



DRY STAR HOT

REFRIGERATED AIR DRYERS

Ref 11164.01
Date 15 August 2003
Cancels First Edition

Campbellsville, Kentucky

Engineering Data DS 15-H - Air Cooled

PERFORMANCE DATA			
Pressure Dew Point (°F)	41	50	59
Airflow Capacity (Scfm @ 68°F)	12.3	15.0	18.1
Air Pressure Drop (psi)	1.66	2.39	3.40
Air Temperature at Dryer Outlet (°F)	83.0	87.2	91.7
Compressor Absorbed Power (kW)	0.22	0.25	0.27
Condenser Heat Rejected (kW)	0.38	0.44	0.49
REFERENCE DATA			
Working Pressure (psig)		125	
Inlet Air Temperature (°F)		180	
Ambient Temperature (°F)		95	
Relative Humidity (%)		60	
GENERAL DATA			
Condenser Airflow (m³/h) / number of fans		99 / 1	
Maximum Operating Pressure (psig)		232	
Sound Pressure Level (dBA) (1 m free field)*		55	
Refrigerant Type		R134a	
Fridge Compressor Type / n°		Hermetic Pistons / 1	
Refrigerant Quantity (kg)		0.13	
Capacity Control		Automatic Expansion Valve	
Expansion System		Automatic Expansion Valve	
Air-to-air Heat Exchanger		Copper Tube in Tube	
Air-to-refrigerant Heat Exchanger		Copper Tube in Tube	
Number of Heat Exchangers		1	
Separator Type		Demister	
Drain Type		Afloat Drain	
Aftercooler Exchanger		Copper Tubes with Aluminium Fins	
Aftercooler Fan Flow (m³/h)		600	
Prefilter (3 micron) Model		HFN010/Q	
PIPING CONNECTIONS			
Air Inlet / Outlet		3/8" NPT - F	
Condensate Drain Outlet		1/2" NPT - M	
DIMENSIONS + WEIGHT			
Width (inch)		7.8	
Height (inch)		32	
Depth (inch)		17.7	
Weight (lb)		55	
ELECTRICAL DATA			
Electrical Supply (+/- 10%) (AC)		115V / 1ph / 60Hz	
L.R.A. Current (Amps)		17.1	
F.L.A. Current (Amps)		3.6	
Total Installed Power (kW)		0.30	
Control Type		Electromechanical	
Electrical Protection Class (Std.)		IP20	

Operating limits:

Max / Min Ambient Temperature (°F): 115 / 41
Max / Min Air Inlet Temperature (°F): 200 / 41



DRY STAR HOT

REFRIGERATED AIR DRYERS

Ref 11164.02
Date 15 August 2003
Cancels First Edition

Campbellsville, Kentucky

Engineering Data DS 25-H - Air Cooled

PERFORMANCE DATA			
Pressure Dew Point (°F)	41	50	59
Airflow Capacity (Scfm @ 68°F)	19.6	25.0	31.6
Air Pressure Drop (psi)	1.31	2.05	3.16
Air Temperature at Dryer Outlet (°F)	74.5	78.7	83.4
Compressor Absorbed Power (kW)	0.26	0.29	0.32
Condenser Heat Rejected (kW)	0.52	0.60	0.68
REFERENCE DATA			
Working Pressure (psig)		125	
Inlet Air Temperature (°F)		180	
Ambient Temperature (°F)		95	
Relative Humidity (%)		60	
GENERAL DATA			
Condenser Airflow (m ³ /h) / number of fans		250 / 1	
Maximum Operating Pressure (psig)		232	
Sound Pressure Level (dBA) (1 m free field)*		60	
Refrigerant Type		R134a	
Fridge Compressor Type / n°		Hermetic Pistons / 1	
Refrigerant Quantity (kg)		0.195	
Capacity Control		Automatic Expansion Valve	
Expansion System		Automatic Expansion Valve	
Air-to-air Heat Exchanger		Copper Tube in Tube	
Air-to-refrigerant Heat Exchanger		Copper Tube in Tube	
Number of Heat Exchangers		1	
Separator Type		Demister	
Drain Type		Afloat Drain	
Aftercooler Exchanger		Copper Tubes with Aluminium Fins	
Aftercooler Fan Flow (m ³ /h)		600	
Prefilter (3 micron) Model		HFN018/Q	
PIPING CONNECTIONS			
Air Inlet / Outlet		½" NPT - F	
Condensate Drain Outlet		½" NPT - M	
DIMENSIONS + WEIGHT			
Width (inch)		11.1	
Height (inch)		39	
Depth (inch)		23.6	
Weight (lb)		93	
ELECTRICAL DATA			
Electrical Supply (+/- 10%) (AC)		115V / 1ph / 60Hz	
L.R.A. Current (Amps)		31.4	
F.L.A. Current (Amps)		5.5	
Total Installed Power (kW)		0.39	
Control Type		Electromechanical	
Electrical Protection Class (Std.)		IP20	

Operating limits:

Max / Min Ambient Temperature (°F): 115 / 41

Max / Min Air Inlet Temperature (°F): 200 / 41



DRY STAR HOT

REFRIGERATED AIR DRYERS

Ref 11164.03
 Date 15 August 2003
 Cancels First Edition

Campbellsville, Kentucky

Engineering Data DS 35-H - Air Cooled

PERFORMANCE DATA			
Pressure Dew Point (°F)	41	50	59
Airflow Capacity (Scfm @ 68°F)	28.2	35.0	42.7
Air Pressure Drop (psi)	2.53	3.76	5.43
Air Temperature at Dryer Outlet (°F)	75.3	80.2	85.2
Compressor Absorbed Power (kW)	0.39	0.44	0.49
Condenser Heat Rejected (kW)	0.79	0.90	1.02
REFERENCE DATA			
Working Pressure (psig)		125	
Inlet Air Temperature (°F)		180	
Ambient Temperature (°F)		95	
Relative Humidity (%)		60	
GENERAL DATA			
Condenser Airflow (m³/h) / number of fans		250 / 1	
Maximum Operating Pressure (psig)		232	
Sound Pressure Level (dBA) (1 m free field)*		60	
Refrigerant Type		R134a	
Fridge Compressor Type / n°		Hermetic Pistons / 1	
Refrigerant Quantity (kg)		0.20	
Capacity Control		Automatic Expansion Valve	
Expansion System		Automatic Expansion Valve	
Air-to-air Heat Exchanger		Copper Tube in Tube	
Air-to-refrigerant Heat Exchanger		Copper Tube in Tube	
Number of Heat Exchangers		1	
Separator Type		Demister	
Drain Type		Afloat Drain	
Aftercooler Exchanger		Copper Tubes with Aluminium Fins	
Aftercooler Fan Flow (m³/h)		1500	
Prefilter (3 micron) Model		HFN018/Q	
PIPING CONNECTIONS			
Air Inlet / Outlet		½" NPT - F	
Condensate Drain Outlet		½" NPT - M	
DIMENSIONS + WEIGHT			
Width (inch)		11.1	
Height (inch)		39	
Depth (inch)		23.6	
Weight (lb)		95	
ELECTRICAL DATA			
Electrical Supply (+/- 10%) (AC)		115V / 1ph / 60Hz	
L.R.A. Current (Amps)		36.5	
F.L.A. Current (Amps)		7.0	
Total Installed Power (kW)		0.54	
Control Type		Electromechanical	
Electrical Protection Class (Std.)		IP20	

Operating limits:
 Max / Min Ambient Temperature (°F): 115 / 41
 Max / Min Air Inlet Temperature (°F): 200 / 41



DRY STAR HOT

REFRIGERATED AIR DRYERS

Ref 11164.04
Date 15 August 2003
Cancels First Edition

Campbellsville, Kentucky

Engineering Data DS 50-H - Air Cooled

PERFORMANCE DATA			
Pressure Dew Point (°F)	41	50	59
Airflow Capacity (Scfm @ 68°F)	40.0	50.0	60.6
Air Pressure Drop (psi)	2.17	3.27	4.66
Air Temperature at Dryer Outlet (°F)	73.2	77.8	82.8
Compressor Absorbed Power (kW)	0.56	0.64	0.69
Condenser Heat Rejected (kW)	1.09	1.26	1.38
REFERENCE DATA			
Working Pressure (psig)		125	
Inlet Air Temperature (°F)		180	
Ambient Temperature (°F)		95	
Relative Humidity (%)		60	
GENERAL DATA			
Condenser Airflow (m ³ /h) / number of fans		300 / 1	
Maximum Operating Pressure (psig)		232	
Sound Pressure Level (dBA) (1 m free field)*		60	
Refrigerant Type		R134a	
Fridge Compressor Type / n°		Hermetic Pistons / 1	
Refrigerant Quantity (kg)		0.24	
Capacity Control		Automatic Expansion Valve	
Expansion System		Automatic Expansion Valve	
Air-to-air Heat Exchanger		Copper Tube in Tube	
Air-to-refrigerant Heat Exchanger		Copper Tube in Tube	
Number of Heat Exchangers		1	
Separator Type		Demister	
Drain Type		Afloat Drain	
Aftercooler Exchanger		Copper Tubes with Aluminium Fins	
Aftercooler Fan Flow (m ³ /h)		1500	
Prefilter (3 micron) Model		HFN022/Q	
PIPING CONNECTIONS			
Air Inlet / Outlet		¾" NPT - F	
Condensate Drain Outlet		½" NPT - M	
DIMENSIONS + WEIGHT			
Width (inch)		13.9	
Height (inch)		47.7	
Depth (inch)		27.6	
Weight (lb)		134	
ELECTRICAL DATA			
Electrical Supply (+/- 10%) (AC)		115V / 1ph / 60Hz	
L.R.A. Current (Amps)		43.5	
F.L.A. Current (Amps)		8.8	
Total Installed Power (kW)		0.72	
Control Type		Electromechanical	
Electrical Protection Class (Std.)		IP20	

Operating limits:

Max / Min Ambient Temperature (°F): 115 / 41

Max / Min Air Inlet Temperature (°F): 200 / 41



DRY STAR HOT

REFRIGERATED AIR DRYERS

Ref 11164.05
Date 15 August 2003
Cancels First Edition

Campbellsville, Kentucky

Engineering Data DS 75-H - Air Cooled

PERFORMANCE DATA			
Pressure Dew Point (°F)	41	50	59
Airflow Capacity (Scfm @ 68°F)	62.0	75.0	89.2
Air Pressure Drop (psi)	2.41	3.43	4.74
Air Temperature at Dryer Outlet (°F)	76.7	81.8	87.0
Compressor Absorbed Power (kW)	0.76	0.85	0.94
Condenser Heat Rejected (kW)	1.64	1.86	2.09
REFERENCE DATA			
Working Pressure (psig)		125	
Inlet Air Temperature (°F)		180	
Ambient Temperature (°F)		95	
Relative Humidity (%)		60	
GENERAL DATA			
Condenser Airflow (m ³ /h) / number of fans		420 / 1	
Maximum Operating Pressure (psig)		232	
Sound Pressure Level (dBA) (1 m free field)*		60	
Refrigerant Type		R134a	
Fridge Compressor Type / n°		Hermetic Pistons / 1	
Refrigerant Quantity (kg)		0.32	
Capacity Control		Automatic Expansion Valve	
Expansion System		Automatic Expansion Valve	
Air-to-air Heat Exchanger		Copper Tube in Tube	
Air-to-refrigerant Heat Exchanger		Copper Tube in Tube	
Number of Heat Exchangers		1	
Separator Type		Demister	
Drain Type		Afloat Drain	
Aftercooler Exchanger		Copper Tubes with Aluminium Fins	
Aftercooler Fan Flow (m ³ /h)		1500	
Prefilter (3 micron) Model		HFN030/Q	
PIPING CONNECTIONS			
Air Inlet / Outlet		¾" NPT - F	
Condensate Drain Outlet		½" NPT - M	
DIMENSIONS + WEIGHT			
Width (inch)		13.9	
Height (inch)		47.7	
Depth (inch)		27.6	
Weight (lb)		154	
ELECTRICAL DATA			
Electrical Supply (+/- 10%) (AC)		115V / 1ph / 60Hz	
L.R.A. Current (Amps)		54.5	
F.L.A. Current (Amps)		10.9	
Total Installed Power (kW)		0.99	
Control Type		Electromechanical	
Electrical Protection Class (Std.)		IP20	

Operating limits:

Max / Min Ambient Temperature (°F): 115 / 41

Max / Min Air Inlet Temperature (°F): 200 / 41



DRY STAR HOT

REFRIGERATED AIR DRYERS

Ref 11164.06
 Date 15 August 2003
 Cancels First Edition

Campbellsville, Kentucky

Engineering Data DS 100-H - Air Cooled

PERFORMANCE DATA			
Pressure Dew Point (°F)	41	50	59
Airflow Capacity (Scfm @ 68°F)	83.9	100.0	116.8
Air Pressure Drop (psi)	3.48	4.81	6.43
Air Temperature at Dryer Outlet (°F)	78.4	84.1	89.8
Compressor Absorbed Power (kW)	0.96	1.09	1.16
Condenser Heat Rejected (kW)	2.30	2.64	2.90
REFERENCE DATA			
Working Pressure (psig)		125	
Inlet Air Temperature (°F)		180	
Ambient Temperature (°F)		95	
Relative Humidity (%)		60	
GENERAL DATA			
Condenser Airflow (m³/h) / number of fans		620 / 1	
Maximum Operating Pressure (psig)		232	
Sound Pressure Level (dBA) (1 m free field)*		60	
Refrigerant Type		R134a	
Fridge Compressor Type / n°		Hermetic Pistons / 1	
Refrigerant Quantity (kg)		0.32	
Capacity Control		Automatic Expansion Valve	
Expansion System		Automatic Expansion Valve	
Air-to-air Heat Exchanger		Copper Tube in Tube	
Air-to-refrigerant Heat Exchanger		Copper Tube in Tube	
Number of Heat Exchangers		1	
Separator Type		Demister	
Drain Type		Afloat Drain	
Aftercooler Exchanger		Copper Tubes with Aluminium Fins	
Aftercooler Fan Flow (m³/h)		1500	
Prefilter (3 micron) Model		HFN030/Q	
PIPING CONNECTIONS			
Air Inlet / Outlet		¾" NPT - F	
Condensate Drain Outlet		½" NPT - M	
DIMENSIONS + WEIGHT			
Width (inch)		13.9	
Height (inch)		47.7	
Depth (inch)		27.6	
Weight (lb)		161	
ELECTRICAL DATA			
Electrical Supply (+/- 10%) (AC)		115V / 1ph / 60Hz	
L.R.A. Current (Amps)		58.3	
F.L.A. Current (Amps)		13.7	
Total Installed Power (kW)		1.22	
Control Type		Electromechanical	
Electrical Protection Class (Std.)		IP20	

Operating limits:
 Max / Min Ambient Temperature (°F): 115 / 41
 Max / Min Air Inlet Temperature (°F): 200 / 41