

KTAOFC Series

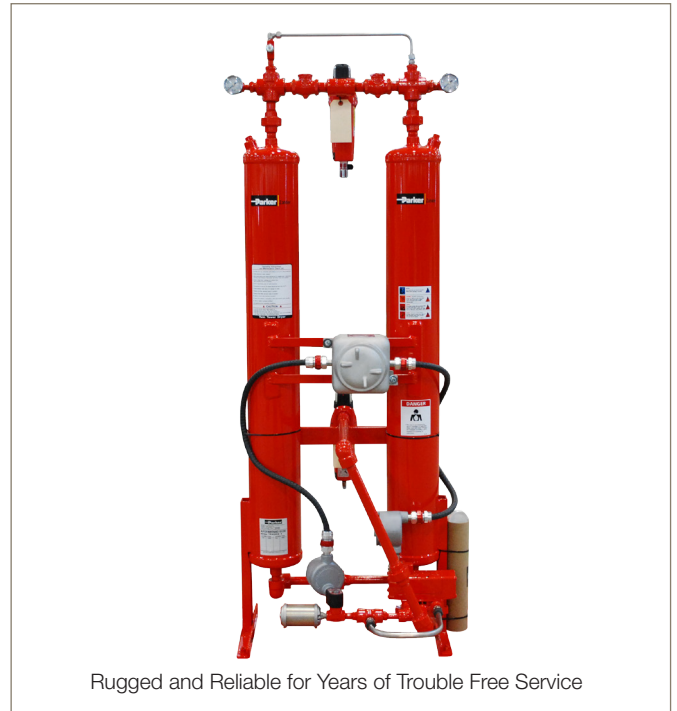
Heatless Desiccant Air Dryers for the Oil & Gas Industry



Parker Zander's KTAOFC Series of heatless desiccant dryers provide a continuous supply of dry, oil-free compressed air by automatically cycling the flow of air through two desiccant towers. Compressed air is dried through one tower while the other desiccant tower is being regenerated by a portion of the dried air. Cycling is controlled by a solid state controller.

The KTAOFC Series is designed specifically for oil, gas and related industries. The dryer provides instrument quality compressed air and is packaged for maximum reliability and long, trouble-free service life.

Considering the importance of filtration to dryer performance, Parker Zander recommends that all KTAOFC Series dryers are ordered as a complete, factory assembled air treatment system. Standard equipment includes: properly sized, factory installed coalescing pre-filter and particulate after-filter with automatic float drain system and visual element condition indicators. Oversized filters are selected for longer element life and low pressure drop.



Rugged and Reliable for Years of Trouble Free Service



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Features & Benefits:

- **Air quality - clean dry, oil-free meets ISO 8573.1 Class 1.2.1**
- **cETLus Listed**
- **Reliable solid state controller eliminates the problems associated with antiquated cam timers.**
- **Superior valve performance.**
 - **Four-way directional control valve has an average life expectancy of 150 million cycles even in the harshest environments (KTAOFC15 thru KTAOFC80).**
 - **High cycle independent air operated angle seat valves specifically designed for compressed air service (KTAOFC105 thru KTAOFC500).**
- **Easily classified to governing code requirements, such as OSHA, CSA, CRN, NEC, etc.**
- **Flexible packaging available. See optional equipment.**
- **Low power requirement - less than 20 watts @ 120V/1Ph/60Hz electrical input.**
- **Few moving parts - low maintenance**
- **Compact design, lightweight with minimal installation space required.**
- **Fully automatic - operates continuously without attention.**



ENGINEERING YOUR SUCCESS.

Standard Equipment

- ETL Listed
- Electric 120V/1Ph/60Hz
- Solid State Controller
- NEMA 4X Panel Enclosure
- Separate Tower Fill and Drain Ports
- Schedule 80, A106B Piping, 3000# A105 Fittings
- ASME Code (KTAOFC105 thru KTAOFC500)
- High Life Cycle Switching Valves
- Safety Relief Valves
- Locally Mounted Tank Pressure Gauges
- Purge Adjustment Valve
- Purge Exhaust Muffler(s) (OSHA Approved)
- 304 Stainless Steel Control Tubing & Parker Fittings
- Mounted Pre-Filter and After-Filter
- CRN Registered Tanks and Filters

Optional Equipment

- NEMA 7 Construction
 - Class 1, Div 1, Group C&D
 - Class 1, Div 2, Group C&D
- Low Ambient Packages
- Non-Yellow Metal Construction
 - Nickel Plated Safety Valve(s) and Exhaust Valve (KTAOFC15 thru KTAOFC80)
 - Stainless Steel Inlet and Exhaust Valves with Nickel Plated Safety Valves (KTAOFC105 thru KTAOFC500)
- Ecotronic Energy Management System

Engineering Data Specifications

Flowrate scfm	Model	Pipe Size In/Out	Height in (mm)	Width in (mm)	Depth in (mm)	Pre-Filter	After-Filter
15	KTAOFC15A1E	3/8"	47 1/8 (1197)	19 5/8 (498)	14 (356)	GL3XL-N	GL3ZL-N
23	KTAOFC23A1E	3/8"	47 1/8 (1197)	19 5/8 (498)	14 (356)	GL3XL-N	GL3ZL-N
36	KTAOFC36A1E	1/2"	67 1/4 (1708)	20 1/2 (521)	14 (356)	GL5XL-N	GL5ZL-N
50	KTAOFC50A1E	1/2"	68 1/8 (1730)	24 (610)	14 (356)	GL7XL-N	GL7ZL-N
80	KTAOFC80A1E	3/4"	68 1/8 (1730)	24 (610)	14 (356)	GL9XL-N	GL9ZL-N
105	KTAOFC105A1E	1"	80 5/8 (2048)	31 3/8 (797)	18 (457)	GL9XL-N	GL9ZL-N
140	KTAOFC140A1E	1"	80 5/8 (2048)	31 3/8 (797)	18 (457)	GL11XL-N	GL11ZL-N
220	KTAOFC220A1E	1 1/2"	81 7/8 (2080)	37 3/4 (959)	21 11/16 (551)	GL11XL-N	GL11ZL-N
280	KTAOFC280A1E	1 1/2"	81 7/8 (2080)	40 3/8 (1025)	21 11/16 (551)	GL12XL-N	GL12ZL-N
360	KTAOFC360A1E	1 1/2"	81 7/8 (2080)	40 3/8 (1025)	21 11/16 (551)	GL13XL-N	GL13ZL-N
500	KTAOFC500A1E	2"	CF	CF	CF	GL14XL-N	GL14ZL-N

Max. Inlet Temperature	120°F (49°C)
Min. Inlet Temperature	50°F (10°C)
Max. Working Pressure	150 psi g (10.3 bar g)
Min. Working Pressure	80 psi g (5.5 bar g)
Dewpoint	-40°F (-40°C)
ISO Quality Class	8573.1 Class 1.2.1
Standard Electronics	120V/1Ph/60Hz
Controls	Solid State Board

- Pressure drop at rated flow: less than 5 psi (0.34 bar)
- Maximum inlet air or ambient air temperature 120°F (49°C)
- Maximum working pressure: 150 psi g (10.5 bar g) standard units for higher maximum working pressure are available.
- Minimum operating pressure: 80 psi g (5.5 bar g)

Correction Factors

Inlet Air Pressure

psi g	80	90	100	110	120	130	140	150
bar g	5.5	6.2	6.9	7.6	8.3	9.0	9.7	10.3
CF	.83	.91	1.00	1.09	1.18	1.27	1.37	1.43

Temperature

°F	100	105	110	115	120
°C	38	41	43	46	49
CF	1.00	0.85	0.74	0.64	0.56

EXAMPLE CALCULATIONS

KTAOFC80 Corrected for 120 psi (8.3 bar)
 Corrected Capacity: = (Rated Capacity) X (psi Correction)
 = 80 scfm (2.27 Nm³/min) X (1.18)
 = 94.4 scfm (2.67 Nm³/min)