

# BelAir

COMPRESSED AIR TREATMENT

**Refrigerated Air Dryers**  
**10-100 scfm**



**iAMD**  
**Dryer Series**



**FRIULAIR**  
**Dryers**



# REFRIGERATED AIR DRYERS "FOUR LEAF CLOVER" SERIES

**AMD** dryers (Aluminium Modular Dryer) are marketed using the "good luck" symbol of the four leaf clover.

The planning and design of this dryer series was not carried out in the conventional way. Instead, all possible requirements were listed, tested and met.

The "four clover leaves" that form the **AMD** dryers are a combination of applying technical solutions to original designs supported by extensive laboratory testing and achieving the goal of innovative development.

## 1- PERFORMANCE



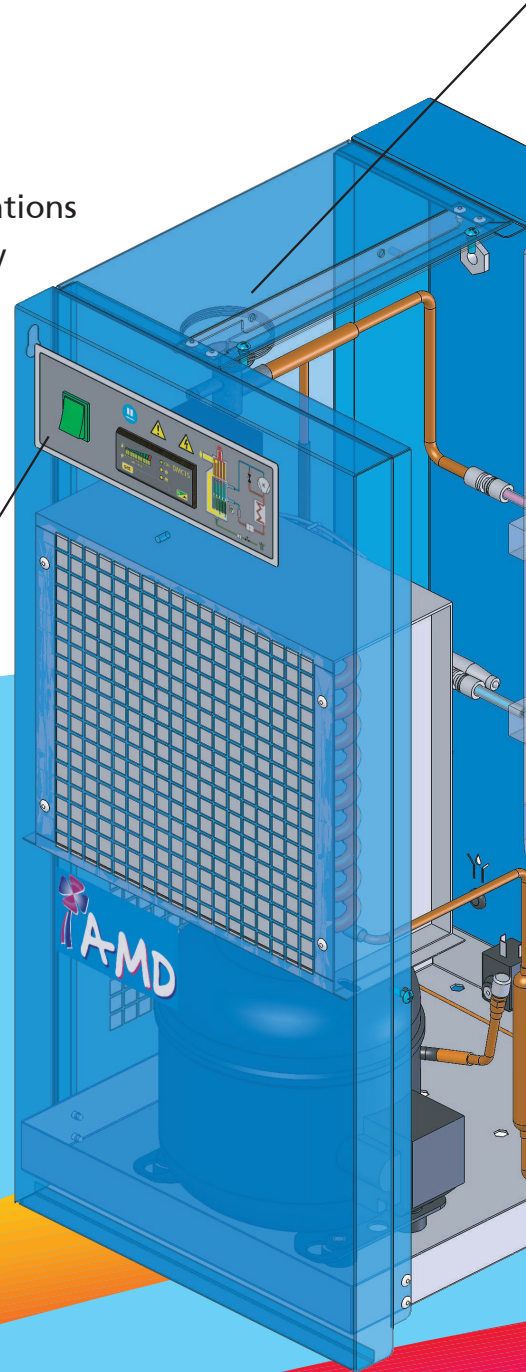
**AMD** dryers achieve excellent performance even in installations with high ambient and high inlet temperatures. The highly efficient and ultra compact heat exchanger is able to operate effectively in ambient temperatures up to 115°F and inlet temperatures of 130°F with minimal pressure drop.



## 2 - ECONOMIC



**AMD** dryers are sized to match standard compressor outputs. E.g. a 10 HP (7.5kW) air compressor with theoretical output of 50 scfm at 100 psig matches the **AMD 50** rated at 50 scfm. It is therefore unnecessary to select a larger model: air compressor-dryer combination is tested and certified by **FRIULAIR**, within the operating limits as shown per the technical specifications section.





### 3 - OPERATION

Operation of the **AMD** dryer is monitored by the DMC15 electronic controller which indicates the DewPoint temperature digitally, controls the condensate drain valve via a timer and the condenser fan via a probe.

The fan control on small dryers is not normally found on competitor's dryers. The fan control allows the dryers to operate at a much lower ambient without risk of freeze-ups.

A unique constant pressure hot gas by-pass valve allows the evaporator to be set at 34°F and not freeze regardless of the flow.

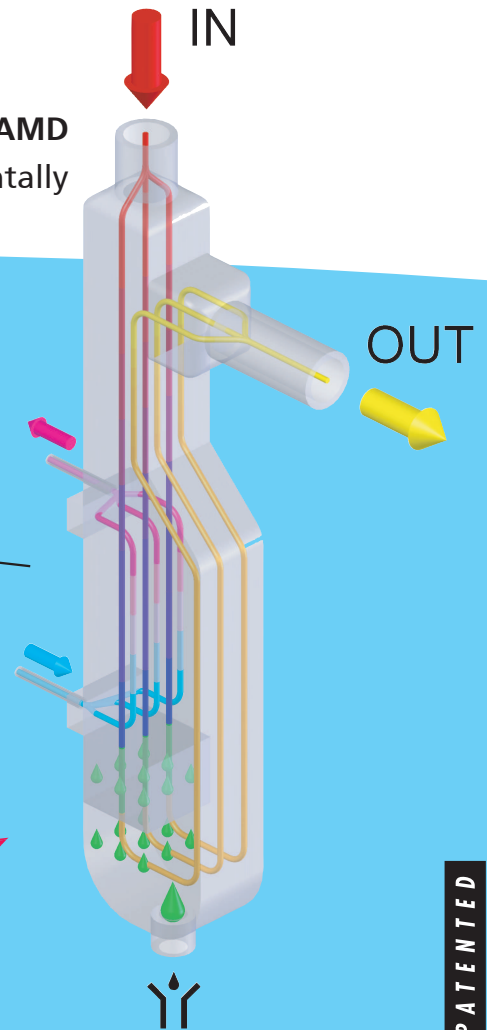
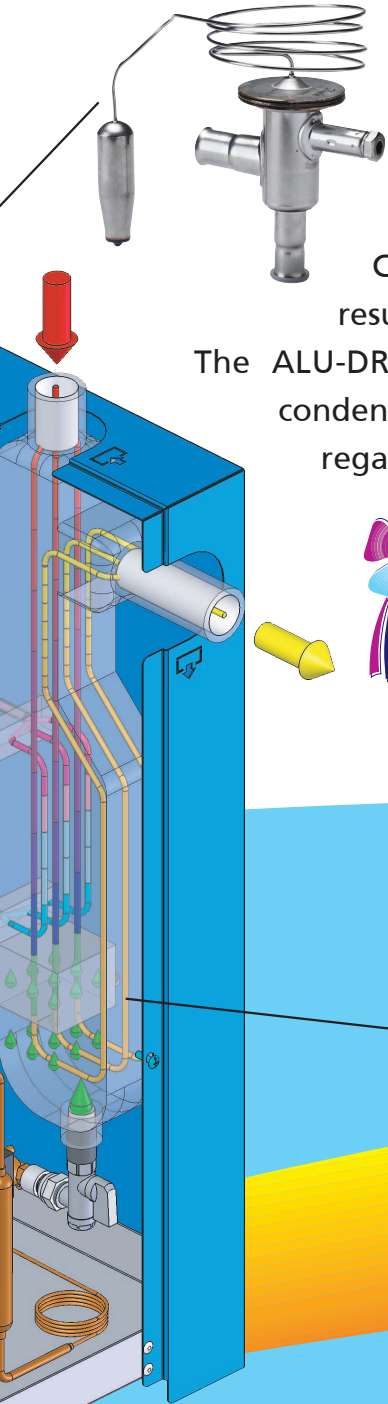
Calibrated at the factory, the valve never needs adjustment in the field, resulting in simpler maintenance.

The **ALU-DRY** aluminium Modules wet surfaces have a vertical flow ensuring the condensed water from the compressed air goes to the automatic drain by gravity regardless of the flow.



### 4- ECOLOGY

All materials used in the construction of **AMD** dryers are easily recycled. Only environmentally friendly refrigerants are used.



PATENTED

# TECHNICAL SPECIFICATIONS AND DIMENSIONS

Standard rating condition: Ambient temperature of 100°F, with inlet air at 100 psig and 100°F and a pressure dewpoint of 39° to 41°F.

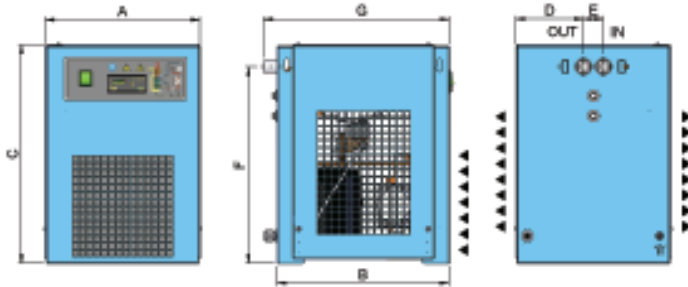
AMD 10-100 scfm dryers are available in both 115/1/60 and a dual 208-230/1/60 VAC.

The maximum operating ambient is 115°F, the maximum inlet temperature is 130°F and the maximum operating pressure is 200 psig.

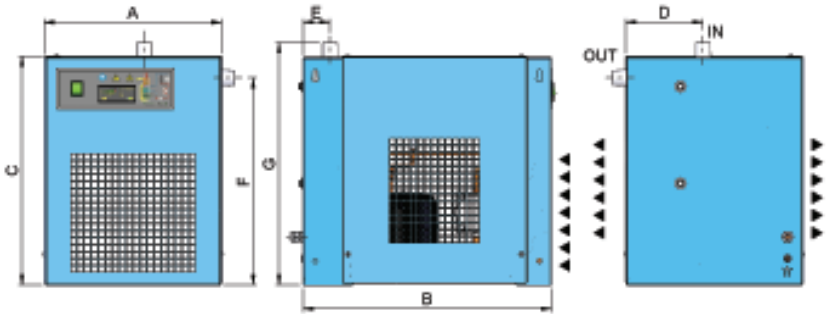
The minimum ambient temperature is 34°F without other protection devices (see IOM for lower ambient operations) and the minimum pressure is 60 psig.

The refrigerant R134a is used on all AMD dryers and meets all current code requirements for environmental safety.

 AMD 10-15



 AMD 20-100



Dryer model	Flow-Rate [scfm]	Pressure Drop [psid]	Connectors ø (IN-OUT)	Dimensions (inches)							Weight [lbs]
				A	B	C	D	E	F	G	
AMD 10	10	1.5	3/8" NPT-F	12"	13.9/16"	17.1/8"	3.3/4"	1.9/16"	15.3/8"	14.5/8"	46
AMD 15	15	2.0	3/8" NPT-F	12"	13.9/16"	17.1/8"	3.3/4"	1.9/16"	15.3/8"	14.5/8"	48
AMD 20	20	0.6	1/2" NPT-F	14.3/8"	20.1/4"	18.11/16"	6.5/16"	2.1/8"	16.15/16"	19.3/4"	55
AMD 35	35	1.3	1/2" NPT-F	14.3/8"	20.1/4"	18.11/16"	6.5/16"	2.1/8"	16.15/16"	19.3/4"	62
AMD 50	50	2.2	1/2" NPT-F	14.3/8"	20.1/4"	18.11/16"	6.5/16"	2.1/8"	16.15/16"	19.3/4"	70
AMD 75	75	2.6	1" NPT-F	13.9/16"	16.1/2"	29.1/8"	5.7/16"	2.3/8"	25.3/4"	30.1/2"	75
AMD 100	100	2.2	1.1/4" NPT-F	13.9/16"	17.1/2"	29.1/8"	5.1/4"	2.3/4"	25.3/4"	30.1/2"	86

CORRECTION FACTOR FOR OPERATING PRESSURE CHANGES:										
Inlet air pressure	psig	60	80	100	120	140	160	180	200	
Factor		0.79	0.91	1.00	1.07	1.13	1.18	1.23	1.27	

CORRECTION FACTOR FOR AMBIENT TEMPERATURE CHANGES:							
Ambient temperature	°F	80	90	100	105	110	115
Factor		1.12	1.09	1.00	0.93	0.85	0.75

CORRECTION FACTOR FOR INLET AIT TEMPERATURE CHANGES:							
Air temperature	°F	80	90	100	110	120	130
Factor		1.24	1.23	1.00	0.81	0.66	0.54

CORRECTION FACTOR FOR DEWPOINT CHANGES:							
Dewpoint	°F	38	41	44	47	50	
Factor		0.92	1.00	1.07	1.16	1.25	



Friulair s.r.l. reserves the right to modify, without notice technical details design and components.