

Applied Industrial Technologies and AIR/TAK

Providing you with compressed air system products that save energy and improve operations

AIR/TAK SRD Series R-134a Refrigerated Air Dryers

Pressure Dew Point (PDP)

The temperature at which compressed air is 100% saturated, below which water vapor will condense.

AIR/TAK SRD Series R-134a Refrigerated Air Dryers deliver constant pressure dew point of 38° F using environmentally friendly refrigeration systems. Moisture condensed during the cooling process is collected in a mechanical separator and discharged through an automatic drain valve.



AIR/TAK Heatless Regenerative Dryers

AIR/TAK Heatless Regenerative Dryers efficiently deliver super-dry compressed air (-40° F PDP) to critical and sensitive pneumatic devices. This regenerative technology utilizes automatic timed switching valves and twin towers filled with an adsorbent desiccant. Wet compressed air enters the on-line tower and water vapor is adsorbed by the desiccant. A small amount of super-dry "purge" air is diverted to the off-line tower where it passes through the desiccant, drawing off the moisture vapor, thus regenerating the desiccant. A timer automatically actuates the switching valves, which cycle the drying and regenerative process between the towers.

AIR/TAK F Series Filters

AIR/TAK F Series Filters are used to remove damaging contamination and condensates from compressed air systems. Installation of a prefilter is required with all compressed air dryers. To further enhance the quality of a compressed air system, install a coalescing filter after a refrigerated air dryer. A coalescing prefilter and a particulate afterfilter are required with a heatless regenerative air dryer.



Refrigerated Compressed Air Dryers

AIR/TAK SD Series Refrigerated Air Dryers are successfully used in applications where clean and dry air, with a PDP of 38° F, is required.



Standard Equipment

- On/off switch
- Power on light
- Alarm light
- Refrigerant analyzer gauge
- Hot gas bypass valve
- Low ambient fan control
- Automatic drain valve
- Moisture separator
- Foamed heat exchanger
- 6' power cord (SRD-10 through 35)
- Electric terminal block (SRD-50 through 250)
- cULus listed

Typical Applications

- General plant air
- Automated equipment
- Cylinders and valves
- Motor/tool grade air

Optional Equipment

- Prefilters
- Afterfilters
- Solenoid drain valve

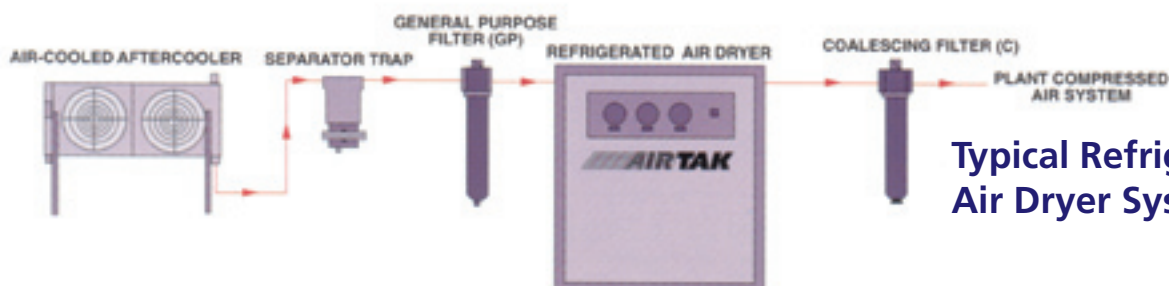
Dryer Capacities and Dimensions

Model No. *	Capacity (SCFM)**		HP	Dimensions (in inches) ***				
	38° F PDP	50° F PDP		NPT Conn.	Width (A)	Depth (B)	Height (C)	Weight (lbs.)
SRD-10-A	10	12	1/5	1/4	16	15	14	65
SRD-15-A	15	18	1/5	1/4	16	15	14	65
SRD-25-A	25	30	1/4	1/2	21	16	17	70
SRD-35-A	35	42	1/3	1/2	21	16	17	75
SRD-50-A	50	60	1/2	3/4	18.2	16.9	26.2	140
SRD-75-A	75	90	1/2	3/4	18.2	16.9	26.2	160
SRD-100-A	100	120	1/2	1	18.2	19.7	27.2	175
SRD-125-A	125	150	1/2	1	18.2	19.7	27.2	185
SRD-150-A	150	180	3/4	1	20.5	25.6	32.6	205
SRD-200-A	200	240	1	1 1/2	20.5	25.6	32.6	285
SRD-250-A	250	300	1	1 1/2	20.5	25.6	32.6	300

* Available voltages: 115-60-1: SRD-10 through 200, 230-60-1: SRD-50 through 200, 230-60-3: SRD-250, 460-60-3: SD-250.

** Based on 100° F inlet ambient temperatures, 100 PSIG. For higher capacity applications, contact your local Applied Service Center.

*** Dimensions subject to change without notice.



Typical Refrigerated Air Dryer System

Heatless Regenerative Compressed Air Dryers

AIR/TAK SHLD and HLD Series are used when ultra-dry (-40° F PDP) compressed air is required by sensitive pneumatic devices or critical operations.



Standard Equipment

- On/off switch (HLD)
- Automatic switching valves
- Solid state timer
- Purge control valves
- Purge mufflers
- NEMA 1 (SHLD)
- NEMA 4 (HLD)
- Stainless steel air diffuser screens
- Activated alumina desiccant
- Pressure gauges
- Tower indicator lights (HLD)
- Pressure relief valves (HLD)
- Visual moisture indicator (SHLD)

Typical Applications

- Pneumatic equipment
- Instrumentation
- Painting systems
- Critical processes

Optional Equipment (HLD)

- Prefilter and afterfilter (PAK)
- 3-valve bypass (PAK Plus I)
- Flex Power Purge System II
- Fail-to-switch alarm
- Visual moisture indicator

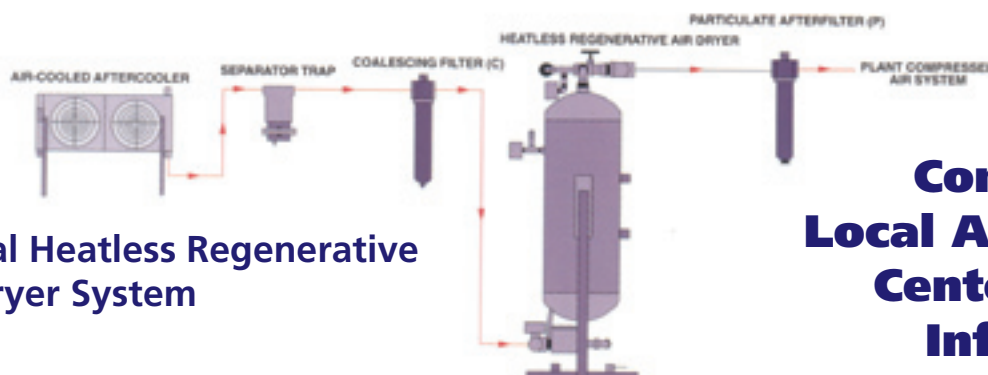
Dryer Capacities and Dimensions

Model No.*	Capacity (SCFM)**			Dimensions (in inches)***				
	75 PSIG	100 PSIG	125 PSIG	NPT Conn.	Width (A)	Depth (B)	Height (C)	Weight (lbs.)
SHLD-10	8	10	12	½	10	5 ¼	18 ½	17
SHLD-25	20	25	30	½	10	5 ¼	22 ¼	24
SHLD-50	39	50	61	½	10	5 ¼	27 ¾	44
HLD-25	20	25	30	½	26 ½	12 ¾	24 ½	70
HLD-35	27	35	43	½	26 ½	12 ¾	29	85
HLD-50	39	50	61	¾	30 ½	17	35 ½	120
HLD-70	55	70	85	¾	30 ½	17	41	160
HLD-100	78	100	122	1	34	17	46	240
HLD-150	117	150	183	1	41 ½	17	39	265
HLD-200	156	200	244	1 ½	34	35	65	625
HLD-250	196	250	304	1 ½	34	35	79	750

* Available voltages: 115-60-1, 100-50-1, 230-60-1, 240/220-50-1, 12 and 24 VDC.

** Based on 100° F inlet temperature and -40° F PDP. For high capacity applications, contact your local Applied Service Center.

*** Dimensions subject to change without notice.



Typical Heatless Regenerative Air Dryer System

**Contact Your
Local Applied Service
Center for More
Information**

Compressed Air System Filters and Elements

Filter Housing Standard Equipment

- Aluminum cast filter housing
- Powder coated exterior
- Anticorrosive interior
- Aluminum tie rod system
- Differential pressure indicator/gauge
- Automatic drain valve



Optional Equipment

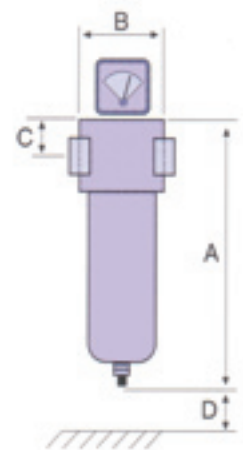
- Solenoid drain valve
- Isolator valve and strainer

Element Grade	Particle Removal	Maximum Oil Carryover (mg/m3)	Pressure Drop (PSID)	Applications
C	.01 μ	0.01	1 ½	Coalescing to remove small aerosols. Prefilter for regenerative dryers or second filter in 2-stage coalescing.
GP	1 μ	0.5	1 ¼	General-purpose filtration to remove heavy aerosol loads. Prefilter for refrigerated or first filter in 2-stage coalescing.
P	1 μ	N/A	1 ¼	Particulate interception. Afterfilter for desiccant air dryers.

Dryer Model	Prefilter Element Grade	Afterfilter Element Grade
SD-10-A, SD-250-A	GP	C
SHLD-10, 25 and 50	C	P
HLD-25, HLD-250	C	P

Filter Capacities and Dimensions

Filter Housing Model No.	Flow Rate	Dimensions (in inches)					Weight (lbs.)
	SCFM @ 100 psig	Inlet and outlet conn.	Height (A)	Width (B)	To Port (C)	Bowl Clearance (D)	
F03-**30	30	¾	7 ⅝	2 ⅝	¾	4	2
F04-**60	60	½	9 ⅓	3¾	¾	6	3
F06-**120	120	¾	14 ¾	4 ⅝	1 ⅓	10	4
F10-**150	150	1	18 ⅓	4 ⅝	1 ⅓	12	5
F12-**300	300	1 ¼	20 ⅞	4 ⅝	1 ⅓	15	10
F14-**350	350	1 ½	20 ⅞	4 ⅝	1 ⅓	17	14
F20-**700	700	2	28 ⅞	6 ⅞	2 ½	22	18
F24-**900	900	2 ½	29 ⅞	9 ¼	2 ⅝	17	24
F30-**1300	1300	3	29 ⅞	9 ¼	2 ⅝	24	36
F40-**2000	2000	4	33 ⅞	14 ⅞	4 ⅞	26	48



** Indicates filter element grade (C, GP, PF, P, A, HT)
 Maximum working pressure = 150 PSIG
 Maximum working temperature = 175° F, grade A only: 75° F, grade HT only: 400° F

Contact Your Local Applied Service Center

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