



# DS SERIES

Oil Free Rotary Screw Air Compressors

375 – 603 hp ■ 280 – 450 kW

103 – 145 psi ■ 7.1 – 10 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

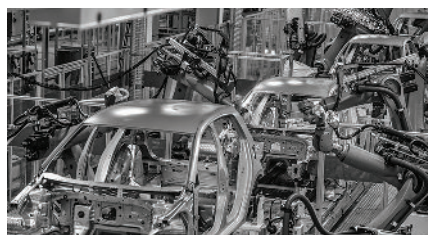
DS Series oil free air compressors are the perfect choice for applications requiring oil free air, including:

- Oil and gas
- 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.

### 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

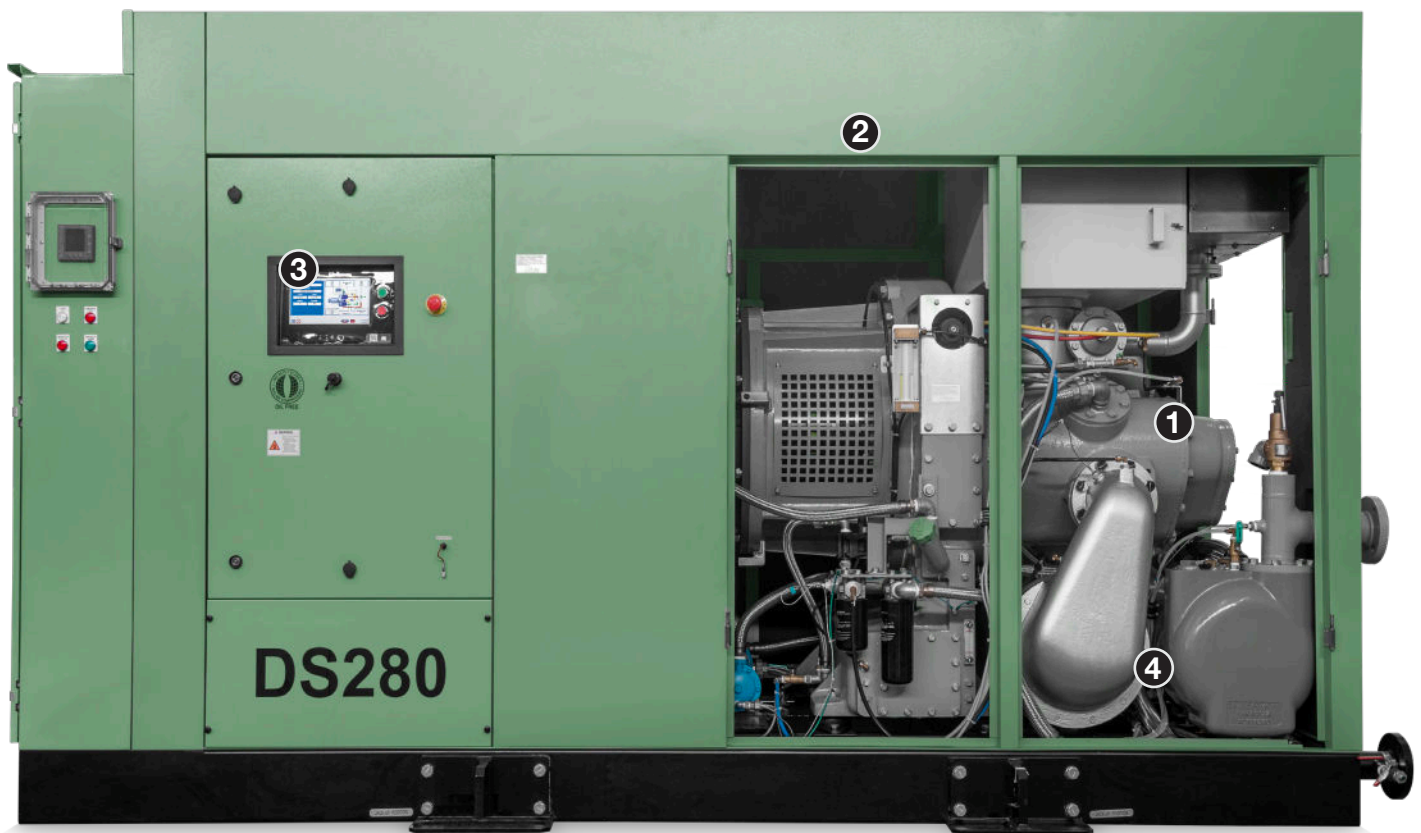
| Class | Solid Particle Maximum number of particles per m³                             |                |                | Pressure Dew Point °F (°C) | Oil (incl. vapor) mg/m³ |
|-------|---|----------------|----------------|----------------------------|-------------------------|
|       | 0.1–0.5 micron  | 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.

# OIL FREE OPERATION YOU CAN COUNT ON

*The DS Series 280 – 450 models utilize reliable Hitachi Air Ends  
backed by more than 50 years of oil free rotary screw experience.*







### 1. Hitachi Two-Stage Air End

- Carbon steel rotors in first and second stage
- Patented blend of PTFE rotor coating with a PSA topcoat
- 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

- Multiple 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

- 10" 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. Intercooler & Aftercooler

- Carbon steel shell with CUNI tubes for optimum reliability

### TEFC High-Efficiency Motor (IE2)

- Compact and designed for high efficiency
  - TEFC premium efficiency motor (IE3) standard on select models

### 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

### Drain Separator

- Drain separators located on both the intercooler and aftercooler



# 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

### 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

- Butterfly type
  - Simple design for high reliability and durability
- Hydraulically controlled for lower maintenance costs
- Designed to operate 3 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.

- Two-speed reduction to help minimize power consumption at unload condition
- Turndown works in the most efficient range of specific power

*\*Available on 280 and 450 models.*

### Flange & NPT Customer Connection

- Helps simplify installation

## SRF DS COMPRESSOR FLUID

### **Specifically formulated for oil free rotary screw compressors**

SRF DS is a high-performance, petroleum-based synthetic fluid for oil free rotary screw compressors. This long-life, high-viscosity fluid helps improve compressor efficiency by optimizing gearbox lubrication—which helps you save money.

- Long-lasting—up to 8000 hours
- Excellent oxidation control
- Exceptional lubrication
- Thermally stable



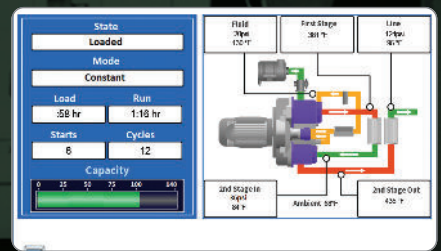
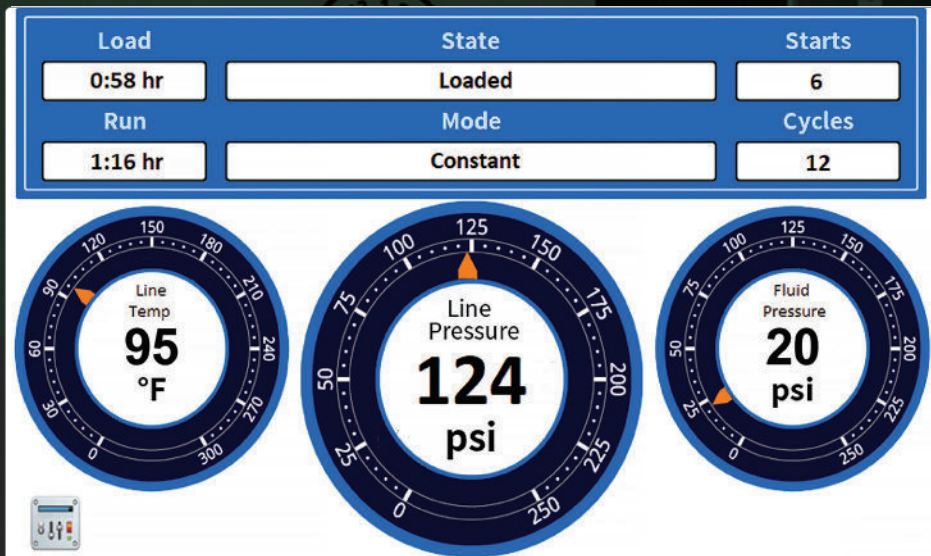
## WARRANTY INFORMATION:

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.

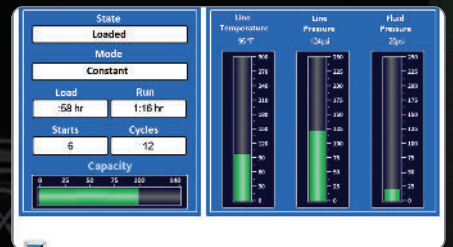
*Restrictions apply.*



# EASY & INTUITIVE ACCESS TO ALL COMPRESSOR CONTROLS



Optional Mimic Screen



Optional Analog/Digital Screen

## THE ULTIMATE CONTROLLER

The enhanced Sullair Touch Screen (STS) Controller utilizes a large 10" 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

### Easy access to AirLinx information

- Email alerts for fault and warning conditions





# 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         |
| DS28007  | 375   | 280 | 103 (7.1) | 1796 (51)    | 3 (76)               | 15,983 (7250)   | 151 x 68 x 86 (3835 x 1727 x 2184) | 71          |
| DS28007V | 375   | 280 | 103 (7.1) | 1796 (51)    | 3 (76)               | 13,007 (5900)   | 142 x 67 x 87 (3607 x 1702 x 2210) | 71          |
| DS28009  | 375   | 280 | 125 (8.6) | 1563 (44.3)  | 3 (76)               | 15,983 (7250)   | 151 x 68 x 86 (3835 x 1727 x 2184) | 71          |
| DS28009V | 375   | 280 | 125 (8.6) | 1563 (44.3)  | 3 (76)               | 13,007 (5900)   | 142 x 67 x 87 (3607 x 1702 x 2210) | 71          |
| DS28010  | 375   | 280 | 145 (10)  | 1430 (40.5)  | 3 (76)               | 15,983 (7250)   | 151 x 68 x 86 (3835 x 1727 x 2184) | 71          |
| DS28010V | 375   | 280 | 145 (10)  | 1430 (40.5)  | 3 (76)               | 13,007 (5900)   | 142 x 67 x 87 (3607 x 1702 x 2210) | 71          |
| DS32507  | 436   | 325 | 103 (7.1) | 2123 (60.1)  | 4 (100)              | 21,056 (9551)   | 175 x 77 x 91 (4435 x 1956 x 2296) | 78          |
| DS32509  | 436   | 325 | 125 (8.6) | 1782 (50.5)  | 4 (100)              | 21,056 (9551)   | 175 x 77 x 91 (4435 x 1956 x 2296) | 78          |
| DS32510  | 436   | 325 | 145 (10)  | 1626 (46.1)  | 4 (100)              | 21,056 (9551)   | 175 x 77 x 91 (4435 x 1956 x 2296) | 78          |
| DS36007  | 483   | 360 | 103 (7.1) | 2316 (65.7)  | 4 (100)              | 21,385 (9700)   | 175 x 77 x 91 (4435 x 1956 x 2296) | 78          |
| DS36009  | 483   | 360 | 125 (8.6) | 2029 (57.5)  | 4 (100)              | 21,385 (9700)   | 175 x 77 x 91 (4435 x 1956 x 2296) | 78          |
| DS36010  | 483   | 360 | 145 (10)  | 1845 (52.3)  | 4 (100)              | 21,385 (9700)   | 175 x 77 x 91 (4435 x 1956 x 2296) | 78          |
| DS40007  | 536   | 400 | 103 (7.1) | 2609 (73.9)  | 4 (100)              | 21,826 (9900)   | 175 x 77 x 91 (4435 x 1956 x 2296) | 78          |
| DS40009  | 536   | 400 | 125 (8.6) | 2288 (64.8)  | 4 (100)              | 21,826 (9900)   | 175 x 77 x 91 (4435 x 1956 x 2296) | 78          |
| DS40010  | 536   | 400 | 145 (10)  | 2094 (59.3)  | 4 (100)              | 21,826 (9900)   | 175 x 77 x 91 (4435 x 1956 x 2296) | 78          |
| DS45007  | 603   | 450 | 103 (7.1) | 2829 (80.1)  | 4 (100)              | 22,707 (10,300) | 175 x 77 x 91 (4435 x 1956 x 2296) | 78          |
| DS45007V | 603   | 450 | 103 (7.1) | 2829 (80.1)  | 4 (100)              | 18,519 (8400)   | 162 x 77 x 91 (4115 x 1956 x 2296) | 78          |
| DS45009  | 603   | 450 | 125 (8.6) | 2585 (73.2)  | 4 (100)              | 22,707 (10,300) | 175 x 77 x 91 (4435 x 1956 x 2296) | 78          |
| DS45009V | 603   | 450 | 125 (8.6) | 2585 (73.2)  | 4 (100)              | 18,519 (8400)   | 162 x 77 x 91 (4115 x 1956 x 2296) | 78          |
| DS45010  | 603   | 450 | 145 (10)  | 2347 (65.5)  | 4 (100)              | 22,707 (10,300) | 175 x 77 x 91 (4435 x 1956 x 2296) | 78          |
| DS45010V | 603   | 450 | 145 (10)  | 2347 (65.5)  | 4 (100)              | 18,519 (8400)   | 162 x 77 x 91 (4115 x 1956 x 2296) | 78          |

\*460v models listed above

\*\*cfm measured in accordance  
with ISO1217, Annex C

