

# SR Series Refrigerated Dryers 5 – 3000 SCFM



**SR Dryer**  
*5-3000 scfm*

**SRHT Dryer**  
*15-100 scfm*

**SRHP Dryer**  
*250-2400 scfm*

*60 HZ Models*



## Solving the Problems of Moisture Contamination

# problem

## The importance of Clean, Dry, Compressed Air

**Water jeopardizes everything you want your compressed air system to do. It ruins product and fouls processes. Here's how:**

- In addition to water, compressed air can also contain dust, pollen, rust, pipe scale, wear particles, bacteria and lubricating fluid.



Water mixes with these pollutants to form an unwanted abrasive sludge.



This sludge, often acidic, rapidly wears tools and pneumatic equipment.



Sludge corrodes piping and can foul product and air-operated devices.

- Sludge blocks valves and orifices, causing high maintenance and costly air leaks.

## How much water is too much? Any amount of water is too much.

- Relative humidity is the amount of water vapor in air relative to what it could hold at a given temperature.
- Moisture in compressed air remains in a vapor state through the compression cycle, so it is not a problem until it leaves the compressor.
- Air discharged from a compressor is approximately 150°F to 450°F.
- At 75°F and 75% relative humidity, a 75 HP compressor takes in 46 gallons of water vapor in 24 hours. When this air is cooled to approximately 35°F at 100 psig, the water vapor condenses into 46 gallons of liquid!

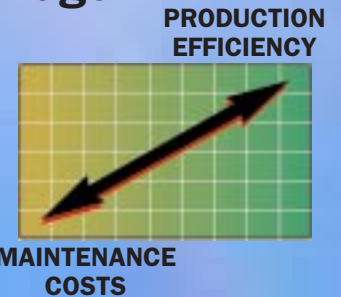


Clean, dry compressed air is essential to your production or process



Sullair SR Series Dryers provide clean, dry air by condensing and removing the water. The result: corrosion and damage are eliminated.

- Productivity improves and maintenance costs are reduced.
- The service life of air tools, motors and cylinders is extended.
- The life of your entire compressed air system is prolonged.



### The benefits of Sullair SR Series Dryers:

#### *Clean, dry air.*

R407C refrigerant and high performance cross-flow heat exchangers provide savings up to 10%. Scroll compressors on models SR-250 to SR-3000 provide an additional 20% to 40% energy savings over comparable dryers using a piston compressor.

#### *Compact and lightweight.*

Patented heat exchanger and refrigerant circuit design reduce size and weight, making them easy to maneuver and position.

#### *Reliable operation.*

Simple circuit design and quality manufacturing and materials assure long, trouble-free service life, and consistent outlet dew points over a wide range of operating conditions.

*Environmentally friendly hydrofluorocarbon (HFC) refrigerant ensures compliance with the Montreal Protocol on substances that deplete the ozone layer.*



solution



# *Sullair SR Series* common e



## **Built for Endurance**

- High quality components.
- Welded connections with “T” pieces.
- Solid base plate mounting.
- Easily removable and reusable heat exchanger insulation.
- Anti-galvanic, easy to service “Rotalock” connections.



Dryer above shown with optional SCD Drain.

# ements and features



## Drain Alcove

- Condensate drain is positioned in an easily accessible alcove.
- Provides maximum protection from damage.
- External electrical connection.
- Large outlet prevents blockages.
- Timed solenoid drain is standard. (SR-125 to SR-3000.)



## Certified and Guaranteed Quality

- Manufactured in an ISO 9001 facility.
- C/UL approved.

## Environmentally Friendly Package

- Compact dryer requires less raw materials.
- Low refrigerant charge.
- Low power consumption.
- Helium tests result in fewer leaks.
- Recyclable materials used throughout and include recyclability coding.
- High quality materials provide longer operating life.
- No ozone depleting components or packaging.
- Low greenhouse warming potential refrigerant.

## Manufacturing and Testing

- Each dryer and its key components are individually tested.
- Tests include:
  - Rated flow and/or pressure.
  - Valve and protection devices.
  - Power consumption.
  - Automatic electrical circuit.
  - Microprocessor.
  - Weight of refrigerant charge.

## Triple Refrigerant Leak Testing

- Each heat exchanger after it is manufactured.
- Each heat exchanger before it is mounted.
- Each finished dryer.

## Sullair's Unparalleled Warranty

The Sullair extended warranty is unsurpassed in the industry:

**5 YEARS**

on major components  
with parts and labor.



# *Sullair Series* SR-5 to SR-10

**Easy to install.**

**Saves floor space.**

**Saves energy.**

**Easy to service.**

**Environmentally friendly.**





### Ease of Installation

- Advanced design makes this dryer extremely compact and lightweight.
- Attention to detail such as pre-drilled holes for mounting on wall or compressor.



- Small footprint and mounting capability saves valuable floor space.

### Low Power Consumption



- Simple but advanced refrigeration unit.
- The dryers' design and large air-to-air heat exchanger offers low power consumption.
- Greater surface area on the exchanger means better heat transfer which reduces power required.



### Demister Separator

- Assures maximum water separation and condensate removal at all air flows.
- Long-lasting, rugged and durable stainless steel construction.

### Easy Serviceability Saves Time and Money

- Easy maintenance through one access panel.
- Only one additional side needs to be free for condenser air flow.
- Less space is needed around dryer for maintenance.



### Environmentally Friendly ER134a Refrigerant

- Minimal environment impact.
- No phase out date.
- Compliant with Montreal Protocol on substances that deplete the ozone layer.



### Highest Operating Limits

- High maximum inlet (140°F) and maximum ambient (122°F) allows worry-free operation in a wide range of operating conditions.
- High maximum operating pressure is 232 psig.

# Sullair Series SR-125 to SR-

**Patented heat exchanger.**

**Innovative refrigeration circuit.**

**Scroll compressor.**

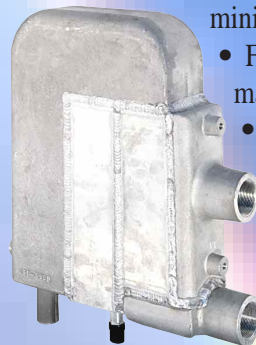
**Advanced microprocessor controls.**

**Cold Mass storage.**

**Environmentally friendly.**

## **Patented Cross-flow Heat Exchanger**

- Air-to-air exchanger, air-to-refrigerant exchanger and demister separator in one compact component.
- Cast aluminum construction for minimum leaks.
  - Fin design for maximum heat transfer.
  - Over-sized air-to-air exchanger for minimum power consumption and less downstream “sweating” of pipes.
  - Stainless steel demister for efficient condensate removal at all air flows.
- Short wide air paths for minimum pressure drop.
- Modular design (SR-700 to SR-3000) permits up to six heat exchangers in parallel.

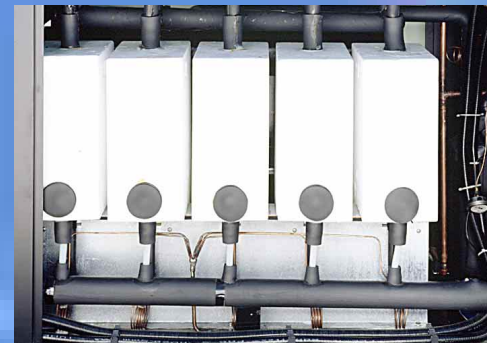


## **Refrigeration Circuit**

- Finely balanced refrigeration circuit.
- Combination of a hot gas by-pass valve and fixed capillary tube.
- Hot gas by-pass with pressure actuation provides precise dewpoint.

## **Highest Operating Limits**

- High maximum inlet (140°F) and maximum ambient (122°F) allows worry-free operation in a wide range of operating conditions.
- High maximum operating pressure is 274 psig.





# 3000



## Scroll Compressors

- Standard on SR-325 to SR-3000
- More energy efficient than similar sized dryers with piston compressor.
- Extremely reliable.
- Fewer moving parts.



## Enhanced Energy Savings with Cold Mass Feature

*When the compressed air system is in stand-by, it is possible to operate the SR dryer in a cycling fashion. The temperature within the heat exchanger is kept within programmable temperature limits.*

- Available on SR-250 to SR-3000
- Cold Mass offers up to 80% energy savings when dryer is operating in "Stand-by".
- Quick return to dewpoint when air compressor is started.
- Offers the biggest benefit of thermal mass dryers: energy savings when in standby.

## R407C Refrigerant

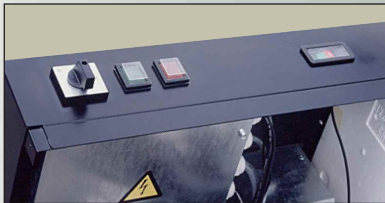
- Only true substitute for R22 refrigerant.
- Zero Ozone Depletion Potential.
- Low Global Warming Potential.
- The most energy efficient HFC.
- R407C is the most environmentally friendly solution for medium to large size dryers.

## Other Notable Features

- Condenser prefilter, standard on SR-700 to SR-3000, to maintain condenser efficiency.
- Drain alcove for easy access to drain.
- Compact and lightweight design.

## CONTROLS

### SR-125 to SR-200



- Controls includes:  
ON-OFF switch  
ON lamp  
Alarm lamp and 3-color dewpoint indicator.

### SR-250 to SR-3000

- Advanced microprocessor
- Pressure gauge
- Main switch with door block
- Digital dewpoint display
- Synoptic display panel
- Coded alarms
- Compressor hour counter
- Maintenance time log
- Remote ON-OFF
- Status report that memorizes dryer operation
- Alarm contacts

### Complete Protection



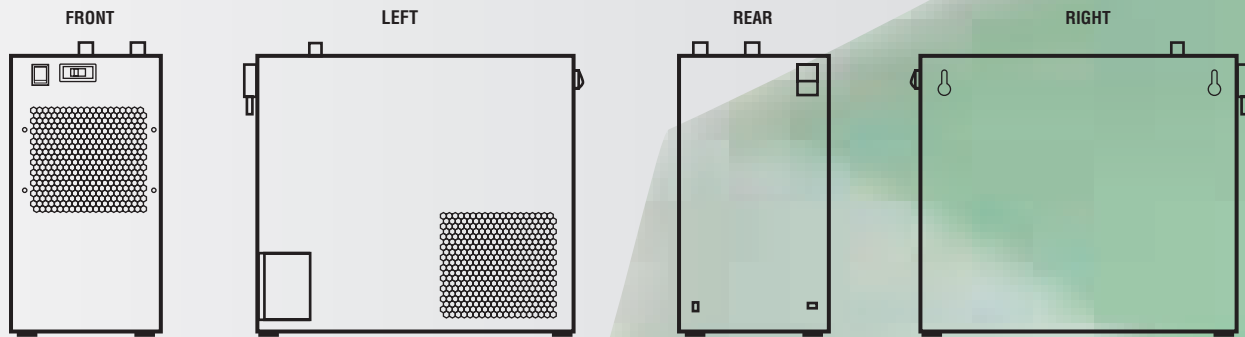
- Alarm sounds. Dryer stops for:  
High Temperature  
High Pressure  
Compressor Internal Protection  
Low Dewpoint  
Controller Fault
- Warnings given but dryer does not stop for:  
High Dewpoint  
Temperature Sensor Fault  
Temperature Outside Limits

# Sullair SR Series 50Hz speci

## SR-2 to SR-30 Specifications

Model	SCFM *	m <sup>3</sup> /min 2-4°C	Weight lbs. kg.	Length in. mm.	Width in. mm.	Height in. mm.	Air in/out
SR-2	7	.2	40 18	17.7 450	7.8 198	17.9 455	3/8" BSP
SR-4	14	.4	40 18	17.7 450	7.8 198	17.9 455	3/8" BSP
SR-6	21	.6	44 20	17.7 450	7.8 198	17.9 455	3/8" BSP
SR-9	32	.9	71 32	23.6 599	11.1 282	20.9 531	1/2" BSP
SR-12	42	1.2	73 33	23.6 599	11.1 282	20.9 531	1/2" BSP
SR-18	64	1.8	102 46	27.6 701	13.9 353	23.9 607	3/4" BSP
SR-24	85	2.4	122 55	27.6 701	13.9 353	23.9 607	3/4" BSP
SR-30	106	3.0	128 58	27.6 701	13.9 353	23.9 607	3/4" BSP

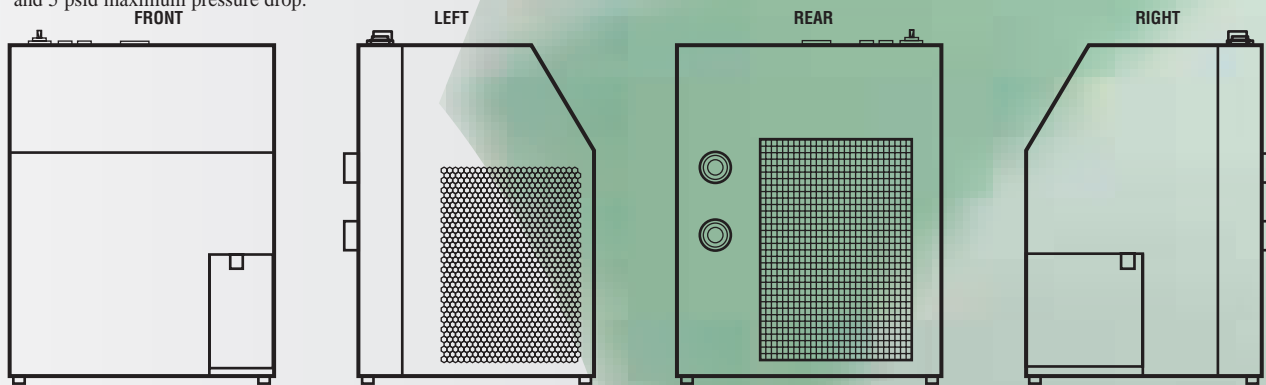
\* Rated flow at CAGI Standard ADF100 for Class H: 33 to 39° pressure dewpoint at 100°F and 100 psig. inlet, 100°F ambient, 100% inlet relative humidity, and 5 psid maximum pressure drop.



## SR-40 to SR-80 Specifications

Model	SCFM *	m <sup>3</sup> /min 2-4°C	Weight lbs. kg.	Length in. mm.	Width in. mm.	Height in. mm.	Air in/out
SR-40	141	4.0	144 65	21.7 551	24.2 615	31.2 791	1-1/2" BSP
SR-52	184	5.2	146 66	21.7 551	24.2 615	31.2 791	1-1/2" BSP
SR-60	212	6.0	150 68	21.7 551	24.2 615	31.2 791	1-1/2" BSP
SR-70	247	7.0	155 70	21.7 551	24.2 615	31.2 791	1-1/2" BSP
SR-80	283	8.0	161 73	21.7 551	24.2 615	31.2 791	1-1/2" BSP

\* Rated flow at CAGI Standard ADF100 for Class H: 33 to 39° pressure dewpoint at 100°F and 100 psig. inlet, 100°F ambient, 100% inlet relative humidity, and 5 psid maximum pressure drop.



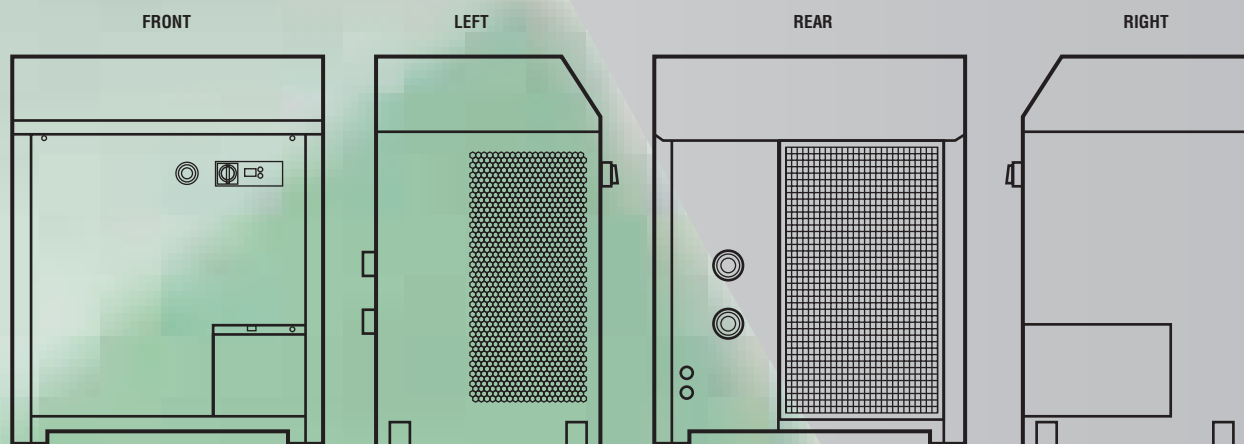
# Specifications



## SR-110 to SR-180 Specifications

Model	SCFM *	m <sup>3</sup> /min 2-4°C	Weight lbs. kg.	Length in. mm.	Width in. mm.	Height in. mm.	Air in/out
SR-110	389	11.0	309 140	26.4 674	36.2 920	47.7 1212	2" BSP
SR-140	494	14.0	318 144	26.4 674	36.2 920	47.7 1212	2" BSP
SR-180	636	18.0	331 150	26.4 674	36.2 920	47.7 1212	2" BSP

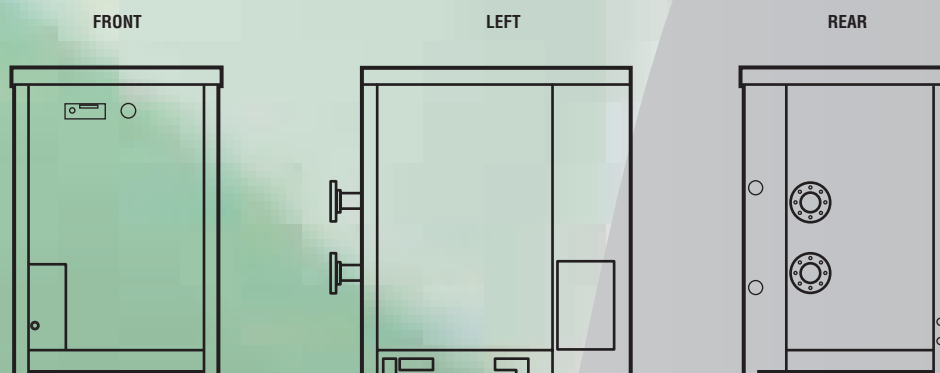
• Rated flow at CAGI Standard ADF100 for Class H: 33 to 39° pressure dewpoint at 100°F and 100 psig. inlet, 100°F ambient, 100% inlet relative humidity, and 5 psid maximum pressure drop.



## SR-220 to SR-1100 Specifications

Model	SCFM *	m <sup>3</sup> /min 2-4°C	Weight lbs. kg.	Length in. mm.	Width in. mm.	Height in. mm.	Air in/out
SR-220	777	22.0	882 400	51.5 1310	39.7 1010	59.0 1500	PN16-DN80
SR-270	954	27.0	926 420	51.5 1310	39.7 1010	59.0 1500	PN16-DN80
SR-370	1307	37.0	993 450	51.5 1310	39.7 1010	59.0 1500	PN16-DN80
SR-450	1589	45.0	1036 470	51.5 1310	39.7 1010	59.0 1500	PN16-DN100
SR-600	2119	60.0	1213 550	71.1 1810	39.7 1010	59.0 1500	PN16-DN100
SR-770	2719	77.0	1279 580	71.1 1810	39.7 1010	59.0 1500	PN16-DN150
SR-900	3178	90.0	1301 590	71.1 1810	39.7 1010	59.0 1500	PN16-DN150
SR-1100	3885	110.0	1455 660	71.1 1810	39.7 1010	59.0 1500	PN16-DN150

• Rated flow at CAGI Standard ADF100 for Class H: 33 to 39° pressure dewpoint at 100°F and 100 psig. inlet, 100°F ambient, 100% inlet relative humidity, and 5 psid maximum pressure drop.



# Sullair SRHT dryers and SRI

## SRHT-15 to 100 cfm High Inlet Temperature Dryer



**Market leading 200°F maximum inlet temperature and 115°F maximum ambient for operation in high temperature applications such as do non-aftercooled piston compressors.**

### All-in-one solution

Includes a pre-cooler, full size pre-filter, and efficient refrigerated dryer in one combined compact solution.

- Small footprint.
- Easy to install.
- Easy to maintain.

### Full size integral pre-filter

- High quality 3 micron microfiber element.
- Low pressure drop.

### Dual zero-loss float drains

- Two points of separation for maximum condensate removal.
- Minimum air loss for maximum energy savings.

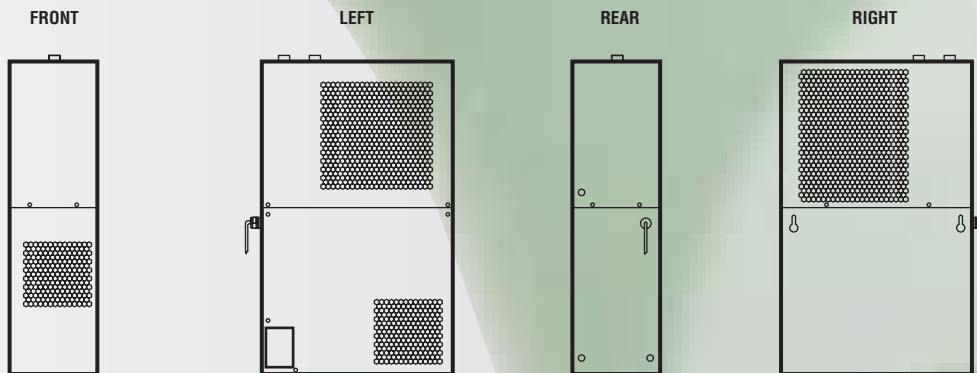
### Other notable features

- High 232 psig maximum operating pressure.
- Environmentally friendly and efficient R134a refrigerant.
- Efficient demister separator for optimum condensate removal at all air flows.
- Easy, single panel maintenance access.
- Easy to access drain alcove.
- Oversized air-to-air exchanger for the least possible power consumption.

### SRHT-15 to SRHT-100 Specifications-

Model	SCFM *	m <sup>3</sup> /min 2-4°C	Weight lbs. kg.	Length in. mm.	Width in. mm.	Height in. mm.	Air in/out
SRHT-5	15	.42	55 25	17.8 450	7.8 197	32.0 815	½" NPT
SRHT-25	25	.71	93 42	23.6 600	11.1 282	39.0 990	½" NPT
SRHT-35	35	1.00	95 43	23.6 600	11.1 282	39.0 990	½" NPT
SRHT-50	50	1.40	135 61	27.6 700	13.9 352	47.8 1212	¾" NPT
SRHT-75	75	2.10	155 70	27.6 700	13.9 352	47.8 1212	¾" NPT
SRHT-100	100	2.80	161 73	27.6 700	13.9 352	47.8 1212	¾" NPT

\* Rated flow at CAGI Standard ADF100 for Class H: 33 to 39° pressure dewpoint at 180°F and 100 psig. inlet, 100°F ambient, 100% inlet relative humidity, and 5 psid maximum pressure drop.



# SRHP Series dryers



## SRHP-100 to 1800 cfm High Inlet Pressure Dryer



**A dryer with a maximum operating pressure of 725 psig perfectly matched to high pressure applications, such as the PET market.**

Unique all stainless steel air side:

- The entire air side -- from the inlet to the outlet -- is corrosion-free stainless steel.
- Stainless steel heat exchanger with integral pre-cooler-heater.
- Oversized stainless steel demister for optimum water separation at all air flows.
- Stainless steel piping and connections.

### Other notable features

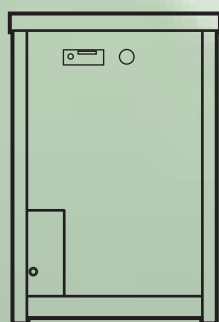
- Energy saving scroll compressor (SRHP-350 to SRHP-1800).
- Efficient and environmentally friendly R407C refrigerant.
- Easy to access drain alcove.
- Easy single panel maintenance access.
- Oversized air-to-air exchanger for lowest possible power consumption.
- Modular heat exchanger design (SRHP-750 to SRHP-1800).
- Advanced microprocessor with Cold Mass energy saving function.
- Air- or water-cooled options available (SRHP-750 to SRHP-1800).

### SRHP-100 to SRHP-1800 Specifications

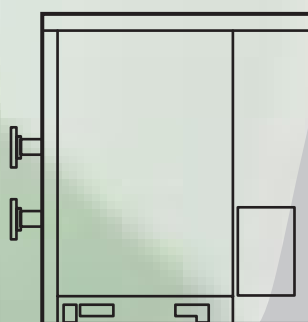
Model	SCFM *	m <sup>3</sup> /min 2-4°C	Weight lbs. kg.	Length in. mm.	Width in. mm.	Height in. mm.	Air in/out
SRHP-100	100	2.83	143 65	21.7 551	24.2 615	31.1 790	1¼" NPT
SRHP-125	130	3.45	143 65	21.7 551	24.2 615	31.1 790	1¼" NPT
SRHP-200	200	5.66	154 70	21.7 551	24.2 615	31.1 790	1¼" NPT
SRHP-250	250	7.08	309 140	26.5 673	36.3 922	47.7 1212	1¼" NPT
SRHP-350	350	9.91	309 140	26.5 673	36.3 922	47.7 1212	1¼" NPT
SRHP-450	450	12.7	317 144	26.5 673	36.3 922	47.7 1212	1¼" NPT
SRHP-550	550	15.6	317 144	26.5 673	36.3 922	47.7 1212	1¼" NPT
SRHP-750	750	21.2	882 400	51.6 1311	39.8 1011	59.1 1501	2½" NPT
SRHP-850	850	24.1	882 400	51.6 1311	39.8 1011	59.1 1501	2½" NPT
SRHP-1200	1200	34.0	992 450	51.6 1311	39.8 1011	59.1 1501	2½" NPT
SRHP-1400	1400	39.6	1036 470	51.6 1311	39.8 1011	59.1 1501	2½" NPT
SRHP-1800	1800	51.0	1036 470	51.6 1311	39.8 1011	59.1 1501	2½" NPT

\* Rated flow at CAGI Standard ADF100 for Class H: 33 to 39° pressure dewpoint at 100°F and 580 psig. inlet, 100°F ambient, 100% inlet relative humidity, and 5 psid maximum pressure drop.

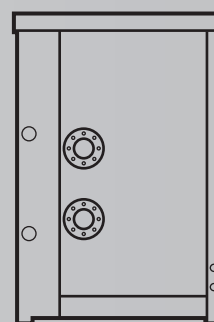
FRONT



LEFT



REAR



# Sullair SR Series options and

## Energy-saving SCD Drains

Add a Zero Air Loss SCD Drain for even more energy savings.

- Optional SCD drain saves air which saves energy which saves money.



## Filtration Products

Protect your dryer, downstream equipment and processes with high quality Sullair filtration products.

- Lowest available pressure drop for minimum operating cost.
- Highest available performance for the cleanest possible air.
- Wide range of filters for virtually any application.
- Exclusive MPCR and PCR filtration systems.



## OS Oil/Water Separator

For the environment's sake... use a Sullair oil/water separator.

- Separates oil and water in air system condensate.
- Long life and low operating cost.
- Dual chambers for optimum separation.
- Patented parallel flow models available.



# ...and accessories...



## ...and an air quality guarantee that's as good as gold.

### The Sullair Air Quality Guarantee.

**Sullair assures that its System—compressor, dryer and filter—when purchased together, will meet specific performance levels throughout its operational life. We offer a one-year test/review period, backed by a purchase refund guarantee, to verify the performance of the Sullair System.**

### The Sullair System.

The Sullair System matches a Sullair compressor, a Sullair dryer and Sullair filters. Dry air is filtered to remove atmospheric particulate, aerosols and other pollutants to provide compressed air for general purposes to the most critical application.

### Two levels of air quality.

Sullair recognizes that the requirements for air quality vary according to each compressed air application. For this reason, we provide Systems that achieve two distinct levels of air quality.

### Level 1.

This System consists of a Sullair compressor and Sullair MPF and MPH or PF/PH filters. The compressed air from this system contains particulates no larger than .01 micron, including coalesced liquid water and lubricants. Maximum remaining oil aerosol content is 0.01 parts per million by weight (ppm/w) @ 70°F, including oil vapor. The air from this Sullair System meets the most stringent ISO standard (ISO 8573.1, Class 1) for air quality.

### Level 2.

Level 2 offers the highest quality compressed air for critical applications. The air from this Sullair System exceeds the ISO standard (ISO 8573.1, Class 1) for air quality with the use of the MPC or PC filter. The System includes a Sullair compressor and Sullair MPF, MPH and MPC or PF, PH and PC filters. The odor-free compressed air from this system contains particulates no larger than 0.01 micron, including water and oil aerosol content of 0.01 ppm/w @ 70°F. The remaining oil vapor content is less than 0.003 ppm/w.

### Select the System.

Select the air quality level to meet your plant air or process requirements. You can be assured that the quality of air from the Sullair System you specify will remain consistent for the life of the equipment. Sullair guarantees it. And that's as good as gold.

Air Quality Guarantee

SULLAIR



Your Sullair System will deliver the quality of air you specify. Sullair guarantees it.

And that's as good as gold.

**SULLAIR SYSTEMS**  
**DELIVER!**

# *Sullair* service and support

## Global Service Support and Worldwide Parts Availability

Your investment is supported by an experienced team of compressed air experts. Our global network of authorized Sullair distributors and field representatives provides responsive, knowledgeable service, including on-site and factory-based assistance, to Sullair customers around the world.

Because Sullair believes that using Genuine Sullair Replacement Parts is critical for optimum performance, we make them available on a global basis. Through our computer-based system, our distributors can procure Genuine Sullair Replacement Parts for any piece of Sullair equipment in any part of the world, quickly and efficiently.



Sullair is committed to a program of continuous improvement. Features and specifications may change without notice. Consult your Sullair representative or authorized Sullair distributor.



Member



[www.sullair.com](http://www.sullair.com)

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