# OMEGA COMPRESSORS

# High Temperature Dryers 20-350 SCFM

- Dryer, Aftercooler, Pre-Filter/Moisture Separator All-in-one
- Reduce Energy Costs
- Excellent ROI
- Lower Pressure Drops
- Environmentally Friendly
- No Air Loss Drains Standard



For us, it's not just business. It's personal.

## **OMEGA High Temperature Dryers 20-350 SCFM**

### THE SOLUTION TO A PROBLEM

Compressed air is an effective and reliable source of power which is used in many operations and processes in industry. However, compressed air does have some inherent problems, which if not treated properly, can create significant problems.

#### Problem 1

During the compression process, air becomes contaminated with water, dirt, metal particles and oil. These contaminants combine to form an abrasive and clogging agent in your compressed air line. Use of contaminated compressed air can result in prematurely worn pneumatic machinery, blocked valves and orifices, spoiled spray paint application, and corroded piping systems.

#### Problem 2

Traditionally, the solution to contaminated compressed air problems has been the use of various compressed air treatment products, installed downstream of the air compressor. These may include an aftercooler with moisture separator to remove bulk liquid, coalescing filters to trap oil and dirt, and a refrigeration dryer to condense any remaining saturated water. The problem in many cases is that there is insufficient space in the compressor room to properly fit the various compressed air treatment components. In addition, numerous interconnecting pipe connections are required, increasing the risk of leaks.

#### The Solution

The solution to both these problems is an all-in-one compressed air purifying package designed and manufactured by a company with extensive knowledge and experience. The Omega AHT series dryers are reliable, high efficiency compressed air purifying units that provide cool, clean and dry compressed air in one simple-to-install package. One inlet and outlet air connection and one electrical power hook-up are all that's required. The system provides a pressure dewpoint of  $+3^{\circ}$ C to  $+7^{\circ}$ C ( $+37^{\circ}$ F to  $+45^{\circ}$ F) at 100 psig working pressure. Since most production processes operate at temperatures well above these levels, your compressed air will be clean and dry at all times.

### OMEGA AHT HIGH TEMPERATURE DRYERS

#### CONTROL PANEL

The AHT dryer operation is controlled by our own custom design DMC controller. The DMC 14 controller incorporates a digital dew point read out selectable in degrees F and C scale. As a standard feature the controller also displays a visual alarm condition with the built capability to send a remote alarm signal.



#### HOT-GAS BY-PASS VALVE

All AHT dryers are fitted with a stainless steel hot gas by-pass valve that underwent years of development. This valve is designed to prevent freezing and provide

a constant dew point. Since this diaphragm valve is controlled by temperature and pressure, the accuracy of operation is unmatched in the industry. The valve is set during final factory testing and no further adjustments are required.



#### AFTERCOOLER

The AHT dryers are designed with a built-in aftercooler to pre-cool the air entering the dryer. The cooler is constructed of copper tubes and aluminum fins. The first three models utilize a split coil which combines the condensor coil and aftercooler coil to conserve space. All other models have an independent cooler and fan motor.

#### **PRE-FILTER/MOISTURE SEPARATOR** In order to ensure clean dry air to the dryer, a 3 micron pre-

filter moisture separator with drain is installed as standard.

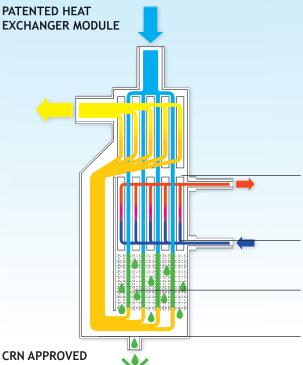


#### CONDENSATE DRAIN

Dryers are all fitted with the industry leading Bekomat, no air loss drains as a standard. This intelligent drain provides energy saving operation which enhances an already energy saving dryer design.



# **Technical Data**



### ALU-DRY HEAT EXCHANGER MODULE

The patented air to air and air to refrigerant heat exchangers and the demister type condensate separator are housed in a uniquely designed vertical module.

Maximum heat transfer is achieved in the air to air heat exchanger cross flow design.

The large surface areas coupled with the cross flow of the refrigerant exchanger ensure no liquid is returned to the refrigeration compressor.

The maintenance free separator is located in the heat exchanger module. This highly efficient coalescing separator provides superior moisture separation.

The large cross-section flow channel results in low velocities, producing low-pressure drop and reduced energy costs.

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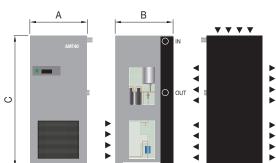
MODEL	FLOW RATE SCFM	POWER SUPPLY	REFRIG.	PIPE SIZE	WEIGHT (lbs.)	DIMENSIONS IN INCHES		
						А	В	С
AHT-20U	20	115/1/60	R134A	1/2" NPT	82	16.75	16.33	25.39
AHT-30U	30	115/1/60	R134A	1/2" NPT	88	16.75	16.33	25.39
AHT-40U	40	115/1/60	R134A	1/2" NPT	90	16.75	16.33	25.39
AHT-50U	50	115/1/60	R134A	1/2" NPT	93	16.75	16.33	25.39
AHT-75U	75	115/1/60	R134A	1" NPT	112	16.00	18.30	44.50
AHT-100U	100	115/1/60	R134A	1-1/4" NPT	134	20.10	20.25	51.96
AHT-100U-230	100	230/1/60	R134A	1-1/4" NPT	134	20.10	20.25	51.96
AHT-150U	150	230/1/60	R404A	1-1/4" NPT	146	20.10	20.25	51.96
AHT-200U	200	230/1/60	R404A	1-1/2" NPT	165	22.0	23.34	55.11
AHT-250U	250	230/1/60	R404A	1-1/2" NPT	185	22.0	23.34	55.11
AHT-300U	300	230/1/60	R404A	2" NPT	291	27.87	30.51	59.17
AHT-350U	350	230/1/60	R404A	2" NPT	304	27.87	30.51	59.17

Compressed air treated with AHT dryer series guarantees high quality standards, conforming to ISO 8573.1, class 5 for residual humidity and class 3 for maximum concentration of solid contaminants.

#### Performance is based on free air delivered by the compressor (at 100°F at 14.7 psig) and at the following operating conditions: Maximum working pressure.....12 bar (174 psig)

### OMEGA FEATURES AND BENEFITS

- Built-in independent air-cooled aftercooler on AHT-75 and up
- R134A / R404A environment friendly refrigerant
- Conforms to CSA standards / Entela approved
- Fully hermetically sealed refrigerant compressor includes thermal overload protection and anti-vibration mountings
- Robust heavy gauge steel construction with over specified fastening devices
- Independent thermally protected cooling fans for the aftercooler and the condenser
- · High efficiency moisture separator for the evaporator



- CRN approved
- High efficiency spin on pre-filter moisture separator for the aftercooler is included and fitted as standard
- Easily removable access panels
- Bekomat drain on evaporator and moisture separator
- Powder coated finish
- Electronic controls complete with LED readout, standard on all models
- Compact space saving design
- Suitable for high inlet air temperature or high ambient air temperature
- · Neat and easily serviceable layout of components



# **Compressed Air Accessories**

Aluminum Air Piping	Magnetic Starters	
Ball Valves	Oil Monitors	
Check Valves	Oil/Water Separators	
Compressed Air Filters	Pilot Valves	
Compressor Oil	Pneumatic Auto Drains	
Compressor Pumps	Pressure Switches	
Desiccant Air Dryers	Refrigerated Air Dryers	
Electric Motors	Remote Air Receivers	
Electronic Auto Drains	Safety Valves	
Filter Elements	Service Parts	
Filter - Regulators - Lubricators	Throttle Controls	
Flex Hose Connectors	Vibration Isolators	
Gauges	Water Separators	2 year limited warranty <b>E Child</b> .



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