



High Pressure
Refrigerated
Air Dryers
HPET Series

Compressed Air Treatment Solutions

Hankison HPET refrigerated air dryers are an integral component for high pressure compressed air installations. A trusted brand name known since 1948, Hankison air treatment products remove water vapor, solid particulate and oil aerosols and vapor for efficient compressed air systems. Designed for 725 psig (50 bar) operation, applications for HPET dryers include blow molding, aeronautical valve testing, pharmaceutical packaging and injection molding.

Hankison HPET Series dryers are built in accordance to UL/ CSA certification and offer time-tested, field proven technology guaranteed to provide years of trouble free service.

Product Features and Benefits

Supreme Craftmanship

- 316 stainless steel brazed plate heat exchangers- No pre-filtration required
- Rugged hermetically sealed refrigeration systems provide years of trouble free service
- Employs environmentally friendly HFC refrigerants
- Unique cabinet design promotes ease of access to perform routine maintenance
 - Precision hot gas bypass valve maintains evaporator temperature with freeze-ups

Filtration

- Standard filter/separator removes bulk liquids and particles down to 3 micron in size
- Timed electric condensate drain reliably discharges contamination from system
- Optional filtration available for Normal and Severe Operation

User-Friendly Instrumentation

- Indication lights include:
 - Power on
 - Compressor on
 - Refrigerant fault alarm
 - Dew point temperature indicator
 - Timer drain programming mode

Options

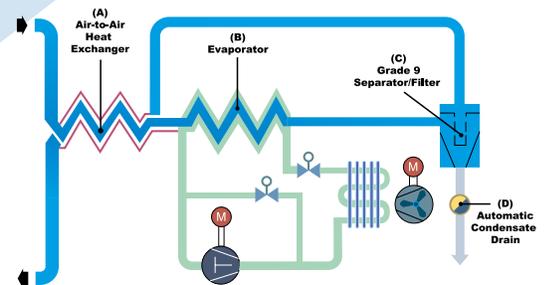
- Dry contact for fault condition



Product Specifications

How it Works: Air Drying Circuit

Compressed air, saturated with water vapor, enters the air-to-air heat exchanger (A), is pre-cooled by the outgoing chilled air, and then directed to the air-to-refrigerant (evaporator) heat exchanger (B) where it is further cooled by the refrigeration system. As the air is cooled, water vapor condenses into liquid droplets which are removed by the separator/filter (C) and discharged from the dryer by an automatic drain (D). Dry, chilled air then returns through the air-to-air heat exchanger where it is reheated before exiting the dryer.



Product Specifications continued

HPET Series Product Specifications

MODEL	RATED FLOW ¹		PRESSURE DROP		MAX. WORKING PRESSURE		REFRIGERATION SYSTEM HP	VOLTAGE	INLET/OUTLET CONNECTIONS IN	HEIGHT IN	WIDTH IN	DEPTH IN	WEIGHT LBS
	SCFM	NM ³ /HR	PSIG	BAR	PSIG	BAR							
HPET-0.17	30	51			725	50	0.17	115/1/60	0.5 NPT	26	18	21	95
HPET-0.2	45	76			725	50	0.2		0.5 NPT	26	18	21	95
HPET-0.25	65	110			725	50	0.25		0.5 NPT	26	18	21	95
HPET-0.33	95	161			725	50	0.33		0.5 NPT	26	18	21	95
HPET-0.5	165	221	1.7	0.12	725	50	0.5	100/1/50 115/1/60	1.5 NPT	37.6	25.6	19.6	251
HPET-0.75	200	340	1.9	0.13	725	50	0.75	208-230/1/60 220-240/1/50	1.5 NPT	37.6	25.6	19.6	279
HPET-1.0	300	510	2.4	0.17	725	50	1.0	460/3/60 380-420/3/50	1.5 NPT	38.6	32.2	32.2	425
HPET-1.5	500	850	4.6	0.32	725	50	1.5		1.5 NPT	38.6	32.2	32.2	463
HPET-2.5	750	1275	4.5	0.32	725	50	2.5		1.5 NPT	58.1	32.2	41.6	691
HPET-3.5	1000	1700	3.7	0.26	725	50	3.5		1.5 NPT	58.1	32.2	41.6	734
HPET-4	1250	2125	3.1	0.22	725	50	4		3 NPT	59	52	52	889
HPET-6	1750	2975	6.2	0.43	725	50	6		3 NPT	59	52	52	939
HPET-7.5	2000	3400	3.6	0.25	725	50	7.5		3 NPT	59	52	52	1,204
HPET-10	3000	5100	4.6	0.32	725	50	10		3 NPT	59	52	52	1,329

¹ Rated Flow Capacity - Conditions are 100°F (38°C) inlet temperature, saturated with water vapor, 725 psig (50 bar) inlet pressure, 100°F (38°C) ambient temperature, 60Hz . 50Hz units are available.

HPET Series Optional Filtration

REFRIGERATED DRYER MODEL	3 MICRON PARTICULATE PREFILTER	1 MICRON PARTICULATE AFTERFILTER
HPET-1	HF9-20-8-69	HF7-20-8-69
HPET-1.5	HF9-24-8-69	HF7-24-8-69
HPET-2.5 - HPET-4	HF9-32-8-69	HF7-32-8-69
HPET-6 - HPET-10	HF9-52-24-48	HF7-52-24-48

Selecting your Filtration

When selecting filtration for your HPET system consider your operating conditions. Normal operating conditions utilize Grade 7 and 3 filtration. For severe operating conditions utilize Grade 9, 7, and 3 filtration in your system.

Capacity Correction Factors

To adjust dryer capacity for conditions other than rated, use Correction Factors (multipliers) from Tables 1 and 2. Example: What is the capacity of an HPET-3.5 when the compressed air at the inlet to the dryer is 500 psig (34.5 bar) and 110°F (43°C), the ambient temperature is 90°F (32°C), and the operating voltage is 380/3/50? Answer: 1,000 scfm (rated flow from Product Specifications Table) x 0.83 (Correction Factor from Table 1) x 1.06 (Correction Factor from Table 2) x 0.83 (Electrical Frequency for 50 Hz, for 60 Hz no adjustment is required) = 730 scfm (1,240 nm³/h).

Table 1 - Inlet Temperature & Pressure

INLET PRESSURE	80°F	90°F	100°F	110°F	120°F
	27°C	32°C	38°C	43°F	49°F
300 psig to MWP 20 bar to MWP	1.49	1.19	1.0	.83	.72

Table 2 - Ambient Temperature*

AMBIENT TEMPERATURE	80°F	90°F	100°F	110°F
	27°C	32°C	38°C	49°C
Multiplier	1.12	1.06	1.00	0.94

* Air-cooled models only. For water-cooled use a 1.15 multiplier if cooling water is less than 95°F (35°C).



High Pressure Refrigerated Air Dryers **HPET Series**

30 to 3000 scfm (51 to 5100 nm³/h)

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.



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