



# PS∆ Oxygen Generator ..

# Regalia



Regalia<sup>™</sup> 10 LPM oxygen concentrators offer the simplicity of the Advanced Technology Fractionator® (ATF) oxygen module in a system that is quiet, lightweight, and easily transportable, making it a perfect fit in applications in which the concentrator may be next to the consumer or user. Regalia concentrators are ideal for applications that do not require a prescription, but can benefit from the sound reduction of plastic housing, the convenience of a handle and casters, the unique elegance of the EZ interface, and the reliability of the ATF technology.

With the EZ interface, simply set the desired flow and the oxygen concentrator will make the necessary adjustments to meet that flow. If the unit is turned off, it returns to the most recent setting when the unit is next turned on. If a downstream flow constriction like a flowmeter or torch valve constricts the flow, it is no problem for the Regalia. When the constriction is removed, the Regalia returns to the target flow.

### **Features**

- Maintenance-free ATF oxygen module
- Valve purge noise eliminated for quiet operation
- Easy-to-read backlit flow display
- Simple keypad controls: On/off and O<sub>2</sub> increase/decrease arrows
- Oxygen concentration monitor (with 3-light display)
- Locking casters

# Typical Applications

#### Glass Industry

• Glass Work/Blowing

#### Medical

- Ozone Therapy
- Health Spas and Clubs

#### **Additional**

- Veterinary
- Hyperbaric
- Cosmetic

# **Specifications**

# Regalia

| Product Characteristics  |   |
|--|---|
| Product Flow <sup>1</sup>  | Variable 1 to 10 LPM (½ liter increments)   |
| Product Pressure (nominal)   | 7 psig (48 kPa)   |
| Product Concentration (nominal)                                    | 90-95%  |
| Product Dew Point -100°F (-73°C)                                   |   |
| Dimensions (W x D x H) (nominal) 15 x 19 x 26 in (38 x 48 x 66 cm) |   |
| Weight   | 57 lb (26 kg)   |
| Physical Connections<br>Product Gas Outlet                         | DISS fitting  |
| Ambient Operating Conditions                                       | Locate the oxygen concentrator system in a well-ventilated area that is protected from weather elements and remains between 40°F (4°C) and 130°F (54°C) inside room or operating enclosure; 0°F (-18°C) and 140°F (60°C) in storage |
| Power Requirements (Single Phase)                                  | 120 V $\sim \pm 10\%$ , 60 Hz, A or 220 V $\sim \pm 10\%$ , 50/60 Hz, A   |
| Typical Power Consumption  | Approximately 600 W   |
| Alarms   | Power failure; O <sub>2</sub> concentration (optional)  |



<sup>&</sup>lt;sup>1</sup>LPM (Liters per minute) gas measured at 1 atmosphere and 21°C / SCF (Standard cubic foot) gas measured at 1 atmosphere and 70°F



# The ATF Advantage

ATF oxygen modules incorporate proven pressure swing adsorption (PSA) principles into a unique patented design, which allows these systems to be compact, efficient, rugged, and lower in cost. The ATF module offers unparalleled design flexibility and enables applications where on-site/onboard oxygen generation was previously impractical.

A patented single rotary distribution valve built into the ATF module is continuously rotated at low speed by a small motor. The valve is maintenance free, selfcleaning, insensitive to contamination, and invulnerable to wear. It sequentially directs the flow of compressed air to a group of four sieve beds (adsorption), while at the same time another four beds are purged into the atmosphere through the valve (desorption). The remaining four of the twelve beds are interconnected through the valve to equalize pressure as the sieve beds sequentially transition between adsorption and desorption. The small amplitude pressure swings generated by the ATF's twelve sieve beds eliminate loud noise pulses, eliminate the need for a pressure regulator, and reduce compressor wear.







# Ordering Information

| Model                           | Part Number | Description   |
|---------------------------------|-------------|---|
| Regalia 5162<br>5163<br>5164    | 5161        | With oxygen concentration monitor (LED indicator) 120 V $\sim \pm 10\%$ , 60 Hz |
|                                 | 5162        | 120 V ~ ±10%, 60 Hz   |
|                                 | 5163        | With oxygen concentration monitor (LED indicator) 220 V ~ ±10%, 50/60 Hz        |
|                                 | 5164        | 220 V ~ ±10%, 50/60 Hz  |
| Shipping Information            |             | Regalia   |
| Class                           |             | 92.5  |
| Commodity Classification Number |             | 8421.39.8040  |
| Dimensions (W x D x H)          |             | 24 x 20 x 30 in (61 x 51 x 76 cm)   |
| Gross Weight                    |             | 67 lb (30 kg)   |

#### Warranty: 1 Year Parts and Factory Labor\*

An unprotected or inadequately ventilated environment, or improper control power may cause damage to the oxygen generator not covered

All performance ratings based on an ambient temperature up to 100°F (38°C), up to 1,000 feet elevation, and 80% relative humidity.



A Chart Industries Company 260 Creekside Drive