



aerospace climate control electromechanical filtration fluid & gas handling hydraulics pneumatics process control sealing & shielding





# **DHA & DBA Series**

Heat Reactivated Desiccant Dryers





ENGINEERING YOUR SUCCESS.

# DHA & DBA series externally heated and blower purge desiccant air dryers

Parker domnick hunter Externally Heated and Blower Purge Desiccant Air Dryers use the adsorption method to remove moisture from compressed air. Nominal pressure dew points ranging from -40°F (-40°C) to -100°F (-70°C) are achieved by directing the flow of saturated compressed air over a bed of desiccant.



DHA Series Flowrates from 250 scfm (425 m<sup>3</sup>/hr) >



DBA Series Flowrates from 500 scfm (850 m<sup>3</sup>/hr) >

The most commonly used desiccant is activated alumina, a spherically shaped, hygroscopic material, selected for its consistent size, shape and extreme surface to mass ratio. This physically tough and chemically inert material is contained in two pressure vessels commonly referred to as "dual" or "twin" towers. As the saturated compressed air flows through the bed of the "on-line" tower, its moisture content adheres to the surface of the desiccant.

# **Benefits:**

### Highest quality air

- Master controller allows for 'on-line' drying and purging thereby stripping accumulated moisture from the 'off-line' bed

### **Energy efficient**

- Maximum energy savings

### Dry air means zero corrosion

- Preventing product spoilage, recall and litigation

### **Optimized air flow**

 Heat combines with dry compressed air or ambient air in a slow and precise flow adsorbing moisture accumulated on desiccant surface

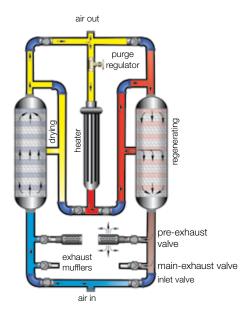
### **OIL-X EVOLUTION** pre & after filtration

The heated, low pressure purge air flows gently through the regenerating bed, adsorbing the moisture that accumulated on the surface of the desiccant during the drying cycle and exhausting it to the atmosphere.



# **DHA & DBA dryers - How they work**

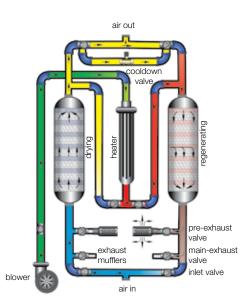
Parker domnick hunter's patented Multi-Port Regeneration System (DHA Series) affects superior desiccant bed regeneration and, as a result, provides better and more consistent performance.



#### DHA Externally Heated with Patented Multi-Port

The Multi-Port Regeneration System injects heated purge air at precise points up and down the towers' length providing a more balanced distribution of heat. This system prevents the desiccant on top from prematurely deteriorating while providing the bottom of the chamber with enough heated purge air to allow complete regeneration on every cycle.

The energy saving temperature monitoring system senses the exiting purge air temperature. When the purge air temperature increases to a pre-set point at which the desiccant bed is fully heated and regenerated, the heater is turned off.



**DBA Series Blower Purge** 

Parker domnick hunter's Primary Blowdown System is standard on all DHA Series and DBA Series heat reactivated air dryers 1000 scfm and larger. It improves performance and efficiency while increasing desiccant life. The depressurization stage also strips moisture from the bottom of the tank through a purge muffler.

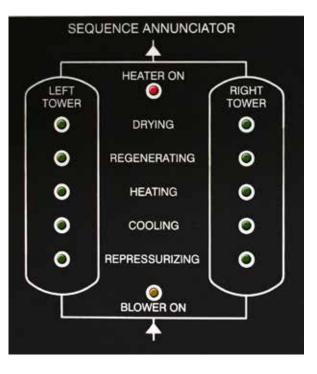
Once depressurization is complete, the system switches to the main exhaust where final regeneration is accomplished with low pressure purge air. By eliminating the main exhaust mufflers, back pressure is also eliminated which allows for more thorough regeneration and less maintenance.

In the event of prefilter/auto drain failure, up flow drying protects the desiccant bed from contamination of bulk liquids and oil since they stay on the bottom of the tank and get discharged during blowdown. When down flow drying, liquids and oil will gravity drain through the entire bed to the bottom of the tank.

# DHA & DBA dryers - operational status

The sequence annunciator indicates the status of each tower. LED's indicate which tower is "on-line" drying, "off-line" regenerating as well as the regeneration stages.





#### **Digital Readout**

The Control Center features a backlit four line character display that monitors operation and status. Including regenerating countdowns and time remaining.

#### ThermaLoc™

#### (10 Year Heater Warranty)

The Control Center also controls domnick hunter's "ThermaLoc<sup>™</sup>" heater protection system. ThermaLoc<sup>™</sup> ensures maximum reliability and eliminates the safety concerns often associated with heat reactivated dryers. Heaters are protected by a totally redundant dual shutdown system that utilizes independent contactors. In addition to the redundant temperature controllers, the system monitors pressure and shuts the heater down in the event of low line pressure. Blower purge dryers have controls to prevent the heater from energizing if the blower is not running.

#### **Dual Mode Heatless Back Up System**

Allows the dryer to function in either the primary heated mode or the auxiliary heatless mode. Should the system experience a temporary overload or a heater failure, the dryer can easily be switched over to operate in the heatless mode. This way the dryer will remain on line until such time as service can be conveniently scheduled. The Dual Mode Back Up System offers unparalleled flexibility, eliminates downtime and prevents business interruptions.

Manual Stepping allows the operator to quickly and safely step the dryer through a complete 8 hour cycle, in a matter of minutes.

#### www.comoso.com

# **DHA & DBA dryers - components and equipment**

Parker domnick hunter's Externally Heated and Blower Purge dryers are designed to process a specific volume of compressed air and deliver it to the discharge at a desired pressure dewpoint. Both dryers are rated for a -40°F (-40°C) pressure dewpoint.







#### **Non-Lubricated Valves**

Dryers up to 800 scfm are equipped with our time-proven and dependable non-lubricated switching valves. These independent, air operated valves are specifically designed for compressed air service. They are resistant to desiccant dust and can be maintained without being removed from the dryer.

#### **Butterfly Actuated Valves**

High Performance Butterfly Actuated Switching Valves are standard on dryers 1000 scfm and larger. These premium, air operated butterfly valves are specifically designed for compressed air. They provide more opening and closing force compared to other types of valves. An indicator shows the "opened/closed" position of the valve and service can be performed without disturbing dryer piping.

#### **Tower insulation**

The tower, heater, and purge lines are insulated to increase dryer performance and efficiency by reducing radiant heat loss. It also keeps the unit within the safety parameters set forth by OSHA. Insulation suitable for indoor service is standard on all Parker domnick hunter Heat Reactivated Dryers (Insulation suitable for outdoor service is an available option).

- Failure to Switch Alarm
- Contacts for Common Alarm
- Systems Sequence
   Annunciator
- Auxiliary Cooldown
- Heater, Blower Flow Interlock (DBA Models)
- Blower Silencer (DBA Models)
- Compressor Surge Protection
- Control Center
- Redundant Heater Control System (ThermaLoc<sup>™</sup>)
- Cycle Stepping
- Dual Mode, Heatless Backup
- Fail-Safe Operation
- Control Air Filter
- Long Life and Low Watt
   Density Heater
- Independent Switching Valves

- Moisture Indicator
- Purge Flow Indicator
- Full Instrumentation
- Indoor Tower Insulation
- Separate Tower Fill/Drain Ports
- Power Saver Exhaust Termination (early regeneration)
- Pressure Equalization
- Stainless Steel Diffuser Screens
- Standby Mode
- Structural Steel Base (1000 scfm & larger)
- Cushioned Seat Check Valves
- High Performance Butterfly Valves (1000 scfm & Larger)
- ASME Coded Vessels
- 10 Year Heater Warranty
- Actuator Valve Limit Switch\*

**\*Optional Equipment** 

- Pre and After Set Filters\*
- Outdoor Insulation\*
- ModBus
- All NEMA Classifications\*
- Non-Yellow Metals\*
- Pressure to 1000 psi g (69 bar g)\*
- Star Watch®\*
- Non-Standard Voltages\*
- PowerLoc<sup>™</sup>\*
- Ethernet connection\*
- RS485 connection\*

Dewpoint spikes, inherent on all blower and heat purge dryers, can be reduced by activating Parker domnick hunter's standard Supplemental Cool Down Purge feature. Standard ratings are based on inlet conditions of +100°F (38°C), 100 psi g (7 bar g) and 100% flow. Dryer performance will vary with different inlet conditions.

# **Dewpoint Dependent Switching (DDS)**

The Control Center is designed to accomodate domnick hunter's optional Dewpoint Dependent Switching Controller (DDS). DDS automatically adjusts energy use to actual moisture load. Moisture loading is affected by inlet temperature, pressure, relative humidity, and flow. These conditions vary throughout the day and rarely combine in such a manner as to produce maximum moisture loads.



An inlet temperature reduction of just 20°F (-7°C) will reduce the moisture load by almost 50%. Desiccant dryers are normally sized for "worst case" operation with the cycle fixed to accommodate maximum moisture loads. Because the fixed cycle does not compensate for fluctuating loads, dryers not equipped with DDS waste energy by regenerating more often than necessary. DDS eliminates this unnecessary use of energy by delaying regeneration until the total design moisture load is achieved. The system monitors actual moisture loading and limits the number of purge cycles accordingly.

Digital dew point control provides for additional energy savings by allowing the operator to select higher dewpoints when appropriate. The moisture probe is contained in and protected by a rugged, stainless steel housing with a 80 micron sintered metal guard and a pressure rating of 3000 psi g. This housing increases the sensor's ability to withstand reasonable shock and vibration.

The housing also contains an electronics package for continuous self calibration, temperature compensation, and signal stabilization. Due to less frequent cycling, switching valves and desiccant will last longer and require less maintenance.

The DDS ceramic sensor is made from state-of-theart metallized ceramic and replaces traditional materials such as aluminum, silicon and hydroscopic salts. This fast response sensor is made from a ceramic tile that is plated and vapor deposited to form a surface that is very sensitive to small changes in water vapor pressure.

The proprietary coating processes make the ceramic sensor inherently faster to respond than other impedance or capacitive sensors curently available. The ceramic sensor features the latest digital technology with calibration data stored directly in the sensor's memory, and is equipped with a built-in thermistor for automatic temperature compensation. DDS is traceable to the National Institute of Standards and Technology. A certificate of traceability is available.

At \$0.08 per KWH, DDS would save \$6,730 annually when used with a 1000 scfm externally heated dryer operating at 75% load for 8,000 hours, at an average inlet temperature of +80°F (27°C).

# DHA & DBA Dryers - control center

Parker domnick hunter's Control Center for Heat Reactivated Desiccant Air Dryers features a complete complement of data acquisition functions. All Parker domnick hunter Heated Desiccant Dryers are remotely accessible by RemoteWatch<sup>™</sup> software which can be downloaded at <u>http://divapps.parker.</u> <u>com/divapps/pdf/Starwatch/</u>. Star Watch<sup>®</sup> activated dryers can monitor and analyze every moment of operation, 24-7; it can be done wirelessly.







- RemoteWatch<sup>™</sup> Software virtual control, diagrams and graphics
- Star Watch<sup>®</sup> ready with 68 channels of data and over 60 process values
- Temperature and pressure instrumentation package
- Energy Management PowerLoc<sup>™</sup> dewpoint digital readout with Power Save (optional)
- Two extra user defined 4-20 mA or 1-5 Vdc inputs with setpoints and alarms for connection to your flow meter, power meter, etc.

- Intelligent display with operational information
- Full system retentive alarm network (event) log
- Programmable process set
   points
- Dryer operating "state" annunciation display
- Automatic data logging 24/7, 365 days of all operational information
- 16 Channel "programmable"
   common alarm

- RS-232 communications port (Optional RS-485)
- Access system via Star Watch<sup>®</sup> or Modbus protocols
- UL Rated Components
- 160 Fields of operational information
- Dual Mode communications.
   Modbus Protocol, and Star Watch<sup>®</sup> Protocol
- Connectivity: telco line and cellular wireless modem
  - Ethernet (optional)

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#### Product Selection -40°F (-40°C) with Activated Alumina Desiccant

|         |                                   |                | Dime       | nsions ins (m | m)        | Wei   | ght  |                             |                |              |  |
|---------|-----------------------------------|----------------|------------|---------------|-----------|-------|------|-----------------------------|----------------|--------------|--|
| Model   | Flowrate<br>@ 100 psi<br>g (scfm) | Heater<br>(kW) | Height (H) | Width (W)     | Depth (D) | lbs   | kg   | Dryer<br>Connection<br>Size | Pre-Filter     | After-Filter |  |
| DHA100  | 100                               | 1.5            | 83 (2108)  | 31 (787)      | 18 (457)  | 680   | 308  | 1" NPT                      | AA025ENFI      | JC0150-FH    |  |
| DHA130  | 135                               | 1.5            | 83 (2108)  | 40 (1016)     | 22 (559)  | 720   | 327  | 1" NPT                      | AA030ENFI      | JC0150-FH    |  |
| DHA200  | 200                               | 3              | 85 (2159)  | 40 (1016)     | 22 (559)  | 920   | 417  | 1 1/2" NPT                  | AA030GNFI      | JC0350-FH    |  |
| DHA250  | 250                               | 3              | 85 (2159)  | 40 (1016)     | 22 (558)  | 1180  | 535  | 1 1/2" NPT                  | AA035GNFI      | JC0350-FH    |  |
| DHA300  | 300                               | 4              | 87 (2209)  | 43 (1092)     | 27 (686)  | 1370  | 621  | 1 1/2" NPT                  | AA035GNFI      | JC0350-FH    |  |
| DHA400  | 400                               | 6              | 88 (2235)  | 47 (1194)     | 27 (686)  | 1400  | 635  | 2" NPT                      | AA040HNFI      | JC0450-FH    |  |
| DHA500  | 500                               | 6              | 89 (2261)  | 50 (1270)     | 27 (686)  | 2060  | 934  | 2" NPT                      | AA045HNFI      | JC0625-FH    |  |
| DHA600  | 600                               | 9              | 92 (2337)  | 52 (1321)     | 28 (711)  | 2350  | 1066 | 2" NPT                      | AA045HNFI      | JC0625-FH    |  |
| DHA800  | 800                               | 9              | 93 (2362)  | 63 (1600)     | 35 (889)  | 3035  | 1377 | 2" NPT                      | AA050INFI      | JC0800-FH    |  |
| DHA1000 | 1000                              | 13             | 102 (2591) | 74 (1880)     | 41 (1041) | 4195  | 1903 | 3" Flg                      | AA055JNFI      | JC1008-FH    |  |
| DHA1200 | 1200                              | 13             | 113 (2870) | 74 (1880)     | 41 (1041) | 5215  | 2365 | 3" Flg                      | AA055JNFI      | JC1008-FH    |  |
| DHA1500 | 1500                              | 18             | 113 (2870) | 78 (1981)     | 60 (1524) | 7765  | 3522 | 4" Flg                      | DH-AA250NDFI-1 | FT3-801-HT   |  |
| DHA2000 | 2000                              | 25             | 110 (2794) | 78 (1981)     | 60 (1524) | 8565  | 3885 | 4" Flg                      | DH-AA250ODFI-1 | FT4-1201-HT  |  |
| DHA2600 | 2600                              | 25             | 112 (2845) | 96 (2438)     | 60 (1524) | 11562 | 5244 | 4" Flg                      | DH-AA300ODFI-1 | FT4-1201-HT1 |  |
| DHA3000 | 3000                              | 30             | 112 (2845) | 96 (2438)     | 60 (1524) | 12002 | 5444 | 6" Flg                      | DH-AA350PDFI-1 | FT6-1201-HT  |  |
| DHA4000 | 4000                              | 38             | CF         | CF            | CF        | CF    | CF   | 6" Flg                      | DH-AA350PDFI-1 | FT6-1201-HT1 |  |
| DHA5000 | 5000                              | 50             | CF         | CF            | CF        | CF    | CF   | 6" Flg                      | DH-AA400PDFI-1 | FT6-1803-HT  |  |
| DHA6000 | 6000                              | 60             | CF         | CF            | CF        | CF    | CF   | 6" Flg                      | DH-AA400PDFI-1 | FT6-1803-HT  |  |
| DHA8000 | 8000                              | 60             | CF         | CF            | CF        | CF    | CF   | 6" Flg                      | DH-AA450QDFI-1 | FT8-2004-HT  |  |

\*Referenced to 68°F (20°C) and 14.5 psi a (1 bar a).



| Description          | Flow<br>Range @<br>100 psi g<br>(7 bar g) | Nominal<br>Dewpoint       | Max<br>Operating<br>Pressure | Min<br>Operating<br>Pressure | Max Inlet<br>Temp | Min Inlet<br>Temp | Controls       | Dewpoint<br>Control | Standard Electrical<br>Supply                                                   |
|----------------------|-------------------------------------------|---------------------------|------------------------------|------------------------------|-------------------|-------------------|----------------|---------------------|---------------------------------------------------------------------------------|
| DHA100 -<br>DHA250   | 100 - 250<br>cfm                          | -40°F (-40°C)<br>Standard | 150 psi g<br>(10.3<br>bar g) | 80 psi g<br>(5.5 bar g)      | 120°F<br>(49°C)   | 50°F (10°C)       | Microprocessor | Optional            | 240V/1PH/60Hz<br>460V/3Ph/60Hz<br>(optional)                                    |
| DHA300 -<br>DHA1500  | 300 - 1500<br>cfm                         | -40°F (-40°C)<br>Standard | 150 psi g<br>(10.3<br>bar g) | 80 psi g<br>(5.5 bar g)      | 120°F<br>(49°C)   | 50°F (10°C)       | Microprocessor | Optional            | 460V/3Ph/60Hz<br>Control Power<br>115V/1Ph/60Hz<br>(575V/3Ph/60Hz<br>Optional   |
| DHA2000 -<br>DHA8000 | 2000 - 8000<br>cfm                        | -40°F (-40°C)<br>Standard | 135 psi g<br>(9.3 bar g)     | 80 psi g<br>(5.5 bar g)      | 120°F<br>(49°C)   | 50°F (10°C)       | Microprocessor | Optional            | 460V/3Ph/60Hz -<br>Control Power<br>115V/1Ph/60Hz<br>(575V/3Ph/60Hz<br>Optional |

#### Notes

1. \*Grade AA & AR filters ARE included in base unit price. Filters supplied mounted on Models DHA250 - DHA800.

"crade AA & AH niters AHE included in base unit price. Filters supplied mounted on Models DHA250 - DHA800.
 "\*DDS (Dewpoint Dependent Switching) includes: energy saving purge cycle control with high humidity alarm and digital dewpoint display. When ordering DDS, use DS as suffix. (Example: DHA500DS)
 Above information should be used as a guideline. Flows are at 100 psi g inlet pressure, 100°F inlet temperature and 100°F ambient temperature. For specific applications, please consult Parker domnick hunter Technical Services at fafquotes@parker.com.
 Weight includes desiccant (shipped loose Models DHA2000 and up).
 For sizing at other temperatures, pressures, and dew points please consult factory.

#### **Correction Factors**

To obtain dryer capacity at new conditions, multiply nominal capacity x C1 x C2.

| Temperature Correction Factor CFT    |              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------------------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Maximum Inlet<br>Temperature<br>(C1) | °F           | 80   |      | 85   | 90   | 95   | 5    | 100  | 105  | 110  |      | 115  | 120  |
|                                      | °C           | 27   |      | 29   | 32   | 35   | 5    | 38   | 41   | 43   |      | 46   | 49   |
|                                      | CFT          | 1.17 |      | 1.17 | 1.17 | 1.18 | 5    | 1.00 | 0.87 | 0.76 |      | 0.66 | 0.58 |
| Pressure Correct                     | ction Factor | CFP  |      |      |      |      |      |      |      |      |      |      |      |
| Minimum                              | psi g        | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135  |
| Inlet Pressure<br>(C2)               | bar g        | 5.51 | 5.86 | 6.21 | 6.55 | 6.89 | 7.24 | 7.58 | 7.93 | 8.27 | 8.62 | 8.96 | 9.31 |
|                                      | CFP          | 0.83 | 0.87 | 0.91 | 0.96 | 1.00 | 1.04 | 1.09 | 1.13 | 1.17 | 1.22 | 1.26 | 1.31 |

# **DBA Series Dryers**



#### Product Selection -40°F (-40°C) with Activated Alumina Desiccant

|         |      |                          | Dime | Wei        | ght        |           |       |       |                             |                |              |  |
|---------|------|--------------------------|------|------------|------------|-----------|-------|-------|-----------------------------|----------------|--------------|--|
| Model   |      | Heater<br>Blower<br>(kW) | HP   | Height (H) | Width (W)  | Depth (D) | lbs   | kg    | Dryer<br>Connection<br>Size | Pre-Filter     | After-Filter |  |
| DBA100  | 100  | .75                      | 3    | 83 (2108)  | 49 (1245)  | 37 (940)  | 1050  | 308   | 1" NPT                      | AA025ENFI      | JC0150-FH    |  |
| DBA200  | 200  | .75                      | 6    | 85 (2159)  | 56 (1422)  | 39 (991)  | 1500  | 417   | 1 1/2" NPT                  | AA030GNFI      | JC0350-FH    |  |
| DBA300  | 300  | 1.5                      | 6    | 87 (2210)  | 43 (1092)  | 27 (686)  | 1900  | 621   | 1 1/2" NPT                  | AA035GNFI      | JC0350-FH    |  |
| DBA400  | 400  | 1.5                      | 9    | 88 (2235)  | 47 (1194)  | 27 (686)  | 2180  | 635   | 2" NPT                      | AA040HNFI      | JC0450-FH    |  |
| DBA500  | 500  | 12                       | 2    | 89 (2261)  | 50 (1270)  | 27 (686)  | 2840  | 1288  | 2" NPT                      | AA045HNFI      | JC0625-FH    |  |
| DBA600  | 600  | 12                       | 2    | 92 (2337)  | 52 (1321)  | 28 (711)  | 3420  | 1551  | 2" NPT                      | AA045HNFI      | JC0625-FH    |  |
| DBA800  | 800  | 18                       | 5    | 93 (2362)  | 64 (1646)  | 35 (889)  | 4490  | 2037  | 2" NPT                      | AA050INFI      | JC0800-FH    |  |
| DBA1000 | 1000 | 18                       | 5    | 102 (2591) | 74 (1879)  | 41 (1041) | 5700  | 2585  | 3" Flg                      | AA055JNFI      | JC1008-FH    |  |
| DBA1200 | 1200 | 25                       | 5.5  | 113 (2870) | 74 (1879)  | 41 (1041) | 6300  | 2858  | 3" Flg                      | AA055JNFI      | JC1008-FH    |  |
| DBA1500 | 1500 | 30                       | 7.5  | 113 (2870) | 78 (1981)  | 60 (1524) | 7165  | 3250  | 3" Flg                      | DH-AA250NDFI-1 | FT3-801-HT   |  |
| DBA2000 | 2000 | 30                       | 7.5  | 112 (2845) | 114 (2896) | 66 (1676) | 9850  | 4468  | 4" Flg                      | DH-AA250ODFI-1 | FT4-1201-HT  |  |
| DBA2600 | 2600 | 50                       | 10   | 112 (2845) | 132 (3353) | 72 (1829) | 12210 | 5538  | 4" Flg                      | DH-AA3000DFI-1 | FT4-1201-HT1 |  |
| DBA3000 | 3000 | 60                       | 10   | 112 (2845) | 132 (3353) | 72 (1829) | 12650 | 5738  | 6" Flg                      | DH-AA350PDFI-1 | FT6-1201-HT  |  |
| DBA4000 | 4000 | 75                       | 15   | 114 (2896) | 168 (4267) | 84 (2134) | 18910 | 8577  | 6" Flg                      | DH-AA350PDFI-1 | FT6-1201-HT1 |  |
| DBA5000 | 5000 | 100                      | 15   | 114 (2896) | 156 (3962) | 92 (2337) | 21590 | 9793  | 6" Flg                      | DH-AA400PDFI-1 | FT6-1803-HT  |  |
| DBA6000 | 6000 | 115                      | 20   | 112 (2845) | 146 (3708) | 92 (2337) | 24890 | 11290 | 6" Flg                      | DH-AA400PDFI-1 | FT6-1803-HT  |  |
| DBA7500 | 7500 | 135                      | 25   | CF         | CF         | CF        | CF    | CF    | 8" Flg                      | DH-AA450QDFI-1 | FT8-2004-HT  |  |
| DBA9000 | 9000 | 150                      | 30   | CF         | CF         | CF        | CF    | CF    | 8" Flg                      | DH-AA450QDFI-1 | FT8-2004-HT  |  |

\*Referenced to 68°F (20°C) and 14.5 psi a (1 bar a).



| Description          | Flow<br>Range @<br>100 psi g<br>(7 bar g) | Nominal<br>Dewpoint       | Max<br>Operating<br>Pressure | Min<br>Operating<br>Pressure | Max Inlet<br>Temp | Min Inlet<br>Temp | Controls       | Dewpoint<br>Control | Standard Electrical<br>Supply                                                     |
|----------------------|-------------------------------------------|---------------------------|------------------------------|------------------------------|-------------------|-------------------|----------------|---------------------|-----------------------------------------------------------------------------------|
| DBA100 -<br>DBA1500  | 500 - 1500<br>cfm                         | -40°F (-40°C)<br>Standard | 150 psi g<br>(10.3<br>bar g) | 80 psi g<br>(5.5 bar g)      | 120°F<br>(49°C)   | 50°F (10°C)       | Microprocessor | Optional            | 460V/3Ph/60Hz,<br>Control Power<br>115V/1Ph/60Hz -<br>(575V/3Ph/60Hz<br>Optional) |
| DBA2000 -<br>DBA9000 | 2000 - 9000<br>cfm                        | -40°F (-40°C)<br>Standard | 135 psi g<br>(9.3 bar g)     | 80 psi g<br>(5.5 bar g)      | 120°F<br>(49°C)   | 50°F (10°C)       | Microprocessor | Optional            | 460V/3Ph/60Hz,<br>Control Power<br>115V/1Ph/60Hz -<br>(575V/3Ph/60Hz<br>Optional) |

Notes

"Grade AA & AR filters ARE included in base unit price. Filters supplied mounted on Models DBA500 - DBA800.
"DDS (Dewpoint Dependent Switching) includes: energy saving purge cycle control with high humidity alarm and digital dewpoint display. When ordering DDS, use DS as suffix. (Example: DBA9000DS)
Above information should be used as a guideline. Flows are at 100 psi g inlet pressure, 100°F inlet temperature and 100°F ambient temperature. For specific applications, please consult Parker domnick hunter Technical Services at faquotes@parker.com.

4. Weight includes desiccant (shipped loose Models DBA2000 and up). 5. For sizing at other temperatures and pressures, please consult factory.

#### **Correction Factors**

To obtain dryer capacity at new conditions, multiply nominal capacity x C1 x C2.

| Temperature Correction Factor CFT    |              |      |      |      |      |      |      |      |        |      |      |      |      |
|--------------------------------------|--------------|------|------|------|------|------|------|------|--------|------|------|------|------|
| Maximum Inlet<br>Temperature<br>(C1) | °F           | 80   |      | 85   | 90   | 9    | 5    | 100  | 105    | 110  |      | 115  | 120  |
|                                      | °C           | 27   |      | 29   | 32   | 3    | 5    | 38   | 41     | 43   |      | 46   | 49   |
|                                      | CFT          | 1.17 |      | 1.17 | 1.17 | 1.1  | 5    | 1.00 | 0.87   | 0.76 |      | 0.66 | 0.58 |
| Pressure Corre                       | ction Factor | CFP  |      |      |      |      |      |      |        |      |      |      |      |
| Minimum                              | psi g        | 80   | 85   | 90   | 95   | 100  | 105  | 11(  | 0 115  | 120  | 125  | 130  | 135  |
| Inlet Pressure<br>(C2)               | bar g        | 5.51 | 5.86 | 6.21 | 6.55 | 6.89 | 7.24 | 7.58 | 8 7.93 | 8.27 | 8.62 | 8.96 | 9.31 |
|                                      | CFP          | 0.83 | 0.87 | 0.91 | 0.96 | 1.00 | 1.04 | 1.09 | 9 1.13 | 1.17 | 1.22 | 1.26 | 1.31 |

# Worldwide Filtration Manufacturing Locations

#### North America

Compressed Air Treatment Filtration & Separation/Balston Haverhill, MA 978 858 0505

www.parker.com/balston Finite Airtek Filtration Airtek/domnick hunter/Zander Lancaster, NY 716 686 6400

www.parker.com/faf Finite Airtek Filtration/Finite

Oxford, MI 248 628 6400 www.parker.com/finitefilter

## Engine Filtration & Water Purification

Racor Modesto, CA 209 521 7860 www.parker.com/racor

Holly Springs, MS 662 252 2656 www.parker.com/racor

Beaufort, SC 843 846 3200 www.parker.com/racor

Racor – Village Marine Tec. Gardena, CA 310 516 9911 desalination.parker.com

Parker Sea Recovery Carson, CA 310 637 3400 www.searecovery.com

#### **Hydraulic Filtration**

Hydraulic Filter Metamora, OH 419 644 4311 www.parker.com/hydraulicfilter

Laval, QC Canada 450 629 9594 www.parkerfarr.com

#### **Process Filtration**

domnick hunter Process Filtration Oxnard, CA 805 604 3400 www.parker.com/processfiltration

Madison, WI 608 824 0500 www.scilog.com

Phoenixville, PA 610 933 1600 www.parker.com/processfiltration

#### **Aerospace Filtration**

Velcon Filtration Colorado Springs, CO 719 531 5855 www.velcon.com

#### Europe

Compressed Air Treatment domnick hunter Filtration & Separation Gateshead, England +44 (0) 191 402 9000 www.parker.com/dhfns

Parker Gas Separations Etten-Leur, Netherlands +31 76 508 5300 www.parker.com/dhfns

Hiross Zander Padova Business Unit Padova, Italy +39 049 9712 111 www.parker.com/hzd

Hiross Zander Essen Business Unit Essen, Germany +49 2054 9340 www.parker.com/hzd

## Engine Filtration & Water Purification

Racor Dewsbury, England +44 (0) 1924 487 000 www.parker.com/rfde

Racor Research & Development Stuttgart, Germany +49 (0)711 7071 290-10

www.parker.com/rfde

#### Hydraulic Filtration

Hydraulic Filter Arnhem, Holland +31 26 3760376 www.parker.com/hfde

Urjala Operation Urjala, Finland +358 20 753 2500 www.parker.com/hfde

Condition Monitoring Centre Norfolk, England +44 (0) 1842 763 299 www.parker.com/hfde

#### Parker Kittiwake

West Sussex, England +44 (0) 1903 731 470 www.kittiwake.com

Parker Procal Peterborough, England +44 (0) 1733 232 495 www.kittiwake.com

#### **Process Filtration**

domnick hunter Process Filtration Birtley, England +44 (0) 191 410 5121 www.parker.com/processfiltration

#### Parker Twin Filter BV

Zaandam, Netherlands +31(0)75 655 50 00 www.twinfilter.com

### Asia Pacific

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China Shanghai, China +86 21 5031 2525 www.parker.com/china

India Navi Mumbai, India +91 22 651 370 8185 www.parker.com/india

Parker Fowler Bangalore, India +91 80 2783 6794 www.johnfowlerindia.com

Japan Tokyo, Japan +81 45 870 1522 www.parker.com/japan

Parker Techno Osaka, Japan +81 66 340 1600 www.techno.taiyo-ltd.co.jp

Korea Hwaseon-City +82 31 359 0852 www.parker.com/korea

Singapore Jurong Town, Singapore +65 6887 6300 www.parker.com/singapore

Thailand Bangkok, Thailand +66 2186 7000 www.parker.com/thailand

#### Latin America

Parker Comercio Ltda. Filtration Division Sao Paulo, Brazil +55 12 4009 3500 www.parker.com/br

Pan American Division Miami, FL 305 470 8800 www.parker.com/panam

Africa Aeroport Kempton Park, South Africa +27 11 9610700 www.parker.com/africa

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