

Hankison HHD Series Refrigerated Air Dryers Improve Productivity

Since 1948, people around the globe have relied on Hankison to deliver the right solutions to efficiently meet the needs of today's applications for compressed air treatment. HHD Series non-cycling refrigerated compressed air dryers offer the right combination of technology and simplicity to keep your air system at a dry, +3°C pressure dew point, from 150 through 1000 scfm.

Dry Compressed Air - Pure & Simple

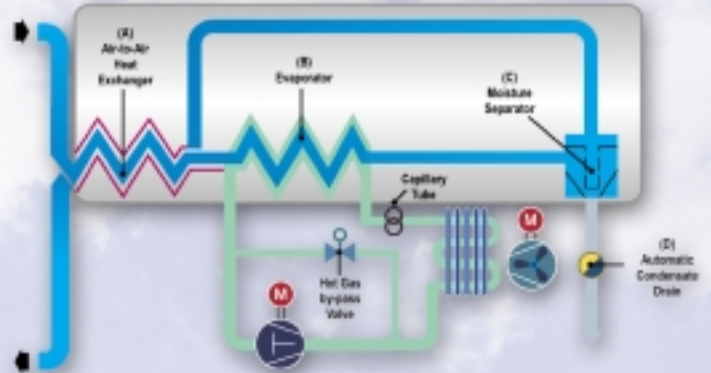
Research indicates that many customers want reliability and dry compressed air at an affordable price. No fancy bells and whistles - just dry air, pure and simple. The HHD Series non-cycling dryers were designed to meet these demands.



HHD Series - Standard Features

- Easy to install package saves time. Simply connect the pipes and plug in the power cord.
- Adapts to system needs without complicated controls. Fully automatic operation saves money.
- Every unit comes pre-assembled with quality components. Long service life.
- Steady +3°C pressure dew point. Ensures maximum moisture removal every day.
- On/off switch illuminates when compressor is on.
- At-a-glance control panel dew point indication verifies performance (HHD 151 - HHD 1200).
- Integral 304 stainless steel heat exchanger, mesh demister and, moisture separator for long life.
- Timer operated drain includes isolation valve/strainer to protect valve from rust and scale.
- Panel mounted drain timer controls (HHD 400-1200).
- LED style dew point indicator (HHD 400-1200).
- Panel filter captures ambient dirt and dust to keep condenser clean.

How it Works



Models HHD151 through HHD1200

Warm saturated air enters the air-to-air heat exchanger (A) where it is pre-cooled by the outgoing chilled air, and then passes through the air-to-refrigerant (evaporator) heat exchanger (B) where it is further cooled by the refrigeration system. Water vapor condenses into liquid droplets to be removed by the Moisture Separator (C) then, discharged from the dryer by an automatic drain (D). Chilled dry air returns through the air-to-air heat exchanger (A) where it is reheated before exiting the dryer.

NEW

Product Features

Models	Lighted Compressor on/off switch	Dew Point Indicator	230V/1/50	Timer Operated Drain Valve, Isolation Valve, Strainer	Panel Mounted Drain Valve Adjustments	Refrigeration System							CE	
						R-407c, Refrigerant	Reciprocating Compressors	Copper Tube-on-Tube Heat Exchanger	Constant Pressure Expansion Valve	304ss Heat Exchanger, Demister and Moisture Separator	Capillary Tube & Hot Gas Bypass Valve	Fan Cycling		High Pressure Cut-out Switch
151-295	S	S	S	S	-	S	S	-	-	S	S	S	-	S
400-1200	S	S	S	S	S	S	S	-	-	S	S	S	S	S

Product Specifications

Model	Capacity	Inlet/Outlet	Power Supply	Input Power	Refrigerant	Height	Width	Depth	Weight
	m ³ /h	"BSP		(kW)		mm	mm	mm	kg.
HHD 151	150	3/4	230/1/50	0.55	R407c	510	480	526	50
HHD 200	200	1	230/1/50	0.60	R407c	525	330	761	56
HHD 250	250	1	230/1/50	0.65	R407c	525	330	761	60
HHD 295	295	1	230/1/50	0.85	R407c	525	330	761	69
HHD 400	400	1-1/2	230/1/50	1.10	R407c	762	437	904	83
HHD 500	500	1-1/2	230/1/50	1.20	R407c	762	437	904	96
HHD 605	605	1-1/2	230/1/50	1.50	R407c	759	518	953	99
HHD 800	800	2	230/1/50	1.90	R407c	759	541	953	105
HHD 1000	1000	2	230/1/50	2.00	R407c	800	640	1052	119
HHD 1200	1200	2	230/1/50	2.30	R407c	800	640	1052	125

Data is in accordance to DIN ISO 7183-1. Maximum operating pressure: 16bar, max. inlet temperature: +49°C. Conditions for dryer ratings are: compressed air at dryer inlet: 7bar and +35°C saturated, ambient temperature: +25°C Pressure dew point +3°C is ISO 8573.

Operating Conditions

HHD Models	Max. Inlet Air Pressure	Min. Inlet Air Pressure	Max. Inlet Air Temp.	Min. Inlet Air Temp.	Max. Ambient Temp.	Min. Ambient Temp.
151-1000	16 bar	2 bar	49°C	4°C	43°C	7°C

Capacity Correction Factors

NOTE: The Maximum Inlet Air Pressure (M.I.A.P.) can vary. Please refer to the appropriate M.I.A.P. prior to using the following correction factor tables when re-sizing a given model.

To adjust dryer capacity for conditions other than rated, use Correction Factors (multipliers) from Tables 1 and 2.

Example: What is the capacity of a 1000 m³/h model when the compressed air at the inlet to the dryer is 10 bar and 45°C, and the ambient temperature is 35°C ?

Answer: 1000 m³/h (rated flow from Specifications Table) x 0,80 (correction factor for inlet temperature and pressure from Table 1) x 0.89 (correction factor for ambient temperature from Table 2) =712 m³/h

Table 1: Correction factors for inlet temperatures and inlet pressures

Inlet Temperature:				
Inlet Pressure:	35°C	40°C	45°C	50°C
3	0,79	0,63	0,51	0,43
4	0,87	0,72	0,60	0,52
5	0,92	0,77	0,65	0,56
6	0,96	0,81	0,68	0,60
7	1	0,84	0,71	0,63
8	1,03	0,87	0,74	0,65
9	1,07	0,91	0,78	0,67
10	1,10	0,93	0,80	0,70
11	1,13	0,96	0,82	0,73
12	1,16	0,98	0,84	0,75
13	1,18	1,00	0,86	0,77
14	1,21	1,02	0,88	0,80

Table 2: Correction factors for various ambient temperatures*

Ambient Temperature	+25°C	+30°C	+35°C	+40°C	+45°C
Multiplier	1	0,94	0,89	0,83	0,78