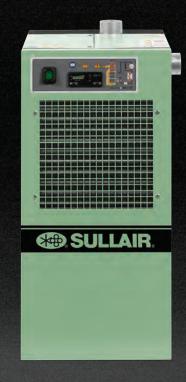


# **REFRIGERATED DRYERS**

## Non-Cycling; High-Temperature

10 – 10,000 scfm ■ .28 – 283.2 m³/min







## THE IMPORTANCE OF CLEAN, DRY COMPRESSED AIR

Water jeopardizes everything you want your compressed air system to do. Failure to remove this water ruins product and fouls process. That's why it is vital to have a reliable air treatment system in place to help protect your equipment and your operations.

Sullair Refrigerated Air Dryers reliably remove harmful moisture and contaminants from compressed air, helping protect your compressed air system, machinery and downstream tools.

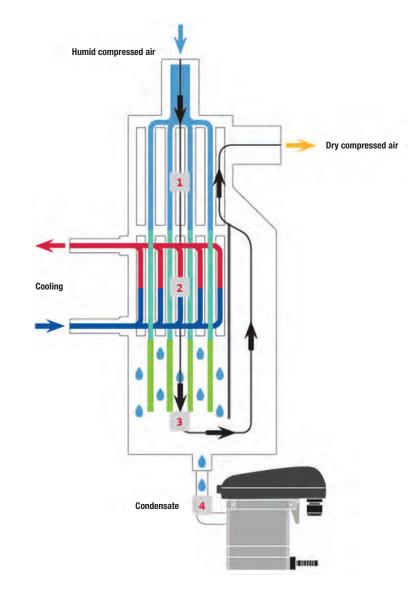
#### How?

- 1. Saturated compressed air enters the system and is precooled in the air/air heat exchanger.
- 2. Then, precooled air moves downstream through the air/refrigerant heat exchanger. The heat exchanger's vertical profile design reduces condensed moisture by nearly 99% using gravitational force.
- **3.** To reliably prevent separated droplets from reentering the airstream, condensate collects in a large reservoir with subsequent recirculation where flow velocity is significantly reduced.
- **4.** Accumulated condensate is then discharged from the dryer via drain.

The dried, cold process air passes back through the heat exchanger to be reheated — reducing relative air humidity and recovering up to 60% cooling capacity.

#### **Non-Cycling**

Non-Cycling dryers are ideal for running at full load because they maintain a constant energy consumption no matter the flow and air demand. Sullair non-cycling dryers use a hot gas bypass to maintain a stable dew point in varying operating conditions and control the amount of refrigerant circulating through the dryer.



## REFREGERATED DRUGERS The next generation of Sullair Refrigerated Air Dryers focuses on efficient design, energy-saving technology and stable dew point in all operating conditions.

### SULLAIR REFRIGERATED AIR DRYERS ARE BUILT FOR DURABLE PERFORMANCE, OPTIMUM RELIABILITY AND FEATURE:

- Unique heat exchanger designed for minimum pressure drop and gravitational self-cleaning
- Hot gas bypass designed for stable dew point in all operating conditions
- Integrated SULLIMAX<sup>™</sup> drain for reliable condensate discharge and maximum energy savings\*
- Energy-saving technology
  - Oversized condensers
  - Smaller high-performance compressors
- Easy-open panels providing simplified access for routine maintenance and service

## SULLAIR REFRIGERATED AIR DRYERS ARE AVAILABLE IN THE FOLLOWING CONFIGURATIONS:

- SR Sullair Refrigerated Dryer 10 to 480 scfm
- SR+ Sullair Refrigerated+ Dryer 20 to 10,000 scfm
- SRHT Sullair Refrigerated High Temperature Dryer 20 to 350 scfm



\* Optional on SR models



### **SR SERIES** SULLAIR REFRIGERATED DRYERS 10 – 480 scfm

- Vertical profile heat exchanger
  - Minimum pressure drop
  - Gravitational self-cleaning
- Hot gas bypass designed for stable dew point in varying operating conditions
- Compact design
- Timer solenoid drain
- Easy-open panels for simplified service



#### SR+ SERIES SULLAIR REFRIGERATED+ DRYERS 20 – 10,000 scfm

- Vertical profile heat exchanger
- Minimum pressure drop
- Gravitational self-cleaning
- Hot gas bypass designed for stable dew point in all operating conditions
- Easy-open panels for simplified service
- High-efficiency performance
- Oversized condensers
- Integrated SULLIMAX<sup>TM</sup> drain





### **SRHT SERIES** SULLAIR REFRIGERATED HIGH TEMPERATURE DRYERS 20 – 350 scfm

- Maximum operating temperature up to 210°F
- Vertical profile aluminum heat exchanger
  - Minimum pressure drop
  - Gravitational self-cleaning
- Hot gas bypass designed for stable dew point in all operating conditions
- Integrated SULLIMAX<sup>TM</sup> drain\*
- Integrated pre-filter
- Large cross section of flow channels for low velocities and reduced power input
- Easy-open panels for simplified service

\* SRHT 20–40 offer timer solenoid drain option

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	SR SERIES	SR+ SERIES	SRHT
Flow Rates scfm	10 - 480	20 - 10,000	20 – 350
Max Inlet Air Temperature $^{\circ\!F}$	130	160	210
Max Inlet Operating Pressure psig	SR 10 – 50: 232	SR+ 20 – 50: 232	200
	SR 75 – 480: 200	SR+ 75 – 10,000: 200	200
Standard Outlet Pressure Dew Point ${}^{\circ\!F}$	37 – 41	37 – 38	45 — 50
ISO 8573-1:2010 Air Quality Class	Class 4 – 5	Class 4 – 5	Class 5 – 6
Standard Condensate Drain	Timer Solenoid	SULLIMAX™	SULLIMAX™
Options	SULLIMAX™ Condensate Drain	PC Connection Kit**	Timer Solenoid Condensate Drain

\*\* Available on SR+ models 600 scfm and up

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# ABOUT Sullair

For more than 50 years, Sullair has been on the leading edge of compressed air solutions. We were one of the first to execute rotary screw technology in our air compressors, and our machines are famous all over the world for their legendary durability. As the industry moves forward, Sullair will always be at the forefront with quality people, innovative solutions, and air compressors that are built to last.

Sullair was founded in Michigan City, Indiana in 1965, and has since expanded with a broad international network to serve customers in every corner of the globe. Sullair has offices in Chicago and manufacturing facilities in the United States and China — all ISO 9001 certified to ensure the highest quality standards in manufacturing. In addition, Sullair Suzhou and Shenzhen facilities are ISO 14001 and OHSAS 18001 certified.

Sulliar is A Hitachi Group Company

#### RELIABILITY. DURABILITY. PERFORMANCE.

These are the pillars that drive the quality of Sullair compressed air solutions. It's a promise we keep with every machine we make.

## RELIABILITY

Customers who work with Sullair have found that the intangibles make all the difference — things like trust, confidence, and peace of mind. They go to work every day having full faith in their equipment, as well as the knowledge that dedicated distributors and Sullair personnel have their back every step of the way.

## DURABILITY

Bulletproof. Built to last. However you spin it, Sullair compressed air solutions are in it for the long haul, driven by innovative designs pioneering the air treatment industry. And ready to stand the test of time.

## PERFORMANCE

Sullair is constantly innovating to improve our compressed air solutions. For our compressed air treatment line, this means more energy efficiency. With air treatment being a vital part of your entire compressed air system, Sullair is committed to helping you protect your equipment and manage your operating expenses.

## SR SERIES SULLAIR REFRIGERATED DRYERS

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#### FREQUENCY: 60 Hz

Model #	FLOW RATE (scfm)	CONNECTION SIZE (NPT)	PRESSURE DROP (psid)	Power Consumption — Load (kW)	Height (in)	Width (in)	Depth (in)	Weight (Ibs)
SR 10	10	3/8″	1.5	0.19	17	12	14	46
SR 15	15	3/8″	2	0.2	17	12	14	49
SR 20	20	1⁄2″	0.6	0.21	19	15	20	55
SR 35	35	1⁄2″	1.3	0.29	19	15	20	62
SR 50	50	1⁄2″	2.2	0.3	19	15	20	71
SR 75	75	1″	2.6	0.45	29	14	17	75
SR 100	100	1¼″	2.2	0.7	29	14	18	86
SR 125	125	11⁄4″	3.5	0.97	29	14	18	88
SR 150	150	1¼″	4.9	1	29	14	18	90
SR 175	175	1½″	2.8	1.05	35	22	23	119
SR 220	220	1½″	3.6	0.91	35	22	23	123
SR 300	300	2″	2	1.15	38	22	25	207
SR 375	375	2″	2.9	2.07	38	22	25	212
SR 480	480	21⁄2″	2.2	2.25	44	26	29	317

CAPACITY CORRECTION FACTORS FOR DIFFERING OPERATING PRESSURE									
<b>Operating Pressure</b> <i>psig</i>	60	80	100	120	140	160	180	200	
Correction Factor 0.79 0.91 1 1.07 1.13 1.18 1.23 1.27									

CAPACITY CORRECTION FACTORS FOR DIFFERING AMBIENT AIR TEMPERATURES							
Ambient Air Temperature 𝔅 80 90 100 110 115							
Correction Factor 1.1 1.07 1 0.83 0.7							

CAPACITY CORRECTION FACTORS FOR DIFFERING INLET AIR TEMPERATURES								
Inlet Air Temperature °F	Inlet Air Temperature °F 90 100 110 120 130							
Correction Factor	<b>Correction Factor</b> 1.11 1 0.8 0.65 0.53							

Required pre-filtration $\mu m$	1
Recommended post-filtration µm	0.01
Standard Opertating Voltage	
SR 10–150	115V/1PH
SR 175–480	230V/1PH
Standard outlet pressure dew point ${}^{\circ\! \!$	37–45
ISO 8573-1:2010 Air Quality Class Max	Class 4-5
inlet air temperature °F	130°F
Min/max ambient temperature $^{\circ\!arsigma}$	34°F/115°F
Max inlet pressure psig	
SR 10–50	232
SR 75–480	200





## SR+ SERIES SULLAIR REFRIGERATED+ DRYERS

## 

#### FREQUENCY: 60 Hz

Model #	FLOW RATE (scfm)	CONNECTION SIZE (NPT)	PRESSURE DROP (psid)	Power Consumption — Load (kW)	Height (in)	Width (in)	Depth (in)	Weight (Ibs)
SR+ 20	20	1⁄2″	0.4	0.26	29	14	17	62
SR+ 30	30	1⁄2″	1	0.27	29	14	17	64
SR+ 50	50	1⁄2″	2.2	0.39	29	14	17	75
SR+ 75	75	1″	2.2	0.48	29	14	17	79
SR+ 100	100	1¼″	2	0.58	32	19	18	82
SR+ 125	125	11⁄4″	2.6	1	32	19	18	101
SR+ 150	150	1¼″	3.3	1.05	32	19	18	110
SR+ 200	200	11⁄2″	1.7	115 V - 1.10 230 V - 1.10 460 V - 1.22	35	22	23	121
SR+ 250	250	1½″	3.6	230 V - 1.39 460 V - 1.38	35	22	23	139
SR+ 300	300	2″	1.5	230 V - 1.64 460 V - 1.41	38	22	25	203
SR+ 350	350	2″	1.9	230 V - 2.19 460 V - 1.8	38	22	25	207
SR+ 400	400	21⁄2″	1	230V - 2.48 460 V - 2.7	44	26	29	331
SR+ 500	500	21⁄2"	1.5	2.97	44	26	29	355
SR+ 600	600	3″	2.2	2.65	58	31	39	529
SR+ 800	800	3″	2.9	3.25	58	31	39	534
SR+ 1000	1000	3″	2.8	4.6	58	31	39	608
SR+ 1250	1250	3″	3.6	5.6	58	31	39	686
SR+ 1500	1500	4″	2.8	6.4	69	45	47	1021
SR+ 1750	1750	4″	1.9	7.5	69	45	47	1186
SR+ 2000	2000	4″	2.6	8.6	69	45	47	1190
SR+ 2500	2500	4″	3.6	9.8	69	45	47	1349
SR+ 3000	3000	6″	2.8	12.2	71	51	69	1830
SR+ 4000	4000	8″	2.8	15.7	74	55	87	2330
SR+ 5000	5000	8″	4.1	23.5	74	55	87	2650
SR+ 6000	6000	8″	3.2	23.7	96	61	85	4040
SR+ 7500	7500	8″	4.5	26.6	96	61	85	4430
SR+ 8000	8000	10″	2.8	35	96	61	107	5280
SR+ 10,000	10,000	10″	3.8	40.7	96	61	107	5990





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## SR+ SERIES SULLAIR REFRIGERATED+ DRYERS

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#### FREQUENCY: 60 Hz

CAPACITY CORRECTION FACTORS FOR DIFFERING OPERATING PRESSURE								
<b>Operating Pressure</b> psig	60	80	100	120	140	160	180	200
Correction Factor 0.79 0.91 1 1.07 1.13 1.18 1.23 1.27								

CAPACITY CORRECTION FACTORS FOR DIFFERING AMBIENT AIR TEMPERATURES									
Ambient Air Temperature % 80 90 100 105 110 115 120									
Correction Factor 1.1 1.09 1 0.94 0.87 0.78 0.69									

CAPACITY CORRECTION FACTORS FOR DIFFERING INLET AIR TEMPERATURES								
Inlet Air Temperature °F 90 100 110 120 130 140 150 160								160
Correction Factor 1.16 1 0.82 0.68 0.61 0.52 0.45 0.4								

Required pre-filtration $\mu m$	1
Recommended post-filtration $\mu m$	0.01
SR+ 600–10,000	UL/CSA control panel
Standard Operating Voltage	
SR+ 20–200	115V/1PH
SR+ 125–400	230V/1PH
SR+ 600–10,000	460V/3PH
Optional Operating Voltage	575V
Standard outlet pressure dew point $^{\circ\!F}$	37–45
ISO 8573-1 2010 Air Quality Class	4–5
Max inlet air temperature °F	160
Min/max ambient temperature $^{\circ\!arP}$	34/120
Max inlet pressure psig	
SR+ 20–50	232
SR+ 75–500	200
MODBUS ready *	

\* 600–10,000 scfm units only





#### FREQUENCY: 60 Hz

Model #	FLOW RATE (scfm)	CONNECTION Size (NPT)	PRESSURE DROP (psid)	Power Consumption — Load (kW)	Height (in)	Width (in)	Depth (in)	Weight (Ibs)
SRHT 20	20	1⁄2″	1.5	0.21	25	17	16	82
SRHT 30	30	1/2″	2.8	0.28	25	17	16	88
SRHT 40	40	1⁄2″	2.9	0.31	25	17	16	90
SRHT 50	50	1⁄2″	4.1	0.46	25	17	16	93
SRHT 75	75	1″	3.8	0.77	45	16	18	112
SRHT 100	100	11⁄4″	3	0.88	52	20	20	134
SRHT 150	150	11⁄4″	5	1.1	52	20	20	146
SRHT 200	200	1½″	3.3	1.55	55	22	23	165
SRHT 250	250	1½″	5.1	1.82	55	22	23	185
SRHT 300	300	2″	4.1	2.6	59	28	31	291
SRHT 350	350	2″	4.5	2.7	59	28	31	304

\* At 45°F Outlet PDP

CAPACITY CORRECTION FACTORS FOR DIFFERING OPERATING PRESSURE								
<b>Operating Pressure</b> psig	60	80	100	120	140	160	180	200
Correction Factor	0.79	0.91	1	1.07	1.13	1.18	1.23	1.27

CAPACITY CORRECTION FACTORS FOR DIFFERING AMBIENT AIR TEMPERATURES							
Ambient Air Temperature °F	80	90	100	105	110	115	120
Correction Factor	1.22	1.11	1	0.94	0.89	0.83	0.78

CAPACITY CORRECTION FACTORS FOR DIFFERING INLET AIR TEMPERATURES						
Inlet Air Temperature $^{\circ\!$	140	160	170	180	195	210
Correction Factor	1.26	1.13	1.07	1	0.9	0.81

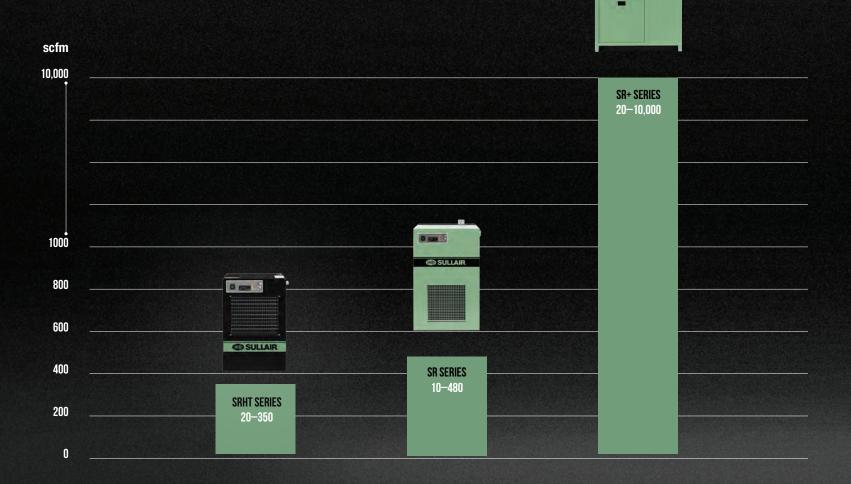
Integrated aftercooler Pre-filter included	
Standard Operating Voltage	
SRHT 20–150	115V/1PH
SRHT 200-350	230V/1PH
Recommended post-filtration µm	0.01
Standard outlet pressure dew point $^{o}\!F$	45–50
ISO 8573-1:2010 Air Quality Class	Class 6
Max inlet air temperature °F	210°F
Min/max ambient temperature °F	34°F/ 120°F
Max inlet pressure <i>psig</i>	200





FOR MORE INFORMATION, CONTACT YOUR LOCAL AUTHORIZED SULLAIR DISTRIBUTOR.

## SULLAIR NON-CYCLING REFRIGERATED DRYERS





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