# Hankison



5 to 1200 SCFM 17 to 2040 M<sup>3</sup>/H

hankisonair.com

## 

## **HPR5/10 - HPR50** 5/10 - 50 scfm

#### **Better By Design**

- Smooth bore, copper tube-on-tube heat exchangers deliver low pressure dew point performance
- Centrifugal separator efficiently captures liquid condensate at varying inlet loads
- Static condenser design provides trouble free, quiet operation

#### **Reliable Condensate Management**

- Models 5/10-15 scfm: Pneumatically operated internal float drain
- Models 25-50 scfm: Electronic drain valve

#### **Ease of Monitoring**

- Models 5/10-15 scfm: Lighted On/Off switch
- Models 25-50 scfm: Lighted On/Off switch and dew point temperature indicator

#### **Options**

- Air bypass valve allows ease of service
- Wall mount bracket enables flexible installation

#### Safety First - Environmentally Friendly

- CFC free R134a refrigerant
- CSA approved

#### **Reliable Operation...**

Customers around the world have relied on Hankison for great value in air treatment solutions. Hankison Refrigerated Dryers offer a simple solution based on a long history of industry leading technology.





## HPRN75 - HPRN1200 Value at its finest... 75 - 1200 scfm

#### **Globally Proven Performance**

- Stainless steel, cross flow heat exchangers optimize heat transfer and service life
- ISO 8573-1 Air Quality: Class 4-5 pressure dew point »
- Smooth, non-fouling channels promote low pressure drop »
- Herringbone geometry stamped into the stainless steel plates creates turbulent flow, for a self-cleaning effect
- Compact design saves floor space

#### **Efficient Condensate Management**

- Increased calming zone and integral demister/ separator captures liquid condensate and solid particles
- Effectively removes condensate from 0 to 100% flow » conditions without moisture carry-over
- Furnished with a timed electric condensate drain
- Includes a Y-strainer to protect the valve from rust and scale

#### **Easy to Monitor**

- Models 75-150: Illuminated On/Off Switch; dew point temperature display indicator to monitor inlet load conditions
- Models 200-1200 scfm: Illuminated On/Off Switch; LED dew point temperature display; dry alarm contact
- Equipped with panel mounted drain timer control »

#### Safety First — Environmentally Friendly

- Models 75-125 scfm CFC free R134a
- Models 150-1200 scfm R407c refrigerant
- CSA approved



Model Shown Above: HPRN75



Adjustable Timed Electric Drain for HPRN Models 75 - 150 scfm







### **Product Warranty**

#### **Standard Warranty**

- HPR Series 5-10 and 15 scfm: standard 1-year warranty parts and labor
- HPR 25 50 scfm: standard 2-year warranty parts and labor
- HPRN 75 2000 scfm: standard 2-year warranty parts and labor

## **HPRN Extended Warranty**

#### **Protect Your Equipment**

As an extra measure of protection, Hankison will provide additional coverage beyond the standard 2-year warranty. Purchase a HPRN 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.

Available for HPRN 75-1200



#### Performance at its best...



**Stainless Steel** Demister/Separator

#### Controls: Models 200-1200 scfm



## **International Air Quality Class Standards**

#### ISO 8573-1: 2010 Air Quality Standard

ISO 8573-1: 2010, the international standard for compressed air quality, defines the amount of contamination permissible in compressed air.

The ISO standard identifies three primary forms of contamination in compressed air systems – solid particles, water and oil. Contaminants are classified and assigned a quality class, ranging from Class 0, the highest purity level, to Class 6, the most relaxed.

HPR and HPRN series refrigerated air dryers offer the perfect balance between technology and simplicity to dry compressed air systems to ISO 8573-1: 2010 Air Quality Class 4 to 5 – pressure dew points.



#### **Option Pre-Filtration**

NGF series – PF grade filtration – removes solid and oil contaminants from the air stream before entering the dryer.

ISO Air Quality Class:

- Solids Class 2
- Remaining Oil Class 4
- Removes solids 1.0 micron and larger
- Remaining oil content 2.0. mg/m<sup>3</sup>

#### **Option After-Filtration**

NGF series – HF grade filtration – provides high efficiency oil removal protecting downstream equipment .

ISO Air Quality Class:

- Solids Class 1
- Remaining Oil Class 1
- Removes 99.999+% of solids ≥ 0.01 micron
- Remaining oil content < 0.01 mg/m<sup>3</sup>

For your conveience, pre-configured filter packs, including NGF Series filtration, available for all models.



#### **Product Specifications**

Model <sup>7</sup>	Rated Flow		Regrigerant	Voltage	Power	Inlet/Outlet	Dimensions in			Weight
	SCFM <sup>2</sup>	M³H			KW	Connections	Height	Width	Depth	lbs
HPR5-10	5	17	R 134a	115/1/60	0.2	3/8" OD	15	13	13	64
HPR15	15	25	R 134a	115/1/60	0.24	3/8" OD	15	13	13	69
HPR25	25	42	R 134a	115/1/60	0.41	3/4" NPT	22	16	15	88
HPR35	35	59	R 134a	115/1/60	0.46	3/4" NPT	22	16	15	92
HPR50	50	85	R 134a	115/1/60	0.57	3/4" NPT	22	20	20	101
HPRN75	75	127	R 134a	115/1/60	0.52	1" NPT	24	14	32	123
HPRN100	100	170	R 134a	115/1/60	0.65	1" NPT	24	14	32	129
HPRN125	125	212	R 134a	115/1/60	0.68	1" NPT	24	14	32	135
HPRN150-1	150	255	R 407c	115/1/60	0.91	1" NPT	24	14	35	148
HPRN200-4	200	340	R 407c	460/3/60	1.81	1" NPT	30	17	36	165
HPRN250-4	250	425	R 407c	460/3/60	1.92	2" NPT	30	17	36	205
HPRN300-4	300	510	R 407c	460/3/60	2.48	2" NPT	30	20	38	212
HPRN400-4	400	680	R 407c	460/3/60	3.09	2" NPT	30	21	38	225
HPRN500-4	500	850	R 407c	460/3/60	3.18	2" NPT	32	21	48	328
HPRN600 <sup>3</sup>	600	1,020	R 407c	460/3/60	3.8	2" NPT	32	22	50	353
HPRN800 <sup>3</sup>	800	1,360	R 407c	460/3/60	5.4	3" FLG	59	30	42	687
HPRN1000 <sup>3</sup>	1,000	1,700	R 407c	460/3/60	6.6	4" FLG	64	29	45	786
HPRN1200 <sup>3</sup>	1,200	2,040	R 407c	460/3/60	8.7	4" FLG	64	29	45	810

1 = For Filter Pack model, add "-FP" to standard model number. (Example: HPRN75-FP)
 Dimensions, weights, and inlet/outlet connections are dryer only and do not include filtration.
 Filtration package shipped loose, additional fittings may be required.

- <sup>2</sup> Rated Flow Capacity Conditions for rating dryers are in accordance with ISO 7183 (Option A2).
  Compressed air at dryer inlet: 100 psig (6.7 barg) and 100 °F (38 °C);
  ambient air temperature: 100 °F (38 °C); operating on 60 Hz power supply.
- <sup>3</sup> Available in water cooled

At rated conditions, pressure drop is less than 5 psig.

### **Operating Conditions**

 Flow Max Model Inlet Air Pressure		Min Inlet Air Pressure		Max Inlet Air Temperature		Min Inlet Air Temperature		Max Ambient Air Temperature		Min Ambient Air Temperature		
SCFM	PSIG	BARG	PSIG	BARG	°F	°c	°F	°C	°F	°C	°F	°C
5-10 to 50	250	17	30	2	120	49	40	4	110	43	45	7
75 to 500	232	16	43	3	120	49	45	7	110	43	37	3
600-1200	232	16	43	3	120	49	45	7	110	43	34	1

## **Capacity Correction Factors**

To adjust the dryer capacity for non-standard conditions, use the Capacity Correction Factors (multipliers) from Tables 1 & 2.

#### Sizing Example:

What is the capacity of an HPRN100 at 100°F inlet air temperature, 150 psig working pressure, and 110°F ambient air temperature?

#### Answer:

100 scfm (rated flow from product specification table) x 1.08 (correction factor for inlet air temperature, Table 1) x 0.94 (correction factor for ambient air temperature, Table 2) = 102 scfm

#### Table 1 - Capacity Correction Factors

Inlet Air Pressure		Inlet Air Temperature							
PSIG	BARG	90°F/32°C	100°F/38°C	110°F/43°C	120°F/49°C				
80	5.6	1.19	0.95	0.77	0.63				
100	6.9	1.25	1	0.82	0.68				
125	8.6	1.3	1.05	0.86	0.72				
150	10.3	1.34	1.08	0.9	0.75				
175	12.1	1.37	1.11	0.92	0.78				
200	13.8	1.39	1.14	0.95	0.8				
250	17.2	1.43	1.17	0.98	0.83				

#### Table 2 - Ambient Air Temperature

Ambient Air	80°F/	90°F/	100°F/	110°F/
Temperature	27°C	32°C	38°C	43°C
Multiplier	1.12	1.06	1	0.94

## Refrigerated Compressed Air Dryers HPR & HPRN Series

5 to 1200 SCFM (17 - 2040 M<sup>3</sup>/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.



Impulsora Zeus, S.A. de C.V. Miguel Hidalgo y Costilla 1415 Int.1616 Col. Monterrey Centro Monterrey Nuevo Leon 64000 Mexico. Tel:.(55) 81-8378-2842 y 2845 www.zeus.mx



© Copyright Hankison 2023 HK\_HPR\_HPRN\_US/09-2023/CI