



## F-H Refrigerated Dryers

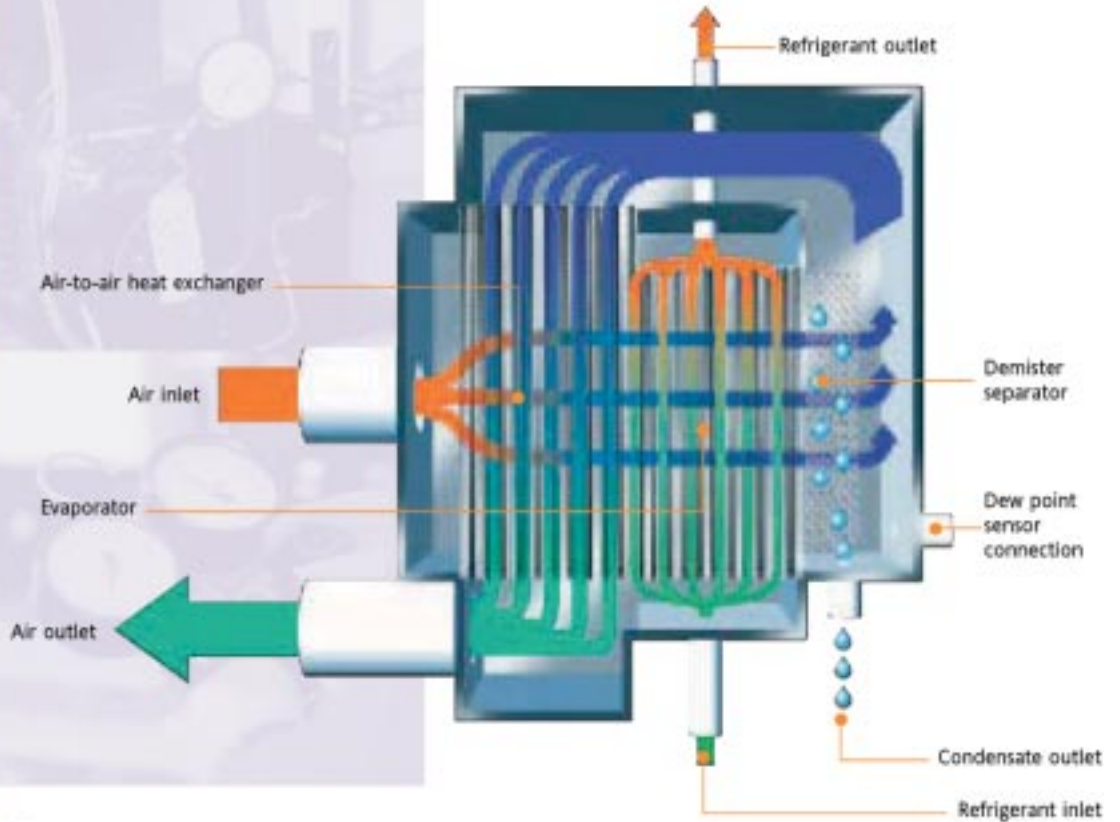


Engineered to Save

# Refrigeration Dryers

F-H Series refrigeration dryers are the final result of intensive research and development program.

The result is the most efficient direct expansion refrigerated dryer on the market today. The innovative design provides a low pressure drop, precise dewpoint control and optimum energy efficiency.



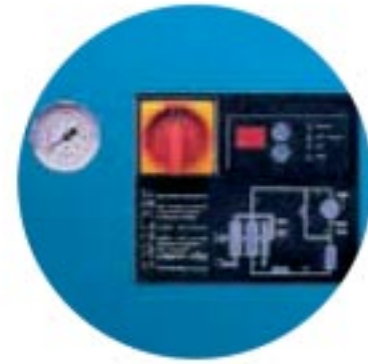
## Revolutionary heat exchanger design

The heart of the dryer is the ultra compact aluminum heat exchanger module (F125H – F3000H). The patented heat exchanger includes an air-to-air heat exchanger, evaporator and high performance demister separator all in one compact unit. The advanced design eliminates the need for interconnecting tubing, a common cause of heat exchanger failure.

In addition to reducing dryer footprint, the high performance heat exchanger ensures non-velocity sensitive moisture separation, minimizes potential for air and refrigerant leaks and optimizes overall energy efficiency.

## Low operating cost and piece of mind

The dryers feature advanced microprocessor control (F250H – F3000H) for maximum reliability and precise control. The microprocessor features a digital dewpoint display, self diagnostic control with 8 safety alarm/faults, hours counter, memory log and common alarm relay. It also incorporates a cycling feature which provides the same benefits of cycling dryers at low load. The F10 through F200H are fitted with dewpoint performance indicator, alarm lamp (125-200) and power on lamp.



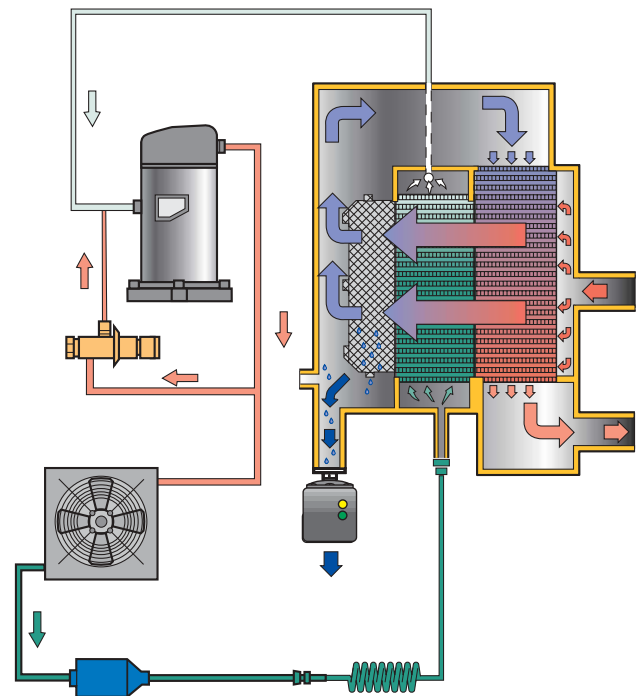
**Precise**  
The control panel is positioned on the front for, simple use and also for a visual guarantee of a constant pressure dew point.

## Energy Efficient

The F-H dryers feature proven scroll compressor technology (from 325 scfm). Scroll compressors provide >20% energy efficiency verse piston compressors and increase reliability due to their nearly indestructible design. The scroll compressor's low vibration decreases noise pollution and optimizes dryer's overall reliability.

## Performance under all loads

Moisture separation is an often overlooked component of refrigerated dryer design. One of the major challenges over the years has been water removal under low loads. Traditional heat exchangers and moisture separators have relied heavily on mechanical or centrifugal separation, which have a difficult time under low loads or low velocity. The F-H Series dryers feature continuous active separation (C.A.S.) to ensure effective water removal regardless of load. C.A.S is achieved by combination of multiple separation techniques in the heat exchanger to ensure effective water removal regardless of load. These techniques include: velocity reduction, direction change, impingement, gravitational pull and cold coalescence.



## Protects your investment

All models are protected from overheating or excess current within the compressor. Further protection is offered by a fan pressure switch (all), high pressure switch (all) and high temperature thermostat (from 125 scfm). These safeguard the operation of the dryer and protect your investment.

## Environmentally friendly refrigerant

All models utilize HCF refrigerants. Therefore they comply with the Montreal Protocol and ensures that they will not have to be replaced prematurely. Models F10-H through F100-H utilize R134a and models F125-H and larger utilize R407C.



**Environmental**  
R407C refrigerant provides a 10% energy savings verse R134a and 6% verse R404A.

# Technical Specifications

Model	Capacity scfm	Nominal Power Absorbed kW	Dimensions (inches)			Air Connection	Weight (lbs.)	Available Voltage 60 Hz	
			A	B	C				
F0010H	10	0.2	17.7	17.9	7.7	3/8" NPT - F	42	115v/1	
F0015H	15	0.23							
F0025H	25	0.27							
F0035H	35	0.4	23.6	20.8	11.1	1/2" NPT - F	71		
F0050H	50	0.59							
F0075H	75	0.8	27.5	23.8	13.8	3/4" NPT - F	101		
F0100H	100	0.99							
F0125H	125	0.71							
F0150H	150	0.76	24.21	31.14	21.73	1 1/2" NPT -	143	115V/1 & 230V/1	
F0175H	175	1.07							
F0200H	200	1.36							
F0250H	250	1.43	36.22	39.96	26.46	2" NPT - F	150	230V/1	
F0325H	325	1.69							
F0400H	400	2.33							
F0500H	500	2.34	39.76	50.06	51.57	3" NPT - M	309	230V/3 & 460V/3	
F0700H	700	2.94							
F0800H	800	2.96							
F1000H	1,000	4.06	71.26	51.57	51.57	3" NPT - M	313		230V/3 & 460V/3
F1200H	1,200	4.23							
F1400H	1,400	6.13							
F1650H	1,650	7.57	39.76	50.06	71.26	4" Flg	317	460V/3	
F2000H	2,000	7.81							
F2400H	2,400	9.17							
F3000H	3,000	11.75	39.76	50.06	71.26	6" Flg	331		460V/3
F0700H	700	2.94							
F0800H	800	2.96							
F1000H	1,000	4.06	39.76	50.06	71.26	6" Flg	882	460V/3	
F1200H	1,200	4.23							
F1400H	1,400	6.13							
F1650H	1,650	7.57	39.76	50.06	71.26	6" Flg	926		460V/3
F2000H	2,000	7.81							
F2400H	2,400	9.17							
F3000H	3,000	11.75	39.76	50.06	71.26	6" Flg	992	460V/3	
F0700H	700	2.94							
F0800H	800	2.96							
F1000H	1,000	4.06	39.76	50.06	71.26	6" Flg	1,014		460V/3
F1200H	1,200	4.23							
F1400H	1,400	6.13							
F1650H	1,650	7.57	39.76	50.06	71.26	6" Flg	1,036	460V/3	
F2000H	2,000	7.81							
F2400H	2,400	9.17							
F3000H	3,000	11.75	39.76	50.06	71.26	6" Flg	1,212		460V/3
F0700H	700	2.94							
F0800H	800	2.96							
F1000H	1,000	4.06	39.76	50.06	71.26	6" Flg	1,290	460V/3	
F1200H	1,200	4.23							
F1400H	1,400	6.13							
F1650H	1,650	7.57	39.76	50.06	71.26	6" Flg	1,301		460V/3
F2000H	2,000	7.81							
F2400H	2,400	9.17							
F3000H	3,000	11.75	39.76	50.06	71.26	6" Flg	1,455	460V/3	
F0700H	700	2.94							
F0800H	800	2.96							

In compliance with CAGI (ADF 100) / NFPA (CLASS H) standard, the airflow rates shown refer to the free air output from the compressor and at the following 3-rated operating conditions: operating pressure 100 psi, compressed air inlet temperature 100°F, ambient temperature 100°F and pressure dewpoint 33-39°F.

**Technical data**

Maximum ambient temperature: 122°F (50°C)

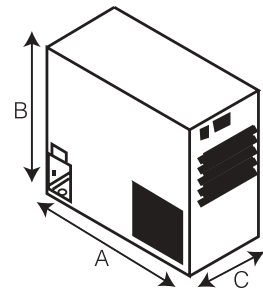
Maximum inlet temperature: 140°F (60°C)

Minimum ambient temperature: 41°F (5°C)

Maximum inlet pressure: F0010H-F0100H - 232 psi g (16 bar g); F0125H-F3000H - 174 psi g (12 bar g)

Refrigerant:F0010H-F0100H R134a

F125H-F3000H 407c



### Correction Factors: F10H – F100H

60Hz Air Cooled								
Pressure Dew Point (°F)	38	41	45	50				
Correction Factors	1	1.09	1.21	1.38				
Inlet Temperature (°F)	90	100	110	120	140			
Correction Factors	1.24	1	0.81	0.67	0.45			
Working Pressure (psi g)	60	80	100	125	150	175	200	230
Correction Factors	0.83	0.93	1	1.07	1.12	1.16	1.19	1.22
Ambient Temperature (°F)	60	70	80	90	100	110	120	
Correction Factors	1.34	1.26	1.17	1.09	1	0.91	0.82	

### Correction Factors: F125H – F3000H

60Hz Water and Air Cooled						
Pressure Dew Point (°F)	38	40	45	50		
Correction Factors	1	1.05	1.19	1.34		
Inlet Temperature (°F)	90	100	110	120	130	140
Correction Factors	1.22	1	0.82	0.68	0.56	0.46
Working Pressure (psi g)	50	80	100	125	150	174
Correction Factors	0.877	0.93	1	1.07	1.12	1.15
Ambient Temperature (°F)	90	100	110	120	122	
Correction Factors	1.05	1	0.94	0.79	0.71	



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3-1,520 cfm  
1-350 hp

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