



# Experienced.

## Cooling Computer Data Centers for Decades

Heat may be your friend on a tropical vacation but in a computer data center, heat is your number one enemy! Griswold Controls valves have been used in Computer Data Centers all across the country to help the HVAC System remove that computer-crippling heat. They also have year round cooling requirements due to the high volume of computer equipment like servers generating tremendous amounts of heat; the load can be six times the cooling requirement of a traditional office building. Unlike most HVAC systems where comfort is the primary objective for design, engineers designing Computer Data Centers have additional details to consider that impact the life and performance of the computer equipment. Therefore it's critical that these systems operate with consistent high performance in the most cost efficient method possible.

## Efficient.

### Reduce Energy to Cool Buildings

For over 55 years, Griswold Controls has improved the efficiency of hydronic HVAC equipment (coils, AHU, terminal units, etc) in HVAC Systems by controlling the flow rate of hot or cold water to the coils. Griswold Controls designed the first balance valve on the market, our automatic flow limiting cartridge controls the flow regardless of pressure changes in the system; which guarantees the coil performs at the engineer's design Delta T at all times. Besides installing the flow limiting valves on CRAC units to control the chilled water, these valves have also been installed on cooling coils mounted directly on the servers themselves. In the early 2000s, Griswold Controls was the first manufacturer to market pressure independent valves to Computer Data Centers. Controlling the climate is a precise job and a pressure independent valve controls the flow at all times, even in reduced load conditions. Griswold Controls' latest product line, the EPIC System, directly controls the Delta T of the coil, reducing energy from over-pumping while maintaining adequate cooling.



## Reliable.

### Guaranteed Cooling

Automatic flow limiting valves, pressure independent valves, and the EPIC System are all automatic and don't require any balancing at the job site, so the flow rate or Delta T at the coil meets the engineer's design specifications from the moment the system is started up. They continue to provide design flow or design Delta T even as the building is occupied and the loads change, guaranteeing the correct cooling at all times.