Achieve maximum energy savings, while ensuring a continuous supply of dry high-quality compressed air.

**Advanced Environmental Sustainability**
Reducing energy use not only saves money, but decreases harmful greenhouse gases that hurt the environment. By shutting off the refrigeration system during periods of low loads, D-EC dryers minimize energy waste. And, they use R-134a refrigerant that has a zero Ozone Depletion Potential (ODP) to minimize overall environmental impact.

**Higher Efficiency, Lower Cost**
The Ingersoll Rand D-EC cycling refrigerated dryer design helps you achieve optimal performance at a lower cost compared to a non-cycling design. To reduce energy consumption, the dryer refrigeration system automatically deactivates during periods of low load and features a patented heat exchanger and thermal mass circuit.

**Reliability through Experience**
Building upon extensive dryer experience, Ingersoll Rand incorporates advanced features into the D-EC dryer, such as microprocessor control, a highly efficient refrigeration system, a heavy duty drain and robust construction that enhance performance and provide maximum reliability.
**Operating Efficiency is the Bottom Line**
Ingersoll Rand D-EC dryers include innovative features to enhance the efficiency of your compressed air system and the quality of the air produced.

- Patented, energy saving heat exchanger
- Low pressure drop
- All energy savings readings on control panel
- Thermal mass cold energy storage reduces dryer compressor run time
- R134a refrigerant lowers energy consumption

**Simply Reliable**
With over fifty years of dryer experience, Ingersoll Rand has developed a comprehensive performance testing program and simplified dryer design that enhance product reliability and ease-of-use.

- Compact size
- Advanced circuit design eliminates the need for thermal expansion valves and fan control switches

**Low Operating Cost**
In a typical compressed air dryer, the refrigerant compressor runs continuously, regardless of demand. The D-EC dryer deactivates the refrigeration system when demand is low. This combined with a low pressure drop helps the D-EC dryer provide lower operating costs.

**Average 5-Year Lifecycle Cost Comparison**

- Patented heat exchanger design provides high heat transfer efficiency, reducing compressor run time and energy costs.
- Low pressure drop.
- Minimized shipping and installation costs.
- A true plug and play installation with single point connections.
- Perfect match for the Ingersoll Rand high-efficiency Nirvana compressor and for critical applications where the demand for compressed air fluctuates on a regular basis.

Every D-EC dryer is manufactured with premium components under stringent quality control resulting in years of dependable operation.
**How the D-EC Dryer Works**

Most facilities operate with varying degrees of compressed air usage. The Ingersoll Rand D-EC dryer meets actual air treatment demand by minimizing operating time through the use of thermal mass, cold energy storage.

1. Compressed air enters the dryer through the heat exchanger
2. Air is cooled by cold outgoing air in the pre-cooler/re-heater
3. Circulating glycol cools the compressed air allowing the refrigerant compressor to turn off during low demands
4. Condensed liquid is removed, which is purged using the dryer’s drain valve
5. Thermal mass, cold energy storage reduces compressor run time saving energy
6. Refrigerant compressor runs only as needed

---

**Ingersoll Rand...At Your Service**

No matter where your facility is located, Ingersoll Rand is committed to serving you 24 hours a day, seven days a week, available to support you with innovative and cost-effective service solutions that will keep you running at peak performance.

Let Ingersoll Rand handle the pressures and responsibilities of owning a compressed air system with our signature service contract.

**With PackageCare, you can...**

- Control costs and keep your equipment running at peak efficiency
- Protect yourself from all repair and replacement expenses over the life of the agreement
- Maintain or improve the operational efficiency of any compressor, regardless of age, make or model
### Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow Rate</th>
<th>In/Out Air</th>
<th>Operating kW*</th>
<th>Dimensions (Width x Depth x Height)</th>
<th>Weight kg</th>
<th>Weight lb</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>m³/hr</td>
<td>scfm</td>
<td>Connect Size</td>
<td>kW</td>
<td>in</td>
<td>m x mm</td>
</tr>
<tr>
<td>D17EC</td>
<td>17</td>
<td>10</td>
<td>1/2” FPT</td>
<td>.35</td>
<td>500 x 386 x 662</td>
<td>19.69 x 15.19 x 26.05</td>
</tr>
<tr>
<td>D31EC</td>
<td>31</td>
<td>18</td>
<td>1/2” FPT</td>
<td>.43</td>
<td>500 x 386 x 662</td>
<td>19.69 x 15.19 x 26.05</td>
</tr>
<tr>
<td>D41EC</td>
<td>41</td>
<td>24</td>
<td>1/2” FPT</td>
<td>.45</td>
<td>500 x 386 x 662</td>
<td>19.69 x 15.19 x 26.05</td>
</tr>
<tr>
<td>D59EC</td>
<td>59</td>
<td>35</td>
<td>1/2” FPT</td>
<td>.53</td>
<td>500 x 386 x 662</td>
<td>19.69 x 15.19 x 26.05</td>
</tr>
<tr>
<td>D85EC</td>
<td>85</td>
<td>50</td>
<td>3/4” FPT</td>
<td>.68</td>
<td>500 x 386 x 662</td>
<td>19.69 x 15.19 x 26.05</td>
</tr>
<tr>
<td>D127EC</td>
<td>127</td>
<td>75</td>
<td>1” FPT</td>
<td>.94</td>
<td>570 x 422 x 772</td>
<td>22.44 x 16.63 x 30.38</td>
</tr>
<tr>
<td>D170EC</td>
<td>170</td>
<td>125</td>
<td>1” FPT</td>
<td>.98</td>
<td>570 x 422 x 772</td>
<td>22.44 x 16.63 x 30.38</td>
</tr>
<tr>
<td>D212EC</td>
<td>212</td>
<td>125</td>
<td>1” FPT</td>
<td>1.10</td>
<td>570 x 422 x 772</td>
<td>22.44 x 16.63 x 30.38</td>
</tr>
</tbody>
</table>

Performance based on ISO 7183, Table 2, Option A2 (100 psig inlet air pressure, 100°F inlet air temperature, 100°F ambient air temperature).

Voltage for all models is 115/1/60.

*Average kilowatts per hour of dryer operation at full rated capacity.

All models feature a 1/4” OD flexible drain line, have a 200 psig maximum working pressure and use R134a refrigerant.

### Features Include

- Multi-Layer Heat Exchanger
- Digital Controller
- Fully Hermetic Refrigeration Compressor
- R134a Refrigerant
- Efficient Refrigeration Condenser
- Glycol Circulation Pump
- Timed Solenoid Drain
- Drain Isolation Valve
- Compact Size

Optional No-Loss Drain (D127EC - D212EC only)

---

Ingersoll Rand (NYSE:IR) advances the quality of life by creating and sustaining safe, comfortable and efficient environments. Our people and our family of brands—including Club Car®, Ingersoll Rand®, Schlage®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; secure homes and commercial properties; and increase industrial productivity and efficiency. Ingersoll Rand products range from complete compressed air systems, tools and pumps to material handling systems. The diverse and innovative products, services and solutions enhance our customers' energy efficiency, productivity and operations. We are a $14 billion global business committed to a world of sustainable progress and enduring results. For more information, visit ingersollrand.com.

Ingersoll Rand, IR, the IR logo and PackageCare are trademarks of Ingersoll Rand, its subsidiaries and/or affiliates. Ingersoll Rand compressors are not designed, intended or approved for breathing air applications. Ingersoll Rand does not approve specialized equipment for breathing air applications and assumes no responsibility or liability for compressors used for breathing air service.

Nothing contained on these pages is intended to extend any warranty or representation, expressed or implied, regarding the product described herein. Any such warranties or other terms and conditions of sale of products shall be in accordance with Ingersoll Rand's standard terms and conditions of sale for such products, which are available upon request.

Product improvement is a continuing goal at Ingersoll Rand. Designs, available functions and specifications are subject to change without notice or obligation.

© 2013 Ingersoll Rand DCL - 12-013-01