

SCROLL COMPRESSORS

AIRPOL SCROLL COMPRESSORS

with motor power from 2,2 kW up to 15 kW

Airpol 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.

Low-noise compressor operation

The low noise intensity level in Airpol 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 scroll compressors can be installed in virtually any working environment.

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.



Enhanced service-life and reliability of scroll air ends

The innovative design of the scroll-based compression air end is a guarantee of long service life, reduced compressor vibrations and limited pulsations of compressed air.

The scroll-based compression air end 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 overdimensioned roller bearings to ensure its long and trouble-free service life.





SUPERVISION AND SAFETY OF THE COMPRESSOR OPERATION

Microprocessor controller Siemens in Airpol scroll compressors

It provides easy and clear view of compressor operating status and fast change of working pressure setting (within the approved by the manufacturer pressure settings range).





Controller menu basic screens:

- compressor status and current compressed air pressure,
- pressure settings (set switch off / on pressure),
- sensor settings (pressure transducer amplification / displacement),
- pulse settings (switching on the condensate drain valve in Airpol SRT and Airpol SRKT),
- counters (compressor operating time, time to next maintenance service).



Protection against:

- too high temperature of the compressed air,
- inadequate power supply parameters,
- compressor overload.

Remote monitoring

It is available via web browser or via the LOGO! mobile application, which is available for Android and iOS systems.

The remote connection gives you the possibility to collect some diagnostic information from the controller and to preview the duplicated operator panel.

Compressed air treatment system in scroll compressors Airpol SRT and Airpol SRKT series

The compact design equipment dedicated to the users who have a small working area and are looking for an efficient compressor station with increased cleanliness class.

Integrated compressed air treatment system



Prefilter – high porosity of the nonwoven fabric, which the filter element is made of, ensures high ability to store dust. It guarantees removal of 99% of solid particles larger than 3 µm.

HIGH QUALITY
OF COMPRESSED AIR
1.4.1 class - according
to ISO 8573.1

Refrigeration dryer – removes moisture from compressed air to the required dew point of +3°C. The air relative humidity, that upstream the dryer is 100%, is reduced to only 21%.

Benefits resulting from the use of compressed air:

- longer life of the pneumatic tools,
- undisturbed technological process,
- reliable operation of the compressed air operated machines,
- reduction of costs related to inspections and repairs of machines,
- limitation of the compressed air plant corrosion,
- elimination of unscheduled downtime in production.

Fine filter – element is made of high density multilayer microfibre. By using the single fibre diffusion and coalescence phenomena, 99.9% of solid particles larger than 0,1 µm are removed.

Both compressed air filters and refrigeration dryer are equipped with automatic drain valves.



Model		Capacity*)		Nominal motor	Air receiver volume	Overall dimensions (L x D x H)	Compressed air	Weight	Noise level **)
		8 bar	10 bar	power	volume	(LXDXH)	connections		ievei ***/
		m3/h	m3/h	kW	1	mm		kg	db(A)
SCROLL COMPRESSORS – STANDARD VERSION									
Airpol	Airpol SRK 2	14,4	12	2,2	240	1500 x 608 x 1172	G 1/2	240	54
		14,4	12	2,2	500	1990 x 608 x 1290		280	54
	Airpol SRK 4	24	-	4	240	1500 x 608 x 1172	G 1/2	245	54
		24	-	4	500	1990 x 608 x 1290		290	54
	Airpol SRK 5	36	26,4	5,5	240	1500 x 608 x 1172	G 1/2	250	58
		36	26,4	5,5	500	1990 x 608 x 1290		300	58
	Airpol SRK 7	51	-	7,5	500	1990 x 608 x 1290	G 1/2	330	59
Airpol		-	38,4	2,2 i 5,5	500	1920 x 608 x 1880		450	59
	Airpol SRK 11	72	52,8	2 x 5,5	500	1920 x 608 x 1880	G ¹ / ₂	510	61
	Airpol SRK 15	102	-	2 x 7,5	500	1920 x 608 x 1880	G ³ / ₄	550	61
	Airpol SR 2	14,4	12	2,2	-	1205 x 608 x 1210	G ¹ / ₂	190	54
	Airpol SR 4	24	-	4	-	1205 x 608 x 1210	G ¹ / ₂	210	54
	Airpol SR 5	36	26,4	5,5	-	1205 x 608 x 1210	G ¹ / ₂	240	58
	Airpol SR 7	51	-	7,5	-	1205 x 608 x 1210	G ¹ / ₂	280	59
		-	38,4	2,2 i 5,5	-	1205 x 608 x 1210		300	59
	Airpol SR 11	72	52,8	2 x 5,5	-	1205 x 608 x 1210	G ¹ / ₂	370	61
	Airpol SR 15	102	-	2 x 7,5	-	1205 x 608 x 1210	G ³ / ₄	410	61
	SCROLI	_ COMPR	ESSORS -	WITH CO	MPRESSEC	AIR TREATMENT S	SYSTEM		
	Airpol SRKT 2	14,4	12	2,2	240	1500 x 608 x 1172	G ¹ / ₂	290	54
Airpol		14,4	12	2,2	500	1990 x 608 x 1290		330	54
	Airpol SRKT 4	24	-	4	240	1500 x 608 x 1172	G ¹ / ₂	295	54
		24	-	4	500	1990 x 608 x 1290		335	54
	Airpol SRKT 5	36	26,4	5,5	240	1500 x 608 x 1172	G ¹ / ₂	350	58
		36	26,4	5,5	500	1990 x 608 x 1290		375	58
	Airpol SRKT 7	51	-	7,5	500	1990 x 608 x 1290	G ¹ / ₂	390	59
		-	38,4	2,2 i 5,5	500	1920 x 608 x 1880		480	59
	Airpol SRKT11	72	52,8	2 x 5,5	500	1920 x 608 x 1880	G 1/2	560	61
Airpol	Airpol SRKT 15	102	-	2 x 7,5	500	1920 x 608 x 1880	G ³ / ₄	600	61
· · · · · · · · · · · · · · · · · · ·	Airpol SRT 2	14,4	12	2,2	-	1110 x 608 x 1210	G ¹ / ₂	240	54
	Airpol SRT 4	24	-	4	-	1110 x 608 x 1210	G 1/2	245	54
	Airpol SRT 5	36	26,4	5,5	-	1110 x 608 x 1210	G 1/2	290	58
	Airpol SRT 7	51	-	7,5	-	1110 x 608 x 1210	G 1/2	330	59
		-	38,4	2,2 i 5,5	-	1490 x 608 x 1210		350	59
	Airpol SRT 11	72	52,8	2 x 5,5	-	1490 x 608 x 1210	G 1/2	420	61
	Airpol SRT 15	102	-	2 x 7,5	-	1490 x 608 x 1210	G ³ / ₄	460	61

^{*)} Capacity measured acc. to EN ISO 1217:2006 and EN ISO 5167-2.

In scroll compressors Airpol SRT and Airpol SRKT series - pressure dew point of the refrigeration air dryer: $+3^{\circ}$ C, 1.4.1 compressed air quality class, acc. to ISO 8573.1.

The manufacturer reserves the right to make changes and/or improvements in designs and dimensions without notice and without incurring obligation.

Airpol Compressors Ltd.

HEADQUARTERS

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^{**)} Noise level acc. to EN ISO 2151.