



## **Lubricated Rotary Screw Air Compressors**

Constant Speed Drives and Variable Speed Drives 18–30 kW = 25–40 hp





**@Hitachi Global Air Power** 

# **SULLAR**

# Legendary Sullair Products

Sullair compressed air solutions have been at the leading edge of rotary screw technology since 1965. The legacy continues as Hitachi Global Air Power—featuring the legendary Sullair product line.

### **COMPRESSED AIR SOLUTIONS DESIGNED FOR** RELIABILITY & DURABILITY

### RELIABILITY

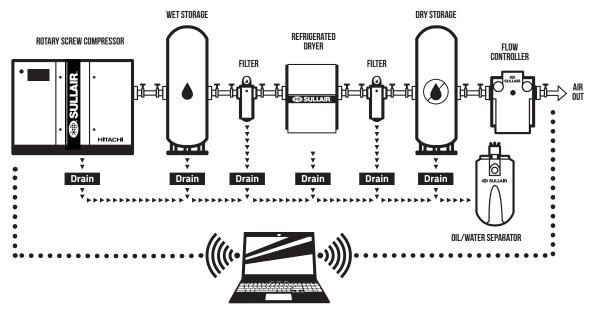
Customers who work with Sullair compressors have found intangibles make all the difference—things like trust, confidence and peace of mind. They go to work every day having full faith in their equipment, as well as the knowledge they have access to true compressor experts ready to support them every step of the way.

### DURABILITY

Bulletproof. Built to last. However you spin it, Sullair compressors are in it for the long haul, driven by the design of the legendary air end. All over the world, you'll find Sullair compressors that have stood the test of time, running consistently today as they did on day one.

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.

# SULLAIR STATIONARY AIR POWER SYSTEMS



Hitachi Global Air Power offers total compressed air systems to help compressed air users reduce energy costs and improve productivity by analyzing, managing and controlling their compressed air systems.

Sullair air systems include: plant air audits, energy efficient products, compressed air system controls, equipment to monitor and manage systems, air distribution products, and after-purchase support.

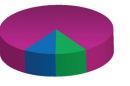
Each component of the system is carefully matched for capacity and pressure to provide reliable performance and energy efficiency.

#### The system includes:

- Rotary screw compressor
- Wet storage
- Refrigerated dryer or desiccant dryer
- Filters to meet your requirement
- Dry storage
- Flow controller
- Drains
- Oil/water separator

### Solutions To

Help Reduce Life Cycle Costs



Equipment Maintenance Electricity

#### Air Compressor Life Cycle Costs

According to Best Practices for Compressed Air Systems, Compressed Air Challenge [Second Edition, 2007] energy costs now represent 82% of the total operating expenses. Energy savings from Sullair S-energy<sup>®</sup> compressors can significantly reduce life cycle costs.

# S-energy compressors can significantly reduce operating and energy costs over the entire compressor life cycle:

- Proven Sullair air end with a low restriction inlet valve
- High efficiency fan
- Low pressure drop air-fluid separation system to prevent energy loss

#### Sullair designs deliver cost savings for the life of the product. Improved air filtration translates into:

- Extended separator life
- Improved fluid filter life
- Less lubricant contamination

## To reduce fluid disposal costs, S-energy compressors are factory-filled with biodegradable Genuine Sullube<sup>®</sup> fluid.

- Protects and cleans (no varnish)
- Controls operating temperatures
- Optimal viscosity
- Environmentally friendly
- Reduces fluid loss
- High flash point (505°F/263°C)
- SULLAIR.

# FEATURES AND BENEFITS

Sullair compressors provide reliable performance and efficiency in one of the most compact, robust, maintenance-friendly and quietest compressor packages available.

#### **Standard Features**

- Low restriction inlet valve for better cfm performance
- Low life cycle costs including long-life bearings, rotors and consumable parts
- Less than 1 ppm fluid carryover
- Excellent motor cooling design characteristics for longer motor life
- Wye Delta Starter
- Sequencing standard
- NEMA 4 standard
- TEFC Motor
- 7" Sullair Touch Screen Controller (STS)
- Easy access oil sampling valve
- Small footprint
- Quietest in its class, as low as 67 dBA
- 12 unique serviceability features
- Environmental, health and safety design features
- Genuine Sullube<sup>®</sup>—non-varnishing, biodegradable compressor fluid
- Optimalair<sup>®</sup> air filter provides 10 times better filtration than other filters
- AirLinx<sup>®</sup> remote monitoring ready\*
  - Easy-to-enable remote monitoring of key compressor operation parameters, warnings and alarms to help maximize uptime and efficiency

#### **Quiet Design**

- Air end, motor and receiver tank are mounted on rubber isolators
- Insulated intake and exhaust louvers
- Low-noise fan

#### **Small Footprint**

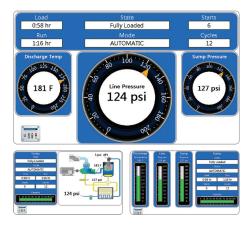
- More compact than similar compressors on the market
- All maintenance is performed from one side, reducing the amount of clearance and floor space typically required

#### **Options**

- Variable Speed Drive (VSD)
- Cold weather package
- Weather hood
- Total package filtration
- Other motors and starters

# **ENGINEERED FOR EASY MAINTENANCE**

S-energy Series compressors revolutionize serviceability and optimize efficiency—helping save you time and money. Standard maintenance can all be performed from one side.



#### Sullair Touch Screen Controller (STS)

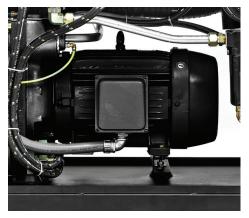
The Sullair Touch Screen (STS) Controller utilizes a large 7" color screen for easy viewing in any lighting condition.

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<sup>®</sup> service)
- Remote access capability via VNC (Virtual Network Computing) protocol
- Start/Stop scheduling with pressure control
- NEMA 4 environmental protection
- Discreet Start and Stop buttons
- Bright operating stats 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

#### **Environmental Protection Pan**

 Fully sealed environmental protection pan to capture spills



#### **Motor Features**

- Slow speed—1800 rpm
- Cast iron construction
- NEMA design
- Direct coupled/flange mounted
- Most comprehensive warranty in the industry



#### Sullair Optimizer™ Air-Fluid Separator

- High-efficiency media
- Lower pressure drop reduces power consumption
- Less than 1 ppm carryover means fewer top-offs

#### **Fiberglass Fluid Filter**

- Coreless, non-metallic design means easy disposal
- 20% more efficient than common cellulose media
- Better filtration helps extend compressor life

#### Sullair Optimalair® Air Filter

- Provides the finest inlet filtration in the industry (.4 micron)
- Keeps fluid clean and extends life of internal components
- Reduces pressure drop during operating life, resulting in energy savings



#### **1. Drive Coupling Element**

Easy access through a large opening and a wrap-flex element allows change without disturbing the hubs.

#### 2. Quick Thermostat Change

To change the thermostat, simply thread the old thermostat out, and the new one in.

#### 3. Improved Separator Maintenance

Simply unbolt the lid and lift it off using the handle. No tubing to disconnect, prevents leaking and saves service time.

#### 4+5. Simplified Filter Change

The fluid filter is in an inverted position to minimize lubricant loss during filter changes. Plus, easy access to the fluid sampling valve.



#### Sullair 10-Year Diamond Warranty

The Sullair 10-Year Diamond Warranty provides comprehensive protection for Sullair lubricated rotary screw air compressors. This program distinguishes itself by covering all major components for new air compressors (with discharge pressures up to 150 psi):

#### **10 Years Coverage:**

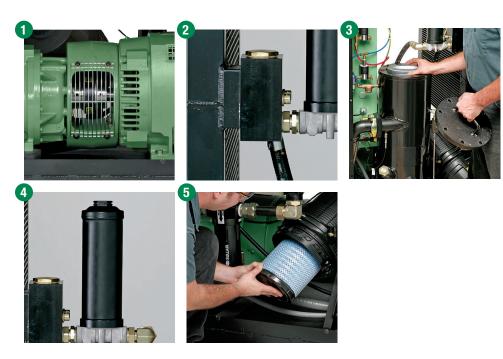
Sullair Air End

#### **5 Years Coverage:**

- Main motor
- Fan motor
- Aftercooler
- Oil cooler
- Separator vessel
- Variable speed drive (if equipped)

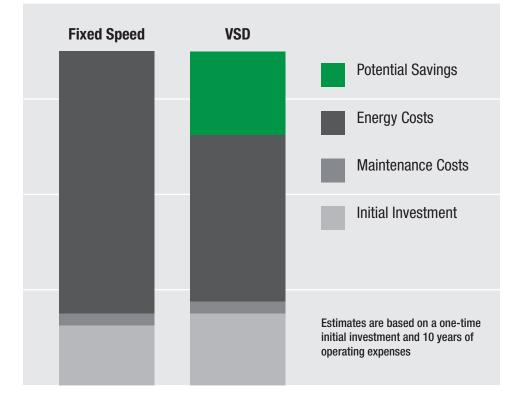
Maintaining the Sullair 10-Year Diamond Warranty requires using Genuine Sullair parts, Sullube<sup>®</sup>, and participation in the oil sampling program. Restrictions apply.







# SULLAIR VSD AIR COMPRESSORS



#### Sullair compressors with Variable Speed Drive (VSD) provide:

- Excellent energy savings
- Relief from potential peak demand charges
- Possible utility company rebate
- DC link choke with 3% line reactor included (model/voltage specific)
- Stable system pressure

#### Reduced system air leaks

- Reduced storage requirements
- Flexibility for future growth

Consistent product quality

Low five-year life cycle cost

#### Your Compressed Air System Can Improve Your Bottom Line

In just ten years, the electrical power cost to operate a standard compressor can be more than six times greater than its purchase price.

#### **Total Compressor Flexibility**

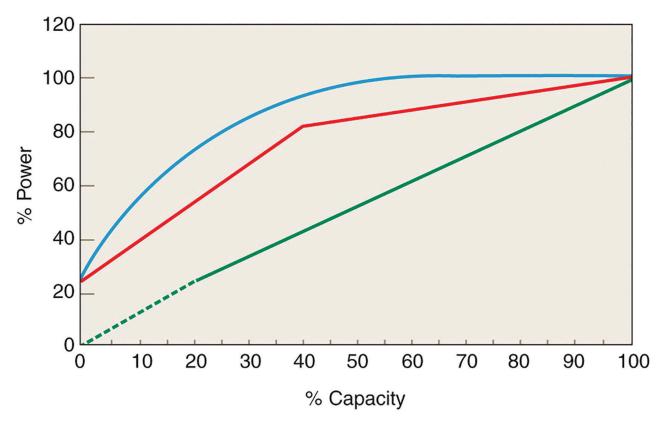
Sullair VSD compressors provide the flexibility to vary both capacity and pressure. This flexibility makes it possible to "grow" your air system without adding more compressors.

#### Variable Speed Drive is the Superior Alternative

The chart above is a representation of nominal control systems for generic comparative purposes. A detailed and accurate comparison of specific compressor models is available from your Sullair representative or authorized distributor.

# SULLAIR **VSD AIR COMPRESSORS**

### PART-LOAD PERFORMANCE ASSESSMENT



## Stable System Pressure Improves the Consistency of Processes to Reduce Product Rejects

- Lowers air system leaks
- Reduces system storage requirements
- Provides increased energy savings to increase profits

#### Soft Start is Standard with Unlimited Starts and Stops

- No need for Wye Delta and other soft starters
- No need to control the number of hot or cold starts
- Unlimited starts and stops save electrical costs
- Avoids high electrical current at start-up

#### **VSD Avoids Potential Peak Demand Charges**

VSD compressors provide the highest power factor over the entire frequency range, often avoiding utility company penalties.

- Single-Stage Lubricated Load/Unload (The graph represents one gallon of storage per cfm.)
  Single-Stage Lubricated Inlet Modulation with Blowdown
  - Single-Stage Lubricated Variable Speed



Reference:Compressed Air and Gas Handbook, 6th Edition, pages 221-224.

#### Standard Compressors

#### Sullair VSD Compressors





# **TECHNICAL SPECIFICATIONS**

50HZ MOTOR Frequency	MO	TOR		FULL-LOAD CAPACITIES **						WEIGHT		DISCHARGE Connection	dBA†	
Model*	hp	kW	100 psi cfm	7 bar m³/min	125 psi cfm	8.6 bar m³/min	150 psi cfm	10.3 bar m³/min	175 psi cfm	12.1 bar m³/min	lbs	kg		
1800	25	18	109	3.09	101	2.86	90	2.55	84	2.38	1420	644	11/2" NPT	67
1800V	25	18	109	3.09	101	2.86	90	2.55	84	2.38	1461	663	11⁄2" NPT	67
2200	30	22	133	3.77	121	3.03	107	3.03	102	2.89	1450	658	11/2" NPT	67
2200V	30	22	134	3.79	122	3.45	108	3.05	102	2.89	1491	676	11/2" NPT	67
3000	40	30	176	4.98	152	4.30	143	4.05	132	3.74	1615	733	11/2" NPT	69
3000V	40	30	176	4.98	152	4.30	143	4.05	132	3.74	1654	750	11/2" NPT	69

60HZ MOTOR Frequency	MO	TOR	FULL-LOAD CAPACITIES **							WEIGHT		DISCHARGE Connection	dBA†	
Model*	hp	kW	100 psi cfm	7 bar m³/min	125 psi cfm	8.6 bar m³/min	150 psi cfm	10.3 bar m³/min	175 psi cfm	12.1 bar m³/min	lbs	kg		
1800	25	18	119	3.37	106	3.00	96	2.71	85	2.40	1420	644	11/2" NPT	67
1800V	25	18	116	3.28	105	2.97	96	2.75	87	2.46	1461	663	11⁄2" NPT	67
2200	30	22	140	3.96	127	3.59	111	3.14	104	2.94	1450	658	11⁄2" NPT	67
2200V	30	22	138	3.90	125	3.54	115	3.25	105	2.97	1491	676	11/2" NPT	67
3000	40	30	-	-	160	4.53	148	4.19	130	3.68	1615	733	11⁄2" NPT	69
3000V	40	30	-	-	163	4.61	150	4.24	141	3.99	1654	750	11/2" NPT	69

DIMENSIONS	LEN	GTH	WI	DTH	HEIGHT		
Model*	in	mm	in	mm	in	mm	
1800, 1800V, 2200, 2200V, 3000, 3000V	53.2	1351	31.5	800	53.2	1351	

\* Model Variations: V = Variable Speed Drive;

 Capacity per CAGI / PNEUROP PN2CPTC2 (Annex C to ISO 1217) Moisture Drain Connection at ¼" NPT
dBA at 1 meter

Information and data are subject to change without notice.

For more information, contact your local authorized Sullair distributor.

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