



Refrigerated Compressed Air Dryers

HTDN Series

High Inlet Temperature





HTDN High Inlet Temperature Refrigerated Air Dryers

Make The Right Choice

Deltech HTDN High Inlet Temperature refrigerated air dryers are designed to efficiently dry compressed air with inlet temperatures up to 180°F.

With six pre-engineered sizes to choose from, the HTDN is the ideal drying solution for auto service centers and general shop air applications that use piston type air compressors 5.0 to 30 horsepower.

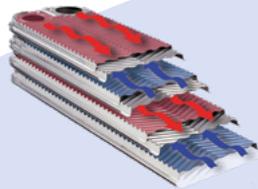
Built To International Standards For Performance, Safety & Environmental Sustainability

- ✓ Moisture removal to ISO 8573-1: 2010 Quality Class 6 (50°F) pressure dew point
- ✓ Certified for quality and safety to UL1995/CSA 22.2 No. 236-95
- ✓ Environmentally friendly R-134a and R-407c refrigerants



Built To Last

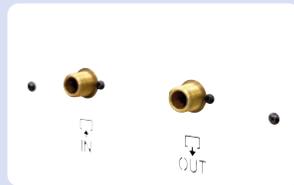
Stainless steel brazed plate heat exchangers with integral demister separator ensure optimal heat transfer for the life of the dryer



Adjustable timed electric drain – valve open and closed time – reliably discharges condensate from the dryer



Widely spaced Inlet/Outlet connections, flow direction stamped into cabinet, for ease of installation and filter mount



Instrumentation with lighted compressor On/Off switch, dew point temperature indicator and fault light



Better By Design

- Top mount fan, upward condenser air flow allows installation in tight spaces
- Bottom base rail with pre-drilled mounting holes for secure floor mount
- Quick release front panel for ease of access to dryer internals for routine maintenance



Protect Your System With ISO Quality Class Air

Dry the air then select a General Purpose particulate filter to capture particles down to 1.0 micron and Coalescing filter to remove 99.9% of the oil.



Model	Connection (NPT)	ISO Quality Class Moisture	General Purpose After-Filter	Connection (NPT)	ISO Quality Class Solids	Oil Removal After-Filter	Connection (NPT)	ISO Quality Class Oil
HTDN20 - HTDN35	3/4"	6	306-P3-DP1	3/4"	2	306-H3-DP1	3/4"	1
HTDN50 - HTDN125	1"	6	308-P3-DP1	1"	2	308-H3-DP1	1"	1

After-Filters have Maximum Operating Temperature of 150°F.
Install downstream of dryer unless the inlet air temperature is $\leq 150^\circ\text{F}$.

As an extra measure of protection, Deltech will provide additional coverage beyond the standard 2-year warranty. Purchase a dryer with Filtration Package and the annual purchase of a maintenance kit and receive 3 years additional protection, parts and labor, a total of 5 years. All major components are covered.



HTDN Series Product Specifications

Model	Flow Capacity SCFM ¹	Power Requirements		In/Out Connections NPT	Refrigerant Type ²	Maximum Working Pressure ³ PSIG / BAR	Maximum Inlet Temperature ³ °F / °C	Ambient Temperature Range ³ °F / °C	Dimensions mm			Weight	
		V/ph/Hz	kW						Height	Width	Depth	LBS	KG
HTDN20	20	115/1/60	0.69	3/4"	R-134a	42-227 psig	40°F-180°F	40°F-110°F	29 (744)	14 (366)	17 (430)	100	45
HTDN25	25	115/1/60	0.69	3/4"	R-134a				29 (744)	14 (366)	17 (430)	100	45
HTDN35	35	115/1/60	0.99	3/4"	R-407c	3.0-16.0 bar	4°C-82°C	4°C-43°C	29 (744)	14 (366)	17 (430)	106	48
HTDN50	50	115/1/60	0.83	1"	R-407c				41 (1044)	18 (447)	17 (430)	125	57
HTDN75	75	115/1/60	1.13	1"	R-407c				41 (1044)	18 (447)	17 (430)	130	59
HTDN125	125	230/1/60	1.97	1"	R-407c				46 (1166)	18 (447)	17 (430)	153	69

¹ Rating conditions are 180°F inlet temperature, 125 psig inlet pressure, 100% inlet relative humidity, 100°F ambient temperature.

² Refer to dryer data plate for refrigerant charge.

³ To ensure optimal performance, do not operate continuously in conditions below or above max/min specifications.

Add -FP to any model to include the Filter Pack. Filter Pack consists of the following: (1) Deltech 300 Series P3 Particulate Filter and (1) Deltech 300 Series H3 Oil Coalescing Filter. Maximum temperature for air entering the filters should not exceed 150°F (66°C).

Capacity Correction Factors

Capacity For Flows Based On 180°F, 82°C Inlet

Model	Flow Capacity	Recommended	Flow Capacity	Recommended	Flow Capacity	Recommended	Flow Capacity	Recommended
	SCFM' @175	Air Compressor	SCFM' @150	Air Compressor	SCFM' @125	Air Compressor	SCFM' @100	Air Compressor
	PSIG (12 KG/CM ²) 60 HZ	Size HP 60 HZ	PSIG (11 KG/CM ²) 60 HZ	Size HP 60 HZ	PSIG (9 KG/CM ²) 60 HZ	Size HP 60 HZ	PSIG (7 KG/CM ²) 60 HZ	Size HP 60 HZ
HTDN20	23	5	22	5	20	5	18	5
HTDN25	29	7.5	27	7.5	25	7.5	23	5
HTDN35	41	10	38	10	35	10	32	7.5
HTDN50	58	15	54	15	50	15	45	10
HTDN75	87	20	81	20	75	20	68	15
HTDN125	145	30	135	30	125	30	114	25

For typical applications where there is NO aftercooler installed upstream

¹ Capacity @ 180°F (82°C) inlet temperature, 160°F (71°C) inlet pressure dew point, 95°F (35°C) ambient temperature, 50°F (10°C) outlet pressure dew point, and less than 5 psig (0.35 kg/cm²) pressure drop.

Capacity For Flows Based On 100°F, 38°C Inlet

Model	Flow Capacity	Recommended	Flow Capacity	Recommended	Flow Capacity	Recommended	Flow Capacity	Recommended
	SCFM' @175	Air Compressor	SCFM' @150	Air Compressor	SCFM' @125	Air Compressor	SCFM' @100	Air Compressor
	PSIG (12 KG/CM ²) 60 HZ	Size HP 60 HZ	PSIG (11 KG/CM ²) 60 HZ	Size HP 60 HZ	PSIG (9 KG/CM ²) 60 HZ	Size HP 60 HZ	PSIG (7 KG/CM ²) 60 HZ	Size HP 60 HZ
HTDN20	32	10	30	7.5	28	7.5	25	7.5
HTDN25	40	10	37	10	34	10	31	7.5
HTDN35	55	15	51	15	47	10	43	10
HTDN50	78	20	73	20	67	15	61	15
HTDN75	118	25	110	25	102	25	92	20
HTDN125	197	40	183	40	170	40	155	30

For typical applications where an aftercooler is installed upstream

¹ Capacity @ 100°F (38°C) inlet temperature, 100°F (38°C) inlet pressure dew point, 100°F (38°C) ambient temperature, 50°F (10°C) outlet pressure dew point, and less than 10 psig (0.7 kg/cm²) pressure drop.

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20 to 125 SCFM

Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing. Please contact your local sales representative for product availability in your region.

Deltech Headquarters
4647 SW 40th Avenue
Ocala, Florida 34474-5788 U.S.A.
Tel.: (724) 745-1555
Fax: (724) 745-6040
deltechair.com

