



# *Fixed Speed Rotary Screw Compressors*

*UP6S Series 15-30 hp (11-22 kW)*



# More Than 145 Years of Compressed Air Innovation



Ingersoll Rand introduced its first air compressor in 1872. Over the next 145 years, we have continued to develop rugged, reliable, industry-leading rotary screw compressor technologies. No matter what the application, Ingersoll Rand rotary screw technology provides clean, dry air in all operating conditions to meet your specific performance needs, reduce costly downtime and maximize your productivity.

## UP6S Series 15-30 hp (11-22 kW)

Offering the reliability you've come to expect, the well-equipped Ingersoll Rand UP6S Series of oil-flooded rotary screw compressors has now raised the bar in functionality, performance upgrades and improved intelligence. We have designed a complete air solution that captures more information and puts more control into your hands. **With greater control comes greater effectiveness.**

### Reliability

- TEFC Tri-Voltage (208-230/460 V) motor allows the unit to adapt to each voltage for all customers
- V-Shield™ technology uses premium PTFE stainless steel braided hoses on all oil-carrying lines as well as O-ring face seal connections, virtually eliminating leaks and increasing hose life
- NEMA® 4 enclosure defends against harsh weather conditions
- Power Outage Restart Option (PORO) safely restores the machine to previous settings following power interruption

### Productivity

- Poly-V belt premium drive system applies patented automatic tensioning to eliminate belt stretch and increase air output
- The UP6S Total Air System (TAS) provides clean, dry air in a single package that minimizes installation costs, space and features improved ISO air quality
- Whisper-quiet operation as low as 67 dBA allows for installation closer to point of use, reducing costs and ensuring a better, safer work environment
- Key maintenance components are grouped to provide ease of serviceability
- Electronic Drain Valve (EDV) cost-effectively removes condensate on a set timer

### Intelligence

- Xe-70M programmable controllers deliver increased control functionality through an intuitive user interface with large navigation buttons
- Built-in event logging and trip history allow for greater machine usability and peace of mind

# Proven Reliability. Robust Design.

## High-Efficiency Integrated Compression Module

The airtend, interconnecting piping and separation system have all been integrated into one simple design to provide maximum performance, efficiency and serviceability.

### 1 Total Air System Cabinet

The TAS integrated dryer option provides clean, dry air in a single package, minimizing installation costs

### 2 Advanced Control with Remote Access

The ultimate in intelligent control systems, the Xe-Series controller effortlessly matches compressed air supply to air demand



### 3 Simple Serviceability

All consumables have been conveniently positioned to facilitate serviceability

### 4 Long-Life Separation System

Integrated, high-efficiency compression module eliminates leaks and pressure loss, while spin-off separator improves serviceability and maximizes uptime

### 5 Advanced Cooling

Efficient aftercooler and pre-filter can be accessed from both sides of the compressor for easy cleaning; top discharge simplifies ducting

# Flexible Performance You Can Count On

Using sophisticated computer analysis, our product engineering experts developed optimum design features and improved manufacturing techniques. The result is a superior airend with smoother, cooler and quieter operation. A NEMA® Type 4/IP55 TEFC motor provides an energy-efficient solution, even in the harshest operating conditions. The unique Tri-Voltage configuration ensures flexibility in any installation.

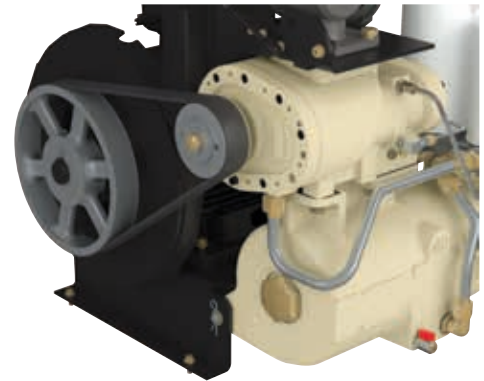


## Improved Flexibility and Reliability

- Unique Ingersoll Rand Tri-Voltage motor designed for heavy duty industrial applications
- All new TEFC motor improves reliability by protecting motor windings from harsh environmental conditions

## Maximized Uptime

- Optimized bearing arrangement reduces resistance and improves power management for greater reliability and endurance
- Airends equipped with robust steel cage ball bearings are engineered for exceptional reliability and efficiency
- Precision machined rotors with coolant paths are integral to the cast housing
- Premium drive system applies patented automatic tensioning to eliminate belt stretch and maximize air output



## Peace of Mind

- Integrated V-Shield™ technology with robust piping, maintenance-free PTFE stainless-steel braided hoses and PTFE O-Ring face seals allow for repeatable, leak-free connections
- Standard package pre-filter prevents contaminants from entering the compressor package



# Simple Controls for Advanced Diagnostics

All new Xe-Series programmable control systems have the capability to sequence up to four compressors without additional hardware. This allows for greater ease of operation and peace of mind, complemented by built-in event logging and trip history for superior diagnostics. All these advancements are included in an intuitive LED backlit display.

## Progressive Adaptive Control

PAC™ software continuously monitors key operations, such as separator element condition, and adapts system parameters to maximize uptime and increase motor life.



## Simple Diagnostics

- Operating status plus data log input and ability to troubleshoot failures\*
- Last 15 trips are dated and time-stamped in trip history with sensor readings at time of trip for root cause analysis
- Built-in event log stores up to 250 events such as start/stop, faults/warnings and trips

## Dual-Control Operation

- Reliable and effective load/no-load control, along with automatic stop and restart, maximizes flexibility
- Eliminates rapid cycling and destructive condensate build-up in lubricant



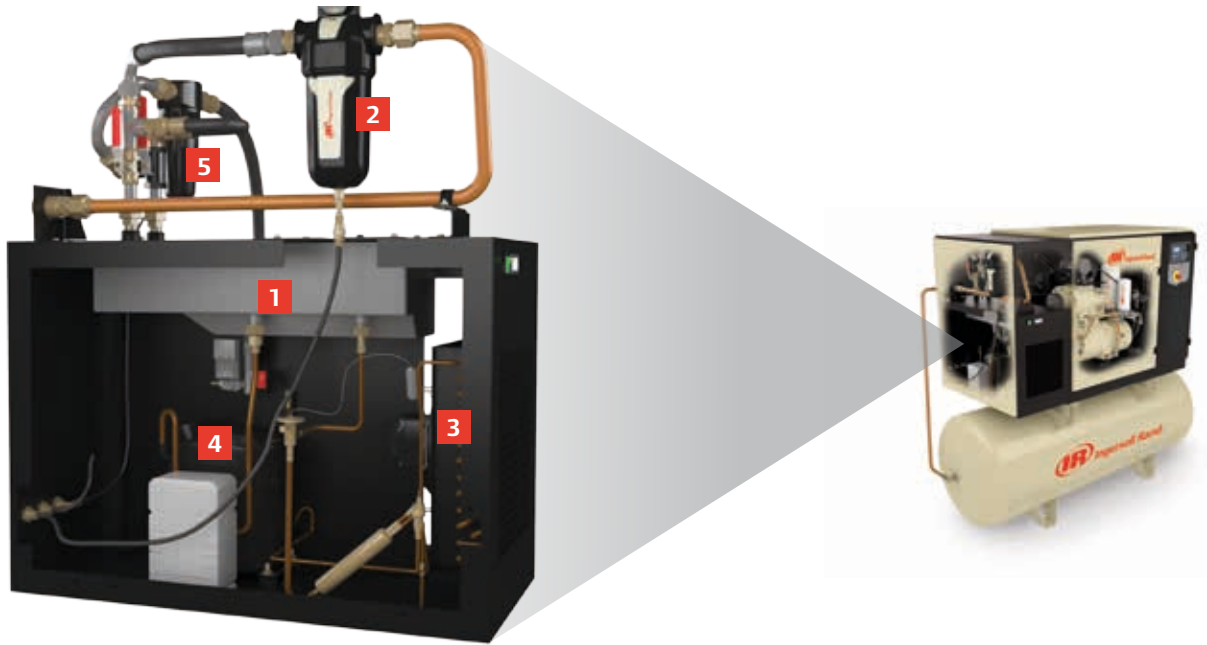
## Specifications

- 2.75" monochrome display operates in over 30 languages
- Software updates executed via service tool
- Standard Modbus RTU protocol\*\*
- Remote start/stop control enhances ease of operation
- Integrates seamlessly with Xi System Controller
- Ethernet connection supports web-enabled devices\*

\*Available with ECO option \*\*Can only use one at a time due to shared port

# Convenient Choices for a Complete Air Solution

To provide the most comprehensive air solution, Ingersoll Rand UP6S Series 15-30 hp compressors are available with a Total Air System (TAS) option. These complete cooler and dryer systems come with water separators, drain ports and filters. No matter the capacity, Ingersoll Rand provides the complete answer in a compact solution that fits your air and workspace requirements.



- |                                                |                                          |                                                                  |
|------------------------------------------------|------------------------------------------|------------------------------------------------------------------|
| <b>1</b> 3-in-1 heat exchanger                 | <b>3</b> Condenser                       | <b>5</b> Moisture separator with timed EDV discharges condensate |
| <b>2</b> High-capacity, general purpose filter | <b>4</b> Reliable refrigerant compressor |                                                                  |

## Energy-Saving Refrigerated Air Dryer

- Particulate removal to 0.1 micron
- High-efficiency, direct expansion refrigerated dryer operates continuously, ensuring constant dew point
- Removes moisture from compressed air, eliminating internal piping rusting, the main cause of premature tool and seal wear

## Smart Integration Benefits

- Dry air receiver mounted as a compact package lowers the cost of installation (optional floor mount also available)
- Easy access to all compressor and air treatment components promotes serviceability
- Simplified piping eliminates potential leaks
- Single-point condensate drain system, instead of separate points, reduces installation cost



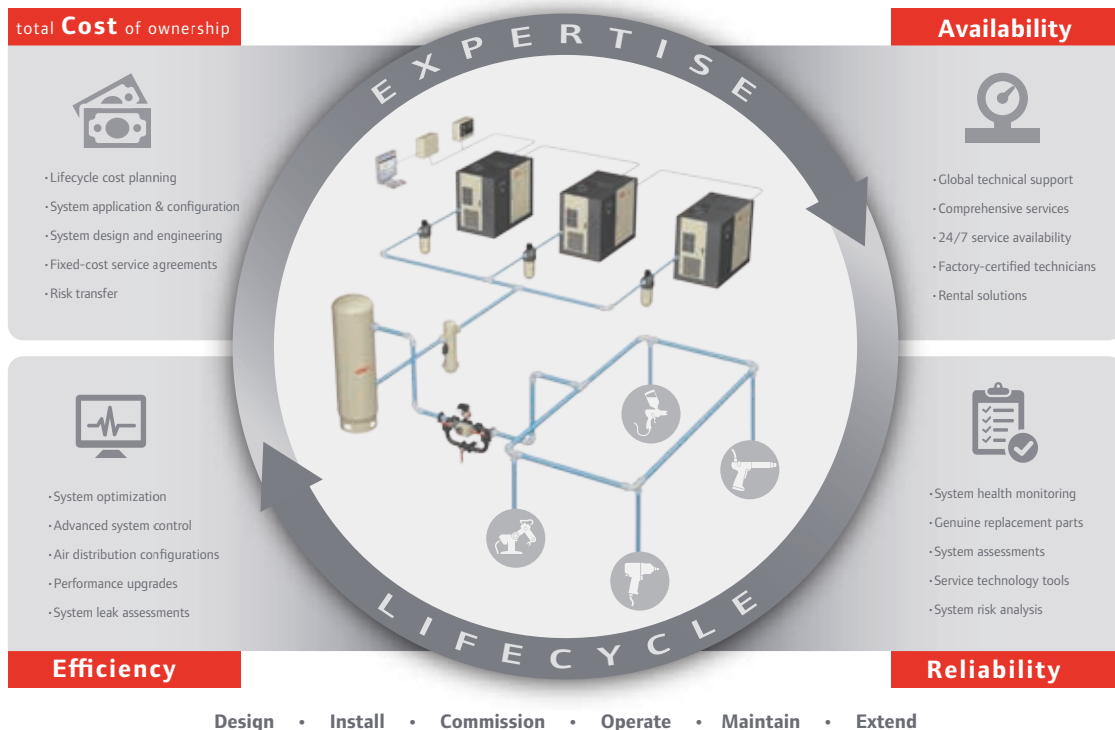
# Compressor Specifications

| Ingersoll Rand Fixed Speed – 60 Hz Performance |               |               |                                      |                 |                                                                    |                     |       |
|------------------------------------------------|---------------|---------------|--------------------------------------|-----------------|--------------------------------------------------------------------|---------------------|-------|
|                                                | Max. Pressure | Nominal Power |                                      | Capacity (FAD)* | Dimensions                                                         | Weight (Air-cooled) |       |
| Model                                          | psig          | kW            | hp                                   | cfm             | Length x Width x Height                                            | kg                  | lb    |
| UP6S-15                                        | 125           | 11            | 15                                   | 65              | millimeters<br>960 x 690 x 1,186.5<br><br>inches<br>52 x 36 x 42.5 | 538                 | 1,183 |
|                                                | 145           | 11            | 15                                   | 58              |                                                                    | 538                 | 1,183 |
| UP6S-20                                        | 125           | 15            | 20                                   | 77              |                                                                    | 538                 | 1,183 |
|                                                | 145           | 15            | 20                                   | 67              |                                                                    | 538                 | 1,183 |
| UP6S-25                                        | 200           | 15            | 20                                   | 58              |                                                                    | 538                 | 1,183 |
|                                                | 125           | 18            | 25                                   | 98              |                                                                    | 547                 | 1,203 |
|                                                | 145           | 18            | 25                                   | 92              |                                                                    | 547                 | 1,203 |
|                                                | 200           | 18            | 25                                   | 75              |                                                                    | 547                 | 1,203 |
|                                                | UP6S-30       | 125           | 22                                   | 30              |                                                                    | 117                 | 586   |
| 145                                            |               | 22            | 30                                   | 112             |                                                                    | 586                 | 1,290 |
| 200                                            |               | 22            | 30                                   | 92              |                                                                    | 586                 | 1,290 |
| Mounting Options                               | Nominal Power |               | Dimensions (Length x Width x Height) |                 |                                                                    | Additional Mass     |       |
|                                                | kW            | hp            | mm                                   | in              | kg                                                                 | lb                  |       |
| Integrated Dryer Option                        | 11            | 15            | 1,702 x 914 x 1,080                  |                 | 67 x 36 x 42.5                                                     | 102                 | 225   |
|                                                | 15            | 20            | 1,702 x 914 x 1,080                  |                 | 67 x 36 x 42.5                                                     | 102                 | 225   |
|                                                | 18            | 25            | 1,702 x 914 x 1,080                  |                 | 67 x 36 x 42.5                                                     | 112                 | 246   |
|                                                | 22            | 30            | 1,702 x 914 x 1,080                  |                 | 67 x 36 x 42.5                                                     | 112                 | 246   |
| 120 gal Tank-mounted Version                   | -             | -             | 1,962 x 914 x 1,797                  |                 | 77.5 x 36 x 72                                                     | 147                 | 327   |
| 240 gal Tank-mounted Version                   | -             | -             | 2,390 x 914 x 1,941                  |                 | 94 x 36 x 76.5                                                     | 269                 | 596   |

\*FAD (Free Air Delivery) is full package performance including all losses. Tested per ISO 1217:2009 Annex C and is measured at 10 psig lower than maximum pressure on non-TAS units and at maximum pressure on TAS equipped units.

## Your Trusted Partner in Compressed Air

Ingersoll Rand products and services optimize total **Cost** of ownership, while maximizing **Availability**, **Reliability** and **Efficiency** for the entire lifecycle of your system.





Ingersoll Rand (NYSE:IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands—including Club Car®, Ingersoll Rand®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. We are a \$13 billion global business committed to a world of sustainable progress and enduring results.



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