AirBooster 2

More efficient cooling of server racks thanks to airflow management for targeted cooling of hot spots
STULZ air conditioning systems for mission-critical applications – around the globe

For 40 years we have been one of the world’s leading manufacturers of air conditioning solutions for mission-critical applications. For our customers, we develop and produce air conditioning systems and chillers, plan individual air conditioning solutions, implement the systems and keep them up and running with our own service department.

Our headquarters are in Hamburg. With 21 subsidiaries, 10 production sites, and sales and service partners in over 140 countries, we make sure we are close to our customers wherever they are in the world.

Technical peak performance from Germany
It is the combination of decades of experience and a continuous innovative spirit that makes STULZ unique. From engineers to customer advisers, we collaborate in close-knit teams to develop and continually optimize our air conditioning and chilled water systems throughout all stages of development. So it should come as no surprise that our systems are extremely reliable and durable, setting the benchmark for energy efficiency around the globe.

High quality service worldwide close to you
Our trained and experienced sales and service partners are located in over 140 countries. The resulting proximity to our customers allows fast response times. In addition, regular training courses and an active exchange of information ensure high quality and an extensive knowledge of all our products. This way, you can be sure your products are in the best hands and get the right maintenance – all over the world.
Server racks deployed in a data center feature different heat loads according to the application. In this era of server virtualization and cloud technologies, changing utilization is a matter that has to be addressed.

It results in the over or undersupply of cold air to your servers, which can lead to increased operating costs or even overheating with subsequent server failure.

If you operate a data center with traditional closed-circuit air conditioning and want to cool your servers based on need, STULZ has the ideal airflow management solution for you.

In just a few simple steps, the AirBooster 2 units from STULZ can be installed in the existing raised floor directly in front of the server rack, where they immediately ensure optimum air conduction and hot spot prevention.

**Benefits at a glance**

- Control based on cooling needs for an efficient and reliable air supply
- Easy installation, operational in minimal time
- UL and CE compliant
- Can be connected to BMS systems
- Grills available in two designs for individual requirements
- Perfect fit for standard raised floor systems with grid size 600 mm x 600 mm
- Low height allows installation under the raised floor (400 mm)
- Service available worldwide
Do you want cooling precisely targeted at hot spots in your data center? The AirBooster 2’s manually adjustable air conduction fins are designed to provide just this kind of pinpoint accuracy. The fins are precisely positioned to target locations that require increased cooling. This way, a concentrated flow of air acts on hot spots. The result is ideal supply air conditions without complicated and expensive installations and enclosures.
Benefits at a glance

• High precision cooling of hot spots in server racks
• Easy installation, operational in minimal time
• Adjustable air conduction fins for targeted air conduction in two zones
• EC fan for pinpoint accuracy of airflow supply
• Airflow of up to 4,360 m³/h
• Temperature measurement by three sensors
• Optional pressure control
• Low power consumption in rated operation
• No enclosure required

Air conduction in two zones

The air stream from the AirBooster 2 units can be aimed at two zones per server rack. The manually adjustable air conduction fins allow the airflow to be directed to the most heat-stressed areas, in line with server load.

The units are fitted with a variable-speed EC fan, a controller and several temperature sensors. These sensors, which are affixed to the server at different heights, measure the temperature of the air at the server inlet. The controller regulates the fan speed based on the measured temperature values and a configurable setpoint. If the server inlet temperature rises, the fan speed is increased to guarantee sufficient cooling of servers.
Optimum operating conditions thanks to smart control

For units with integrated control
- User-friendly interface and display
- RS485 interface for BMS
- RTU Modbus protocol
- Connection terminals for remote control On/Off
- Auxiliary contact for general alarm signals
- Three temperature sensors
- Unit of measurement on temperature display: °C or °F
- Illuminated On/Off switch
- LED status light

Grills in two designs

Airflow management units are supplied with either a light-duty or a heavy-duty grill, depending on requirements.

Light-duty grill for optimum air conduction
- Flow-optimized grill for small pressure drops
- BS EN 13264:2001 classification
  - Distributed load 33 kN/m²
  - Point load 1.5 kN over 25 mm × 25 mm surface area
- Dimensions (width x length x depth): 598 mm × 598 mm × 20 mm
- Can be adjusted to various raised floor grill thicknesses: 23–44 mm
- Color: RAL 7047

Heavy-duty grill for protection against mechanical stress
- Available as an option
- Protects the units against loads relating to lift trucks
- BS EN 13264:2001 classification
- Point load 4.5 kN over 25 mm × 25 mm surface area
- Dimensions (width x length x depth): 598 mm × 598 mm × 30 mm
- Can be adjusted to various raised floor grill thicknesses: 33–44 mm
- Color: RAL 7047
Technical data

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Airflow 3,900 m³/h</th>
<th>Airflow 4,360 m³/h</th>
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<tbody>
<tr>
<td>Width, length</td>
<td>mm</td>
<td>598 x 598</td>
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<tr>
<td>Depth</td>
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<td>Power consumption</td>
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<tr>
<td>Cooling capacity</td>
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<tr>
<td>Delta T 10 K</td>
<td>kW</td>
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<tr>
<td>Delta T 20 K</td>
<td>kW</td>
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</tr>
</tbody>
</table>

_Bemerkung:_

¹ Delta T: Difference in air temperature between the server inlet and server outlet

For additional information on Delta T, please scan the QR code or visit our website at www.stulz.de/url/1E03q
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 ten production sites are situated in Europe, North America and Asia.

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