

SCREW COMPRESSORS

Airpol – SCREW COMPRESSORS

The screw compressors are ready for operation and fully automatic units designed for continuous operation in harsh operating conditions.

The units are made in the sound-proof housing in a version with or without air receiver. They are equipped with the belt drive or direct drive.

All compressors are manufactured in accordance with the standards and requirements specified in the directives concerning machines, pressure and electrical equipment and electromagnetic compatibility. The implemented quality management system for the design, production and service of screw compressors ensures a selection of the highest quality compressor.



High quality of compressed air

Oil content in the compressed air at the level of 3 ppm (in the standard compressor version, without additional filters) is achieved owing to the use of efficient double oil separation.

The compressed air temperature is 10°C above ambient temperature owing to effective selection of fans and air coolers installed in the compressors.

Synthetic oil – longer periods between inspections

The oil used has optimum properties to ensure appropriate protection of the compressors, maintain technical parameters and extend service life, in all work conditions.

The Airpol synthetic oil helps to maintain the constant compressed air delivery necessary for efficient system operation by, among other things, over five times faster air removal (which improves lubrication and increases the efficiency of oil separation) and over two times faster water separation by oil (which ensures effective protection and lubrication).





Microprocessor Controller

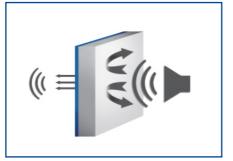
Easy to read display and user friendly user menu enables an effective control and supervision of the compressor or compressor group operation.

Proven high quality

The detailed quality control is carried out at every production stage.

High quality of the products was confirmed by the ISO 9001 quality certificate that was awarded to the company in 1998.





Low level of sound intensity

All screw compressors casings are lined internally with noise dampening material, whose ability to absorb sound is 80% on average.

The specially formed ventilation ducts lined with the foam characterized by a high acoustic insulation coefficient effectively reduce sound intensity.

Reliable vibration isolators additionally reduce noise and suppress the compressor vibration.

High service life of the screw air end

Designed and manufactured by Airpol, ASU airend assemblies with optimized rotor profile, have high efficiency and long service life provided by appropriately oversized bearings (their first regeneration is performed no sooner than after about 30,000 hours of operation).





Reliable and thought out design

The compressor design, protection and regulation methods used ensure full working safety and user comfort.

A good access to all elements improves and shortens service operations.

Daily maintenance and service is simple and not requiring the specialised tools.

SCREW COMPRESSORS WITH BELT DRIVE

SIMPLE DESIGN, EASY TO USE

motor power from 3 kW to 55 kW

Effective cooling system

Suitably selected air coolers with the carefully thought out air flow system enable the compressors to operate at ambient temperature up to 40°C and ensure appropriate compressed air cooling.



Good access to

subassemblies

The elements to be maintained and serviced are optimally accessible, which shortens service down time.



Airpol

Control system protection

against heat and pollution.

The microprocessor controller including electrical installation is located in the separated, cooled space

with the increased ingress protection (IP) rating. It ensures better ventilation, safety and protection

According to the operating conditions, the screw compressors with belt drive and direct drive compressors can be additionally equipped with:

- frequency inverter (Airpol PR series compressors with motor power from 5,5 kW)
- water/oil exchanger,
- heating system,
- water cooling,
- stainless steel or galvanized air receiver,
- compressed air treatment system (Airpol KT, Airpol T series).

DIRECT DRIVE SCREW COMPRESSORS

motor power from 15 kW to 315 kW

HIGH-EFFICIENCY DRIVE



Direct drive 1:1

The most efficient drive option, where the screw unit is coupled directly to an electric motor, using the flexible coupling. Owing to such a solution, there are no energy losses when a torque is transferred from the motor to the block. Power consumption is considerably reduced.

MS Connect – real-time monitoring and supervising of individual compressor

MS Connect provides the remote work monitoring, supervision and changing of the basic operating parameters of the screw compressor equipped with the MS-AIRPOL POWER CONTROL series controller.

Software is designed for installation on PCs of people responsible for maintaining work continuity and managing the operation of compressors.





Centrifugal fan

The high-efficiency fan with a higher compression ratio ensures effective cooling throughout the entire compressor operation time. High compression ratio ensures an appropriate, even flow of sucked ambient air, through the cooler, also in the case of cooler fouling. Centrifugal fan is driven by low-speed electrical motor, which considerably influences the compressor noise level.



Easy installation

The compressors are the complete compressed air stations ready for operation. It is enough to connect the compressor to power supply and compressed air network, and no additional installation work is required. All compressors are equipped with a standard connector, and in the case of a version on the receiver (Airpol K and Airpol KT series) there is no need to install equalizing tanks.

SCREW COMPRESSORS WITH COMPRESSED AIR TREATMENT SYSTEM

Airpol KT Airpol T

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.





Individual approach to every Customer

According to the operating conditions, the compressors type Airpol T can be additionally equipped with:

- frequency inverter (Airpol PRT, Airpol KTPR),
- water/oil exchanger,
- stainless steel or galvanized air receiver,
- automatic condensate drain mounted under the air receiver,
- additional end filters,
- MS Connect software for remote work monitoring, supervision and changing of the basic operating parameters of the screw compressor equipped with MS-185, MS-585, MS-587FRQ controllers).

HIGH QUALITY OF COMPRESSED AIR

3in1

COMPRESSION = FILTRATION = DRYING

Compact design

The refrigerant dryer together with two compressed air filters are located in one housing with the entire compressor.

It eliminates the necessity of providing an additional operating space and spending installation costs of the compressed air treatment system.

Good access to components

The elements to be maintained and serviced are optimally accessible, which shortens service down time.

Daily maintenance and service is simple and does not require specialised tools.

Safe design

The compressed air treatment system is located in a separated chamber to ensure better ventilation, safety of the dryer operation and protection of the compressed air treatment equipment against a heat stream coming from the compressor cooling.



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 and liquid ones larger than 3 μm.

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%.

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 1 µm are removed and the residual oil content downstream the filter not higher than 0,1 mg/m³ is achieved.

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



Airpol

SCREW COMPRESSORS WITH FREQUENCY INVERTER

Airpol PR Airpol KPR Airpol PRT Airpol KTPR with motor power from 5,5 kW

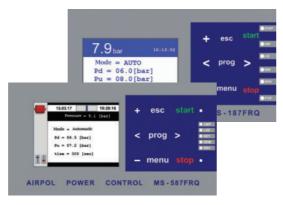
INTELLIGENT DRIVE TECHNOLOGY



Cooperation of compressors without the use of an external controller

The MS-587FRQ controller, which is standard equipment of variable speed screw compressors from 30kW, enables the cooperation of compressors connected to one network. The variable speed compressor with the MS-587FRQ controller works as the main one, switching auxiliary compressors (max. 4 compressors with MS-Airpol Power Control type controllers working in the network in sequential or cascade mode).

The compressor equipped with the MS-587FRQ controller can also cooperate in a network with one analog-controlled compressor or one equipped with a different controller than the MS-Airpol Power Control series controller without the need for an external controller.



Infinite rotation adjustment and constant pressure in the compressed air network

Energy-saving screw compressors of the Airpol PR, Airpol PRT, Airpol KPR and Airpol KTPR series have a smooth speed control in the range of 20% to 100% (for individual compressors this range varies depending on the engine power and pressure for which the device is made).

The operation control system with the frequency inverter tries to maintain the compressor motor rotations at the level that ensures constant pressure in the compressed air system i.e. at the set level. When the network pressure decreases, the inverter increases the motor rotational speed, which results in the compressor capacity increase, and when pressure increases, the motor rotational speed decreases.

ENERGY SAVING
close to
70% of electric
energy saving when
compared to the
compressors
with traditional control



Benefits from the use of a frequency converter in screw compressors:

- reduction of compressor pressure hysteresis, thus reducing pressure variations in the pneumatic network,
- adjustment of the compressor's capacity to the actual demand for compressed air,
- start-up current limitation,
- reduction of the number of starts,
- reduction of idle run time,
- energy saving,
- minimization of mechanical wear and extending of the components working life,
- possibility of using an air receiver with a smaller capacity.



Longer life and higher reliability

Smoothly controlled acceleration and deceleration reduces load of mechanical and electrical elements. The moving structural elements operate at lower rotations.

Operation safety

The frequency inverter is located in the separate and effectively cooled switchgear, which ensures good ventilation and protection against an influence of heat emitted by the compression module operation.

Airpol

MICROPROCESSOR CONTROL

The Airpol Power Control controllers, based on the modern technologies (microprocessor with the Cortex core), meet the recent industrial requirements with simultaneous minimum power consumption and correct, failure-free compressor operation.

Easy to read display, information diodes and clear keyboard provide easy and fast configuration of operating parameters, diagnosis of the compressor operation state, as well as an operation mode selection.

EASY USE AND CLEAR WAY OF PARAMETER CHANGES

MASTER CONTROLLER OF **SCREW COMPRESSOR GROUP**

ECONOMIC WAY OF THE **COMPRESSOR OPERATION CONTROL**

THE LEDS ON THE **CONTROLLER INFORM** THE OPERATING **PERSONNEL ABOUT:**

- compressor operation mode,
- motor operation status,
- occurrence of any events.



Touch operator panel



The intelligent algorithm for automatic control of the motor idle running time - AutoTlse, limits considerably the power consumption.

Possibility of selecting the operation mode and precise programming of the compressor operation time according to calendar and time needs, which additionally provides the economic machine operation.

The extended supervision and self-control mode that monitors the most important compressor and motor parameters and reminds of worn mechanical consumables and service dates.

The event identification mode that signals the event occurrence with suitable messages.

The circuit-breaker and overvoltage protection systems used in the power supply circuit.

The short-circuit detection module in the 24VDC circuit, prevents damage of the controller electronic elements (in MS-585, MS-587FRQ and Siemens 1200).

Possibility of co-operation with the external power supply asymmetry and phase sequence monitoring module ASKF3B or two-state power supply monitoring module. When a phase is missing or phase sequence is incorrect, an error message will prevent the compressor from starting, protecting it against damage.

Enhanced communication capabilities: Modbus, CanOpen, Ethernet.

Master control unit RC is responsible for:

- control of the start and stop system of the compressors installed in one compressed air network,
- monitoring and ensuring correct pressure in the system,
- optimum load distribution between individual compressors,
- possibility of selecting the leading compressor,
- setting pressure start and stop thresholds;
- entering the parameters of the system regulation,
- collection of information from the supervised system and its processing, visualisation, archiving and signalling (in RC-S),
- remote monitoring of the supervised system status by means of the installed interface operated in the web browser or/and by means of the Modbus TCP communication protocol (in Modbus RTU option via RS485), (in RC-S).

Sm@rt Server - additional feature of the RC-S series master controllers that provides to duplicate the operator panel onto a PC or mobile devices.

This feature can be implemented in both new controllers and the controllers that are already used to control a specific group of compressors.



The use of the RC-control unit of the compressor group eliminates the necessity of the machine operator intervention into settings and enables equal load distribution between compressors.

Control of the screw compressor group is possible in the sequence or cascade mode. The sequence control is recommended for the compressors of comparable size. Their operation time is usually equalized.

The cascade control is dedicated to the machines of different sizes, where the one operates in a continuous way and the others operate only during peak demands for compressed air.



REMOTE MONITORING AND COMPRESSOR WORK SUPERVISION

Web Server – gives the opportunity to monitor the current compressor status and its parameters, view settings and counter indications and check the activity of recorded events. Everything is done in a standard web browser - there is no need to install special software (refers screw compressors with S7-1200 controller).



User benefits of compressors work remote monitoring:

- possibility to manage the compressor from a different location than the location of the compressor,
- ability to act quickly in the event of unforeseen events - monitor preview,
- possibility to analyse sensor datawork optimisation,
- remote change of the basic compressor operating parameters,
- planning service inspectionscost optimisation.

MS Connect – software designed for installation on PCs of people responsible for maintaining work continuity and managing the operation of compressors. The application is used to monitor and supervise in real time individual compressors working alone or in a group consisting of max.14 compressors (for compressorsequipped with MS 385V24, MS-386V24, MS-185, MS-585, MS-386FRQ, MS-586FRQ, MS-587FRQ controllers).



CONTAINER COMPRESSOR STATIONS

The container compressor stations are used wherever there is a need for the source of compressed air or nitrogen and there is no possibility of building a compressor room. They provide high mobility and use at any location by a user.





The professionally made container compressor station ensures protection of the inside equipment against any external factors and optimum conditions for the equipment operation at the same time. The entire station equipment is configured according to individual needs of a customer.

The container size depends on the type and number of units installed inside such as: screw compressors, boosters, air receivers, separators, filters and air dryers. The construction of the container together with the units installed is placed on a common supporting frame, which enables easy transport and installation at any location.

Owing to the use of the suitable ventilation and heating system, the container station is completely independent of prevailing weather conditions.

Power is supplied into the container switchgear from the power network or generating sets through the cable entries.



HEAT RECOVERY FROM SCREW COMPRESSORS

Every screw compressor converts 100% of the supplied electrical energy into heat energy.

Only 4% of heat energy remains in the compressed air, and 96% may be effectively recovered and used again.







System of ventilating ducts

Almost 96% of the energy supplied to the compressor may be recovered in a form of hot air stream.

The suitable ventilation ducts together with the damper system make it possible to appropriately direct an air stream and use it directly for forced air heating of the rooms adjacent to the compressor station e.g. production or store halls.

The heated air stream is dosed through the dampers (electrically driven and thermostatically controlled), which enables constant temperature to be maintained at the heated room.

When there is no demand for heating, air is directed outside through the dampers.

HEATING ENERGY SAVING

Water/oil exchanger

Approx. 78% of energy may be recovered by installation of the water/oil exchanger in the compressor. Heated water is used in the water central heating system or domestic hot water system.

The plate heat exchanger system is anticipated for standard applications.

The use of thin plates, effective use of heat exchange surface and possibilities of achieving very high turbulence of liquids flowing through the exchanger enable superb heat transfer coefficients between oil and cooling water to be achieved.

It is possible to heat water up to temperature of approx. 60°C at full-load of the compressor.

The depreciation period of the heat recovery system purchase (installation of the water/oil exchanger) is max. 1 year.







	Model	Discharge overpressure	Capacity *)	Capacity *)	Nominal motor power	Air receiver volume	Overall dimensions (L x D x H)	Compressed air connection	Weight	Noise level **)	
		MPa	m³/h	m³/min	kW	L	mm		kg	db(A)	
		SCREW	COMPRI	ESSORS	ON AIR	RECEIVE	R - BELT DRIVE				
		0,8	25	0,42		240	1920x660x1530		250		
Airpol		1,0	20	0,33							
	Airpol K3	0,8	25	0,42	3		1430x660x1430	G ¹ / ₂	340	72	
Airpol		1,0	20	0,33		500	1430000001430		340		
		0,8	34	0,57					255		
		1,0	28	0,47		240	1920x660x1530		255		
Airpol		1,3	22	0,37					330		
	Airpol K4	0,8	34	0,57	4			G ¹ / ₂		72	
		1,0	28	0,47		500	0 1430x660x1430		340		
Airpol		1,3	22	0,37					410	-	
		0,8	50	0,83							
		1,0	40	0,66					360		
Airpol	Airpol K5	1,3	33	0,55	5,5	500	1920x660x1520	G ³ / ₄		72	
24 2 24		1,5	20	0,33					410		
		0,8	68	1,13					270		
₽	A: 11/7	1,0	57	0,95	7.5	500	1020 (60 1520	6.3	370	72	
Airpol	Airpol K7	1,3	47	0,78	7,5	500	1920x660x1520	G ³ / ₄	420	72	
-1		1,5	35	0,58					420		
		0,8	108	08 1,80		395					
	Airpol K11	1,0	90	1,50	11	500	1920x660x1520	G ³ / ₄	393	72	
Airpol	Airpol K11	1,3	70	1,16		300	1920000001320	G -/4	445	72	
-11		1,5	55	0,91					1-13		
		0,8	150	2,50	50		475				
. 📮	Airnol K15	1,0	120	2,00	15	5 500 1920x660x1600	G ³ / ₄	.,,	72		
Airpol	Airpol K15	1,3	96	1,60	15		500 1	1920x660x1600	3 1/4	525	, 2
-1	rpoi	1,5	85	1,41						323	5

^{*)} Capacity measured acc. to EN ISO 1217:2009 and EN ISO 5167-2.

-	M	p	OI

									•
	Model	Discharge overpressure	Capacity *)	Capacity *)	Nominal motor power	Overall dimensions (L x D x H)	Compressed air connection	Weight	Noise level **)
		MPa	m³/h	m³/min	kW	mm		kg	db(A)
	SCREV	V COMPR	ESSORS V	VITHOUT	AIR RECI	EIVER - BELT DRIV	E		
							_		
Airpol	Airpol 3	0,8	25	0,42	3	1000x645x935	G ¹ / ₂	270	70
-		1,0	20	0,33					
		0,8	34	0,57					
Airpo	Airpol 4	1,0	28	0,47	4	1000x645x935	$G^{1/2}$	270	70
-		1,3	22	0,37					
		0,8	50	0,83					
		1,0	40	0,66					
lo dubin	Airpol 5	1,3	33	0,55	5,5	940x660x1340	$G^{1}/_{2}$	280	70
		1,5	20	0,33					
		0,8	68	1,13					
		1,0	57	0,95					
- T	Airpol 7	1,3	47	0,78	7,5	940x660x1340	$G^{1}/_{2}$	290	70
		1,5	35	0,58					
		0,8	108	1,80					
<u>a</u>	Airpol 11	1,0	90	1,50	11	940x660x1340	G 1/2	320	70
. - 		1,3	70	1,16			-		
		1,5	55	0,91					
		0,8	150	2,50					
	Airpol 15	1,0	120	2,00	15	1100x720x1430	G ³ / ₄	400	70
. 4	1	1,3	96	1,60			- 74		
		1,5	85	1,41					
		0,8	190	3,16					
	Airpol 18	1,0	160	2,66	18,5	1100x720x1430	G ³ / ₄	420	70
. Video	Allpol 16	1,3	132	2,20	10,3	1100x/20x1430	G %	420	70
		1,5	90	1,50					
		0,8	220	3,66					
	4: 100	1,0	190	3,16		4400 700 4400	6 3	400	7.0
. Airbo	Airpol 22	1,3	162	2,70	22	1100x720x1430	G ³ / ₄	480	70
		1,5	120	2,00					
		0,75	320	5,33					
Airpo	Airpol 30	1,0	265	4,41	30	1000x1170x1470	G 1 ¹ / ₂	720	76
	All pol 30	1,3	200	3,33	30	1000X1170X1470	Q 1 /2	720	/0
		1,5	190	3,17					
1 2		0,75	385	6,41					
4	Airpol 37	1,0 1,3	325 290	5,41 4,83	37	1000x1170x1470	$G 1^{1}/_{2}$	760	76
			1,5 245 4,08						
		0,75	465	7,75					
Mrpo	Airmal 45	1,0	420	7,00	AE	1060v1250v1570	C 11.	1100	76
	Airpol 45	1,3	350	350 5,83	45	1060x1350x1570	G 1 ¹ / ₂	1100	76
		1,5 280	4,66						
		0,75	595	9,91					
and a second	Airpol 55	1,0 1,3	510 400	8,50 6,67	55	1060x1350x1570	G 1 ¹ / ₂	1140	76
		1,5	350	6,67 5,83					
		1,5	330	3,03					

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

	Model	Discharge overpressure	Capacity *)	Capacity *)	Nominal motor power	Fan motor power	Overall dimensions (L x D x H)	Compressed air connection	Weight	Noise level **)
		МРа	m³/h	m³/min	kW	kW	mm		kg	db(A)
			SCREW	COMPR	ESSORS	- DIREC	Γ DRIVE			
Arpol	Airpol NB 75	1,0	740	12,33	75	4,15	2100x1230x1670	G2	1750	75
		0,75	1155	19,25						
Airpol	Airpol NB 110	1,0	1015	16,92	110	5,5	2670x1330x1800	G 2	2400	83
		1,3	850	14,16						
		0,75	1380	23,00						
Irpol	Airpol NB 132	1,0	1235	20,58	132	5,5	3300x1600x1800	G 2 ¹ / ₂	3350	83
		1,3	995	16,58						
		0,75	1800	30,00						
lodino	Airpol NB 160	1,0	1475	24,58	160	11	3300x1600x1800	G 2 ¹ / ₂	3600	83
MANA		1,3	1360	22,66						
		0,75	2080	34,66						
Airpol	Airpol NB 200	1,0	1865	31,08	200	15	4000x1900x2180	DN 100	5500	85
		1,3	1570	26,16						
		0,75	2400	40,00						
Airpol	Airpol NB 250	1,0	2160	36,00	250	15	4000x1900x2180	DN 100	5700	85
		1,3	1800	30,00						
		0,75	2990	49,83						
Airpol	Airpol NB 315	1,0	2460	41,00	315	22	4000x1900x2180	0 DN 100	6100	85
		1,3	2280	38,00						

NOTE: for screw compressors with direct drive and 30–90 kW electric motor, the manufacturer offers extended, energy-saving version with a frequency converter (p. 22–23).

Airpol

	Model	Discharge overpressure	Capacity *)	Capacity *)	Nominal motor power	Air receiver volume	Overall dimensions (L x D x H)	Compressed air connection	Weight	Noise level **)			
		MPa	m³/h	m³/min	kW	L	mm		kg	db(A)			
SCR	EW COMPRES	SORS W	ITH AIR	DRYER A	ND CON	/IPRESSE	D AIR FILTERS – B	ELT DRI	VE				
		0,8	25	0,42		240	1430x660x1430		310				
Airpol	Airpol	1,0	20	0,33	3			G 1,		70			
	KT 3	0,8	25	0,42	3	500	1920x660x1530	G ¹ / ₂	390	70			
Airpol		1,0	20	0,33		300	1920000001930		370				
		0,8	34	0,57									
		1,0	28	0,47		240	1430x660x1430		310				
Airpol	Airpol	1,3	22	0,37	4			G ¹ / ₂	385	70			
	KT 4	0,8	34	0,57					3 /2	200	. , 0		
Airpol		1,0	28	0,47					500 1920x660x1530	1920x660x1530		390	
Airpoi		1,3	22	0,37					465				
		0,8	50	0,83				395					
	Airpol	1,0	40	0,66	5.5	5,5	5.5	5.5	500	1920x660x1520	G ³ / ₄	373	72
Airpol	KT 5	1,3	33	0,55	3,3		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	74	445	, -			
41		1,5	20	0,33									
		0,8	68	1,13					400				
	Airpol	1,0	57	0,95	7,5	500	1920x660x1520	G ³ / ₄		72			
Airpol	KT 7	1,3	47	0,78	,			7	450				
-4 - 1		1,5	35	0,58									
		0,8	108	1,80					425				
	Airpol	1,0	90	1,50	11	500	1920x660x1520	G ³ / ₄		72			
Airpol	KT 11	1,3	70	1,16				74	475	. –			
44	Airpol KT 15	1,5	55	0,91									
		0,8	150	2,50	0 15				515				
		1,0	120	2,00			,00 15 500 1920x660x1600 G ³ / ₄	500 1020/550/1500	G ³ / ₄		72		
Airpol		1,3	96	1,60		300	1720,000,1000	3 1/4	565	/ _			
4 . 4		1,5	85	1,41					303				

^{*)} Capacity measured acc. to EN ISO 1217:2009 and EN ISO 5167-2.

In screw compressors Airpol KT and Airpol T series:

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

⁻ pressure dew point of the refrigeration air dryer: +3°C

 $^{-2.4.2\} compressed\ air\ quality\ class,\ acc.\ to\ ISO\ 8573.1\ (in\ standard\ version\ of\ screw\ compressors\ Airpol\ KT\ and\ Airpol\ T).$ On Customer request - possible individual compressor version, depending on the required air quality class.

Airpol

	Model	Discharge overpressure	Capacity *)	Capacity *)	Nominal motor power	Fan motor power	Overall dimensions (L x D x H)	Compressed air connection	Weight	Noise level **)
		MPa	m³/h	m³/min	kW	kW	mm		kg	db(A)
SCR	EW COMPRE	SSORS V	VITH AIF	DRYER A	AND CO	MPRESS	ED AIR FILTERS –	BELT DR	IVE	
8 8	Airpol	0,8	25	0,42						
Am	Т3	1,0	20	0,33	3	-	650x1200x1380	G ¹ / ₂	290	70
		0,8	34	0,57						
. Airpol	Airpol T 4	1,0	28	0,47	4	-	650x1200x1380	G ¹ / ₂	290	70
		1,3	22	0,37						
.		0,8	50	0,83						
a a	Airpol	1,0	40	0,66	5,5	_	940x660x1340	G ¹ / ₂	300	70
. 4	Т5	1,3	33	0,55						
		1,5	20 68	0,33						
3	A i wa a l	1,0	57	1,13 0,95						
Joday	Airpol T 7	1,3	47	0,78	7,5	-	940x660x1340	G ¹ / ₂	310	70
		1,5	35	0,58						
		0,8	108	1,80						
	Airpol	1,0	90	1,50	11 -	040966091340	G 1/2	360	70	
Airpo	T 11	1,3	70	1,16	11	-	940x660x1340	G 1/2	300	70
		1,5	55	0,91						
[F].		0,8	150	2,50						
and the same of th	Airpol T 15	1,0	120	2,00	15	-	1100x720x1430	G 3/4	490	70
. 4	1 15	1,3	96	1,60						
		1,5 0,8	85 190	1,41 3,16						
3	Airpol	1,0	160	2,66						
Airpel	T 18	1,3	132	2,20	18,5	-	1100x720x1430	G ³ / ₄	530	70
		1,5	90	1,50						
		0,8	220	3,66						
	Airpol	1,0	190	3,16	22	_	1100x720x1430	G ³ / ₄	560	70
Airpé	T 22	1,3	162	2,70	22	_	11000/2001430	G 3/4	300	70
		1,5	120	2,00						
SCRE	W COMPRES	SORS W	ITH AIR	DRYER A	ND COM	1PRESSE	D AIR FILTERS – D	DIRECT D	RIVE	
		0,75	1155	19,25						
Airpol	Airpol T 110	1,0	1015	16,92	110	3,0	3750x1485x2130	G 2	3530	83
m .		1,3	850	14,16						
		0,75	1380	23,00						
Airpol	Airpol T 132	1,0	1235	20,58	132	5,5	4500x1600x1800	G 21/ ₂	4100	83
	1132	1,3	995	16,58						
		0,75	1800	30,00						
Inpol	Airpol T 160	1,0	1475	24,58	160	11	4500x1600x1800	G 2 ¹ / ₂	4200	83
	1 100	1,3	1360	22,66						

NOTE: for screw compressors with air dryer, compressed air filters and 30–90 kW electric motor, the manufacturer offers extended, energy-saving version with a frequency converter (p. 25–26).

	Model	Discharge overpressure	Capacity *) min-max	Capacity *) min-max	Nominal motor power	Air receiver volume	Overall dimensions (L x D x H)	Compressed air connection	Weight	Noise level **)
		MPa	m³/h	m³/min	kW	L	mm		kg	db(A)
	SCRE	W COMP	RESSORS	WITH FREQ	UENCY	CONVE	RTER – BELT DR	IVE		
		0,8	10 - 50	0,17 - 0,83					380	
. 📮	Airpol	1,0	10 - 40	0,17 - 0,67		500	1020,460,4520	C 2.	360	72
Airpol	KPR 5	1,3	10 - 33	0,17 - 0,55	5,5	500	1920x660x1520	G ³ / ₄	420	72
1		1,5	17 - 85	0,28 - 1,42					430	
		0,8	17 - 68	0,28 - 1,13						
.	Airpol KPR 7	1,0	17 - 57	0,28 - 0,95				_	390	
Airpol	KPR 7	1,3	15 - 47	0,25 - 0,78	7,5	500	1920x660x1520	G ³ / ₄		72
1. 1		1,5	13 - 35	0,22 - 0,58	-				440	
		0,8	17 - 108	0,28 - 1,80						
ļ Ģ	Airpol	1,0	17 - 90	0,28 - 1,50	-				415	
Airpol	KPR 11	1,3	17 - 70	0,28 - 1,17	11	500	1920x660x1520	G ³ / ₄		72
1. 1		1,5	14 - 55	0,23 - 0,92	-				465	
		0,8	52 - 150	0,87 - 2,50						
, 📮	Airpol	1,0	52 - 120	0,87 - 2,00	-				490	
Airpol	KPR 15	1,3	17 - 96	0,28 - 1,60	15	500	1920x660x1600	G ³ / ₄		72
1.		1,5	17 - 85	0,28 - 1,42	_				545	
	SCRE	N COMP	RESSORS '	WITH FREQU	UENCY (CONV <u>E</u> I	rter – Direct [DRIVE_		
, e	Airpol	0,8	52 - 150	0,87 - 2,50					500	72
Airpol	KPR D15	1,0	52 - 120	0,87 - 2,00	15	500	1920x700x1644	G ³ / ₄	500	72

- *) Capacity measured acc. to EN ISO 1217:2009 and EN ISO 5167-2.
- **) Noise level acc. to EN ISO 2151.

In screw compressors Airpol KT, Airpol KTPR and Airpol T, Airpol PRT series:

- pressure dew point of the refrigeration air dryer: +3°C
- 2.4.2 compressed air quality class, acc. to ISO 8573.1 (in standard version of screw compressors KT and T).

On Customer request - possible individual compressor version, depending on the required air quality class.

	Model	Discharge overpressure	Capacity *) min-max	Capacity *) min-max	Nominal motor power	Fan motor power	Overall dimensions (L x D x H)	Compressed air connection	Weight	Noise level **)
		MPa	m³/h	m³/min	kW	kW	mm		kg	db(A)
	SCRE	W COMP	RESSORS	WITH FREQ	JENCY (ONVER	TER – BELT DRIV	/E		
		0,8	10 - 50	0,17 - 0,83						
	Airpol	1,0	10 - 40	0,17 - 0,67	5,5	_	940x660x1340	G ¹ / ₂	290	70
Airpol	PR 5	1,3	10 - 33	0,17 - 0,55	3/3		710000001310	G /2	250	
		1,5	10 - 20	0,17 - 0,33						
		0,8	17 - 68	0,28 - 1,13						
	Airpol	1,0	17 - 57	0,28 - 0,95	7,5		940x660x1340	G ¹ / ₂	300	70
Airpol	PR 7	1,3	15 - 47	0,25 - 0,78	7,5	_	940000001340	G ./2	300	70
		1,5	13 - 35	0,22 - 0,58						
		0,8	17 - 108	0,28 - 1,80						
<u></u>	Airpol	1,0	17 - 90	0,28 - 1,50	11		040,660,1340	C 1.	240	70
Airpol	PR 11	1,3	17 - 70	0,28 - 1,17	11	-	940x660x1340	G ¹ / ₂	340	70
		1,5	14 - 55	0,23 - 0,92						
		0,8	52 - 150	0,87 - 2,50						
	Airpol	1,0	52 - 120	0,87 - 2,00	1.5		1100x720x1430	<i>C</i> 2	410	70
Airpol	PR 15	1,3	17 - 96	0,28 - 1,60	15	-	1100X/20X1430	G ³ / ₄	410	70
		1,5	17 - 85	0,28 - 1,42						
	SCREW	COMPRE	SSORS WI	TH FREQUE	NCY CO	NVERTE	R – DIRECT DRI\	/E		
		0,8	55 - 190	0,92 - 3,17						
Airpol	Airpol PR 18	1,0	55 - 160	0,92 - 2,67	18,5	0,64	720x1300x1460	G ³ / ₄	440	70
T T		1,3	50 - 132	0,83 - 2,20						
		0,8	54 - 220	0,90 - 3,67						
Airpol	Airpol PR 22	1,0	54 - 190	0,90 - 3,17	22	0,64	720x1300x1460	G ³ / ₄	520	70
A		1,3	52 - 162	0,87 - 2,70						
		0,75	90 - 320	1,50 - 5,33						
Airpol	Airpol PR 30	1,0	90 - 265	1,50 - 4,42	30	2,2	1750x900x1450	G 1 ¹ / ₂	920	75
	50	1,3	77 - 200	1,28 - 3,33						
		0,75	96 - 385	1,60 - 6,42						
Airpol	Airpol PR 37	1,0	96 - 325	1,60 - 5,42	37	2,2	1750x900x1450	G 1 ¹ / ₂	950	75
, a		1,3	98 - 290	1,63 - 4,83						

Airpol

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		0,75	150 - 465	2,50 - 7,75						
Airpol	Airpol PR 45	1,0	150 - 420	2,50 - 7,00	45	2,2	2000x1000x1640	G 1 ¹ / ₂	1200	75
		1,3	120 - 350	2,00 - 5,83						
		0,75	154 - 595	2,57 - 9,92						
Airpol	Airpol PR 55	1,0	154 - 510	2,57 - 8,50	55	2,2	2000x1000x1640	G 1 ¹ / ₂	1300	75
		1,3	138 - 400	2,30 - 6,67						
		0,75	218 - 820	3,36 - 13,67						
Airpol	Airpol PR 75	1,0	218 - 740	3,36 - 12,33	75	4,15	2100x1230x1670	G 2	1800	75
		1,3	212 - 565	3,53 - 9,42						
		0,75	276 - 975	4,60 - 16,25						
Airpol	Airpol PR 90	1,0	276 - 820	4,60 - 13,67	90	4,15	2300x1330x1670	G 2	1950	83
		1,3	206 - 685	3,43 - 11,42						
		0,75	577 - 1155	9,62 - 19,25						
Airpol	Airpol PR 110	1,0	507 - 1015	8,45 - 16,92	110	3,0	2670x1330x1800	G 2	2500	83
		1,3	425 - 850	7,10 - 14,17						
		0,75	690 - 1380	11,50 - 23,00						
Airpol	Airpol PR 132	1,0	618 - 1235	10,30 - 20,60	132	5,5	3300x1600x1800	G 2 ¹ / ₂	3430	83
		1,3	498 - 995	8,30 - 16,58						
		0,75	900 - 1800	15,00 - 30,00						
Airpol	Airpol PR 160	1,0	738 - 1475	12,25 - 24,58	160	11	3300x1600x1800	G 2 ¹ / ₂	3850	83
		1,3	680 - 1360	11,33 - 22,67						
		0,75	1040 - 2080	17,33 - 34,67						
Airpol	Airpol PR 200	1,0	933 - 1865	15,55 - 31,10	200	15	4000x2100x2200	DN 100	5750	85
		1,3	785 - 1570	13,10 - 26,17						
		0,75	1200 - 2400	20,00 - 40,00						
Airpol	Airpol PR 250	1,0	1080 - 2160	18,00 - 36,00	250	15	4000x2100x2200	DN 100	5950	85
		1,3	900 - 1800	15,00 - 30,00						
		0,75	1495 - 2990	24,92 - 49,83						
Airpol	Airpol PR 315	1,0	1230 - 2460	20,50 - 41,00	315	22	4000x2200x2200	DN 100	6350	85
0		1,3	1140 - 2280	19,00 - 38,00						

^{*)} Capacity measured acc. to EN ISO 1217:2009 and EN ISO 5167-2.

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

		Model	Discharge overpressure	Capacity *) min-max	Capacity *) min-max	Nominal motor power	Air receiver volume	Overall dimensions (L x D x H)	Compressed air connection	Weight	Noise level **)
			МРа	m³/h	m³/min	kW	L	mm		kg	db(A)
	SCRE	EW COMPRI	ESSORS	WITH FREC	QUENCY CO	NVERTE	R AND A	IR DRYER – BEL	I DRIVE		
			0,8	10 - 50	0,17 - 0,83	-				415	
		Airpol	1,0	10 - 40	0,17 - 0,67	5,5	500	1920x660x1520	G ³ / ₄		72
	Airpol	KT PR5	1,3	10 - 33	0,17 - 0,55	3,3	300	1920,000,1320	G 74	465	72
	41		1,5	10 - 20	0,17 - 0,33					403	
١.			0,8	17 - 68	0,28 - 1,13						
Н		Airpol	1,0	17 - 57	0,28 - 0,95	-				425	
l	Airpol	KT PR7	1,3	15 - 47	0,25 - 0,78	7,5	500	1920x660x1520	G ³ / ₄		72
Ι,	10 - 10		1,5	13 - 35	0,22 - 0,58	58				475	
Ι.			0,8	17 - 108	0,28 - 1,80					445	
Н		Airpol	1,0	17 - 90	0,28 - 1,50			4000 660 4500	6.3	445	
li	Airpol	KT PR11	1,3	17 - 70	0,28 - 1,17	11	500	1920x660x1520	G ³ / ₄	405	72
	of a of		1,5	14 - 55	0,23 - 0,92					495	
١.			0,8	52 - 150	0,87 - 2,50						
Н		Airpol	1,0	52 - 120	0,87 - 2,00					535	
li	Airpol	KT PR15	1,3	17 - 96	0,28 - 1,60	15	500	1920x660x1600	G ³ / ₄		72
Ι,	41		1,5	17 - 85	0,28 - 1,42	-				585	
	SCR	REW COMPR	RESSORS	WITH FRE	QUENCY CO	NVERTE	R AND A	AIR DRYER – DIR	ECT DR	IVE	
Ī		Airpol	0,8	542 - 150	0,87 - 2,50	15	500	1920x700x1644	G 3,	540	75
	Airpol	KTPR D15	1,0	52 - 120	0,87 - 2,00	15	500	1920X/00X1644	G ³ / ₄	540	/5

In screw compressors Airpol KTPR and Airpol PRT series:

Airpol

	Model	Discharge overpressure	Capacity *) min-max	Capacity *) min-max	Nominal motor power	Fan motor power	Overall dimensions (L x D x H)	Compressed air connection	Weight	Noise level **)
		MPa	m³/h	m³/min	kW	kW	mm		kg	db(A)
SCI	REW COMPR	ESSORS	WITH FRE	QUENCY CO	NVERTE	R AND A	IR DRYER – BEL	T DRIVE		
		0,8	10 - 50	0,17 - 0,83						
	Airpol	1,0	10 - 40	0,17 - 0,67	5,5	_	940x600x1340	G ¹ / ₂	300	70
. Am	PRT 5	1,3	10 - 33	0,17 - 0,55	3,3		J-10X000X1J-10	0 /2	300	70
		1,5	17 - 85	0,28 - 1,42						
		0,8	17 - 68	0,28 - 1,13						
	Airpol	1,0	17 - 57	0,28 - 0,95	7.5		040	C 1	210	70
. Airpo	PRT 7	1,3	15 - 47	0,25 - 0,78	7,5	-	940x660x1340	G ¹ / ₂	310	70
		1,5	13 - 35	0,22 - 0,58						
		0,8	17 - 108	0,28 - 1,80						
	Airpol	1,0	17 - 90	0,28 - 1,50						
Airpol	PRT 11	1,3	17 - 70	0,28 - 1,17	11	-	940x660x1340	G ¹ / ₂	380	70
		1,5	14 - 55	0,23 - 0,92	2					
		0,8	52 - 150	0,87 - 2,50						
	Airpol	1,0	52 - 120	0,87 - 2,00						
Airpol	PRT 15	1,3	17 - 96	0,28 - 1,60	15	-	1100x720x1430	G ³ / ₄	510	70
		1,5	17 - 85	0,28 - 1,42						
SCI	REW COMPR	ESSORS	WITH FRE	QUENCY CO	NVERTE	R AND A	IR DRYER – DIR	ECT DRI	VE	
		0,8	55 - 190	0,92 - 3,17						
0	Airpol PRT 18	1,0	55 - 160	0,92 - 2,67	18,5	0,64	720x1300x1460	G ³ / ₄	560	70
Airpol	FILLIO	1,3	50 - 132	0,83 - 2,20						
		0,8	54 - 220	0,90 - 3,67						
3	Airpol PRT 22	1,0	54 - 190	0,90 - 3,17	22	0,64	720x1300x1460	G ³ / ₄	595	70
Airpot	PK1 22	1,3	52 - 162	0,87 - 2,70						
		0,75	90 - 320	1,50 - 5,33						
Arrpol	Airpol	1,0	90 - 265	1,50 - 4,42	30	2,2	2330x900x1460	G 1 ¹ / ₂	1250	75
, a	PRT 30	1,3	77 - 200	1,28 - 3,33				_		
		0,75	96 - 385	1,60 - 6,42						
Airpol	Airpol	1,0	96 - 325	1,60 - 5,42	37	2,2	2330x900x1460	G 1 ¹ / ₂	1290	75
Į.	PRT 37	1,3	98 - 290	1,63 - 4,83		_,_		12		
		٠,٦	20 200	1,03 1,03						

^{*)} Capacity measured acc. to EN ISO 1217:2009 and EN ISO 5167-2.

**) Noise level acc. to EN ISO 2151.

⁻ pressure dew point of the refrigeration air dryer: +3°C

^{- 2.4.2} compressed air quality class, acc. to ISO 8573.1 (in standard version of screw compressors KTPR and PRT). On Customer request - possible individual compressor version, depending on the required air quality class.

	Model	Discharge overpressure	Capacity *) min-max	Capacity *) min-max	Nominal motor power	Fan motor power	Overall dimensions (L x D x H)	Compressed air connection	Weight	Noise level **)
		MPa	m³/h	m³/min	kW	kW	mm		kg	db(A)
SCRE	W COMPRES	SORS W	/ITH FREQU	JENCY CON	VERTER	AND AIF	R DRYER – DIREC	T DRIV	E	
		0,75	150 - 465	2,50 - 7,75						
Airpol	Airpol PRT45	1,0	150 - 420	2,50 - 7,00	45	2,2	2530x1000x1640	$G 1^{1}/_{2}$	1400	75
		1,3	120 - 350	2,00 - 5,83						
		0,75	154 - 595	2,57 - 9,92						
Airpoi	Airpol PRT 55	1,0	154 - 510	2,57 - 8,50	55	2,2	2530x1000x1640	G 1 ¹ / ₂	1500	75
		1,3	138 - 400	2,30 - 6,67						
		0,75	218 - 820	3,36 - 13,67						
Airpol	Airpol PRT 75	1,0	218 - 740	3,36 - 12,33	75	4,15	2850x1230x1670	G 2	2200	75
		1,3	212 - 565	3,53 - 9,42						
		0,75	276 - 975	4,60 - 16,25						
Airpol	Airpol PRT 90	1,0	276 - 820	4,60 - 13,67	90	4,15	3750x1485x2130	G 2	3000	83
		1,3	206 - 685	3,43 - 11,42						
		0,75	577 - 1155	9,62 - 19,25						
Atrool	Airpol PRT 110	1,0	507 - 1015	8,45 - 16,92	110	3,0	3750x1485x2130	G 2	3800	83
		1,3	425 - 850	7,10 - 14,17						
		0,75	690 - 1380	11,50 - 23,00						
Afripol	Airpol PRT 132	1,0	618 - 1235	10,30 - 20,60	132	5,5	4500x1600x1800	G 2 ¹ / ₂	4200	83
		1,3	498 - 995	8,30 - 16,58						
		0,75	900 - 1800	15,00 - 30,00						
Althol	Airpol PRT 160	1,0	738 - 1475	12,25 - 24,58	160	11	4500x1600x1800	G 2 ¹ / ₂	4500	83
	100	1,3	680 - 1360	11,33 - 22,67						



Airpol Ltd. is the largest Polish manufacturer of compressors, delivering modern and efficient compressed air production and treatment systems. We offer a complete service from design to turnkey compressor room and adapt our products to meet individual customer's requirements.

The company was established in 1991, after restructuring a factory with over 30 years of tradition in compressors manufacturing. At present it employs nearly 150 people, including the experienced team of engineers and technicians who continuously improves our products, develops innovative design solutions and offers extensive help in development of individual energy-saving solutions.

Over 60 years of experience in the compressor industry led to extending our offer with our own air ends, designed and manufactured with the highest precision using the latest technology.

The detailed quality control at every stage of the production process gives the certainty of selecting the products with the highest quality and utility features.

Many years of experience in compressors production, high quality product and wide company's offer together with an individual approach to every customer has ensured the company a strong competitor position in the compressor industry both on the Polish and foreign market.

WE OFFER

- oil-free and oil-injected screw compressors
- oil lubricated and oil-free reciprocating compressors for air and other gases
- scroll compressors
- screw air ends
- blowers
- air receivers
- adsorption dryers
- refrigeration dryers
- nitrogen generators
- container compressor stations
- compressed air treatment systems (filters, dryers, water separators, oil water separators)
- compressed air installations
- permanent service support of compressors (through factory service in Poznan, Elk, Rzeszow and Gliwice and developed network of authorised service centres)





Screw air ends **ASU** with optimized rotors profile







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



COMPRESSORS Ltd.

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