

# **AIR/TAK**

*Compressed Air System Products*

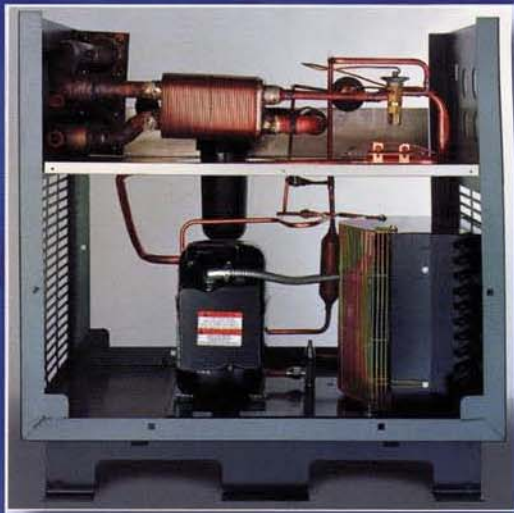
## **SD/SRD Small Refrigerated Air Dryers**



**Compressed Air System Products That  
Save Energy & Improve Operations**

# SD Series

## Small Refrigerated Air Dryers



## Dry Air Saves Money

Wet compressed air is damaging to tools, instruments, controls and machinery. Moving parts and small orifices are particularly susceptible to damage from dirt and corrosion. This results in erratic operation, reduced productivity, or downtime.

**Air/Tak** Refrigerated Air Dryers remove water and contaminants before they can damage your equipment or disrupt operations. The dryers supply clean, dry air with a low pressure dew point so:

- Machines run better
- Operations run more efficiently
- Equipment lasts longer with less maintenance

**Air/Tak SD Series** dryers are designed for smaller flows. Air-cooled units with rated flows from 10-250 SCFM are available with heavy-duty heat exchangers and condensing units completely enclosed in a welded, high-quality painted metal cabinet.

### Standard Features:

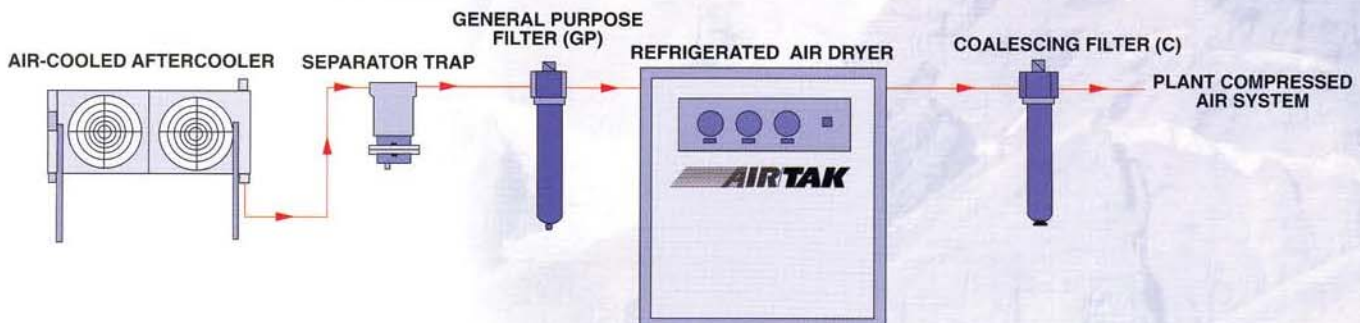
- Six-foot Power Cord (SD-10-A to SD-100-A)
- Electrical Terminal Block (SD-150-A to SD-250-A)
- On/Off Switch
- Power On & High Temperature Indicator Lights
- Air-to-Refrigerant Tube-in-Tube Copper Heat Exchanger (SD-10-A & SD-20-A)
- Air-to-Air and Air-to-Refrigerant Tube-in-Tube Copper Heat Exchanger (SD-30-A & SD-40-A)
- Air-to-Air and Air-to-Refrigerant Brazed Plate Stainless Steel Heat Exchanger (SD-50-A to SD-250-A)
- Moisture Separator/Automatic Drain
- Refrigerant Suction Pressure Gauge
- Inlet Air Temperature and Outlet Air Pressure Gauges (SD-150-A to SD-250-A)
- Double Flared Connections

### Optional Equipment:

- Ambient Air Filter
- Solenoid Drain Valve
- Inlet Air Temperature Gauge
- Outlet Air Pressure Gauge
- Coalescing prefilters and Afterfilters



### Typical Refrigerated Air Dryer System



**Air/Tak SRD Series** Refrigerated Air Dryers combine environmentally friendly refrigeration systems with compact air/air (precool/reheat) and air/refrigerant heat exchangers. These dryers housed in compact metal cabinets are suitable for small flow OEM applications as well as point-of-use installations.

These SRD Series Refrigeration Air Dryers are equipped with refrigeration controls that include a cap tube expansion device, hot gas bypass valve and low ambient fan control. They are supplied with a power on light, on/off switch, compressor failure alarm light, refrigerant suction pressure gauge, and a moisture separator with an automatic drain valve.

### **Standard Features:**

- Ambient Air Filter
- Solenoid Drain Valve
- Inlet Air Temperature Gauge
- Outlet Air Pressure Gauge
- Six-foot Power Cord
- Power On Light
- On/Off Switch
- Refrigerant Compressor Failure Alarm Light
- Refrigerant Suction Pressure Gauge
- Low Ambient Fan Control
- Hot Gas Bypass Valve
- R-134a Refrigerant
- Air/Air and Air/Refrigerant Heat Exchangers
- Moisture Separator with Automatic Drain Valve

### **Optional Equipment:**

- Solenoid Drain Valve
- Air Temperature Gauge
- Air Pressure Gauge

## **SRD Series Small Refrigerated Air Dryers**



Heat exchangers are foamed for optimal performance



**Air/Tak** has over 30 years of experience as a manufacturer of compressed air system products. We offer a broad range of products as well as customized engineered solutions. We do not outsource our products. All products are "American Made" in our western Pennsylvania manufacturing facility

# Selecting the Right Model

## Other Specifications SD Series

- Maximum working pressure.....250 psig
- Drain connections.....1/8" NPT(m)
- Refrigerant.....R-134a

Using the specifications columns, read down the column to the nearest SCFM capacity which exceeds the required flow. An "A" in the dryer model number indicates air-cooled units. The number indicates rated capacity.

Rated capacities are based on 100°F inlet air, 100°F ambient air and 100 psig. These standard conditions for rated capacities comply with ANSI/CAGI ADF 100, *Refrigerated Compressed Air Dryers - Methods for Testing and Rating*.

For inlet air temperatures, apply the following correction factors to rated capacity:

- 90°F inlet air.....1.20
- 100°F inlet air.....1.00
- 110°F inlet air.....0.80
- 120°F inlet air.....0.70

For ambient air temperatures, apply the following correction factors to rated capacity:

- 80°F ambient air.....1.10
- 90°F ambient air.....1.05
- 100°F ambient air.....1.00
- 110°F ambient air.....0.95

For inlet air pressures, apply the following correction factors to rated capacity:

- 50 PSIG.....0.85
- 100 PSIG.....1.00
- 125 PSIG.....1.05
- 150 PSIG.....1.10

## SRD Series

- Maximum working pressure.....200 psig
- Drain connections.....1/8" NPT(f)
- Refrigerant.....R-134a

## Convenient and Easy to Install

Installing an Air/Tak dryer in your system is simple – just connect to plant air piping and electrical service. The air inlet and outlet connections are located in the same plane for ease of piping. Electrical connections are accessible at the junction box.

The dryer may be installed indoors in any location where the surrounding temperatures are between 50°F and 100°F. If the dryer needs to be located outdoors, a weatherproof shelter must be provided.

### SD SERIES REFRIGERATED AIR DRYERS

Specifications				Dimensions (Inches)					Electrical Data			
Model No.	Comp. HP	Rated Capacity <sub>2</sub> (SCFM)		Pressure Drop (PSID)	Inlet & Outlet Conn. (NPT)	Width	Depth	Height	Weight (lbs.)	Main Power <sub>4</sub>	Control Power	Run Load Amps (RLA)
		Pressure Dew Point										
		38°F	50°F									
SD-10-A	1/6	10	12	3.8	3/8	15	12	14	55	115-60-1		2.9
SD-20-A	1/5	20	24	1.0	1/2	16	15	14	70	115-60-1		4.4
SD-30-A	1/5	30	36	1.4	3/4	18	19	19	95	115-60-1		4.4
SD-40-A	1/4	40	50	2.4	3/4	18	19	19	100	115-60-1 230-60-1		5.4 2.8
SD-50-A	1/4	50	60	3.5	3/4	18	19	19	120	115-60-1 230-60-1		5.4 2.8
SD-75-A	1/2	75	90	3.5	3/4	18	19	19	125	115-60-1 230-60-1		9.2 4.8
SD-100-A	1/2	100	120	4.2	1	18	19	19	130	115-60-1 230-60-1		9.2 4.8
SD-150-A	3/4	150	180	3.0	2	25	31	31	250	115-60-1 230-60-1		13.0 7.0
SD-200-A	1	200	240	4.3	2	25	31	31	300	230-60-1 230-60-3 460-60-3	230-60-1 230-60-1 115-60-1	14.8 10.5 5.2
SD-250-A	1 1/4	250	300	4.5	2	25	31	32	325	230-60-1 230-60-3 460-60-3	230-60-1 230-60-1 115-60-1	18.4 14.3 7.5

Notes: 1) Capacities are based on 100°F Inlet Air and Ambient Air Temperatures, and 100 PSIG Inlet Air Pressure.  
2) Specifications and Dimensions subject to change without notice.  
3) Pressure Drop based on Rated Capacities for 38°F Pressure Dew Point.  
4) Consult factory for other Main Power Applications.

### SRD SERIES REFRIGERATED AIR DRYERS

Specifications				Dimensions (Inches)					Electrical Data		
Model No.	Comp. HP	Rated Capacity <sub>1</sub> (SCFM)		Inlet & Outlet Conn. (NPT)	Width	Depth	Height	Weight (lbs.)	Main Power <sub>4</sub>	Control Power	Run Load Amps (RLA)
		Pressure Dew Point									
		38°F	50°F								
SRD-10-A	1/5	10	12	1/4	16	15	14	65	115-60-1		3.2
SRD-15-A	1/5	15	18	1/4	16	15	14	65	115-60-1		3.2
SRD-25-A	1/4	25	30	1/2	21	16	17	70	115-60-1		6.0
SRD-35-A	1/3	35	42	1/2	21	16	17	75	115-60-1		7.6

Notes: 1) Based on 100°F Inlet Air and Ambient Air Temperatures, and 100 PSIG Inlet Air Pressure.  
2) Dimensions subject to change without notice

