

# Refrigerated Compressed Air Dryers **DFX Series**



deltechair.com

3,000 – 12,000 scfm (5,098 to 20,388 m<sup>3</sup>/h)

# **Deltech**<sup>™</sup>

# DFX Series: Smart, Efficient Design

The Deltech DFX Series refrigerated dryers offer an energy-efficient solution for air compression systems, removing moisture and preventing liquid contamination in compressed air. These dryers are engineered to adjust their energy consumption in line with the air demand, ensuring cost-effective operation. By incorporating the most recent developments in heat transfer technology, the DFX Series provides a cutting-edge and efficient method for keeping compressed air dry and clean.



- Stainless steel brazed plate 3-in-1 heat exchanger (patent pending), with phase change material reservoir
- The PCM thermal reservoir operates at a precise temperature to deliver a stable pressure dew point.
- Smooth, non-fouling stainless steel surfaces promote low resistance to flow, optimizing air system efficiency
- 2. No-air-loss, demand drain efficiently removes condensate without loss of compressed air
- Condensate drain lines terminate at discharge connections conveniently located on the dryer
- Failure to discharge alarm on the operator interface enhances system reliability

## 3. High efficiency, water-cooled condenser

## 4. Reliable, semi-hermetic refrigerant compressors

- Environmentally friendly, globally accepted refrigerants
- Rugged design, for long-term operation

## 5. Moisture Separator

Stainless steel mesh design for the highest separation rates, independent of the flow, volume and speed

## 6. Controller with LCD display provides ease of monitoring and operating status

- Energy saving (%), dryer operating time, refrigeration compressor operating time, active fault message dew point status, and USB connection port to download operating data and upgrade firmware
- Remote monitoring capability RS485 communications port



## **Pre-Filtration Option:**

DF series – Grade 5 High Efficiency Oil Removal filtration – removes solid and oil contaminants from the air stream before entering the dryer.

ISO Air Quality Class:

- Solids Class 1
- Remaining Oil Class 1
- Removes solids 0.01 micron and larger
- Remaining oil content .008 ppm/w



## **DFX Series Product Specifications**

			Qty	Pressure		Inlet/Outlet Connections	Operating Power	Dimensions					Approx.		
Inlet Flow		Module	oFX DFX DFX Modules	Drop				н		w		D		Weight	
SCFM	NM <sup>3</sup> /H	used		PSID		IN	kW	IN	MM	IN	MM	IN	MM	LBS	KG
3000	5098	DFX15.1W	2	3.9	460/3/60	8" R.F. FLANGE	14.2	98	2489	95	2413	72	1826	4204	1907
4000	6796	DFX20.1W	2	4.3	460/3/60	8" R.F. FLANGE	17.0	98	2489	98	2489	83	2108	4204	1907
6000	10194	DFX20.1W	3	4.3	460/3/60	10" R.F. FLANGE	25.5	100	2540	148	3759	83	2108	7126	3233
8000	13592	DFX20.1W	4	4.3	460/3/60	10" R.F. FLANGE	34.0	100	2540	209 1/4	5315	83	2108	8225	4003
10000	16990	DFX20.1W	5	4.3	460/3/60	12" R.F. FLANGE	42.5	100	2540	258 13/16	6574	83	2108	11438	5188
12000	20388	DFX20.1W	6	4.3	460/3/60	12" R.F. FLANGE	51.0	100	2540	308 5/16	7138	83	2108	13552	6147

## **Capacity Correction Factors**

To adjust the dryer capacity for non-standard conditions, use the Capacity Correction Factors (multipliers) from Tables 1, 2 and 3.

#### Table 1: Inlet Air Pressure

Inlet Air Pressure	75 PSIG 5.2 BAR	100 PSIG 6.9 BAR	120 PSIG 8.3 BAR	150 PSIG 10.3 BAR	225 PSIG 15.5 BAR
Multiplier	0.86	1.00	1.04	1.09	1.15

## Table 2: Inlet Air Temperature

Inlet Air Temperature	80°F/27°C	90°F/32°C	100°F/38°C	110°F/43°C	120°F/49°C
Multiplier	1.46	1.23	1.00	0.82	0.68

## Table 3: Ambient Air Temperature

Ambient Air Temperature	80°F/27°C	90°F/32°C	100°F/38°C	110°F/43°C	120°F/49°C
Multiplier	1.12	1.06	1.00	0.83	0.68

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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** 

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