



SCROLL COMPRESSORS

Airpol[®]

Compressors Manufacturing Company Ltd.

www.airpol.com.pl



Airpol Ltd. is the largest screw compressors manufacturer in Poland. Established in 1991, after restructuring a factory with more than 30 years of tradition in compressors production.

It employs about 150 workers, including an experienced team of engineers and technicians.

From its beginning until the present day the company has been continuously adapting in order to follow worldwide trends in construction and technology.

We pay particular attention to the quality of the machines and equipment offered, as well as to the quality of the services provided. Our work has been certified with a quality system based on the ISO 9001 standard that we have held since 1998. We have also acquired different certificates from other countries.

Today Airpol Ltd. manufactures oil lubricated and oil-free screw and reciprocating compressors for air and other gases, scroll compressors. As well as compressors we also produce air blowers, air tanks and offer compressed air treatment systems (filters, refrigeration and absorption dryers, moisture separators, oil/water separators, etc.). Our products are designed to meet our clients' individual needs. We constantly search for new technical and organizational solutions to satisfy our customers.

OUR ADVANTAGES

The whole cycle, from design through manufacturing to assembly at the client's site, is led by the strict requirements of the ISO 9001 standard.

Detailed quality control at every step gives absolute certainty of the right choice of the highest quality compressor.

Component selection and strict quality tests assure that you obtain a durable compressor with excellent parameters.

Technical solutions, safety and control devices assure a safe and comfortable working environment.





Airpol SR scroll compressors can be used in all those applications that demand high-quality compressed air. By making compressed air free of any oil, the compressors are suitable for medical applications, including dental care and drug production, as well as for the food industry, varnish manufacture, and many more.

PRINCIPLE OF OPERATION

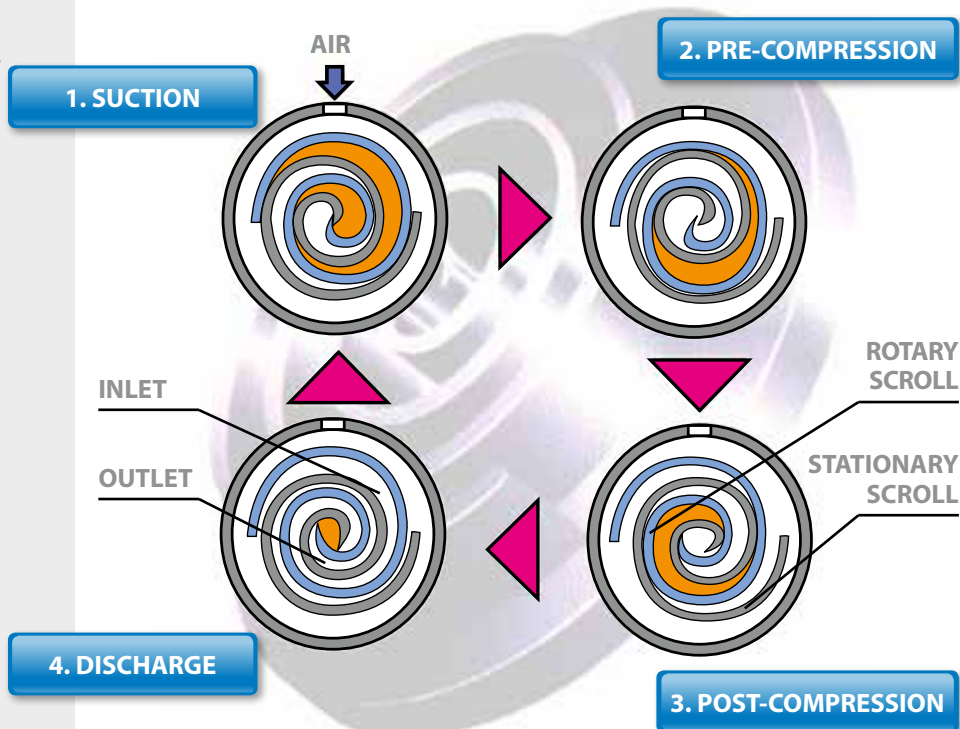
In the highly innovative series of Airpol SR scroll compressors, the compression process is effected through cooperation of two scrolls. One scroll is stationary, whereas the other follows a circular orbit while making 2,5 rotations.

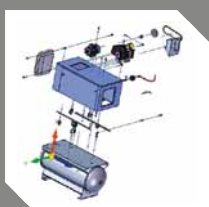
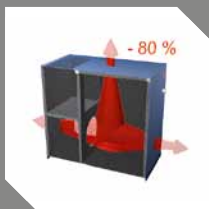
Such arrangement of scrolls creates working spaces that decrease in volume during the rotation while moving away from the inlet port towards the outlet port.

The movement of the rotary scroll causes air to be drawn in. It is then captured within one of air pockets and compressed towards the centre of the scroll where the outlet port and non-return valve are located. It takes 2,5 turns for the compression cycle to be completed. This ensures continuous flow of air without pulsation.

Metal surfaces of the scrolls do not come in contact with one another during compression, so there is no need for using lubrication oil within the compression chamber.

This method of compression guarantees that air being produced is free of any oil.





► LOW-NOISE COMPRESSOR OPERATION

The low noise intensity level in Airpol SR scroll compressors results both from reduced rotational speed of the compression scrolls and from the application of a sound-proof housing.

All Airpol sound-proof housings are internally covered with noise absorbing material with average sound absorption efficiency of 80%. With such protection, Airpol SR scroll compressors can be installed in virtually any working environment.

► RELIABLE, HIGH-QUALITY COMPONENTS

All components and parts used in Airpol SR scroll compressors are manufactured by reputable global companies and by our own facilities. The quality of our products is confirmed by the ISO 9001 certificate that we acquired in 1998.

► OIL-FREE, HIGH-QUALITY COMPRESSED AIR

In the innovative design of the scroll-based compression stage, metal surfaces of the scrolls do not come in contact with one another during compression.

As a result, there is no need for using lubrication oil within the compression chamber. It means that the air being produced is free of any oil.

Furthermore, the temperature of compressed air is only 10°C above the ambient temperature.

► INNOVATIVE AND SMART DESIGN

Our team of experienced engineers and technicians are committed to constantly improve our products, according to the latest trends in compressors design and technology, to be able to better satisfy needs of the contemporary market.





► ENHANCED SERVICE LIFE AND RELIABILITY OF THE SCROLL-BASED COMPRESSION STAGE

The innovative design of the scroll-based compression stage is a guarantee of long service life, reduced compressor vibrations and limited pulsations of compressed air. The scroll-based compression stage is mainly built with stationary components that are perfectly symmetrical to ensure the compressor is well balanced, subject to small vibrations and quiet. With compression effected as a continuous process, pulsations of compressed air are significantly reduced. The rotor is supported by over-dimensioned roller bearings to ensure its long and trouble-free service life.

► SIMPLE OPERATION AND MAINTENANCE

The compression stage is of compact design to reduce complexity of the compressor construction. It is built of a limited number, easy to maintain components. Compression is effected within a single stage to further reduce the number of equipment and improve reliability of the device.

► SCROLL COMPRESSORS AIRPOL SR MEET THE EXPECTATIONS OF THE MOST DEMANDING CUSTOMERS

We have almost 50 years of experience in compressors production. Our offer is continuously updated with new products according to the needs of the market. We are committed to constantly improve our products and, above all, to adjust them to the individual needs of our customers.



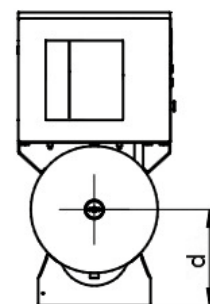
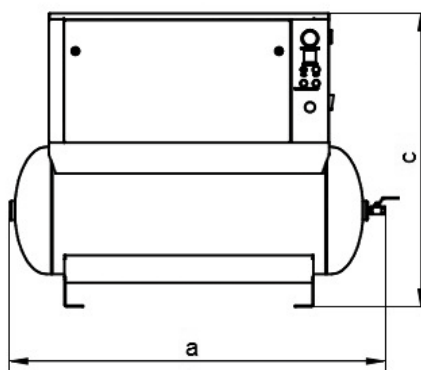
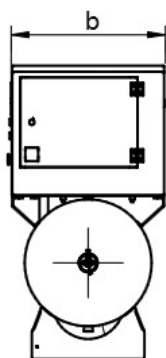
SCROLL COMPRESSORS Airpol SRK IN CASE ON TANK

Model	Efficiency				Motor power	Receiver capacity	Dimensions a x b x c	Outlet height dimension d	Weight
	8,3bar		10bar						
	l/min	m³/h	l/min	m³/h					
Airpol SRK2	240	14,4	200	12,0	2,2	240	1500 x 608 x 1172	385	340
						500	1994 x 610 x 1375	385	365
Airpol SRK5	600	36,0	440	26,4	5,5	240	1500 x 608 x 1172	385	350
						500	1994 x 610 x 1375	385	375
Airpol SRK7	840	50,4	640	38,4	2,2 & 5,5	500	1994 x 1120 x 1375	385	535
Airpol SRK11	1200	72,0	880	52,8	2 x 5,5	500	1994 x 1120 x 1375	385	550

Ambient temperature: from 5 to 40°C

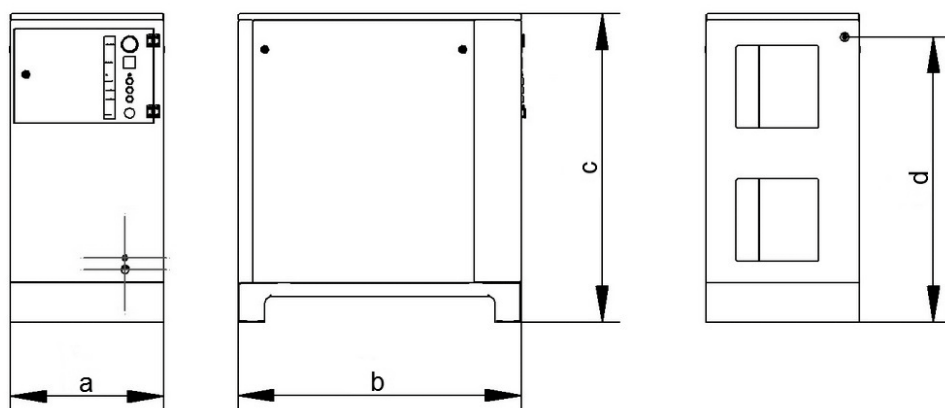
Air temperature on the outlet: approx. 10°C above ambient temperature

Feed voltage: 400V



Model	Efficiency				Motor power	Dimensions a x b x c	Outlet height dimension d	Weight
	8,3bar		10bar					
	l/min	m³/h	l/min	m³/h				
Airpol SR2	240	14,4	200	12,0	2,2	600 x 1110 x 1210	1099	156
Airpol SR5	600	36,0	440	26,4	5,5	600 x 1110 x 1210	1099	180
Airpol SR7	840	50,4	640	38,4	2,2 & 5,5	600 x 1110 x 1210	1099	260
Airpol SR11	1200	72,0	880	52,8	2 x 5,5	600 x 1110 x 1210	1099	300

Ambient temperature: from 5 to 40°C
 Air temperature on the outlet: approx. 10°C above ambient temperature
 Feed voltage: 400V





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