



# ES-6 *S-energy*®

Encapsulated Rotary Screw Air Compressors

4–7 kW • 5–10 hp



# ABOUT SULLAIR

For more than 50 years, Sullair has been on the leading edge of compressed air solutions. We were one of the first to execute rotary screw technology in our air compressors, and our machines are famous all over the world for their legendary durability. As the industry moves forward, Sullair will always be at the forefront with quality people, innovative solutions, and air compressors that are built to last.

*Sullair was founded in Michigan City, Indiana in 1965, and has since expanded with a broad international network to serve customers in every corner of the globe. Sullair has offices in Chicago and manufacturing facilities in the United States and China — all ISO 9001 certified to ensure the highest quality standards in manufacturing. In addition, Sullair Suzhou and Shenzhen facilities are ISO 9001, ISO 14001 and OHSAS 18001 certified.*

**RELIABILITY.  
DURABILITY.  
PERFORMANCE.**

*These are the pillars that drive the quality of Sullair compressed air solutions. It's a promise we keep with every machine we make.*

## RELIABILITY

Customers who work with Sullair have found that the 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 that dedicated distributors and Sullair personnel have their back every step of the way.

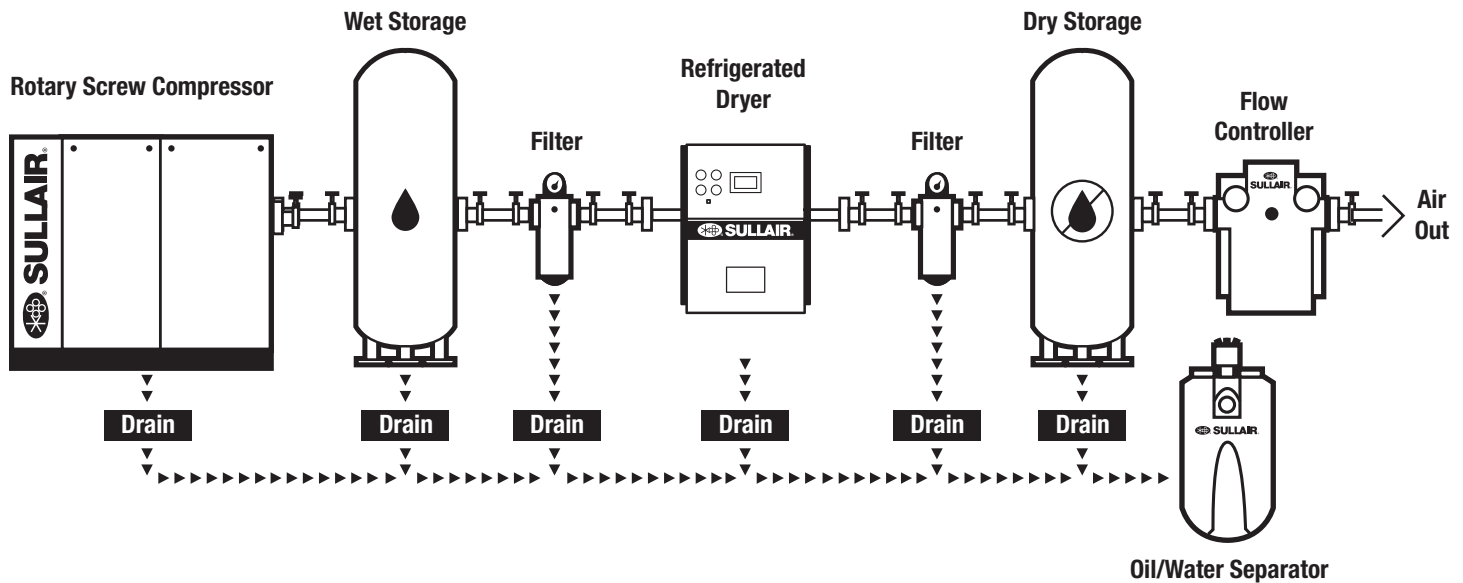
## DURABILITY

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

## PERFORMANCE

You have high expectations for your operations, and we make machines that share your work ethic. Sullair compressed air solutions do what they're supposed to do, and they do it extremely well for a very long time. And working with us means not only access to clean, quality air, but also the tools you need to optimize this vital resource.

# SULLAIR STATIONARY AIR POWER SYSTEMS



Sullair 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.

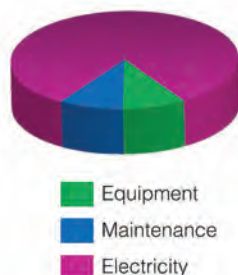
Sullair air systems include: plant air audits, energy efficient products, compressed air system controls, equipment to monitor and manage systems, air distribution products, and after-purchase support.

Each component of the system is carefully matched for capacity and pressure to provide maximum 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

## Sullair Reduces Your Life Cycle Costs



## 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® compressors can significantly reduce life cycle costs.

Sullair S-energy compressors significantly reduce operating and energy costs over the entire compressor life cycle. Contributing to the energy savings are:

- 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® 10,000-hour fluid.

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

# SULLAIR ES-6 S-ENERGY®

## ENCAPSULATED ROTARY SCREW AIR COMPRESSOR

### 1. Aftercooler / Oil Cooler

- Air-cooled
- Simplified access
- Easy cleaning

### 2. Heavy-Duty Air Filter

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

### 3. Sullair 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

### 4. Encapsulated Design

- Maintenance items are easy to replace
- Minimizes connections

### 5. Multi-Stage Air-Fluid Separator

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

### 6. Fluid Sight Glass

### 7. 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 one year

### 8. Oil Drain Tube

### 9. Starter

- Integrated full voltage starter





# SUPERIOR FEATURES AND BENEFITS SET SULLAIR APART

## Simple, Compact Design

Sullair encapsulated compressors utilize design simplicity to provide exceptional reliability and extremely low maintenance. Designed with a smaller footprint and 40% fewer parts than conventional models, these compact machines redefine industry standards for continuous duty compressors in the 5 to 10 hp 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-6 compressors are available in 5 to 10 hp, with capacities from 17 to 30 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 68 dBA
- Lift out doors

## Reliable Sullair Air End

- Patented E-profile rotor design
- Longer bearing life

## Helical Design Drive Gears

- Reduces thrust load
- Increases bearing life

## Bearing Fluid Reservoirs

- Ensures fluid is available at start-up
- Extends air end life

## 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

## All ES-6 compressors are factory filled with biodegradable Genuine Sullube® 10,000 hour fluid.

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

## PristineFG™ is Optional

- Meets USDA and FDA H1 requirements
- Lasts up to 6000 hours
- Reduces lubricant consumption
- Performs in wide temperature range
- Extends compressor life

## Sullair 10-Year Diamond Warranty

The Sullair 10-Year Diamond Warranty provides comprehensive protection for Sullair oil-flooded rotary screw air compressors. This program distinguishes itself by covering all major components for new air compressors (with discharge pressures up to 150 psig) — both parts and labor:

### 10 Years Coverage:

- Sullair air end

### 5 Years Coverage:

- Main motor
- Aftercooler
- Oil cooler
- Separator vessel



Maintaining the Sullair 10-Year Diamond Warranty requires using Genuine Sullair parts and fluids, as well as the oil sampling program.

# SULLAIR ES-6 *S-energy*®

## PERFORMANCE AIR SYSTEM

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



**ES-6 S-energy®**

Encapsulated Rotary Screw Air Compressor



**Receiver Tank**



**Sullair  
Refrigerated Dryer**

### The Sullair Solution

We've taken the guesswork out of putting your system together. Sullair offers the Performance Air System which includes an ES-6 compressor; a refrigerated dryer; a liquid and particulate filter; and a receiver tank. All components of the System have been perfectly sized to provide maximum performance. Plus, the Performance Air System is simple to install and requires a minimum amount of floor space.

### Clean, Dry Air is Essential

Quality air treatment — the removal of condensate and particulate — is essential to protect your plant air system and air-using equipment. Plus, quality air can help improve the quality of your product and process.

*The Performance Air System helps achieve your goals with:*

- Matched refrigerated dryer — to help remove water vapor found in compressed air. The Sullair dryer features an oversized demister separator and easy drain access. And the unit features environmentally compatible refrigerant.
- High efficiency filter — to remove particles down to 1.0 micron. The filter also helps to remove coalesced liquid and lubricants.

# TECHNICAL SPECIFICATIONS

FOR MORE INFORMATION, CONTACT YOUR  
LOCAL AUTHORIZED SULLAIR DISTRIBUTOR.

| 60HZ MOTOR FREQUENCY | MOTOR |     | PERFORMANCE FULL-LOAD CAPACITIES |                |                 |                 | DRYER SIZE | FILTER SIZE |
|----------------------|-------|-----|----------------------------------|----------------|-----------------|-----------------|------------|-------------|
| Model                | hp    | kW  | 125 psig / acfm                  | 9 bar / m³/min | 175 psig / acfm | 12 bar / m³/min | Model #    | Model #     |
| 5H                   | 5     | 3.7 | 17                               | .48            | —               | —               | ATRN25     | FXF25       |
| 5XH                  | 5     | 3.7 | —                                | —              | 13              | .36             | ATRN25     | FXF25       |
| 7.5H                 | 7.5   | 5.5 | 28                               | .79            | —               | —               | ATRN35     | FXF45       |
| 7.5XH                | 7.5   | 5.5 | —                                | —              | 20              | .56             | ATRN35     | FXF45       |
| 10H                  | 10    | 7.4 | 36                               | 1.01           | —               | —               | ATRN50     | FXF45       |
| 10XH                 | 10    | 7.4 | —                                | —              | 30              | .84             | ATRN50     | FXF45       |

| STYLE    | CUSTOMER CONNECTION | DIMENSIONS, ALL ES6 MODELS |      |       |     |        |     | ES6 5H/XH |     |             | ES6 7.5H/XH |     |             | ES6 10H/XH |     |             |
|----------|---------------------|----------------------------|------|-------|-----|--------|-----|-----------|-----|-------------|-------------|-----|-------------|------------|-----|-------------|
|          |                     | Length                     |      | Width |     | Height |     | Weight    |     | dBA Rating* | Weight      |     | dBA Rating* | Weight     |     | dBA Rating* |
|          |                     | in                         | mm   | in    | mm  | in     | mm  | lbs       | kg  |             | lbs         | kg  |             | lbs        | kg  |             |
| Open     | ½" NPT              | 29.5                       | 749  | 25.5  | 648 | 22.8   | 579 | 230       | 104 | 80          | 270         | 122 | 82          | 280        | 127 | 85          |
| Enclosed | ¾" NPT              | 44.0                       | 1117 | 28.0  | 711 | 28.0   | 711 | 400       | 181 | 68          | 440         | 199 | 69          | 450        | 204 | 70          |

| STYLE                             | CUSTOMER CONNECTION | DIMENSIONS, ALL ES6 MODELS |      |       |     |        |      | ES6 5H/XH |     |             | ES6 7.5H/XH |     |             | ES6 10H/XH |     |             |
|-----------------------------------|---------------------|----------------------------|------|-------|-----|--------|------|-----------|-----|-------------|-------------|-----|-------------|------------|-----|-------------|
|                                   |                     | Length                     |      | Width |     | Height |      | Weight    |     | dBA Rating* | Weight      |     | dBA Rating* | Weight     |     | dBA Rating* |
|                                   |                     | in                         | mm   | in    | mm  | in     | mm   | lbs       | kg  |             | lbs         | kg  |             | lbs        | kg  |             |
| Open Tankmount <i>80 gal</i>      | 1¼" NPT             | 64.5                       | 1638 | 26.5  | 650 | 50.0   | 1270 | 560       | 254 | 80          | 600         | 272 | 82          | 610        | 276 | 85          |
| Open Tankmount <i>120 gal</i>     | 1¼" NPT             | 67.0                       | 1702 | 27.0  | 686 | 54.0   | 1371 | 650       | 294 | 80          | 690         | 312 | 82          | 700        | 317 | 85          |
| Enclosed Tankmount <i>80 gal</i>  | 1¼" NPT             | 66.0                       | 1676 | 28.0  | 711 | 52.5   | 1333 | 710       | 322 | 68          | 750         | 340 | 69          | 760        | 344 | 70          |
| Enclosed Tankmount <i>120 gal</i> | 1¼" NPT             | 68.0                       | 1727 | 28.0  | 711 | 56.5   | 1435 | 800       | 362 | 68          | 840         | 381 | 69          | 850        | 385 | 70          |

| STYLE WITH DRYER / FILTER         | CUSTOMER CONNECTION | DIMENSIONS, ALL ES6 MODELS |      |       |     |        |      | ES6 5H/XH |     |             | ES6 7.5H/XH |     |             | ES6 10H/XH |     |             |
|-----------------------------------|---------------------|----------------------------|------|-------|-----|--------|------|-----------|-----|-------------|-------------|-----|-------------|------------|-----|-------------|
|                                   |                     | Length                     |      | Width |     | Height |      | Weight    |     | dBA Rating* | Weight      |     | dBA Rating* | Weight     |     | dBA Rating* |
|                                   |                     | in                         | mm   | in    | mm  | in     | mm   | lbs       | kg  |             | lbs         | kg  |             | lbs        | kg  |             |
| Open Tankmount <i>80 gal</i>      | ½" NPT              | 69.5                       | 1765 | 26.5  | 673 | 50.0   | 1270 | 640       | 290 | 80          | 680         | 308 | 82          | 690        | 312 | 85          |
| Open Tankmount <i>120 gal</i>     | ½" NPT              | 71.0                       | 1803 | 27.0  | 686 | 54.0   | 1371 | 730       | 331 | 80          | 770         | 349 | 82          | 780        | 353 | 85          |
| Enclosed Tankmount <i>80 gal</i>  | ½" NPT              | 71.0                       | 1803 | 28.0  | 711 | 52.5   | 1333 | 810       | 367 | 68          | 850         | 385 | 69          | 860        | 390 | 70          |
| Enclosed Tankmount <i>120 gal</i> | ½" NPT              | 72.0                       | 1828 | 28.0  | 711 | 56.5   | 1435 | 900       | 408 | 68          | 930         | 421 | 69          | 940        | 426 | 70          |

\* At 1 meter