CyberLab

Precision air conditioning unit for a constant climate in archives, warehouses, museums and laboratories
Technical development from Germany

We put a great deal of experience and innovative spirit into our air conditioning systems. Engineers, specialist departments and sales employees work closely together and are involved through all stages of development, all the way to the finished product. We brook no compromise where the efficiency of our products is concerned, and cost-effective operation is at the heart of our endeavors.

In 1971 we began specializing in the development and production of precision air conditioning units and chillers for data centers. That’s a wealth of experience gathered over 40 years from many thousands of projects that we’ve implemented worldwide.

Test to your specifications

In our state-of-the-art, 700-square-meter Test Center with its various climate chambers, we can perform a variety of tests on precision air conditioning systems. If you are interested in a STULZ solution, you can book a witness test in our Test Center. This allows you to have the desired air conditioning system tested according to your exact specifications, creating transparency and providing you with information about the system’s performance and energy consumption.

Intelligent solution for special applications

In laboratories, archives, museums and warehouses, the temperature and air humidity need to be kept constant to ensure that sensitive stored goods do not deteriorate.

With its new CyberLab unit, STULZ offers a solution that is both reliable and efficient, and was developed especially for these kinds of situations, with no or just a low heat load.

STULZ has been an expert in the cooling of mission-critical applications for over 40 years. Now, we also have a standardized solution for you, which is quick and easy to install.

Benefits at a glance

• The market’s first standardized unit for special applications of this kind
• Compact design for easier transport and installation
• Satisfies the hygiene requirements of VDI 6022
• Designed for continuous, no-downtime operation over many years
• High-quality, perfectly harmonized components
• Precise control system
• Use of EC Technology for maximum efficiency
• Opportunity to get your unit tested in our Test Center
• Service available worldwide
Flexible and simple installation

The compact CyberLab units can be installed in the room quickly and easily.

Hygiene requirements to VDI 6022

The CyberLab was designed to comply with the requirements of the VDI 6022 German hygiene regulations. In order to satisfy these requirements, among other things the units are fitted with four windows. This enables you to check the condition of the condensate tray and heat exchanger easily at any time, and so prevent the growth of bacteria.

Humidification

For humidification, our STULZ UltraSonic BNB is connected externally and controlled by the CyberLab controller. These STULZ units are perfectly coordinated to guarantee optimum operation.
EC compressor for maximum efficiency

- Infinite compressor control for precise temperature regulation
- Maximum efficiency especially in partial load mode
- Constant supply air temperature
- Integrated compressor soft start to protect the power line
- Long service life thanks to continuous operation without compressor on/off cycles

Precise control for maximum reliability

To ensure the highest possible standards when it comes to reliability and efficiency, the air conditioning and the control system must work in perfect harmony. That is why here at STULZ we research and develop our controllers ourselves.

The CyberLab is equipped with our innovative C7000, which controls all components, including the external STULZ humidifier, with the utmost precision. This keeps the temperature and air humidity precisely constant, while cutting operating costs to a minimum.

Technical data

CyberLab units are available in an air-cooled Upflow version.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cooling capacity (kW)</td>
<td>20.1</td>
</tr>
<tr>
<td>Sensible cooling capacity (kW)</td>
<td>25.1</td>
</tr>
<tr>
<td>Output control range (%)</td>
<td>0-100</td>
</tr>
<tr>
<td>Power consumption (kW)</td>
<td>5.9</td>
</tr>
<tr>
<td>Air flowrate (m³/h)</td>
<td>6000</td>
</tr>
<tr>
<td>Noise level (dBA)</td>
<td>57</td>
</tr>
<tr>
<td>External static pressure (Pa)</td>
<td>50</td>
</tr>
<tr>
<td>Max. external static pressure (Pa)</td>
<td>450</td>
</tr>
<tr>
<td>Refrigerant</td>
<td>R410a</td>
</tr>
</tbody>
</table>

Note:
All data apply at 400V/3 ph/50 Hz with 50 Pa ESP
Data for 60 Hz available on request.

STULZ UltraSonic BNB

<table>
<thead>
<tr>
<th>Model</th>
<th>Humidifying output (kg/h)</th>
<th>Number of oscillators</th>
<th>Power consumption (VA)</th>
<th>Dimensions (WxHxD in mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BNB 5000A</td>
<td>5.0</td>
<td>10</td>
<td>430</td>
<td>694x256x200</td>
</tr>
<tr>
<td>BNB 8000A</td>
<td>8.0</td>
<td>16</td>
<td>670</td>
<td>1024x256x200</td>
</tr>
</tbody>
</table>

1 Return air conditions: 24°C/45 % r. h.
2 Noise level at a height of 1 m and a distance of 2 m in front of the unit, in free-field conditions and with nominal data.
Technical data subject to change without notice.
Close to you around the world

With specialist, competent partners in ten German branches and in subsidiaries and exclusive sales and service agents around the world.

Our seven production sites are situated in Europe, North America and Asia.

For further information, please visit our website at www.stulz.com