



# **Senergy™ Series** **Encapsulated Air Compressors**

**Variable Speed Drive**  
1100eV | 1500eV | 1800eV

Reliable • Variable Speed Drive • Energy Efficient • Lower Overall Costs



11-18 kW/15-25 horsepower  
Rotary Screw Air Compressors  
Variable Speed Drive

 **SULLAIR®**  
*Always air. Always there.*

# The Next Revolution in Compressor Design

Since its inception in 1965, Sullair has been an industry leader in rotary screw technology. Our award-winning Rotary Screw design has set the industry standard – and delivers the quality and reliability you depend on from Sullair.

For over forty years, we have offered reliable compressed air solutions to fit every need. So you can count on Sullair to deliver the next revolution in compressor design: the Sullair **Senergy** Series compressors.

The addition of the Sullair **Senergy** Series to our quality compressor family is truly revolutionary: Sullair reliability in the most energy efficient, maintenance-friendly, quiet, and compact compressor package available on the market.

These reliable Sullair compressors set the standard in virtually every category:

- reliability
- life cycle costs
- variable speed drive
- microprocessor technology
- energy efficiency
- low sound levels

## Reliable

### Integrated Package Design Significantly Increases Uptime

- Air End
  - Features encapsulated air-end for these reliable compressors
  - Industry standard for nearly half a century
  - Features tapered bearing arrangement: high load capacity, time proven design
  - Precision ground rotors provide consistent performance
  - Features controlled pressure lubrication and bearing fluid reservoir
- Motor
  - Uses Totally Enclosed Fan Cooled motors — TEFC
  - Features premium efficient motors
  - Covered by Sullair's Ultra Emerald Five-Year Compressor Health Assurance Warranty

- Cooling Air Flow
  - Driven by centrifugal cooling fan
  - Keeps compressor package cool
  - Protects key components
  - Better distributes air to the cooler
- Optimalair Inlet Filter
  - Provides finest inlet filtration in the industry (.4 microns using Fine Fiber Technology)
  - Keeps fluid clean and extends life of other internal components
  - Reduces pressure drop throughout the operating life, resulting in energy savings
  - Extends package life as a result of total package engineering—from inlet to discharge



# Sullair *S-energy*™ Series with Sullair Smart Technology

When you invest in Sullair's *S-energy* Series compressors, operating consistency and energy efficiency are your dividends. That's just the beginning.

**Sullair *S-energy* Series compressors with Sullair Smart Technology provide:**

- Excellent energy savings
- Relief from potential peak demand charges
- Alleviation from electrical harmonics
- Stable system pressure
- Consistent product quality
- Reduced system air leaks
- Reduced storage requirements
- Flexibility for future growth
- Lowest five-year life cycle cost
- Potential utility company rebate



Stable system pressure improves the consistency of your process and product to reduce product rejects, in addition to:

- Fewer air system leaks
- Reduced system storage requirements
- Increased energy savings for increased profits



**Conventional System Pressure**



***S-energy* Series System Pressure**

**Variable Speed Drive Avoids Potential Peak Demand Charges**

The Sullair *S-energy* Series provides the highest power factor over the entire frequency range, often avoiding utility company penalties.

**Soft Start is Standard**

- Eliminate the need for Wye Delta and other soft starter
- Avoid high electrical current at start-up

**Unlimited Starts and Stops**

- No need to control the number of hot or cold starts
- Unlimited starts and stops save electrical costs

**Total Compressor Flexibility Automatically with Safety Built In**

Sullair *S-energy* Series provides the flexibility to vary both capacity and pressure. This flexibility makes it possible to “grow” your air system without adding another compressor.



**For Today, Tomorrow, and the Future**

# The Sullair *S-energy*™ Series

## Sullair Smart Technology Gives You

- Simplicity
- Reliability
- Flexibility
- System protection

### Simplicity: User-Friendly

- User-friendly set-up via WS microprocessor
- Simplified user interface and adjustment
- Reduced number of components
- Instantaneous access to all cumulative “Vital Statistics”

### Flexibility: Pressure/Capacity

- Enter three parameters:
  - Unload Pressure
  - Load Pressure
  - Required Pressure
- You set the pressure; Sullair Smart Technology takes care of the rest

### Reliability

- Designed from the frame up as a complete package — not built with a variety of off-the-shelf components
- Serial communication between WS Controller and VSD eliminates the need for hard wired relays

### System Protection: Built-in Harmonic Filtration is Standard

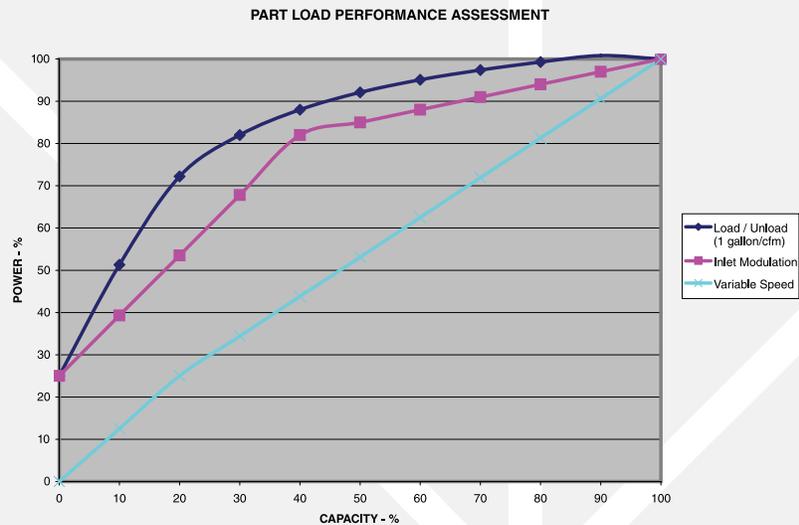
- Harmonic filters protect and lengthen the life of all compressor components, as well as other electrical devices on your power grid
- Provides cleaner power to the motor
- Sullair has your system in mind by furnishing this protection at no additional cost to you (It's an expensive add-on from other manufacturers)
- Avoid purchasing additional costly corrective devices

## Energy Efficient

This encapsulated series is more energy efficient than similar compressors, thanks to:

- Sullair's proven air-end
- Optimized fluid system that reduces fluid temperatures
- Efficient 1800 RPM motors
- Low pressure drop air-fluid separation system
- High efficiency centrifugal fan

Considering that energy costs represent 77% of the total cost of owning compressors, these savings significantly reduce total life cycle costs.



Variable Speed Drive is the superior alternative to other compressor control systems. The chart above represents the 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.

### Lower Overall Costs for the Life of Your Machine

The highly efficient Optimalair Air Filter provides filtration that is 10 times better than the standard cellulose media air filters commonly used in the industry, which translates into:

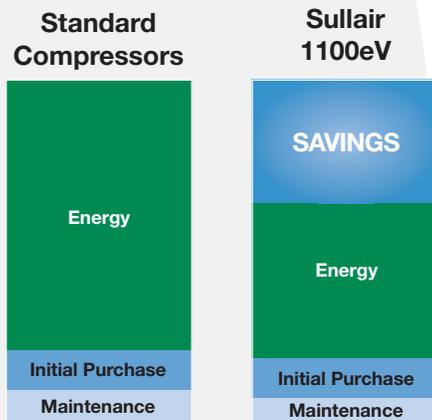
- Longer air filter life
- Extended separator life
- Improved fluid filter life
- Less lubricant contamination
- Improved compressor performance—not compromised by a clogged inlet filter

Our 2.5 gallon fluid capacity and our less than 2 ppm carryover reduce the overall fluid and disposal costs:

- Standard Sullube™ lubricant is biodegradable
- Optional 24KT™ lubricant requires no lubricant changes
- Sullair's SRF and food grade lubricants are also available

### Total Life Cycle Costs

Energy savings are maximized when the compressor doesn't have to overcome high pressure drop conditions. This Series provides significant savings over standard compressors.



### Simplified Microprocessor Delivers Critical Information

With the simplified WS microprocessor, there are no complicated menus to manage.

- Two large start/stop buttons are used in conjunction with three smaller ones to navigate the system and adjust settings
- The WS microprocessor controls the variable speed drive
- The graphic display is clear and concise, making it easy to read and simple to understand
- Get required, critical operations information easily, including:
  - status
  - temperature
  - pressure
  - load/unload set points



You can also use a Windows PC to remotely monitor, upgrade the software, and set up changes. The microprocessor has WSPC interface capability and also features:

- Service maintenance reminders
- Remote monitoring capability
- Built-in sequencing of up to 16 machines with the full load solenoid valve
- Real-time clock
- Upgradability
- Warnings
- Protection alarm

# Best-in-class!

## Quiet

The Sullair **Senergy** Series incorporates many design features that reduce the noise of the machine:

- Air-end and motor mounted on rubber isolators
- Insulated intake and exhaust louvers
- Low noise centrifugal fan

In fact, it's so quiet (as low as 66 dba) that these compressors can even be used at the point-of-use.

## Clean, Ergonomic Enclosure is Standard

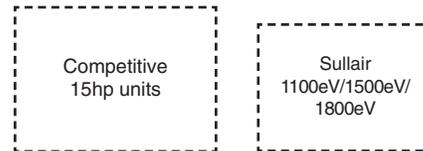
The Sullair **Senergy** Series' enclosure was designed with an eye toward form, fit, and finish.

- The enclosure is an integral part of every machine
- Expertly designed package allows for easy service and further reduces noise
- Skeleton structure supports the cooler pack, starter, and outer panels
- Beveled edges and corners provide the clean look of an ergonomically designed package

## The Smallest Footprint in its Class

The Sullair **Senergy** Series meets the smaller footprint needs for point-of-use compressors.

- Measures only 53.2" x 31.5" x 53.2" – more compact than any similar compressor
- Fits through a standard 36-inch door, simplifying installation
- Clearance and floor space typically required are reduced by serviceability from one side of the machine



## Features & Options

### 1100eV/1500eV/1800eV Standard Features

- Totally Enclosed Fan Cooled motor — TEFC
- Low life cycle costs including long-life bearings, rotors, and consumable parts
- Less than 2 ppm fluid carryover
- Excellent motor cooling design characteristics for longer motor life
- Sequencing standard
- NEMA 12 standard
- WS microprocessor standard
- Smallest footprint in its class
- Quietest in its class — as low as 66 dba

- Numerous unique serviceability enhancements
- Environmental Health & Safety design
- Sullube™ – 8000 hour non-varnishing biodegradable compressor fluid
- Total package filtration
- Optimalair Inlet Filter: 10 times the filtration versus other filters

### 1100eV/1500eV/1800eV Options

- 24KT™ (10-Year air-end warranty)

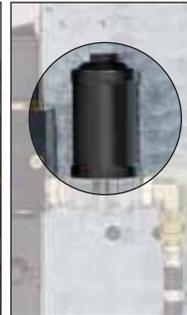
# Easy to Maintain

The Sullair **S-energy™** Series simplifies routine maintenance. Multiple features of this Series revolutionize the compressor's serviceability and provide for a cleaner, safer work environment and cost-effective compressor.



## Unimpeded Access to Inside the Compressor

Simply lift off the canopy door for unimpeded access to the inside of the compressor.



## Simplified Filter Change

Changing the air and fluid filters is simpler than ever. The fluid filter is in an inverted position to minimize lubricant loss during filter changes.



## Electric Solenoid Drain

This Series features an electric solenoid drain with an easy-to-clean strainer that improves reliability. Energy-saving zero loss drains are also available.



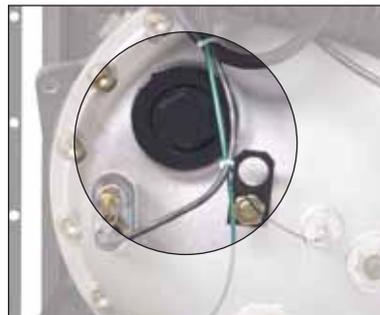
## Quick Access to Cooler

With the removal of just a few bolts, the cooler slides out on rails for easy routine cleaning.



## Quick Thermostat Change

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



## Convenient Separator Element

The separator is conveniently located for easy service. There's no tubing to disconnect, which prevents leaking and saves service time.



## Sight Glasses

The fluid fill and operating fluid level indicator sight glasses are conveniently located for easy access.



## Environmental Protection Pan

The Encapsulated Series features a fully sealed environmental protection pan to capture spills that may occur during servicing.

# All That, Plus Better for the Environment Too

- Low-noise fan helps reduce the machine's noise level to as low as 66 dba, important when on the plant floor
- Fully-sealed environmental protection pan contains fluid should any drips occur while servicing
- Coreless filter with non-metallic design can either be incinerated or crushed, virtually eliminating disposal issues
- Environmentally compatible Sullube™ is a biodegradable lubricant
- 24KT™ lubricant requires no lubricant changes
- 2.5 gallon fluid capacity reduces overall fluid costs and disposal issues



## The Most Comprehensive Warranties in the Industry

Our confidence in the high quality workmanship, materials, and components of Sullair products allows us to offer the most unique warranty coverage: A comprehensive five-year protection package. Sullair is the only manufacturer to offer this unprecedented warranty. Simply complete and return your startup card to activate your warranty. No kits or spare parts agreements required.



### Ultra Emerald Five-Year Compressor Warranty

With the Ultra Emerald Warranty, you get all the benefits of Sullair's Emerald Five-Year Compressor Health Assurance, with the added benefit of our Variable Speed Drive (VSD). Sullair compressors with VSD keep working at maximum efficiency for longer life and lower energy costs.



### 24KT™ Ten-Year Warranty

When you use the 24KT™ compressor fluid, the Sullair 24KT™ System carries an unprecedented ten-year warranty on the Sullair air-end. You receive the benefits of our five-year coverage on all other major components.

### Oil Free Guarantee



Sullair matches the best combination of compressor, dryer, and filters to remove atmospheric particulate, aerosols, and other pollutants to provide two levels of air quality—from general purpose to the most critical applications.

# Specifications: 60 Hz Horsepower Rated

## 1100eV - 15 Horsepower

Model	1107eV	1109eV	1110eV	1112eV
<b>Compressor Performance*</b>				
Full Load Pressure - psig	100	125	150	175
Capacity at Full Load Pressure (acfm)	69.2	59.1	50.6	42.4
<b>Motor (horsepower)</b>				
	15	15	15	15
<b>Dimensions &amp; Weights w/Enclosure – Uncrated (Crated)</b>				
Length - inches	53.2 (60)	53.2 (60)	53.2 (60)	53.2 (60)
Width - inches	31.5 (40.5)	31.5 (40.5)	31.5 (40.5)	31.5 (40.5)
Height - inches	53.2 (62)	53.2 (62)	53.2 (62)	53.2 (62)
Weight - lbs.	1078 (1308)	1078 (1308)	1078 (1308)	1078 (1308)
Discharge Connection - in. NPT	1 1/2	1 1/2	1 1/2	1 1/2
Moisture Drain Connection - in. NPT	1/4	1/4	1/4	1/4
<b>dBA Ratings at 1 Meter (Typical)</b>				
Air-cooled w/enclosure	66	66	66	66

## 1500eV - 20 Horsepower

Model	1507eV	1509eV	1510eV	1512eV
<b>Compressor Performance*</b>				
Full Load Pressure - psig	100	125	150	175
Capacity at Full Load Pressure (acfm)	91.9	80.9	69.6	61.8
<b>Motor (horsepower)</b>				
	20	20	20	20
<b>Dimensions &amp; Weights w/Enclosure – Uncrated (Crated)</b>				
Length - meters	53.2 (60)	53.2 (60)	53.2 (60)	53.2 (60)
Width - meters	31.5 (40.5)	31.5 (40.5)	31.5 (40.5)	31.5 (40.5)
Height - meters	53.2 (62)	53.2 (62)	53.2 (62)	53.2 (62)
Weight - kgs	1132 (1362)	1132 (1362)	1132 (1362)	1132 (1362)
Discharge Connection - in. NPT	1 1/2	1 1/2	1 1/2	1 1/2
Moisture Drain Connection - in. NPT	1/4	1/4	1/4	1/4
<b>dBA Ratings at 1 Meter (Typical)</b>				
Air-cooled w/enclosure	66.5	66.5	66.5	66.5

## 1800eV - 25 Horsepower

Model	1807eV	1809eV	1810eV	1812eV
<b>Compressor Performance*</b>				
Full Load Pressure - psig	100	125	150	175
Capacity at Full Load Pressure (acfm)	113.8	99.8	90.2	81.3
<b>Motor (horsepower)</b>				
	25	25	25	25
<b>Dimensions &amp; Weights w/Enclosure – Uncrated (Crated)</b>				
Length - meters	53.2 (60)	53.2 (60)	53.2 (60)	53.2 (60)
Width - meters	31.5 (40.5)	31.5 (40.5)	31.5 (40.5)	31.5 (40.5)
Height - meters	53.2 (62)	53.2 (62)	53.2 (62)	53.2 (62)
Weight - kgs	1156 (1386)	1156 (1386)	1156 (1386)	1156 (1386)
Discharge Connection - in. NPT	1 1/2	1 1/2	1 1/2	1 1/2
Moisture Drain Connection - in. NPT	1/4	1/4	1/4	1/4
<b>dBA Ratings at 1 Meter (Typical)</b>				
Air-cooled w/enclosure	67	67	67	67

All models available in: 460V and 575V

\*Capacity per CAGI / PNEUROP PN2CPTC2 (Annex C to ISO 1217.)

NOTE: Data subject to change without notice.

## Air Audits

Sullair air audits review your entire compressed air system to identify ways to maximize efficiency; reduce waste; and reduce utility, maintenance, and equipment costs. And, Sullair is the only compressor manufacturer to offer three levels of air system audits that address the Department of Energy's standard levels — walk-through, assessment, and audit.

## Customer Care by SULLAIR™

Our Customer Care program gives you a complete package of all the system maintenance resources you need, and our training programs teach you how to properly operate, maintain, and service Sullair equipment. Our global customer support network gives you high-speed access to genuine Sullair service parts and responsive, knowledgeable service.

## AirTility™

Sullair's AirTility™ is the industry's most comprehensive air outsourcing solution. Think of AirTility™ for your compressed air system just as you think of the electrical and water systems at your facility — as a utility. AirTility™ is for those who want a reliable, safe compressed air system with no capital expenditures and no maintenance worries.

## System Monitoring

Sullair's eConnect™ remotely monitors and diagnoses the health of your compressed air equipment. Using only a computer and a web browser, the status of your entire system can be viewed from anywhere in the world. System monitoring also helps in preventive maintenance and trend analysis.

## Core Products

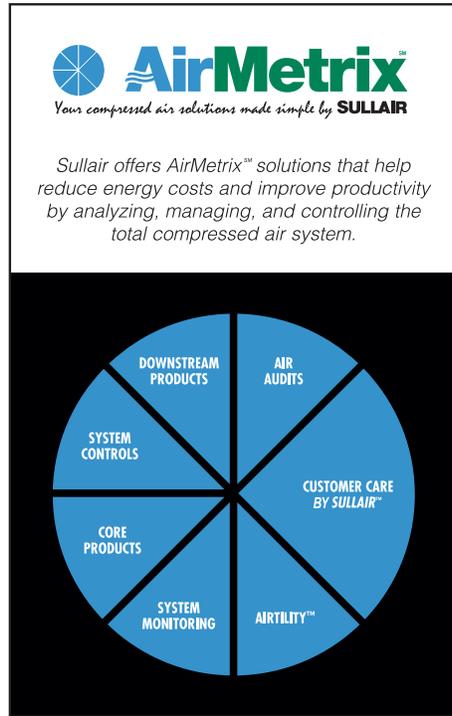
No one gives you more ways to efficiently produce clean air power than Sullair. Compressors are the heart of our business, and our reputation for reliability is reflected in our entire industrial compressor range, from 5 to 600 hp. Sullair also offers a wide range of dryers and filters for contaminant removal, as well as a range of rotary screw vacuum systems.

## System Controls

Compressed air system controls match compressed air supply with system demand, and let you take a total systems approach to the most efficient production, distribution, and use of compressed air. Proper control is essential to efficient system operation and high performance.

## Downstream Products

Sullair — and our distributor partners — are complete systems solutions providers for the demand side of your compressed air system. From the filter, regulator, and lubricator to the piping system and storage tanks, we provide a complete range of equipment and expertise to help keep your system at peak productivity.



**For more information on Sullair products and services, please contact your local Sullair distributor.**



**www.sullair.com**  
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