

Compressed Air Dryers

H Series Refrigerated Dryer



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

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

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	Flow Rate @ 100 psig (scfm)	Pressure Drop (psid)	Refrig. Comp. (hp)	Voltage	Air In/Out Conn. (NPTF)	Dimensions H x W x D (in.)	Weight (lbs.)
TAH 4	12	0.7	0.35	115/1/60 or 230/1/60	3/4	25 x 15 x 19	70
TAH 6	20	0.7	0.44				83
TBH 9	30	3.2	0.44	115/1/60		30 x 14 x 20	99
TBH 13	40	3.2	0.57				104
TCH 22	80	3.0	0.87	115/1/60 or 230/1/60	1	35 x 17 x 24	121
TCH 26	90	3.7	0.87				124
TCH 32	110	4.4	1.00				130
TCH 35	125	4.4	1.20				145

Table based on: 100°F air inlet, 100 psig, 100°F ambient temperature, and 38°F pdp
 • Minimum ambient temperature: 38°F • Maximum ambient temperature: 113°F
 • Maximum inlet temperature: 140°F • Maximum/minimum working pressure 230/20 psig
 • Condensate drain connection: 1/4" NPTF

Specifications are subject to change without notice.

Sizing your dryer

Nominal flows for dryers are based on fully saturated air at 100 psig and 100°F, with ambient air temperature of 100°F. To correct the rated capacity of a dryer for actual conditions, find the capacity correction factor corresponding to inlet and ambient conditions. Multiply these factors to find your "overall" correction factor and multiply the dryer's rated capacity by the overall factor to determine the dryer's capacity at your operating conditions.

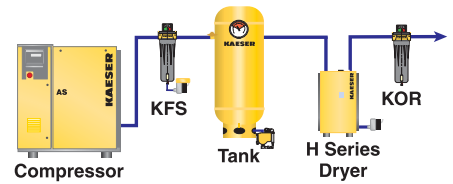
Temperature and pressure capacity correction factors

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

Ambient air capacity correction factors

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

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.

KAESER COMPRESSORS

Built for a lifetime.™

Corporate Headquarters:
 P.O. Box 946
 Fredericksburg, Virginia 22404
 Phone 540-898-5500
 Fax 540-898-5520
 www.kaeser.com

Certified Management Systems



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 unequalled 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.