

Compressed Air Dryers

Wall Mounted Desiccant Dryer



Consistently dry air

For small applications that need very dry air, Kaeser offers a wall mounted version of its heatless adsorptive desiccant dryer. The KADW dryers are based on a “counterflow” design in which towers dry air as it flows up and purge air on the way down. The driest desiccant is always at the top of the bed so air leaving the dryer is always at the specified dew point.

To ensure proper unit operation, the towers are designed to limit the air velocity. This prevents bed fluidization and

desiccant dusting and ensures proper contact time between the air and desiccant.

Precise dew points

All KADW's include a highly accurate solid-state timer. The timer is set for a standard 4 minute cycle to ensure the required dew point.

Large desiccant beds ensure sufficient water vapor removal to yield -40°F pressure dew point or a -100°F pressure dew point.

Capacity

- 7 to 50 scfm @ 100 psig

Features

- Convenient wall-mounting
- Consistent dew points
- Regenerative desiccant
- Solid state timer
- Completely assembled, piped, and wired for installation
- 6 foot cord set

Recommended Accessories

- KOR coalescing oil removal filter as a prefilter (shown at left)
- KPF-RF particulate filter as an after-filter (shown at left)

Easy installation

KADW series dryers are furnished in ready-to-mount cabinets. Completely assembled, piped, and wired at the factory, and fully charged with desiccant. Simply make the utility connections and the air dryer is ready for operation.

All units are designed for easy connection to the recommended Kaeser oil removal prefilter and the particulate afterfilter.

Flow capacities

Maximum inlet flow capacities at various pressures: To determine maximum inlet flow at air inlet pressures other than 100 psig, multiply the inlet flow from Table 1 by the multiplier from Table 2 that corresponds to system pressure at inlet of dryer.

Purge flow at various capacities: To determine average or maximum purge flow at inlet pressures other than 100 psig, multiply purge flow (Table 1), by the correction factor (Table 3) that corresponds to system pressure at inlet of dryer

Outlet flow capacities: To determine outlet flow capacity, subtract purge flow from inlet flow.

Optional Equipment: Filters

Filters provide the additional protection from contaminants that degrade desiccant performance. Filters remove solid particles, oil aerosols, moisture, and oil vapors. Adding filters to the compressed air system will save considerable costs in process downtime, cleaning tools, and repairing equipment.

Table 1: Kaeser Wall-Mounted Desiccant Dryers

Model	Outlet Dew Point (°F)	Inlet Flow ¹ (scfm)	Purge Flow ² (scfm)		Downstream Air Avail (scfm)		Dimensions W x D x H (in.)	Inlet/Outlet Conn (in.)	Wt. (lbs)
			Avg.	Max.	Avg.	Min.			
KADW 7A	-40 -100	7.3 5.6	1.5	2.0	5.8 4.1	5.3 3.6	19 ³ / ₈ x 6 ¹¹ / ₁₆ x 30 ¹ / ₂	1/2 NPT(F)	55
KADW 13A	-40 -100	13 10	2.7	3.7	10.3 7.3	9.3 6.3			60
KADW 20A	-40 -100	20 16	4.2	5.5	15.8 11.8	14.5 10.5			71
KADW 25A	-40 -100	25 20	5.1	6.8	19.9 14.9	18.2 13.2	26 ¹ / ₄ x 8 ⁹ / ₁₆ x 31 ⁵ / ₈	1/2 NPT(F)	93
KADW 30A	-40 -100	30 24	6.2	8.2	23.8 17.8	21.8 15.8			93
KADW 35A	-40 -100	35 28	7.2	9.6	27.8 20.8	25.4 18.4			99
KADW 50A	-40 -100	50 40	10.2	13.6	39.8 29.8	36.4 26.4	26 ¹ / ₄ x 8 ⁹ / ₁₆ x 43 ³ / ₈		132

Max/Min working pressure: 150/50 psig. **Electrical Power:** 115V/1ph/60 Hz. **Enclosure:** NEMA 1 (standard); NEMA 4 (optional). **Pressure drop:** <5 psi. **Ambient temperature range:** 40 to 120°F.

Note 1: Inlet flows are established in accordance with CAGI (Compressed Air and Gas Institute) standard ADF-200, Dual Stage Regenerative Desiccant Compressed Air Dryers - Methods for Testing and Rating. Conditions for rating dryers are: Inlet pressure - 100 psig; inlet temperature - saturated at 100°F.

Note 2: Average Purge Flow is the total amount of air used to purge and repressurize off-stream towers averaged over the cycle time. Maximum purge flow is the flow rate through the off-stream tower during that portion of the cycle the purge/repressurization valve is open.

Table 2: Capacity Correction Factor for Various Inlet Pressures

Inlet Pressure (psig)	50	60	70	80	90	100	110	120	130	140	150
Multiplier	0.31	0.42	0.54	0.68	0.83	1.0	1.09	1.17	1.26	1.35	1.44

Table 3: Purge Flow Correction Factor for Various Inlet Pressures

Inlet Pressure (psig)	50	60	70	80	90	100	110	120	130	140	150
Multiplier	0.55	0.64	0.73	0.82	0.91	1.0	1.09	1.17	1.26	1.35	1.44

Specifications are subject to change without notice.



Built for a lifetime.™

www.kaeser.com

Kaeser Compressors, Inc.
511 Sigma Drive
Fredericksburg, VA 22408 USA
Telephone: 540-898-5500
Toll Free: 800-777-7873
info.usa@kaeser.com

Kaeser Compressors Canada Inc.
3760 La Verendrye Street
Boisbriand, QC J7H 1R5 CANADA
Telephone: (450) 971-1414
Toll free: (800) 477-1416
info.canada@kaeser.com

Kaeser Compresores de México S de RL de CV
Calle 2 #123
Parque Industrial Jurídica
76100 Querétaro, Qro.
Telephone: 01 (442) 218 64 48
sales.mexico@kaeser.com

Kaeser Compresores de Guatemala y Cia. Ltda.
Calz. Atanasio Tzul 21-00, zona 12
El Cortijo II, Bodega 501
01012-Guatemala City
Telephone: +502 2412-6000
info.guatemala@kaeser.com

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