



## Humidification in data centers

Large data centers generate enormous amounts of heat which they release into the room air. Without cooling, the operation of the server systems would automatically lead to overheating and dehydration of the room. As servers and storage systems operate most reliably at an ambient temperature of 18-21°C and a relative humidity of over 45% RH, air conditioning of the rooms is absolutely essential. The use of adiabatic humidification systems is an energy- and cost-efficient way of regulating humidity and room temperature. Evaporative coolers can be used in exhaust air cooling and significantly reduce operating costs for server cooling. The cooling effect achieved in the exhaust air is transferred to the supply air. Conventional air conditioning systems can therefore be dimensioned considerably smaller.

A sufficiently high air humidity in the server rooms counteracts the development of electrostatic discharges. Damage to expensive hardware or valuable data can thus be avoided. In addition, the improved air humidity effectively prevents the health hazards to employees typical of a dry working environment.

## The advantages at a glance

- Risk reduction of server downtime and data loss
- Protection against dangerous electrostatic discharges
- Healthy and pleasant room climate for the employees in the company
- Reduction of operating costs through the use of adiabatic cooling





Constant humidity for industry and processes