

ECOTROC CT

High-end Activated Carbon Adsorber

Solutions for oil-free compressed air and gas



When quality matters

Oil aerosoles up to 0.01 mg/m^3 can be extracted by filtration technology. If compressed air of higher purity is required, ECOTROC CT activated carbon towers come into play. The result is an exceptionally high air quality with a residual oil content down to 0.003 mg/m^3 . The **ECOTROC CT** product group can be divided into the lighter **CTAP** aluminium version, **CTN** standard welded version and the **CTF** version with flange connection.

Versions and options

- **ECOTROC CTAP** for volume flows from 6 cfm up to 130 cfm
- **ECOTROC CTN** for volume flows from 200 cfm up to 705 cfm
- **ECOTROC CTF** for volume flows from 915 cfm up to 1,800 cfm

ECOTROC CT PLUS-EFFECTS +++

- + optimized adsorption of oil vapour (hydrocarbons)
- + highly activated carbon for air and gases ensures maximum efficiency
- + optimized volume flow diversion through the whole activated carbon bed
- + residual oil content up to maximum 0.003 mg/m^3 (exceeds ISO 8573-1 class 1 requirements)
- + oil indicator monitors the saturation stage, standard from model **CTN200** and larger (optional for **CTAP**)
- + easy access to all components
- + 8,000 hours activated carbon life time*

*The activated carbon life time depends on the quality and the relative humidity of the medium as well as on the type of compressor.

ECOTROC CT

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Effective 3-stage-process

1. Pre-filtration

The flow optimized pre-filter **KSI ECOCLEAN SMA** (optional) separates solid and fluid components (oil aerosols) from the compressed air/compressed gas according to ISO 8573.1 class 1.

2. Adsorption

The pre-filtered compressed air passes through a diffuser from the top end of the desiccant vessel through the activated carbon. Physical adhesion power cause the adsorption of hydrocarbons (oil vapour) onto the large inner surface of the special activated carbon.

3. Post-filtration

The compressed air reaches the bottom end of the desiccant vessel after flowing through the whole activated carbon bed and enters the **KSI ECOCLEAN DMF** final filter for the final filtration of residual particles. Afterwards, high purity compressed air is available for further use.

Scope of supply and performance levels

ECOTROC CTAP6 – 130

ready-to-use activated carbon adsorber

including

- post-filter **KSI ECOCLEAN DMF**
- pressure gauge for displaying the operating pressure
- capacity volume flow: up to 130 cfm*
- residual oil content up to: < 0.003 mg/m³

* calculated at 14,5 psi (abs.) and 68°F at 101,5 psi working pressure

ECOTROC CTN200 – 705

ready-to-use activated carbon adsorber

including

- post-filter **KSI ECOCLEAN DMF**
- pressure gauge for displaying the operating pressure
- oil test indicator
- capacity volume flow: up to 705 cfm*
- residual oil content up to: < 0.003 mg/m³

* calculated at 14,5 psi (abs.) and 68°F at 101,5 psi working pressure



ECOTROC CTF915 – 1800

ready-to-use activated carbon adsorber

including

- pressure gauge for displaying the operating pressure
- oil test indicator
- capacity volume flow: up to 1,800 cfm*
- residual oil content up to: < 0.003 mg/m³

* calculated at 14,5 psi (abs.) and 68°F at 101,5 psi working pressure

Specifications

Type	Capacity*		Dimensions (inch)				Connection		Weight
	cfm	A	B(1)	B(2)	C	D	Inlet	Outlet	lbs
CTAP6	6	27.32	25.00		9.69	7.09	1/4"	3/8"	18
CTAP12	12	31.26	28.94		9.69	7.09	1/4"	3/8"	20
CTAP20	20	32.76	30.20		12.32	8.27	1/2"	3/8"	35
CTAP30	30	36.73	34.13		12.32	8.27	1/2"	3/8"	37
CTAP35	35	40.67	38.07		12.32	8.27	1/2"	1/2"	49
CTAP40	40	36.65	33.86		14.80	9.84	1/2"	1/2"	57
CTAP55	55	42.17	39.37		14.80	9.84	1/2"	1/2"	66
CTAP65	65	49.25	46.46		15.75	9.84	1/2"	1/2"	71
CTAP80	80	39.69	36.54	27.00	15.00	21.34	1"	1"	124
CTAP110	110	45.20	42.05	27.00	15.00	21.34	1"	1"	137
CTAP130	130	52.28	49.13	27.00	15.00	21.34	1"	1"	155
CTN200	200	60.63	59.49	41.22	27.40	27.56	1 1/2"	1 1/2"	353
CTN285	285	64.53	63.39	45.08	27.40	27.56	1 1/2"	1 1/2"	375
CTN350	350	82.64	81.5	63.19	27.40	27.56	1 1/2"	1 1/2"	463
CTN480	480	74.45	70.2	47.52	33.86	33.27	2"	2"	761
CTN590	590	83.43	82.01	59.33	33.86	33.27	2"	2"	882
CTN705	705	87.36	85.94	63.27	33.86	33.27	2"	2"	926
CTF915	915	83.15	79.21	6.22	27.48	27.56	3" (flange)	3" (flange)	827
CTF1090	1090	83.54	79.61	5.83	29.49	27.56	3" (flange)	3" (flange)	959
CTF1210	1210	83.98	80.04	5.39	31.50	28.58	3" (flange)	3" (flange)	1089
CTF1445	1445	91.65	87.32	8.74	34.06	33.46	4" (flange)	4" (flange)	1257
CTF1800	1800	92.13	87.80	8.27	36.46	33.58	4" (flange)	4" (flange)	1532

*calculated at 14.5 psi (abs.) and 68°F at 101.5 psi working pressure

Corrections factors

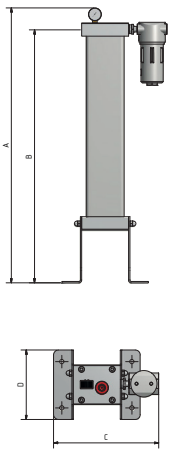
Correction factors operating pressure																									
psi	58	65	73	80	87	94	102	109	116	123	131	138	145	152	160	167	174	181	189	196	203	210	218	225	232
F(p)	0.6	0.7	0.74	0.82	0.89	0.97	1	1.08	1.11	1.16	1.22	1.29	1.36	1.42	1.5	1.57	1.63	1.69	1.75	1.83	1.9	1.96	2.03	2.1	2.14

Correction factors inlet temperature									
°F	<77	77	86	95	100,4	104	113	118,4	122
F(t)	1,2	1,1	1,09	1	0,84	0,78	0,72	0,65	0,58

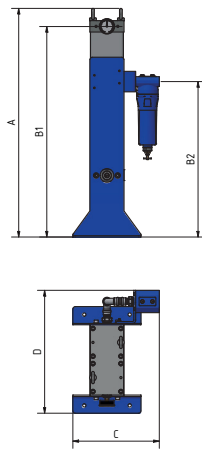
Multiply the capacity of the dryer by the correction factor in the table above and you will get the corrected capacity.

Higher inlet temperatures on request.

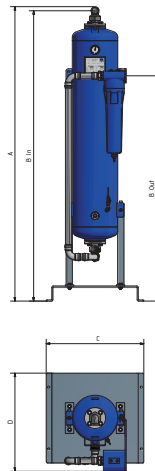
Dimensional drawings



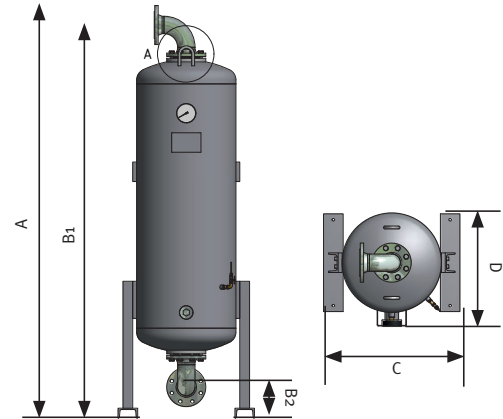
CTAP6 - CTAP65



CTAP80 - CTAP130



CTN200 - CTN705



CTF915 - CTF1800

Field of application

Field of application	Installation inside non-aggressive atmosphere
Residual oil amount at 68°F	0.003 mg/m ³
Relative humidity	100% (under the precondition of an upstream refrigeration dryer)
Ambient temperature max.	122°F
Ambient temperature min.	+35.6°F
Operating pressure	0 to 232 psi (CTAP65 + CTAP130 max 196 psi)
Medium	compressed air and gases

*calculated at 14.5 psi (abs.) and 68°F at 101.5 psi working pressure

Technical features

Following norms and manufacturing processes are basis for the production:

DIN EN ISO 12100, DIN EN 1050, DIN EN 50081, DIN EN 50082, DIN EN 60204, DIN EN ISO 9001:2015 (Quality Management), 2014/29/EU (Simple Pressure Vessels), 2014/68/EU (Pressure Equipment Directives), TR B'en (Technical Directives Pressure Vessels), GSG (Equipment Safety Act), 9. GSGV (9th Regulation for Equipment Safety), 2006/42/EG

Approvals for Pressure Equipment	
EU	Approved for fluid group 2 according to Pressure Equipment Directive 2014/68/EU
North America	CRN (certificates on request) ASME U/UM and NB
according to classification	CTAP6 - 20 par. 3 art. 4
DGRL 2014/68/EU	CTAP30 - 130 category
fluid group	2
Quality Management	
development/Production	DIN EN ISO 9001
Air purity class according to ISO 8573-1:2010	
solid particles	Class 2
humidity (gaseous)	-
Total oil	Class 1