



Technical Data Sheet

BORA High Pressure Fridge Dryers

Technical alterations reserved / R01/2012/11/08

The compressed air is being fed into the dryer and being pre-cooled in the air-to-air heat exchanger by the outgoing cold compressed air. The pre-cooled air then passes through the refrigerant-to-air heat exchanger where it is being further cooled down to the required pressure dew point. The moisture in the compressed air condenses out and gathers and discharges automatically. Finally, the cold discharged air is being reheated by the incoming compressed air. This saves energy and prevents any moisture forming beyond the dryer in the compressed air system. The cooling capacity of the refrigeration cycle is being controlled by a hot gas bypass which assures the dryer functionability for partial loads, too.



	volume flow*		press. drop	power supply	protec. Class	power cons.**	cooling air requir.**	air con.	weight
	m³/h	m³/min	bar	V/Ph/Hz		kW	m³/h	BSP	kg
DHP 0025 AX	25	0,42	0,25	230/1/50-60	IP 20	0,16	200	3/8"	28
DHP 0045 AX	45	0,75	0,24	230/1/50-60	IP 20	0,18	200	3/8"	29
DHP 0075 AX	72	1,20	0,25	230/1/50-60	IP 20	0,22	300	3/8"	32
DHP 0090 AX	90	1,50	0,23	230/1/50-60	IP 20	0,23	300	3/4"	38
DHP 0135 AX	135	2,25	0,23	230/1/50 or 60	IP 20	0,46	300	3/4"	39
DHP 0180 AX	180	3,00	0,24	230/1/50 or 60	IP 30	0,69	380	3/4"	50
DHP 0240 AX	240	4,00	0,24	230/1/50 or 60	IP 30	0,75	380	3/4"	53
DHP 0315 AX	315	5,25	0,20	230/1/50 or 60	IP 40	0,70	450	1"	89
DHP 0450 AX	450	7,50	0,22	230/1/50 or 60	IP 40	0,84	450	1"	101
DHP 0615 AX	615	10,25	0,22	230/1/50 or 60	IP 40	1,10	1900	1"	115
DHP 0810 AX	810	13,50	0,23	230/1/50 or 60	IP 40	1,45	2500	1.1/2"	156
DHP 1010 AX	1.008	16,80	0,22	400/3/50 or 460V/3/60	IP 40	2,17	3400	1.1/2"	188
DHP 1260 AX	1.260	21,00	0,22	400/3/50 or 460V/3/60	IP 42	2,55	5400	2"	252
DHP 1620 AX	1620	27,00	0,23	400/3/50 or 460V/3/60	IP 42	2,85	7200	2"	265
DHP 2280 AX	2.280	38,00	0,20	400/3/50 or 460V/3/60	IP 42	3,50	7400	2"	391

* according to ISO 7183 @ 40 bar g

**at 50 Hz frequency

Donaldson Filtration Deutschland GmbH
Büssingstr. 1
42781 Haan
Tel.: +49 (0) 2129 569 0
Fax: +49 (0) 2129 569 100
E-Mail: CAP-de@donaldson.com
Web: www.donaldson.com

Subject to change 11/2012

Donaldson
Ultrafilter

DHP 0025 AX - DHP 2280 AX

Features of Bora dryer DHP 0025 AX - DHP 2280 AX	Benefits
Copper brazed stainless steel heat exchanger (DHP0025AX-DHP0075AX coaxial copper HE)	Designed for low pressure drop and high cooling performance
High overload capacity to a pressure dew point of approx. +20 °C	In case of overload, the dryer will only switch off at a dew point above than appr. +20 °C
All dryer in metal cabinet construction	Optimum protection against mechanical damage and against dirt
Lightweight & compact design	Minimum space requirement (on stock, for transport and for the installation in the compressed air network)
Potential free alarm contact (from DHP 0090 AX)	Economical operation and safe system installation in the compressed air network
RS485 serial port (from DHP 1260 AX)	Remote control. Connection to supervisors system or PC.

Product description

Complete compressed air drying system with timed solenoid valve condensate drain, electronic dew point indicator, metal housing, all units air cooled, environmental friendly refrigerant.

Colour: RAL 5019 Capri blue.

Operating Pressure :
DHP 0025 AX - DHP 1010 AX : max. 50 bar g
DHP 1260 AX - DHP 2280 AX : max. 45 bar g

Air inlet temperature :
max. 65 °C

Ambient temperature :
min. +2°C / max. +50 °C

Pressure dew point :
+3 °C

Refrigerant :
DHP 0025 AX - DHP 0135 AX : R134a
DHP 0180 AX - DHP 2280 AX : R407C

Sound pressure level (at a distance of 1m)
DHP 0025 AX - DHP 1010 AX : < 70 dB(A)
DHP 1260 AX - DHP 2280 AX : < 75 dB(A)

Declaration of conformity:
acc. to 2006/42/EC

Sizing

Comp. air inlet temp.	°C	25	30	35	40	45	50	55	60	65
Factor	fti	1,20	1,12	1,00	0,83	0,69	0,59	0,50	0,44	0,39

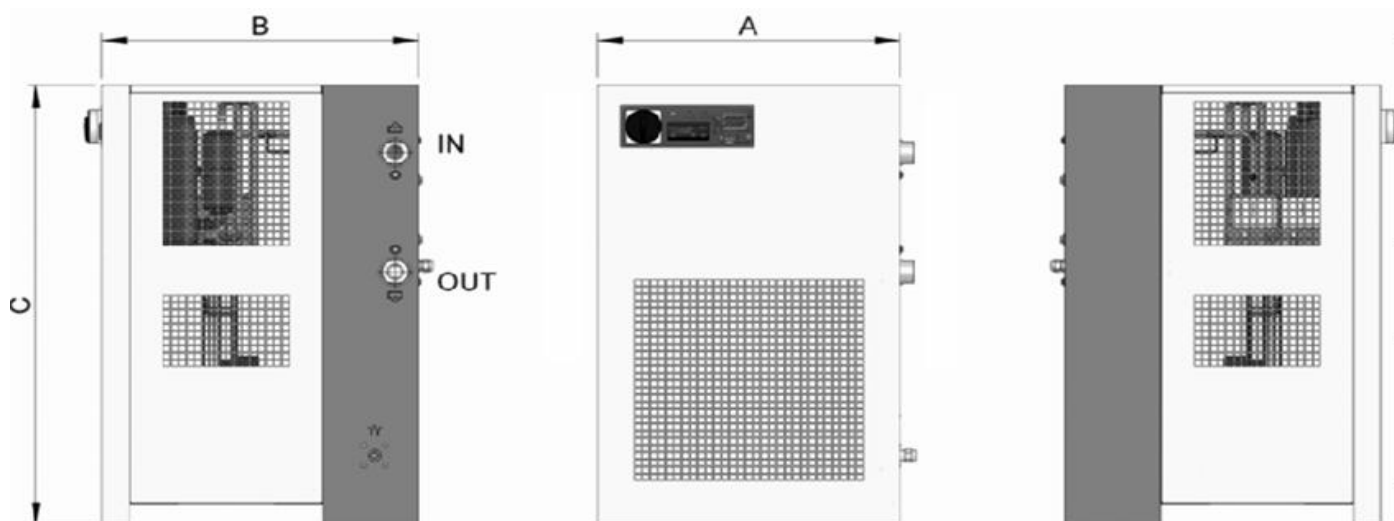
Pressure dew point	°C	3	5	7	10
Factor	ftpd	1,00	1,09	1,19	1,37

Working overpressure	bar (g)	15	20	25	30	35	40	45	50
Factor	fp	0,57	0,70	0,80	0,88	0,94	1,00	1,05	1,10

Temperature of cooling air	°C	25	30	35	40	45	50
Factor	fte	1,00	0,96	0,90	0,82	0,72	0,60

$$V_{\text{korr}} = \frac{V}{\text{fti} \times \text{ftpd} \times \text{fp} \times \text{fte}}$$

DHP 0025 AX - DHP 2280 AX



Size	A width mm	B depth mm	C height mm	location of air connection
1	370	515	475	back side
2	345	420	740	right side
3	485	455	825	right side
4	555	580	885	right side
5	665	725	1105	back side
6	790	725	1105	right side

For detailed dimensions please request the dimension sheet.

Function diagram (exemplary)

