Pegasus 50 - 200

Premium Quality ‘Designer’ Dehumidifier

- Pool room or ‘through wall’ installation
- Air heating coil options
- Integral control panel
- Aluminium frame chassis
- Digital low noise fans
- Genuine UK manufacture
- Genuine nationwide ‘on-site’ service support by Heatstar’s own expert technicians
- Electronic and remote control options
**Introduction**

A considerable amount of water evaporates from the surface of a heated swimming pool or spa pool. If the pool is indoors, all this evaporated water is effectively trapped within the pool room in the form of airborne humidity. As the evaporation from the pool continues, the amount of water within the room air quickly increases until the point when the air can hold no more water. Surface condensation will then occur on the windows and ceiling etc of the room and condensation can also actually occur within the structure of the building. This can soon lead to extensive mould growth, rapid deterioration of the décor and possible eventual structural problems.

Effective air heating is also important within a pool room as the quantity of water which evaporates from the pool surface will be much increased if the air is not able to be maintained at a sufficiently high temperature.

With the option of an integral air heating facility, the Pegasus range of dehumidifiers provides an attractive, convenient and economical solution to condensation control.

**Simple installation**

The Pegasus is simply attached to the supporting wall using the fixed mounting bracket provided. Floor mounted and 'through the wall' versions are also available. The Pegasus will require a mains electrical supply and condensate water drain pipe.

**Dehumidifying heat pump with ‘Active’ heat recycling**

The pool room air is re-circulated through the Pegasus by the integral fan. Inside the unit the humid room air is passed through the cold refrigerated coil matrix of the dehumidifying heat pump where, upon contact, the excess humidity condenses to cold water, thus the air is dehumidified prior to being returned back to the room.

The warm, moisture laden pool room air is rich in energy and the dehumidifying heat pump is able to absorb both ‘Sensible’ (dry heat) and ‘Latent’ (steam-like energy available within the airborne water vapour). This heat, together with ALL the electrical energy used to operate the dehumidifier, is then returned back into the pool room air.

Energy recycling efficiencies of up to 350% are possible through this process of ‘active’ heat recycling via the dehumidification process.

**Attractive styling and colour options**

The Pegasus enjoys stunning ‘Art Deco’ styling, combining coloured PVC coated steel and Perspex. Available in white as a neutral colour or, alternatively, natural wood grain. Many other colours are available on request. The low budget ‘plasticy’ appearance associated with older dehumidifier designs is completely avoided.

The quality and robust appearance of the facia, together with the elegance of the laminate decorative end panels ensures that the Pegasus will naturally complement the pool room décor.

**Automatic control**

The Pegasus is fully automatic, incorporating an easy-to-use control panel with built-in sensors to accurately maintain the required environment. Electronic or remote controls are available as an option.

**‘Through Wall’ version**

With the ‘Through Wall’ version of the Pegasus, the dehumidifier can be concealed by being mounted behind a wall of the pool room in an adjoining area. The pool room air would travel to and from the dehumidifier via apertures through the wall and all that can be seen from the pool room are louvres which cover the apertures.

**Pool room air heating option**

To assist in achieving the optimum pool room temperature, an integral air heating coil, together with automatic control, can be incorporated within the Pegasus dehumidifier.

This coil transfers heat piped from a separate boiler into the pool room air as it is re-circulated through the Pegasus by the internal fan. Alternatively, an electric air heating coil option is also available.

**Quiet operation**

The Pegasus uses a special low-speed, high-efficiency, digital centrifugal fan, ensuring minimal operational noise. To help absorb vibration, the refrigeration compressor is positioned on anti-vibration rubber mounts.

**Air distribution into pool room**

The warm, dry conditioned air is discharged back into the pool room via a special vent in the facia of the Pegasus. This vent is designed to enable the air to be supplied at the optimum velocity and angle to obtain the best possible dispersion over a range of installation heights.

**Low temperature application**

De-frost versions are available to also enable use in cold, unheated areas.

**Motor protection**

The Pegasus is equipped with an automatic cut-out device to automatically switch off the compressor motor in the event of low refrigerant pressure. The compressor is also fitted with a thermal overload protection.

**Highest quality construction**

The Pegasus is designed and constructed to the highest possible standard and all components have been especially selected for use within corrosive swimming pool environments.

For maximum durability and strength, the core unit is constructed using a 30mm thick anodised aluminium frame chassis. All panels and facia are formed from robust galvanised steel with a tough PVC coating to prevent corrosion.

The low operating pressure refrigeration system is filled with zero ozone depletion eco refrigerant and is completely hermetically sealed to guard against leakage.

The Pegasus has an IPX4 enclosure rating.

**Energy Related Product Directive compliance (ERP)**

The European Union Directive for ‘Energy Related Products’ is now in force and encompasses sweeping legislation which impacts upon ventilation product engineering, efficiency and performance rating. The Pegasus fully complies with the new directive.
### Pegasus installation

#### Wall mounted application

- **Warm dry air** from the pool room is directed to the plant room.
- **Humid air** is introduced into the pool room.
- **Condensate water** is collected and directed back to the pool room.

#### ‘Through wall’ application

- **Warm dry air** is supplied from the plant room to the pool room.
- **Humid air** is extracted from the pool room and directed to the plant room.
- **Condensate water** is collected and directed back to the plant room.

### Pegasus standard performance specifications

<table>
<thead>
<tr>
<th>Type</th>
<th>50</th>
<th>100</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air recirculation fan duty</td>
<td>m³/Hr</td>
<td>690</td>
<td>1180</td>
</tr>
<tr>
<td>Fan type</td>
<td>Forward curved, direct drive, electronically commutated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dehumidifying heat pump</td>
<td>L/Day</td>
<td>40.8</td>
<td>81.6</td>
</tr>
<tr>
<td>Room air heating potential</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dehum heat pump recycled heat</td>
<td>kW</td>
<td>2.5</td>
<td>5.0</td>
</tr>
<tr>
<td>LTHW coil option</td>
<td>kW</td>
<td>2.7</td>
<td>4.0</td>
</tr>
<tr>
<td>Electric coil option</td>
<td>kW</td>
<td>2.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Rated conditions</td>
<td></td>
<td>Pool air: 30°C/60% R.H. Pool water: 28°C</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ambient: 7°C/100 R.H. Winter: 28°C/45% R.H. summer</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LTHW: 70°C Flow/50°C return</td>
<td></td>
</tr>
</tbody>
</table>

Due to continuous development, the right to alter specifications without notice is reserved. E&OE.
Rigorous testing procedures
Prior to a new Pegasus unit leaving the Heatstar factory, it is first subjected to a thorough procedure of testing and appraisal within Heatstar’s own climatic chamber to ensure that all aspects meet the required quality standards. Individual certificates of testing are provided.

Factory supported warranty and maintenance
The Pegasus comes with the peace of mind of a comprehensive ‘on-site’ warranty within the UK. Also available are extended warranty options and the benefit and assurance of future routine servicing by Heatstar’s own technicians to ensure minimal maintenance costs, a very long operating life and that the Pegasus is always able to obtain optimum efficiency.

Free system design service
Heatstar offer a free, computer-aided system design facility providing accurate and precise equipment selections, installation schemes and economic assessments. Heatstar’s highly experienced team of experts are available for consultation on all related aspects, without charge or obligation.

Why choose Heatstar?
Heatstar is a specialist British manufacturer and the renowned leading authority for the application of environmental control technology for indoor swimming pools. Heatstar have pioneered the innovation, design and development of modern, highly energy efficient, systems and are specified with total confidence by the UK’s leading pool building experts.

A flag-bearer for energy-efficiency for over three decades, Heatstar continue to play a huge part in making swimming pools role models for energy savings and reduced carbon emissions.

Through the years, over 10,000 Heatstar systems have been supplied within the UK and also exported to numerous Countries.

When investing in equipment of this nature, confidence and assurance in the brand are important considerations. Needless to say, the performance, quality and, very importantly, the long-term reliability and durability of Heatstar and their products systems have been demonstrated beyond question.

Contact us
Contact Heatstar for detailed specifications and a full analysis of your swimming pool heating and environmental control requirements.

Tel +44 (0)1983 521465
Fax +44 (0)1983 822016
Email info@heatstar.com

www.heatstar.com