

ECOTROC® ATM



Adsorption Dryers for Medical Compressed Air

ECOTROC® ATM



Medical breathing air – reliably purified

The ECOTROC® ATM product line has been specially developed for the conversion of compressed air into medical air. Compressed air intended for use as breathing air is subject to particularly strict requirements concerning air quality and failure safety.

Use of the ECOTROC® ATM purification systems guarantees compliance with the internationally applied limits and current standards (e.g. Pharmacopée Européenne / DIN EN ISO 7396-1).



Your Safety

KSI Filtertechnik is certified compliant with DIN EN ISO 9001 and EN ISO 13485 and is therefore your ideal partner if you are looking for a medical device manufacturer able to guarantee a risk-free installation.

Our trained team of medical equipment consultants will be glad to inform you of our capabilities and to devise and deliver a technically problem-free and safe solution for your specific requirements. In particular, the fact that we can also commission the compressed air processing system in conformity with DIN EN ISO 7396-1 will help you to simplify the procedures for new installation or expansion of your existing compressed air system.

For clean compressed air, free of moisture and dirt

Costs, costs, costs

The reduction of investment costs, operating costs and maintenance costs, in particular through the use of the **ECOTROC® ATM** product line, is our contribution to cost-cutting in the medical sector. Our intelligently structured spare parts packages will also reduce your long-term costs.

The **ECOTROC® ATM** product line can be used both as retrofit for existing compressed air supply systems and in new systems, which can also be commissioned and certified by KSI.

ATM und ATM- AL

Standard package

Composition of an ECOTROC® ATM purification unit:

- **ECOCLEAN®**
MFO/SMA prefilter combination (1 micron/0.01 micron)
- **ECOTROC®**
ATK heatless-type adsorption dryer, fully automatic, with special adsorbent combination
- **ECOMATIC**
Electronic control system including compressor synchronizing circuit
- **ECOCLEAN®**
CA activated carbon filter
(residual oil content 0,003 mg/m³)
- **ECOCLEAN®**
HC catalyst
- **ECOCLEAN®**
SMA final filter (0,01 micron)

Options

ECOTROCONOMY® Dewpoint Control

- Optional expansion or problem-free retrofit
- Dewpoint sensor with dewpoint indicator
- If required, regeneration control as a function of the detected operating situation
- Potential-free alarm output
- Storage of operating data in the event of power failure
- Automatic service indicator
- Interface for data output to PC/software [Option]

Limit values for Breathing Air

Residual values according to Pharmacopée Européenne / DIN EN ISO 7396-1 and ECOTROC® ATM

				Pharmacopée Européenne	ECOTROC® ATM
Carbon monoxide	CO	(ppm)	<	5	5
Carbon dioxide	CO ₂	(ppm)	<	500	300
Water vapour		(ppm)	<	67	67
Sulphuric acid	SO ₂	(ppm)	<	1	1
Nitrous gases	NO _x	(ppm)	<	2	2
Nitrogen oxide	NO ₂	(ppm)	<	2	2
Oil vapour/residual content		(mg/m³)	<	0,1	0,1
Nitrogen	N ₂	(ppm)	<		2
Oxygen	O ₂	%	<	21 (+/-1)	20,9 (+/-1)
Dirt particles	<			0,01 micron with 99,9999%	
Aromatic and odorous substances				free	

The specified values are maximum concentrations

A thoroughly convincing product

... and how it works

Contaminated compressed air high in humidity and oil fractions is first fed into the prefilter combination. Here, the compressed air is cleaned of particles and condensate. Then, in the downstream adsorption dryer, the water vapour concentration is reduced to a dewpoint of -28°C. Next, the compressed air is freed of odours and various residues of gases and carbon monoxide in the activated carbon and catalyst stages. Finally, any abraded particles are blocked in the final filter stage.



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Medical air purification

Type	Capacity m ³ /h	Connection	Width in mm	Depth in mm	Height in mm
ATM-AL 1	6	1/4"	720	205	550
ATM-AL 2	12	1/4"	720	205	685
ATM-AL 3	24	3/8"	750	205	895
ATM-AL 4	42	3/8"	750	215	1155
ATM-AL 6	60	1/2"	885	215	1218
ATM-AL 8	84	1/2"	885	215	1360
ATM-AL 9	108	1/2"	1005	260	1360
ATM 15	180	1"	1100	664	1106
ATM 18	216	1"	1100	664	1266
ATM 22	252	1"	1154	664	1382
ATM 34	408	1 1/2"	1154	729	1652
ATM 45	576	1 1/2"	1527	729	2011
ATM 55	720	1 1/2"	1980	875	1800

*based on 1 bar (abs) and 20°C with 9 bar g and 35°C inlet temperature

Medium: compressed air

Pressure dewpoint: -28°C

Operating pressure: min. 4 bar / max. 16 bar (g)

Power supply: 230V/ 50-60 Hz AC

ATM 15-55

ATM-AL 1-9

