

## Compressed Air Dryers

# H Series Refrigerated Dryer



### Capacity

- 12-125 cfm @ 100 psig

### Standard Features

- On/Off switch
- Dew point indicator
- Built-in moisture separator
- Automatic condensate drain
- Environmentally friendly R134a refrigerant

### Optional Equipment

- Bypass piping

*All dryers are UL 508 listed and CSA certified.*

*All dryers use environmentally friendly R134a refrigerant*

### Why dry your air?

Atmospheric air contains water vapor. At 75°F and 75% relative humidity, a typical 25 hp compressor ingests as much as 6 gallons of water every 8 hours. As a rule of thumb, every 20 degree increase in temperature doubles air's ability to hold moisture. As a result, hot compressed air holds a lot of moisture vapor. As the air moves through your system, the vapor cools and condenses into liquid, promoting rust and corrosion in piping. It also contaminates tools and product. Rust, corrosion and contamination in pipes, tools and product increase maintenance and production costs.

### Effective and efficient

For the vast majority of air system moisture problems, refrigerated dryers are the most effective solution. Kaeser's new H series refrigerated dryers efficiently remove liquids by cooling the air and condensing the water vapor. Water is then removed by our built-in separator and automatic drain trap.

### Reliable

Our single plate stainless steel heat exchanger provides maintenance-free operation with low pressure drop. TBH and TCH models feature multistage stainless steel centrifugal separators

with a wire mesh to remove 99.9% water. These and other features reflect Kaeser's commitment to building equipment that will provide years of trouble free operation in the industrial environment.

### Value

H dryers are also extremely cost effective. They are easy to install, require little maintenance, and consume little electricity. The combination of excellent efficiency features, high reliability, and easy maintenance make the H series dryer an exceptional value.

## Specifications

Model	Rated Capacity* (scfm)	Power Supply (V / Ph / Hz)	Inlet/Outlet Connection (in. NPTF)	Dimensions W x D x H (in.)	Weight (lbs.)
TAH 4	12	115 / 1 / 60 or 230 / 1 / 60	3/4	5 x 19 x 25	70
TAH 6	20				83
TBH 9	30	115 / 1 / 60		14 x 20 x 30	99
TBH 13	40				104
TCH 22	80	115 / 1 / 60 or 230 / 1 / 60	1	17 x 24 x 35	121
TCH 26	90				124
TCH 32	110				130
TCH 35	125				145

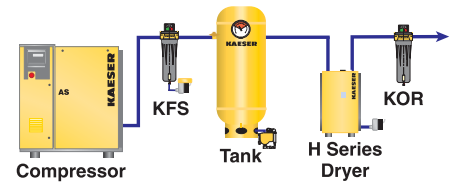
\*Rated capacity: Based on compressed air saturated at 100°F and 100 psig and operation in a 100°F ambient.

- Maximum inlet temperature: 130°F
- Maximum/minimum ambient air temperature: 110/40°F
- Maximum allowable working pressure: 230 psig

## Selecting the Proper Dryer

To correct rated capacity for actual operating conditions, refer to "Capacity Correction Factors for Operating Conditions" and "Capacity Correction Factors for Ambient Temperature". Find the capacity correction factors corresponding to the inlet and ambient conditions. Multiply these factors to find the "overall" capacity correction factor, then multiply any dryer's rated capacity by the overall correction factor to determine its capacity at your operating conditions. Capacity correction factors for conditions not shown may be interpolated.

## Typical dryer location



For most efficient energy usage, place a filtered separator (KFS) and a receiver tank before the dryer to remove the bulk liquid condensate and solid particles. An oil removal filter (KOR) after the dryer removes oil aerosols. For heavy, intermittent air usage, a second receiver after the dryer may be required.

Table 1: Capacity Correction Factors for Operating Conditions

Pressure (psig)	Temperature (°F)										
	75	80	85	90	95	100	105	110	115	120	130
20	1.03	0.89	0.79	0.70	0.67	0.64	0.53	0.48	0.45	0.40	0.33
40	1.19	1.02	0.91	0.81	0.77	0.74	0.60	0.55	0.51	0.46	0.38
60	1.37	1.18	1.05	0.93	0.88	0.85	0.69	0.64	0.59	0.53	0.44
75	1.47	1.26	1.12	1.00	0.95	0.91	0.75	0.68	0.64	0.56	0.47
100	1.61	1.39	1.23	1.10	1.04	1.00	0.82	0.75	0.70	0.62	0.52
110	1.65	1.42	1.26	1.12	1.06	1.02	0.84	0.77	0.71	0.63	0.53
125	1.72	1.48	1.31	1.17	1.11	1.06	0.87	0.80	0.74	0.66	0.55
145	1.77	1.53	1.36	1.21	1.14	1.10	0.90	0.83	0.77	0.68	0.57
175	1.85	1.60	1.42	1.26	1.20	1.15	0.94	0.86	0.80	0.71	0.60
200	1.92	1.65	1.47	1.31	1.24	1.19	0.98	0.90	0.83	0.74	0.62
230	1.99	1.71	1.52	1.36	1.29	1.23	1.01	0.93	0.86	0.77	0.64

Table 2: Capacity Correction Factors for Ambient Temperature

Factor	Ambient Air Temperature (°F)							
	75	80	85	90	95	100	105	110
	1.15	1.12	1.09	1.06	1.03	1.00	0.97	0.94

Specifications are subject to change without notice.



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Certified Management System



## The Air Systems Specialist

With over 85 years of experience, Kaeser is the air systems specialist. Our extensive 100,000 square foot facility allows us to provide unequaled product availability. With service centers nationwide and our 24-hour emergency parts guarantee, Kaeser customers can rely on the best after-sales support in the industry. Kaeser stands committed to providing the highest quality air system for your specific compressed air needs.