

# ES-6 *S-energy*<sup>TM</sup> Encapsulated Rotary Screw Air Compressors

3-7 kW ■ 5-10 Horsepower



- Simple
- Compact
- Reliable
- Lower Maintenance Costs
- Quiet

# Sullair Capabilities

## Sullair Leadership

Since 1965, Sullair has been recognized around the world as an innovator and a leader in rotary screw compression technology. For more than 40 years, Sullair has designed and manufactured its own rotors and air end assemblies at the corporate headquarters in Michigan City, Indiana.

The award-winning rotary screw design sets the industry standards and delivers the quality and reliability one expects from a leader.

## Sullair Technology

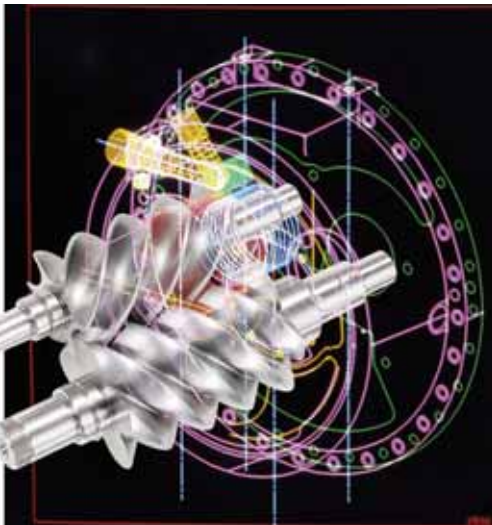
Utilizing the most modern technologies, equipment and advanced manufacturing techniques, Sullair designs, manufactures, assembles, and tests the most advanced compressed air products in the industry. Sullair products are known around the world for their universally applicable design, outstanding craftsmanship and superior quality.

## Sullair's Statistical Process Control

Our Statistical Process Control (SPC) system monitors rotor quality standards to assure consistent compressor performance.

## Sullair's Commitment to Innovation

Underlying Sullair's leadership is a dedication to excellence and a commitment to innovation. We are constantly exploring new ideas and seeking new ways to meet industry's need for increasingly energy-efficient compressed air solutions.



# Sullair AirMetrix<sup>SM</sup> Solutions

Sullair offers AirMetrix<sup>SM</sup> solutions—a *total compressed air system*—to help compressed air users reduce energy costs and improve productivity by analyzing, managing and controlling total compressed air systems.

Sullair's AirMetrix<sup>SM</sup> solutions include: plant air system audits, energy efficient products, compressed air system controls, monitoring and management systems, air distribution products, and after-purchase support.



The Sullair ES-6 is a complete AirMetrix<sup>TM</sup> Performance Air System for small horsepower applications that includes a Sullair encapsulated compressor, SRS dryer, SCF filter, and 80 gallon or 120 gallon storage tank.

Note: The compressor enclosure, dryer, filter, and receiver are optional.

## Sullair Reduces Your 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>TM</sup> compressors can significantly reduce life cycle costs.

The Sullair **S-energy**<sup>TM</sup> compressors significantly reduce operating and energy costs over the entire compressor life cycle. Contributing to the energy savings are:

- Sullair's proven air end with the 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, we offer our biodegradable Sullube<sup>TM</sup> 8000-hour fluid, or 24KT<sup>TM</sup>, a long-life fluid that never needs changing.

# Superior Features and Benefits

## Simple, Compact Design

Sullair encapsulated compressors utilize design simplicity to provide exceptional reliability and extremely low maintenance. Designed with a smaller footprint and 40 percent fewer parts than conventional models, these compact machines redefine industry standards for continuous duty compressors in the 5 to 10 horsepower range.

## Rotary Screw Reliability

These **S-energy™** encapsulated compressors use a single-stage rotary screw air end, featuring Sullair's patented E-Profile rotors and rugged bearing design.

## Lower Maintenance Costs

Thanks to a simplified design that uses fewer parts and connections, the **S-energy™** compressors require only minimum routine maintenance.

## Broad Operating Range

ES compressors are available in 5 to 10 horsepower, with capacities from 13 to 36 acfm and pressure ratings of 125 and 175 psig.

## Superior Package Design

- 40% fewer parts improve reliability
- Small footprint
- Designed for continuous duty

## Optional Sound Enclosure

- Reduces sound levels to 70 dBA
- Lift out doors

## Reliable Sullair Air End

- Patented E-profile rotor design
- Longer bearing life

## Heavy-Duty Air Filter

- Protects premature failure of key components
- Extends separator, fluid filter and fluid life

## Sullair's Versatile Control System

- Allows the compressor to run in modulation or load/no load operation
- Matches output to demand
- Stabilizes system pressure
- Extends package life
- Package instrumentation

## Aftercooler / Oil Cooler

- Air-cooled
- Simplified access
- Easy cleaning

## Starter

- Integrated full voltage starter



# Benefits That Set Sullair Apart

## Helical Design Drive Gears

- Reduces thrust load
- Increases bearing life

## Bearing Fluid Reservoirs

- Ensures fluid is available at startup
- Extends air end life

## Encapsulated Design

- Maintenance items are easy to replace
- Minimizes connections

## Flange-Mounted Motor and Air End

- Provides positive alignment
- Optimizes bearing life of air end and motor
- Motor enclosure is Totally Enclosed Air Over (TEAO)
- Available Voltages include 200V, 230V, 460V and 575V

## Select a Long-Life Fluid...

- Sullube™ is standard factory fill
  - 5-year air end warranty
  - Biodegradable
  - 1 year or 8000 hour service life
  - Reduces fluid disposal costs
- 24KT™ is optional
  - Exclusive 10-year air end warranty
  - Eliminates annual fluid changes
  - Eliminates fluid disposal costs

Free fluid sampling and analysis program with either fluid.

## Best Warranties in the Industry



### Sullair's Emerald 5-Year Warranty

This unmatched warranty includes: the air end, motor, air/fluid receiver and cooler(s).



### Sullair's 24KT™ 10-Year Warranty

This unprecedented warranty includes: 10 years on the air end, 5 years on the motor, air/fluid receiver and cooler(s).



## Multi-stage Air-Fluid Separator

- Reduces fluid carryover to less than 2 ppm
- Lowers make-up fluid costs
- Separator element is easily replaced

## Fluid Site Glass

## Spin-On Fiberglass Fluid Filter

- Aircraft-quality media provides better filtration
- Up to 20% more efficient than conventional paper elements
- Lengthens life of the compressor
- Filter service life is extended up to 1 year

## Oil Drain Tube

# ES-6 *S-energy*™ Performance Air System

Compressed air is a vital source of energy for industry for applications such as **manufacturing, instrumentation, and process equipment. To meet increasingly stringent air quality requirements, Sullair responds to your needs by developing a total compressed air package.**

## Clean, dry air is essential

Quality air treatment — the removal of condensate and particulate — is essential. When cooled, vapor in compressed air will condense. The removal of condensate and particulate is essential for quality air. First, the air must be dry. Vapor in compressed air will condense when cooled. Without removing the condensate, moisture in the air stream can damage your total compressed air system, product, or process. To protect your plant air system and air-using equipment, particulate must be removed by filtration. Sullair filters will provide this protection and improve the quality of your product or process. Proper filtration will also reduce your compressed air energy costs.

## The Sullair Solution

The solution is the Performance Air System. The System includes an ES-6 *S-energy*™ compressor, optional enclosure, SRS Dryer, SCF Filter, and receiver tank. We've taken the guesswork out of putting your System together. All components of the System have been perfectly matched and sized to provide maximum performance, without paying for more than you need. Plus, the Performance Air System is simple to install and, because of its small footprint, requires a minimum amount of floor space.

## The SRS Dryer features:

- Advanced 3-in-1 heat exchanger module
- Oversized demister separator
- Low pressure drop
- Environmentally friendly refrigerant
- Dew point indicator
- Easy drain access
- Single panel maintenance access
- 5-year dryer warranty (compressor, condenser and heat exchanger)
- 115V voltage



## The SCF Filter features:

- High efficiency design using latest filter technology
- Removal of particles to 1.0 micron
- Removal of coalesced liquid water and lubricants
- Maximum remaining aerosol after filtration is 0.5 ppm @ 70°F

## Features of the Receiver Tank include:

- ASME and CRN approval
- 80- and 120-gallon tank availability
- Pressure relief and ball valve as standard



# ES-6 Air Compressor Technical Specifications: 60 Hz

## Compressor Performance:

Models	Motor HP	Capacity acfm	Full Load Pressure (psig)	Dryer Size	Filter Size
5H	5	17	125	SRS 25	SCF 40
5XH*	5	13	175	SRS 25	SCF 40
7.5H	7.5	28	125	SRS 35	SCF 40
7.5XH*	7.5	20	175	SRS 35	SCF 40
10H	10	36	125	SRS 50	SCF 65
10XH*	10	30	175	SRS 50	SCF 65

\*"XH" Models not available with 24KT.

## Dimensions and Weights:

Models	Customer Connection	Length inches	Width inches	Height inches	Weight lbs	dBA
<b>ES-6 5H/XH</b>						
Open	1/2" NPT	29.5	25.5	22.8	230	82
Enclosed	3/4" NPT	44.0	28.0	28.0	400	68
Open Tankmount 80 Gal.	1-1/4" NPT	64.5	26.5	50.0	560	82
Open Tankmount 120 Gal.	1-1/4" NPT	67.0	27.0	54.0	650	82
Enclosed Tankmount 80 Gal.	1-1/4" NPT	66.0	28.0	52.5	710	68
Enclosed Tankmount 120 Gal.	1-1/4" NPT	68.0	28.0	56.5	800	68
Open Tankmount 80 Gal. with Dryer/Filter	3/4" NPT	69.5	26.5	50.0	640	82
Open Tankmount 120 Gal. with Dryer/Filter	3/4" NPT	71.0	27.0	54.0	730	82
Enclosed Tankmount 80 Gal. with Dryer/Filter	3/4" NPT	71.0	28.0	52.5	810	68
Enclosed Tankmount 120 Gal. with Dryer/Filter	3/4" NPT	72.0	28.0	56.5	900	68
<b>ES-6 7.5 H/XH</b>						
Open	1/2" NPT	31.5	25.5	22.8	270	82
Enclosed	3/4" NPT	44.0	28.0	28.0	440	69
Open Tankmount 80 Gal.	1-1/4" NPT	64.5	26.5	50.0	600	82
Open Tankmount 120 Gal.	1-1/4" NPT	67.0	27.0	54.0	690	82
Enclosed Tankmount 80 Gal.	1-1/4" NPT	66.0	28.0	52.5	750	69
Enclosed Tankmount 120 Gal.	1-1/4" NPT	68.0	28.0	56.5	840	69
Open Tankmount 80 Gal. with Dryer/Filter	3/4" NPT	69.5	26.5	50.0	680	82
Open Tankmount 120 Gal. with Dryer/Filter	3/4" NPT	71.0	27.0	54.0	770	82
Enclosed Tankmount 80 Gal. with Dryer/Filter	3/4" NPT	71.0	28.0	52.5	850	69
Enclosed Tankmount 120 Gal. with Dryer/Filter	3/4" NPT	72.0	28.0	56.5	930	69
<b>ES-6 10 H/XH</b>						
Open	1/2" NPT	31.5	25.5	22.8	280	85
Enclosed	3/4" NPT	44.0	28.0	28.0	450	70
Open Tankmount 80 Gal.	1-1/4" NPT	64.5	26.5	50.0	610	85
Open Tankmount 120 Gal.	1-1/4" NPT	67.0	27.0	54.0	700	85
Enclosed Tankmount 80 Gal.	1-1/4" NPT	66.0	28.0	52.5	760	70
Enclosed Tankmount 120 Gal.	1-1/4" NPT	68.0	28.0	56.5	850	70
Open Tankmount 80 Gal. with Dryer/Filter	3/4" NPT	69.5	26.5	50.0	690	85
Open Tankmount 120 Gal. with Dryer/Filter	3/4" NPT	71.0	27.0	54.0	780	85
Enclosed Tankmount 80 Gal. with Dryer/Filter	3/4" NPT	71.0	28.0	52.5	860	70
Enclosed Tankmount 120 Gal. with Dryer/Filter	3/4" NPT	72.0	28.0	56.5	940	70

# Global Support. Local Solutions.



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Sullair offers AirMetrix<sup>SM</sup> solutions to help compressed air users reduce their energy costs and improve their productivity by analyzing, managing and controlling total compressed air systems. Information on the compressed air system tailored to your specific needs can be obtained by contacting your local Sullair Distributor. To acquire local distributor contact information visit us online at [www.Sullair.com](http://www.Sullair.com) or call 1-800-SULLAIR.



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