VAN AIR SYSTEMS

Technical Specifications

HL Series Heatless Regenerative Dryers

Main Features

All Van Air HL Series heatless regenerative dryers 200 scfm and larger include...

- Permanently lubricated Inlet Valve
- Valve Position Indicator
- Purge Metering Valve
- Activated Alumina Desiccant
- Interlock Valve Logic System with Depressurization Safety
- Power on switch/LED
- Control Power Fuse
- Enamel Exterior Finish
- ASME Vessels with:
  - Lifting Lugs
  - Fill and Drain Ports
  - Removable Stainless Steel Desiccant Screens
- Purge Exhaust Mufflers
- Control Air Filter
- Panel Mounted Tower Pressure Gauges
- Panel Mounted Moisture Indicator
- Tower Status LED
- Tower Drying / Regenerating LEDs
- Dual Pilot Valves
- Terminal Strip
- 115/1/60 Supply Power
- Solid State / PLC Control
- NEMA 4 Control Box
- -40°F Dew Point
- Switching Failure Monitor LED/Contact
- Cycle Hold Feature

Options

- Full flow safety relief valves
- 220/1/50-60 Supply Power
- Molecular sieve desiccant
- NEMA 7 control box
- Mounted filters & bypass piping
- Pneumatic timer
- Audible alarm
- Digital dew point readout

Controllers for HL Series Dryers

Touchpad Controller

Standard models HL 200 through 2500

Touchpad controller with real-time status display. Includes a **Hold Feature** which preserves system pressure and conserves purge air by closing the purge exhaust valve when the compressor unloads or is on standby. The cycle resumes when compressor flow returns.

Cycle Saver™

Standard models HL-3000 and larger

Optional on models up to 3000 scfm

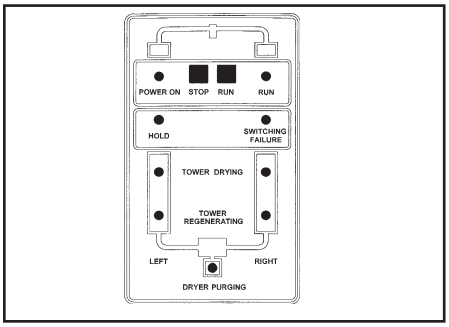
Includes switching failure monitor LED and contact. Minimizes purge to actual moisture load conditions for maximum savings, lowest operating cost and a -40°F dew point.

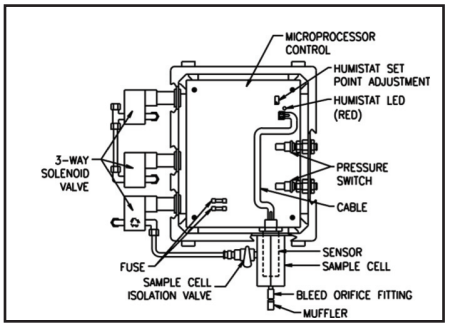
EMCON II®

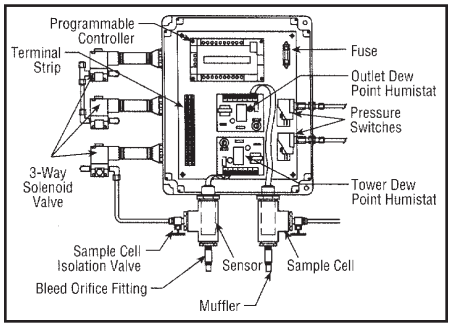
Optional on all models

Energy management control adjusts purge to actual moisture load conditions for maximum savings, lowest operating cost and a -40°F dew point. Includes features of Cycle Saver, plus high humidity LED, common alarm light and contact and in/out pressure gauges.

- High humidity monitor LED/contact
- Panel-mounted inlet/outlet pressure gauges



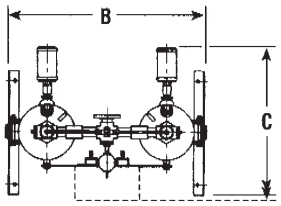




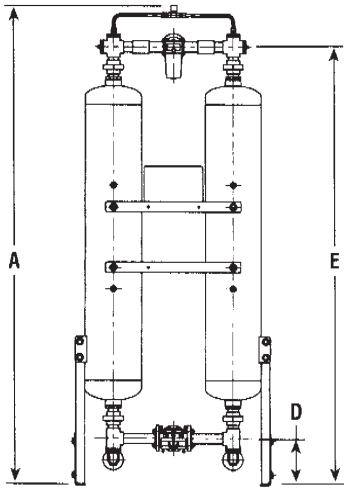
Dimensions and Specifications - inches (cm) and pounds (Kg)

MODEL NO.	A		B[1]		C		D		E		IN/OUT CONN. (FLG)	DESIC. WGT. per tower[2]		TOTAL WGT.[3]	
HL-200	91	231	37½	95	28½	72	9	23	84½	215	1½	106	48	692	314
HL-250	91	231	37½	95	28½	72	9	23	84½	215	1½	130	59	740	336
HL-375	88½	225	43¼	110	32	81	9	23	81¼	206	1½	203	92	1056	479
HL-500	88½	225	43¼	110	32	81	9	23	81¼	206	1½	266	121	1182	536
HL-650	103¼	262	53¾	137	45¼	115	16¾	43	95¼	242	2½	366	166	1702	772
HL-800	103¼	262	53¾	137	45¼	115	16¾	43	95¼	242	2½	440	200	1850	839
HL-1000	109	277	65¾	167	49¼	125	18	46	105½	268	2½	560	254	2670	1211
HL-1250	109	277	65¾	167	49¼	125	18	46	105½	268	2½	678	308	2906	1318
HL-1500	121	307	83¾	213	72	183	24¼	62	117¼	298	3	872	396	3904	1771
HL-1750	121	307	83¾	213	72	183	24¼	62	117¼	298	3	986	447	4132	1874
HL-2000	121	307	83¾	213	72	183	24¼	62	117¼	298	3	1119	508	4398	1995
HL-2500	88	224	109½	278	72	183	35¾	91	66¾	170	4	1450	658	5800	2631
HL-3000	97	246	92¾	236	84	213	35¾	91	75¾	192	4	1705	773	6480	2939
HL-4000	100	254	105	267	92	234	43¼	110	76¼	194	6	2321	1053	9142	4147
HL-5000	100½	255	108¾	276	98	249	43¼	110	76¼	194	6	2966	1345	10832	4913

[1]Mufflers extend from sides on models HL-2500 and larger. Dimension B includes mufflers.
[2]For total desiccant weight, multiply by two. [3]Subtract 40 lbs. for models w/standard controller.
Due to our policy of continuous improvement, dimensions and specifications may change without notice. Request certified drawing for pre-piping. For special models, contact factory.



Top View



Front View

Maximum Capacities - SCFM (M^3/hr) for -40°F Dew Point

MODEL NO.	75 PSIG 5.2 BAR		90 PSIG 6.2 BAR		100 PSIG 6.9 BAR		125 PSIG 8.6 BAR		150 PSIG 10.3 BAR	
HL-200	156	266	183	310	200	340	243	414	287	488
HL-250	196	332	228	388	250	425	304	517	359	610
HL-375	293	498	342	582	375	637	457	776	538	915
HL-500	391	664	456	776	500	850	609	1035	718	1220
HL-650	508	864	593	1008	650	1105	792	1345	933	1586
HL-800	626	1063	730	1241	800	1359	974	1656	1149	1952
HL-1000	782	1329	913	1551	1000	1699	1218	2070	1436	2440
HL-1250	978	1661	1141	1939	1250	2124	1522	2587	1795	3050
HL-1500	1173	1993	1369	2327	1500	2549	1827	3104	2154	3660
HL-1750	1369	2326	1597	2714	1750	2974	2131	3622	2513	4270
HL-2000	1564	2658	1826	3102	2000	3398	2436	4139	2872	4880
HL-2500	1955	3322	2282	3878	2500	4248	3045	5174	3590	6100
HL-3000	2346	3987	2738	4653	3000	5098	3654	6209	4308	7320
HL-4000	3128	5315	3651	6204	4000	6797	4872	8278	5744	9760
HL-5000	3910	6644	4564	7755	5000	8496	6090	10348	7180	12200

RATED FLOWS BASED ON 100 PSIG, 100°F INLET AND 100% RH.

***Correction Factors:

Inlet Temperature:	110°F	120°F
Correction Factor:	0.9	0.8

Operating Conditions:	Maximum	Minimum
Pressure:	150 psig	60 psig
Inlet Air Temperature:	120°F	40°F
Ambient Temperature:	120°F	40°F

***Consult factory for Emcon II and Cycle Saver Applications above 100°F Inlet temperature

- Contact factory for temperatures below 40°F.
- All models include enamel exterior finish and ASME coded vessels with tower lifting lugs.
- Contact factory for -100°F PDP applications.

Regenerative dryers must have clean, oil-free inlet air!

Lubricated compressors: Dryer must be equipped with proper prefilters as recommended in our filter brochure. An afterfilter should be installed downstream of the dryer to prevent desiccant particle migration.

Non-lubricated compressors: A particulate prefilter is recommended to prevent pipe scale and dust from fouling the dryer. If the atmosphere contains condensable hydrocarbons, a coalescing prefilter should also be used. An afterfilter should be installed downstream of the dryer to prevent desiccant particle migration.

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2950 Mechanic Street
Lake City, PA 16423 USA
Phone: (814) 774-2631, (800) 840-9906
Corporate Fax: (814) 774-0778
Order Entry Fax: (814) 774-3482
E-mail: vanair@vanairsystems.com
www.vanairsystems.com