

Solutions for Data Center Cooling

Data centers generate an enormous amount of heat. Managing that heat is mission-critical. Reliable cooling systems are essential to maintaining uptime, protecting sensitive equipment, and preventing costly disruptions. Every component of your HVAC and fluid movement system must be built for continuous, high-performance operation.

AC DRIVES

Fuji Electric AC Drives provide precise and dependable speed control for the air handlers, chillers, and pumps that keep your data center running cool and steady—no matter the load.

- Rugged and durable: Built to handle 100% full load operation, even in harsh conditions.
- Outdoor-ready: Designed for mounting in NEMA 3R enclosures with reliable operation in environments up to 50°C.
- Wide power range: Available from 1 hp to 1,200 hp at 460V, including single-module high-power models (500–1,200 hp) ideal for large-scale cooling systems.
- Built to last: Backed by an industry-leading 3-year warranty, giving you peace of mind and proven performance.



Why It Matters

Efficient cooling is not just about temperature control — it's about performance, energy savings, and system longevity. With Fuji Electric's AC Drives, your data center gains:

- Stable operation with continuous full-load performance
- Reduced energy consumption and better system efficiency
- Long-lasting components that lower maintenance needs



HMI UNITS

Fuji Electric HMI's provide the ability to closely monitor energy usage, and system status. Our HMI Displays aid in keeping you apprised of the health of your Data Center HVAC systems. The color touchscreen HMI display provides easy operation, as well as comprehensive information and diagnostics.



Why It Matters

- Operation Log Function
- Recipe Function
- PLC 8-Way communication
- MES Function
- Device Memory Map
- Trend Graph
- Ladder Transfer
- PDF Viewer
- VNC Function
- VPN Remote Access

INSTRUMENTATION & CONTROL

Flow meters in data centers are crucial for optimizing cooling efficiency, monitoring energy use, and ensuring reliability by precisely measuring liquid (chilled water) and gas (compressed air) flow in HVAC systems, from chillers to server racks, helping managers find leaks, balance systems, and cut costs. They provide real-time data to prevent overheating, manage energy consumption, and maintain stable conditions for IT equipment, supporting sustainability goals and operational health.



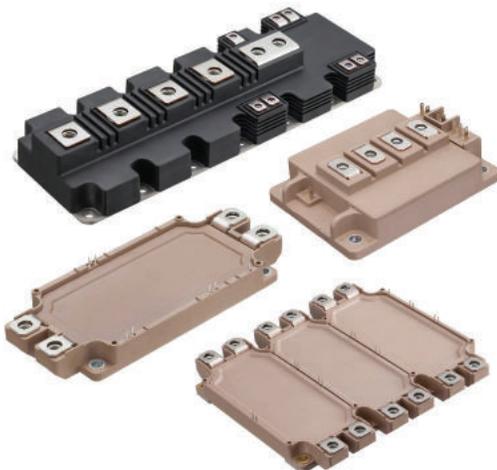
Why It Matters

- Accurate gauge of the working condition of your equipment.
- Energy performance indicators to allow accurate and continuous monitoring of consumption.
- Detect any possible deviations or malfunctions, anticipate failures, and optimize operations.



SEMICONDUCTORS

Fuji Electric's semiconductors provide energy efficiency with our state-of-the-art IGBT technology creating more reliability for your application. Our IGBT modules and semiconductors offer 175 degrees C maximum continuous temperatures (T_{jop}) to help power and control equipment.



Why It Matters

- Size Reduction – Size Reduction of IGBT Modules was realized by the 7th Generation Chip & Package Technologies.
- Low Loss Energy – The Inverter Losses of the 7th Generation IGBT Modules were reduced by 10% compared to the 6th Generation.
- High Reliability – Continuous Operating Temperature was Expanded up to 175°C by Improvement of Chip Characteristics & Package Reliability