belair

TOTAL COMPRESSED AIR SOLUTION

BHTD SERIES

High-Inlet Temperature Refrigerated AIR DRYER

High-Inlet Temperature Refrigerated

AIR DRYER

Efficiency,
Reliability,
Innovation

- High Inlet Temperature of 80°C
- High Inlet Pressure of 16 Barg
- High Ambient Temperature of 45°C
- Pressure Dewpoint Range of 2 - 10°C
- Highly Efficient Moisture Separation
- Timer Drain Standard
- Consistent Dew Point
- Low Pressure Drop
- Convienient Installation
- Build In After Cooler

Compressed air contains moisture and other contaminations that must be removed to avoid damage to pneumatic valve, tools and instrument. Failure to remove these impurities can caused product waste and production downtime.

BELAIR BHTD Series Dryer designed for Efficiency, Reliability, and Performance. BHTD Series Dryer Shell-Tube Heat Exchanger design that integrates a Pre-cooler / Re-heater, Chiller, Evaporator and Moisture Separator for high operating efficiency.

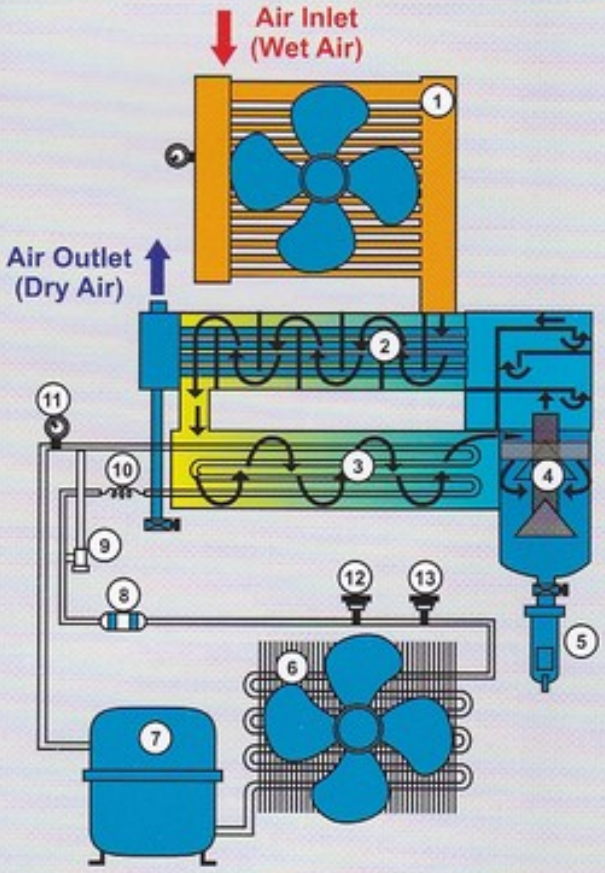
This Shell-Tube Heat Exchanger has low pressure drop to positively affect a user's entire compressed air system.

The dryer's refrigeration system, which uses environmentally friendly and very efficient R407C refrigerant, is designed to provide long service life and deliver consistant dew point in all operating conditions.

DESIGN ASSEMBLY & FEATURES

- After Cooler & Fan Unit
- Pressure Switch
- Condenser & Fan Unit
- Filter Drier
- Pre-Cooler / Re-Heater
- Evaporator
- Electronic Timer Drain
- Hot Gas By-Pass Valve

FLOW DIAGRAM & HOW IT WORKS



1. After Cooler (Air Cooled)
2. Pre-Cooler / Re-Heater
3. Evaporator
4. Moisture Separator
5. Condensate Auto Drain
6. Condenser Unit
7. Freon Compressor
8. Filter Drier
9. Hot Gas By-Pass Valve
10. Expansion Valve
11. Low Pressure Switch
12. High Pressure Switch
13. Fan Pressure Switch

TECHNICAL SPECIFICATIONS

Model	Flow Rate		Connection (inches)	Voltage (V/Ph/Hz)	Dimension (mm) (L x W x H)	Weight (KG)
	m3/min	scfm				
BHTD-08A	0.8	28	G1"	230/1/50	630X450X640	45
BHTD-12A	1.2	42	G1"	230/1/50	630X450X800	65
BHTD-18A	1.8	64	G1"	230/1/50	700X450X990	85
BHTD-25A	2.4	88	G1"	230/1/50	700X450X990	85
BHTD-40A	4.1	144	G1-1/2"	230/1/50	850X500X1080	100
BHTD-55A	5.6	198	G1-1/2"	230/1/50	880X520X1110	125
BHTD-60A	6.8	240	G1-1/2"	230/1/50	880X550X1150	140
BHTD-80A	8.8	311	G2"	230/1/50	1140X690X1270	260
BHTD-140A	13.8	487	G2"	415/1/50	1200X690X1270	330
BHTD-180A	18	636	DN80	415/1/50	1450X800X1450	410
BHTD-200A	23	812	DN80	415/1/50	1650X900X1605	500
BHTD-250A	27	953	DN80	415/1/50	1700X900X1655	710
BHTD-300A	35	1236	DN100	415/1/50	1800X900X1810	880

Data refer to the norminal condition: Inlet Temperature 80°C, Ambient Temperature 38°C & Inlet Pressure 7 barg @ Pressure Dew Point +3°C
Max Inlet Temperature: 90°C, Max Inlet Pressure: 16 barg, Max Ambient Temperature: 45°C
Refrigerant: R22 (Standard), R407C (Optional), BHTD 12A - BHTD 300A (with build in after cooler)

CORRECTION FACTOR FOR OPERATING PRESSURE CHANGES:

Inlet Pressure (barg)	<6	7	8	10	12	16
Factor	0.96	1.00	1.10	1.18	1.26	1.41

CORRECTION FACTOR FOR AMBIENT TEMPERATURE CHANGES:

Ambient Temperature °C	<32	35	38	40	42	45
Factor	1.11	1.05	1.00	0.95	0.89	0.80

CORRECTION FACTOR FOR INLET TEMPERATURE CHANGES:

Inlet Temperature °C	<70	80	90
Factor	1.11	1.00	0.89

CORRECTION FACTOR FOR DEW POINT CHANGES:

Dew Point °C	3	5	10
Factor	1.00	1.05	1.10