



Conteg Pressure control

Accessories for CoolTeg Plus



Application

Installation of the Pressure Control accessory reduces pressure generated by CoolTeg Plus unit fans on the servers in contained cold/hot aisles. This solution extends server lifetime and reduces power consumption of CoolTeg Plus cooling fans.

Main advantages

- Extends server lifetime
- Reduces fan power consumption
- Eliminates hotspots and dustiness in front of servers
- Can be install directly into the CoolTeg Plus or in a separate box

Technical description

This accessory can be used only in case of contained aisles with mechanically separated hot and cold zones. Enables fan control of the whole CoolTeg Plus group based on pressure difference between hot and cold zones. User can adjust demanded overpressure in the cold zone. If the overpressure in this zone is lower, it means that the airflow through the ICT has increased. All connected CoolTeg Plus units automatically increase fan speed to provide the required amount of air. This accessory is suitable for contained hot zones as well. CoolTeg plus unit fans keep slight overpressure in the cold zone.

Conteg recommends adjusting the overpressure in the cold zone (in front of the servers) to 2 Pa to avoid potential leakage of air from hot into cold zone, reducing dustiness and hotspots in front of the servers.

Pressure control is connected to any CoolTeg Plus unit in a group. The particular parameter for pressure control can be set during the commissioning phase. Parameters for pressure control can be set via the color touch-screen display for all units in the zone.

For greater safety, two pressure control modules can be used for one zone, connecting them to two different units. If the pressure control or controller of the CoolTeg Plus unit fails, each unit in the zone is individually controlled by the temperature difference, as in standard mode.

Version:

AC-PRESSURECONT-1

Installed in a separate enclosure. This pressure controller contains a very precise differential pressure meter, expansion control box and transformer. Can be mounted either on the wall of the room or in an IT rack. Air pressure is transferred via hoses leading from cold and hot zone to the precise differential pressure meter. A separate 230V power supply with C14 slot is necessary for this version. The pressure controller must be connected to one of the CoolTeg Plus units via communication cable.

AC-PRESSURECONT-2

Installed in a separate electrical box inside one of the CoolTeg Plus units. It contains a very precise differential pressure meter and an expansion control box. Power supply is ensured via common transformer of CoolTeg unit. Also the communication between Pressure control and CoolTeg controller is ready from Conteg production. Air pressure is transferred by hoses leading from cold and hot zone to the precise differential pressure meter, installed in the electric box.

Pressure hoses are installed in the room in the correct position so the air does not blow directly into the hole. It allows measurement of static pressure. It is possible to use a pipe with more holes. If the Pressure control module is installed outside the unit (AC-PRESSURECONT-1) in a hot zone, one air input can be left without a hose.