



DS SERIES

Oil Free Rotary Screw Air Compressors

60 – 100 hp ■ 45 – 75 kW

100 – 150 psi ■ 7 – 10.3 bar



Sullair & Hitachi

Since 1965, Sullair air compressors have been known for their Reliability, Durability and Performance. The legacy continues now as Hitachi Global Air Power — featuring the legendary Sullair product line. Together, two titans in the industry bring experience, engineering and expertise for every compressed air need.

RELIABILITY.
DURABILITY.
PERFORMANCE.

These are the pillars that drive the quality of Sullair compressors. It's a promise every Sullair machine makes.

RELIABILITY

Customers who work with Sullair compressors have found 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 they have access to true compressor experts ready to support them every step of the way.

DURABILITY

Hitachi Global Air Power represents the collective strength of more than 150 years of compressor experience and the legendary durability of Sullair products. In shops and factories all around the world, our products have withstood the test of time, running consistently today as they did on day one.

PERFORMANCE

Our vision for success is two-fold: produce clean, quality air for the job at hand, and provide cost-effective solutions for now and the long term. With high standards of efficiency for our compressors, we are committed to customer performance—especially in applications where air purity is critical.

The Hitachi Global Air Power network of engineering and quality experts continues to build next-generation, environment-forward compressed air solutions to meet the demands of today's hard-working customers.

THE SULLAIR OIL FREE SEAL

The Sullair Oil Free Seal is your assurance the compressor produces the clean air required for your operational needs. All Sullair compressors which meet the ISO standard for Class 0 oil free air ISO 8573-1 carry the Sullair Oil Free Seal.



OIL FREE COMPRESSION & ROTARY SCREW DEPENDABILITY

THE KEY TO WORRY-FREE OPERATION

DS Series oil free air compressors are the perfect choice for applications requiring oil free air, including:

- Pharmaceuticals
- Food and beverage manufacturing
- Electronics
- High-technology manufacturing
- Textile manufacturing
- Robotics
- Automotive
- Paint

The DS Series is powered by the robust Hitachi Two-Stage Air End—with thousands of successful oil free rotary screw compressor installations around the world.

Add to that, a package designed for simplified service and maintenance as well as ease of use.

Why Oil Free?

In many operations, compressed air comes into contact with items in the manufacturing process. When air purity is critical—oil free air is essential. Oil particulates in compressed air can contaminate downstream processes and production. Oil free compressors help eliminate potential contamination as no oil or lubricant is introduced into the air compression process. Reduced risk of contamination helps improve your business operations and profitability—giving you ultimate peace of mind.



AIR QUALITY STANDARDS

ISO 8573-1 CLASSES

Class	Solid Particle Maximum number of particles per m³			Pressure Dew Point °F (°C)	Oil (incl. vapor) mg/m³
	0.1–0.5 micron	0.5–1.0 micron	1.0–5.0 micron		
0	As specified by the end-user or manufacturer, and more stringent than Class 1				
1	≤ 20,000	≤ 400	≤ 10	≤ -94° (-70°)	0.01
2	≤ 400,000	≤ 6,000	≤ 100	≤ -40° (-40°)	0.10
3	—	≤ 90,000	≤ 1,000	≤ -4° (-20°)	1.00
4	—	—	≤ 10,000	≤ 37.4° (3°)	5.00
5	—	—	≤ 100,000	≤ 44.6° (7°)	—
6	—	—	—	≤ 50° (10°)	—



Class 0 Oil Free Air—For applications in which air purity is essential, including pharmaceuticals, food and beverages, electronics, automotive, painting and textiles. DS Series compressors are tested to meet oil free requirements under ISO 8573-1.

RELIABLE OIL FREE OPERATION IN A PACKAGE DESIGNED FOR EASE OF SERVICE & USE

The DS Series utilizes reliable Hitachi Air Ends backed by more than 50 years of oil free rotary screw experience. All engineered in an innovative package design with a premium controller to provide the ultimate in oil free operation.





1. Hitachi Two-Stage Air End

All aspects of this innovative air end are engineered to provide long life and high efficiency

- Stainless steel rotors in first and second stage
- Patented PTFE-free rotor coating
- Rotor housing coated internally
- Both first and second stage air ends are easy to remove separately for long-term maintenance needs

2. Designed for Easy Serviceability & Maintenance

- Easily removable hinged door panels
- Easy access to typical service and maintenance items
- Standard full base frame to keep dirt and dust out

3. Enhanced Sullair Touch Screen (STS) Controller

- 7" color screen for easy viewing and intuitive operation
- Menu-driven screens offer easy access to compressor controls
- Integrated graphing and trending to analyze compressor performance

4. Patented Oil Mist Remover (OMR)

Reduces gearcase top offs and helps improve air quality—helping save you money

- Removes oil mist from gearcase with 99.99% efficiency
- Maintains gearcase at negative pressure

5. TEFC Premium Efficiency Motor (IE3)

- Compact and designed for high efficiency
- TEFC super premium efficiency motor (IE4) standard on VSD models

6. Centrifugal Cooling Fan

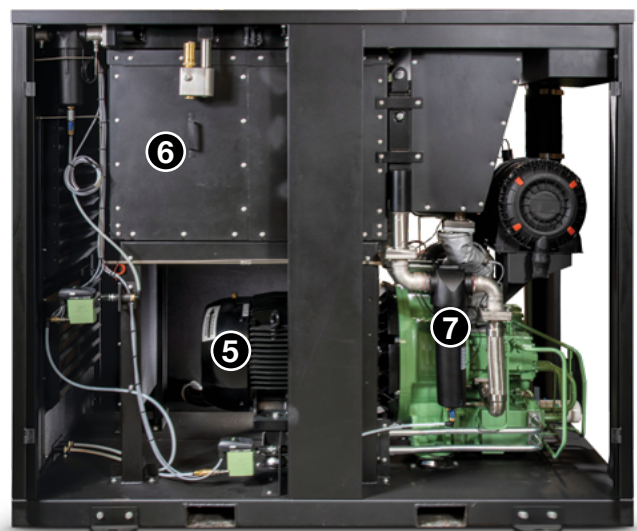
- TEFC efficient fan motor

7. Drain Separator

- Located before second stage air end to help remove moisture from first stage compression

AirLinx® Remote Monitoring

- Connect anywhere to keep an eye on compressor operation, and reduce the risk of unplanned downtime
- Monitor pressure, temperature, running hours and service hours
- Alerts for service and warnings
- Data checked and collected at 15-minute intervals
- Customizable reporting, from basic to advanced
- Real-time information collected via cellular connection



ENHANCED, STATE-OF-THE-ART TOUCH SCREEN CONTROLLER FOR UNPARALLELED EASE OF USE & REMOTE MONITORING

FULL CONTROL OF THE DS SERIES IS EASY. THE STATE-OF-THE-ART TOUCH SCREEN CONTROLLER PROVIDES EASY, INTUITIVE NAVIGATION TO ALL COMPRESSOR CONTROLS.



FEATURES THAT COUNT

Designed with you in mind, the DS Series offers reliability in a package designed for ease of use and service.

Patented High Pre-Cooler Design (Air Cooled Units)*

Helps prevent thermal fatigue and premature aftercooler failure providing higher reliability and durability

** Pre-cooler not available on 100 psi (7 bar) models*

Aftercooler

- Provides second stage of cooling in conjunction with patented High Pre-Cooler*

OPTIONS

High Ambient Package (131°F/55°C)

Cold Weather Package (-4°F/-20°C)

Weather Hood

High Altitude Package (3281 to 9843 ft/ 1000 to 3000 m)

Containment Pan

PTFE-Free Airstream

316 Stainless Steel Cooling Tubes (water cooled only)

Water Shut Off Valve (water cooled only)

65kA Short Circuit Current Rating (SCCR)

NEMA 4X Stainless Steel Starter Panel

Remote Air Inlet

Less Aftercooler

VFD Radial Fan

Variable Speed Drive (VSD) Capacity Control**

Motorized Isolation Valve (MIV)

Helps prevent migration of moisture back into the compressor package when compressor is not running. This provides additional protection for the compressor from humidity—one of the biggest enemies of oil free screw compressors.

Capacity Control System

■ Fixed speed

- Diaphragm type
 - Simple design for high reliability and durability
- Pneumatically controlled for lower maintenance costs
- Designed to operate 1 million cycles/year to provide longer maintenance intervals

■ Variable Speed Drive (VSD)**

- Provides maximum energy efficiency and operating consistency by adjusting motor speed to match compressed air supply needs
- Patented no-inlet valve design to help eliminate restriction—meaning no air loss
 - Two-speed reduction to help minimize power consumption at unload condition
 - Turndown works in the most efficient range of specific power
 - Power consumption at no load is reduced up to 30% vs fixed speed of same model

***Available on 55 and 75 models.*

Air Cooled or Water Cooled Models Available

NPT Customer Connection

- Helps simplify installation



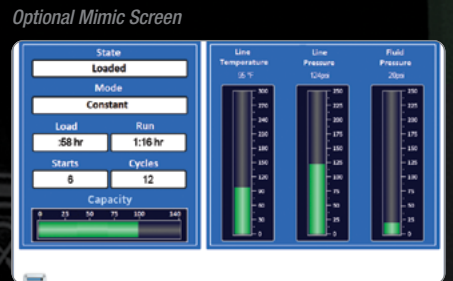
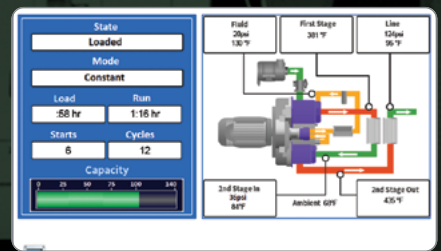
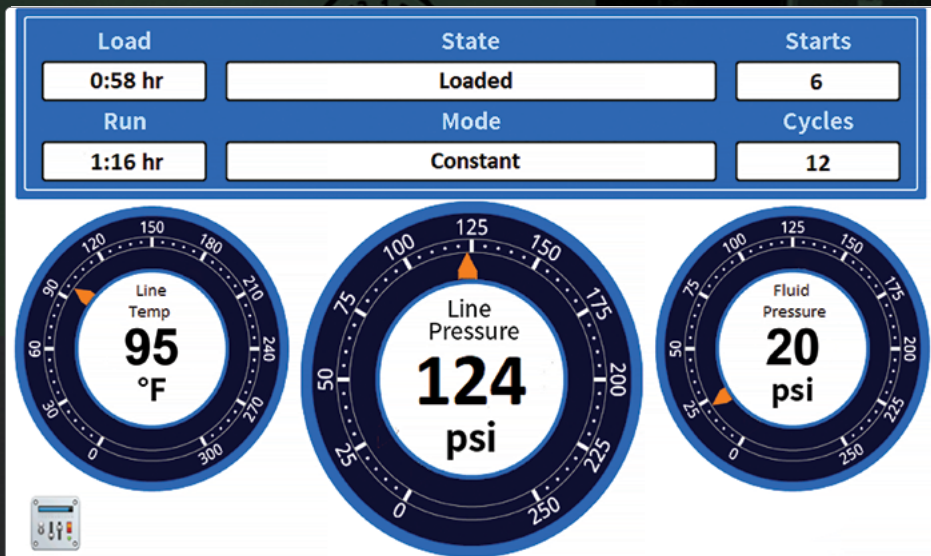
WARRANTY INFORMATION:

All DS Series Oil Free Air Compressors feature a 3-year package warranty and a 5-year air end warranty when continuously serviced with Genuine Sullair parts.

Restrictions apply.

The DS Series is covered by one or more of the following US patents:
6461112, 6561766, 6739841, 8801412, 9328731

EASY & INTUITIVE ACCESS TO ALL COMPRESSOR CONTROLS



THE ULTIMATE CONTROLLER

The enhanced Sullair Touch Screen (STS) Controller utilizes a large 7" color screen for easy viewing in any lighting condition

Menu-driven screens provide easy access to all compressor controls

- Support for sequencing up to 16 compressors
- More communication capabilities: Ethernet, ModBus RTU and ModBus TCP, Cellular (AirLinx® service)
- Start/Stop scheduling with pressure control
- NEMA 4 environmental protection
- Discreet Start and Stop 22 mm buttons
- Bright operating status LEDs, even when display is dimmed
- Expandable I/O for additional sensor monitoring and output control
- Supports power monitoring
- Trend graphing of operational parameters
- Most controller functions and adjustments via protected controller submenus
- New data download capabilities

AirLinx® Remote Monitoring

AirLinx enables you to stay connected to your compressor operations wherever you are. It provides automated service and fault alerts, as well as a portal where system performance and data trends can be viewed. AirLinx helps reduce the risk of unplanned downtime and helps ensure timely service.

AirLinx service features

- Pressure monitoring
- Compressor temperature monitoring
- Running hours and service hours monitoring
- Alerts for service and warning breakdowns
- Data stored at 15-minute intervals

Provides VSD load profile graphing capabilities*

- One year of data retained on the cloud

**For units equipped with VSD*

AirLinx can be customized to provide different service levels

- **Basic:** Email for fault and warning conditions
- **Advanced:** Tracking and visualizing all relevant performance parameters, with reporting tools to support the management of the compressor system



PRODUCT INFORMATION

FOR MORE INFORMATION, CONTACT YOUR
LOCAL AUTHORIZED SULLAIR DISTRIBUTOR.



Scan to view the
full Oil Free line.

60 Hz	POWER		PRESSURE	PERFORMANCE	DISCHARGE CONNECTION	WEIGHT	DIMENSIONS — W x D x H	Sound Level
Model	hp	kW	psi (bar)	cfm (m³/min)	in (mm)	lbs (kg)	in (mm)	dBA
DS4507AC	60	45	100 (7)	283 (8)	2 (50) NPT	4012 (1820)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	72
DS4507WC	60	45	100 (7)	293 (8.3)	2 (50) NPT	3836 (1740)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	71
DS4509AC	60	45	125 (8.6)	222 (6.3)	2 (50) NPT	4012 (1820)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	72
DS4509WC	60	45	125 (8.6)	234 (6.6)	2 (50) NPT	3836 (1740)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	71
DS5507AC	75	55	100 (7)	351 (9.9)	2 (50) NPT	4057 (1840)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	73
DS5507VAC	75	55	100 (7)	360 (10.2)	2 (50) NPT	3836 (1740)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	73
DS5507VWC	75	55	100 (7)	364 (10.3)	2 (50) NPT	3704 (1680)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	72
DS5507WC	75	55	100 (7)	358 (10.1)	2 (50) NPT	3880 (1760)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	72
DS5509AC	75	55	125 (8.6)	290 (8.2)	2 (50) NPT	4057 (1840)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	73
DS5509VAC	75	55	125 (8.6)	307 (8.7)	2 (50) NPT	3836 (1740)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	73
DS5509VWC	75	55	125 (8.6)	318 (9)	2 (50) NPT	3704 (1680)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	72
DS5509WC	75	55	125 (8.6)	304 (8.6)	2 (50) NPT	3880 (1760)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	72
DS5510AC	75	55	150 (10.3)	259 (7.3)	2 (50) NPT	4057 (1840)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	73
DS5510VAC	75	55	150 (10.3)	272 (7.7)	2 (50) NPT	3836 (1740)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	73
DS5510VWC	75	55	150 (10.3)	283 (8)	2 (50) NPT	3704 (1680)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	72
DS5510WC	75	55	150 (10.3)	276 (7.8)	2 (50) NPT	3880 (1760)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	72
DS7507AC	100	75	100 (7)	473 (13.4)	2 (50) NPT	4255 (1930)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	75
DS7507VAC	100	75	100 (7)	445 (12.6)	2 (50) NPT	3858 (1750)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	75
DS7507VWC	100	75	100 (7)	459 (13)	2 (50) NPT	3748 (1700)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	73
DS7507WC	100	75	100 (7)	483 (13.7)	2 (50) NPT	4101 (1860)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	73
DS7509AC	100	75	125 (8.6)	408 (11.6)	2 (50) NPT	4255 (1930)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	75
DS7509VAC	100	75	125 (8.6)	396 (11.2)	2 (50) NPT	3858 (1750)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	75
DS7509VWC	100	75	125 (8.6)	406 (11.5)	2 (50) NPT	3748 (1700)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	73
DS7509WC	100	75	125 (8.6)	432 (12.2)	2 (50) NPT	4101 (1860)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	73
DS7510AC	100	75	150 (10.3)	378 (10.7)	2 (50) NPT	4255 (1930)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	75
DS7510VAC	100	75	150 (10.3)	364 (10.3)	2 (50) NPT	3858 (1750)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	75
DS7510VWC	100	75	150 (10.3)	371 (10.5)	2 (50) NPT	3748 (1700)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	73
DS7510WC	100	75	150 (10.3)	388 (11)	2 (50) NPT	4101 (1860)	86.6 x 55.1 x 71.9 (2200 x 1400 x 1825)	73

Certified to UL/CSA standards ASME approved GRN available upon request

HitachiGlobalAirPower.com/OilFree



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