

Compressed Air and Gas Dryers

Catalog No. B-30E

MPS Heaterless Dryer Series

The need for clean, pure, moisture-free compressed air and gas is critical. Moisture and contaminants are found in all compressed air and gas systems . . . causing rust and corrosion in your pneumatic tools, contaminating process flows, clogging and damaging delicate pneumatic instrumentation. When freezing temperatures are encountered, condensation trapped in air systems will freeze, causing catastrophic failure in pneumatic lines.

Heaterless regenerative dryers (adsorptive pressure-swing types) are generally preferred by pneumatic specialists because of their simple, reliable design and because of the very low dew points that can be attained ... to -100° F ... in large volumes of compressed air, at minimum cost.

The drying operation uses an inert, hygroscopic material with an enormous surface to mass ratio. As air is passed through this desiccant, moisture is absorbed onto the porous surface. To provide continuous drying, the moisture is removed from the desiccant by passing a small amount of dry, low pressure air through the off-line tower for a pre-set interval. Since the partial pressure of moisture in the bed is higher than the partial pressure of moisture in the purge air, the desiccant releases its absorbed moisture into the purge air. Purge air and moisture are then vented to the atmosphere.

By using twin towers and an automatic cycling system, one tower is always drying while the other is regenerating, thereby providing a continuous, uninterrupted flow of dry air or gas.

Kahn dryers are available for almost all air and gas requirements.

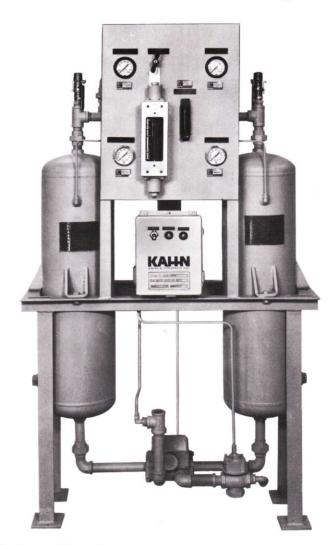
Standard Features

110V/60Hz/1ø-200W

-40°F line pressure dew point
ASME Coded desiccant vessels*
NEMA 10 minute cycle, fully automatic operation
NEMA 1 electrical construction
Fail safe operation. Continuous flow in case of power
failure
Non lubricated flow control valves
Pressure gauges on each desiccant vessel*
Gradual repressurization for longest desiccant life

Gradual repressurization for longest desiccant life Relief valve on outlet manifold Full charge of desiccant Heavy duty angle and channel support base*

*Floor mounted units (MPS-25B and larger)



Optional Features

—100°F line pressure dew point NEMA Class 4, 4X, 7, 12 electrics Entrainment separators, Coalescing prefilters Afterfilters Manual by-passes

Purge rate flow meter and valve

Failure to cycle alarm

Easy to read color change dew point indicator with isolation valve Solid state dew point alarm

Instrument panel

Temperature gauges

Steam jet ejector for vacuum purge

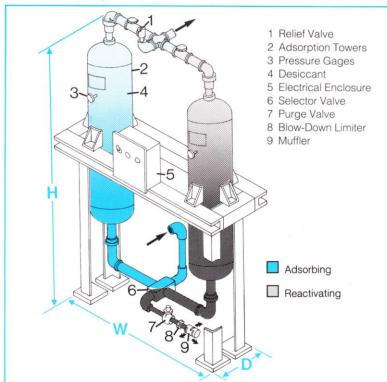
Special designs available for flows up to 30,000 SCFM, 9000 PSIG Construction for corrosive environments, explosive process gases See data sheet B/C 3141 for more information.

Specifications

Model MPS-	Maximum flow capacities (SCFM)										Appx.	NPT	Dimensions		
	80 PSIG		90 PSIG		100 PSIG		110 PSIG		120 PSIG		Wt. (lbs.)	Size (inches)	(inches) H W D		
	100°F	120°F	100°F	120°F	100°F	120°F	100°F	120°F	100°F	120°F					
5E	1.1	1.1	1.2	1.2	1.4	1.3	1.5	1.4	1.6	1.6	13	1/4	13	12	5
5A	1.1	1.1	1.2	1.2	1.4	1.3	1.5	1.4	1.6	1.6	35	1/4	24	18	6
10A	12	12	13	13	15	14	16	15	17	17	55	3/8	34	24	5
17A	36	35	40	38	43	42	47	46	51	49	70	1/2	36	27	9
25B	43	42	48	46	53	51	57	55	62	60	275	1/2	49	33	11
50B	78	75	86	83	94	91	102	99	110	107	350	1	53	37	13
100B	152	147	169	163	185	178	201	194	217	209	500	1	63	39	15
150B	254	245	281	271	308	297	335	323	361	349	725	11/2	68	43	18
200B	356	343	393	380	431	416	468	452	506	488	900	11/2	73	44	18
250B	497	480	550	530	602	581	654	632	707	682	1075	11/2	76	48	21
300B	630	608	697	673	763	737	830	801	896	865	1400	2	78	56	22
400B	915	883	1011	976	1108	1070	1204	1163	1288	1256	1875	2	90	62	26
500B	1056	1020	1168	1128	1280	1236	1392	1344	1503	1451	2150	21/2	89	66	28
600B	1321	1276	1460	1410	1600	1545	1740	1680	1855	1814	2625	3" Fing.	106	70	30
700B	1775	1714	1962	1895	2150	2075	2337	2256	2525	2437	3650	3" Fing.	103	75	60
800B	2350	2268	2589	2533	2720	2663	2850	2788	2973	2908	4350	4" Fing.	103	75	60
900B	3160	3050	3494	3373	3827	3695	4103	4015	4281	4188	5800	6" Fing.	100	90	72

Note: Models MPS-5A through MPS-17A are wall mounted. All larger models are floor mounted and include two locally mounted pressure gages as a standard feature.

Dimensional/Pneumatic



Wide range of flow capacities



Note: The information included herein was correct at the time of publication and supersedes all previously published data. However, it is our policy to continually improve our products to insure even better performance. Consequently, current Kahn products may incorporate modifications not shown or described on these pages.

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