refrigerated dryer and two compressed air filters</li> </ul>	
Type	<b>Airpol SRT 15</b>	
Overpressure (design options)	MPa	0,8 / 1,0
Capacity [0.8 MPa]	m <sup>3</sup> /h	102
Capacity [1.0 MPa]	m <sup>3</sup> /h	82,4
Overall dimensions (L x W x H)	mm	1250x620x1218
Compressed air connection		G ¾
Weight	kg	460
Ambient temperature	°C	from +5 to +40
Cooling air requirement	m <sup>3</sup> /h	3000
Compressed air temperature	°C	15 degrees above ambient temperature
Sound level	dB(A)	61
Power transmission system		belt drive
Nominal motor power	kW	2x7,5
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>	5x6
Protection fuse	A	40
Pressure dew point of the dryer	°C	+3
Compressed air purity class according to ISO 8573-1:2010		1.4.0
Microprocessor controller		OPTI Power Control

