

Photo: Stock image

Calorex chosen for crucial data protection role

One of the largest data centre operators in Singapore has put its trust in specialist environmental control machines supplied by world leading Calorex, to help protect its valuable computer equipment from potentially catastrophic condensation.

The company, which oversees a network of world-class data security bases in the Asia Pacific, ordered 48 DH150 dehumidifiers for the suites within its new data centre.

To maximise system reliability, each suite is temperature and humidity controlled with a constant flow of fresh air to prevent contaminate build up. While room cooling is provided by a central plant, the humidity in each room is controlled by the Calorex DH150s, and as the site is tropically located, this is a key component within the environmental control package.

"Humidity control is essential to stop moisture in the fresh air supply from condensing into the room and potentially damaging equipment," comments Richard Carrington Calorex Managing Director.

"Calorex means the best in quality and reliability for industrial dehumidification with the added bonus of international coverage by experienced staff," he adds.

Unlike traditional heating methods, dehumidifiers will control atmospheric conditions by taking potentially damaging moisture out of the air.

Drying by traditional heating involves continuously warming a stream of outside air on a constant 'in and out' cycle equivalent to eight times the volume of the room every hour. In a facility that requires cooling, this approach will not work.

"Calorex means the best in quality and reliability for industrial dehumidification with the added bonus of international coverage by experienced staff" Dehumidification, on the other hand, is much more sophisticated. It re-circulates the same air and physically removes moisture from it. As a by-product of dehumidification, heat is returned to the airstream, including some or all of the energy used to drive the dehumidifier. In an application where the heat is not required, the smaller power consumption of the DH150 is therefore not only a cost saving, it reduces cooling demand on the central plant compared to alternative systems.

The Calorex DH150s were chosen due to their very low power consumption and low maintenance cost. In fact, a power consumption comparison against alternative systems demonstrated that the DH150s would consume two thirds less energy, and ongoing servicing costs are limited to a function check. As an additional bonus the DH150s are simple to install and do not require duct connections to outside walls.