Johnson Controls

CHANGING THE TIDE IN THE DATA CENTRE INDUSTRY

DIGITAL REPORT

JOHNSON CONTROLS:

CHANGING THE TIDE IN THE DATA CENTRE INDUSTRY

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(Left to right): Todd Grabowski, Anthony Seiler, Aaron Lewis, Davin Sandhu of Johnson Controls

Johnson Controls executives underscore the company's three-pillar strategy as a key driver in meeting accelerating global hyperscale and colocation demands

As the global data centre industry undergoes unprecedented transformation, the rise of AI workloads is intensifying pressure on infrastructure and introducing new power and thermal management challenges.

To address these demands, Johnson Controls, a Fortune 500 leader in building technologies, is leveraging its Global Data Centre Solutions (GDCS) division to better support hyperscale operators and colocation providers.

With a worldwide footprint, the company is expanding its efforts to deliver integrated solutions across the thermal management chain, intelligent building automation, white glove service and parts availability, fire suppression and security.

"We've been involved in data centres now for over two decades and have seen the growth of data centres expanding globally," says Todd Grabowski, President of GDCS at Johnson Controls. "The formation of the Johnson Controls global data centre organisation has really been a customer-led initiative.

"As our customers were expanding globally, they were looking for partners that could expand with them and that had the scalability and local market presence to ensure successful data centre implementation."

"The formation of the Johnson Controls global data centre organisation has really been a customer-led initiative"

TODD GRABOWSKI

TITLE: PRESIDENT FOR GLOBAL DATA CENTER SOLUTIONS

Todd brings over 30 years of leadership at Johnson Controls and is President of Global Data Center Solutions, reporting to the CEO. With deep expertise in HVAC, he drives strategic growth and innovation across the data centre industry.

How Johnson Controls is breaking new ground in the data centre industry

With market dynamics accelerating demand for data centre infrastructure, cloud computing giants are scaling globally at an unprecedented pace. This rapid expansion is driving the need for facilities that deliver exceptional reliability and performance.

In response, Johnson Controls has structured its strategy around three foundational pillars:

- Innovation – fueling breakthrough product development to meet evolving technical demand
- Scalability – enabling global manufacturing capacity to support rapid deployment
- Consistency – ensuring uniform performance and quality across all regions

"We meaningfully want to participate in this market, drive this market and support this customer set," says Austin Domenici, Vice President and General Manager of GDCS at Johnson Controls. "We don't want to launch anything that we can't do at quality or at scale so our customers can really trust what we're doing."

To realise its strategic ambitions, Johnson Controls has made significant investments – particularly in thermal innovation. At its specialised Johnson Controls Advanced Development Engineering Center (JADEC) testing facility in Pennsylvania, the company is rigorously evaluating equipment under extreme conditions to accelerate advancements in data centre technologies.

"We meaningfully want to participate in this market, drive this market and support this customer set"

AUSTIN DOMENICI,
VICE PRESIDENT AND GENERAL MANAGER OF GDCS, JOHNSON CONTROLS

"It's a one-of-a-kind testing laboratory for chillers, for air handlers and most importantly their sub components," explains Mihir Nandkeolyar, Business Development and Technology Strategy Manager Thermal Management at Johnson Controls. "It gives us the ability to test equipment across the full assembly to really understand the performance of the individual components in all sorts of unique applications within a data centre context.

"The ability for us to do that helps us rapidly innovate because we now know when something changes on a customer's side, we know what component we need to change and can rapidly deploy that instead."

Traditional product development cycles previously stretched three to

AUSTIN DOMENICI

TITLE: VP & GM FOR GLOBAL DATA CENTER SOLUTIONS ORGANIZATION

As Vice President and General Manager of the Data Center Solutions organisation, Austin Domenici is a strategic, cross-functional executive committed to advancing human and planetary health. A seasoned founder, operator, and P&L owner, he brings a proven track record of driving success across industries. With deep expertise in financial and business operations, Austin is focused on delivering measurable results- accelerating growth, reshaping business trajectories, and improving margins through thoughtful leadership and execution.

DAVIN SANDHU

TITLE: PORTFOLIO DIRECTOR FOR GLOBAL DATA CENTER SOLUTIONS

With expertise in portfolio management and strategic planning, Davin drives Johnson Controls' Global Data Center Solutions. With 20 years of leadership experience at JCI in HVAC, Controls, Security, and Fire, he brings a wealth of expertise.

five years, hiking up costs and delaying data centre projects. In order to facilitate faster innovation, Johnson Controls' efforts have compressed development timelines dramatically.

"We can flex NPI processes as quickly as six to nine months now to produce a new product that fits the needs of the data centre," says Aaron Lewis, CCO of GDCS at Johnson Controls. This acceleration enables rapid response to market changes. "We feel now that we have a strong case to bring our expertise to market to satisfy any solution."

Davin Sandhu, Global Portfolio Director, GDCS at Johnson Controls, explains: "We're really able to take a strong stance on the products that we provide and use them to be a unique data centre partner.

"We have a strong footprint in our chiller portfolio and our air handling unit portfolio to drive innovation."

The company's YVAA chiller platform exemplifies this innovation approach. The product operates across all global climates without modification from -28°C to 59°C, whereas traditional air-cooled chillers require additional equipment for extreme temperatures.

With power usage effectiveness (PUE) targets becoming increasingly stringent, Johnson Controls says the YVAA platform helps clients meet these demanding standards consistently.

"A typical air-cooled chiller in the market will require some sort of water evaporation to work in some of the warmer climates," Mihir notes. "The YVAA platform eliminates these complications entirely and has the ability to run to both hot and low temperatures, allowing data centres to scale with a consistent known solution."

"As data centres are becoming more densely populated from a power standpoint, we're able to continuously innovate new products and continue to leverage the scale that we have across the globe"

DAVIN SANDHU,
PORTFOLIO DIRECTOR FOR GLOBAL DATA CENTER SOLUTIONS, JOHNSON CONTROLS

Manufacturing at unprecedented scale

AI is creating a broad range of heat-related challenges for data centres, particularly as graphics processing units (GPUs) generate enormous heat loads when running the technology.

In order to meet new demands – and to keep data centre emissions down – Johnson Controls has undertaken massive manufacturing expansion to meet surging demand. The company describes these investments as among the largest in its history, having increased

production capacity across multiple facilities, particularly in air cooled and water cooled chillers.

"As data centres are becoming more densely populated from a power standpoint, we're able to continuously innovate new products and continue to leverage the scale that we have across the globe," Davin says.

Aaron adds: "We have seen significant expansions at multiple plants: for example, in the Americas regions, our air cooled chiller production has surged to nearly four times pre-data centre boom levels.

"What this has allowed us to do is satisfy a large number of customers as opposed to just a single customer and focusing the factory there."

Johnson Controls has also introduced an innovative capacity reservation system, allowing large clients to secure manufacturing slots based on projected demand. This forward-looking approach ensures greater supply chain predictability and delivers mutual value – optimising production planning for Johnson Controls while providing customers with enhanced delivery assurance.

Aaron adds: "It gives us an opportunity to feel comfortable in making the investment, but it gives our data centre clients confidence that we have the capacity – it's reserved for them and we'll deliver on time."

Delivering consistency at the global level

Currently, the company operates over 40 production facilities globally. Such a robust manufacturing footprint enables more localised production for regional markets, meaning that transportation costs and delivery times are reduced for the customer.

"Our worldwide presence means we can share all our knowledge between countries to make us more consistent and efficient in making critical decisions," says Jesús Antonio Martínez Sastre, BMS Business Director, Security and HVAC at Johnson Controls. "With this and applying continuous innovation, we achieve service excellence."

To enhance operational resilience, Johnson Controls has also embedded redundancy into its global manufacturing strategy. This means that if one facility experiences a disruption, production can be seamlessly shifted to alternate sites.

This built-in flexibility strengthens the company's ability to maintain continuity and ensures customers are protected against unforeseen supply chain interruptions.

WATCH NOW

How Johnson Controls is Changing the Tide in the Data Centre Industry

"It's about having everybody on a central team to share best practices"

AARON LEWIS

TITLE: CHIEF COMMERCIAL OFFICER FOR GLOBAL DATA CENTER SOLUTIONS

Aaron is the Chief Commercial Officer for Johnson Controls' Global Data Center Solutions and leads the Direct HVAC Equipment field business for North America. With 17 years at JCI, he brings extensive leadership across sales, operations, and service in HVAC, Fire, and Security.

JESUS MARTINEZ SASTRE

TITLE: DIVISION DIRECTOR FOR CFS IBERIA AND PORTUGAL AND CONTROLS DOMAIN FOR SOUTHERN EUROPE

With over 20 years of leadership at Johnson Controls, Jesus brings deep expertise in operations and commercial strategy. As Division Director of Installation and Service for Iberia, Portugal, and the Controls domain in Southern Europe, he has driven remarkable growth- tripling the CFS business in Iberia and Portugal- and led exponential expansion in data centre installation and service through innovative, integrated approaches.

The secret to Johnson Controls' success is its consistency, with every facility around the world requiring identical performance.

"Our ability to deliver the same technical solution, whether that location is in Phoenix, Arizona, Scotland, Dubai or Singapore allows our customers to have predictability of how those systems will perform," Todd explains. "This then leads into scalability – having both the capital infrastructure to build our solutions and the field infrastructure to implement solutions."

He adds: "When you think about the scale our customers are building at, then you start to see some of the restrictions of that growth. Partners like Johnson Controls are able to come in and help these customers overcome these challenges by providing innovative solutions that reduce the power consumption on the cold chain and reduce water usage rates, for example."

The company consolidated previously separate regional teams three years ago in order to create a more unified approach.

"These teams had vast knowledge about data centres, but only through the lens of their specific customers," Aaron explains. "It's about having everybody on a central team to share best practices. It's been a blessing to how we can support customers."

Jesús adds: "We devote many resources and hours to actively listening to the customer. Once we understand their needs, protocols and procedures, we are able to create an ecosystem and manage to offer the most advanced service that exists today for the data centre segment."

As a result, Johnson Controls' customer relationships have evolved beyond traditional transactional arrangements. The company embeds engineers directly in client design processes, with these partnerships typically spanning 12 to 18 months before commercial agreements.

Likewise, service standards have been elevated to match data centre criticality levels, as mission-critical facilities demand immediate attention.

"The SLAs are much faster. It's two to four hours to respond instead of two to four days," Aaron explains.

Johnson Controls maintains over 40,000 field-based employees globally to support these commitments.

"Our worldwide presence means we can share all our knowledge between countries to make us more consistent and efficient in making critical decisions"

JESUS MARTINEZ SASTRE,
DIVISION DIRECTOR FOR CFS IBERIA AND PORTUGAL AND CONTROLS DOMAIN FOR SOUTHERN EUROPE,
JOHNSON CONTROLS

Building the future of hyperscale growth

Data centre operators face multiple constraints as they scale operations, including power availability, the thermal race to the chip, water usage and skills gaps.

As data centres get closer to driving more heat away from the chip, they are now leveraging liquid cooling – but Davin explains that, in order for the hyperscalers to achieve greater rack density, the data centres are likely to need other methods or refrigerants to make this possible.

"As we continue to innovate, Johnson Controls is able to bring a lot of value in understanding how to approach the problem of pulling as much heat away from the chip and then driving that solution forward," Davin says. "Customers want a solution that's reliable and tested by a company like Johnson Controls so they can scale across their facility."

Todd adds: "Partners like Johnson Controls are able to come in and help customers overcome some of those challenges. We want to be thermal experts to allow our customers to utilise their resources more to power up the chips that they get their revenue from."

The company's innovation strategy focuses on working directly with the customer to reduce power consumption across its cooling systems. As more efficient thermal management frees electricity for revenue-generating computing equipment, every watt saved on cooling increases available computing capacity.

"It is essential to have a deep knowledge of the client's facilities, procedures and internal protocols," Jesús explains. "To achieve this, we work directly and daily with them, continuously optimising the action protocols.

"In this way, in the event of any contingency, a faster solution will be achieved without affecting the service."

-28°C TO 59°C

The company's YVAA chiller platform exemplifies this innovation approach. The product operates across all global climates without modification from -28°C to 59°C, whereas traditional air-cooled chillers require additional equipment for extreme temperatures.

Building tomorrow's infrastructure today

As the data centre industry continues to evolve at an extraordinary pace – bringing infrastructure closer to end users – global sustainability requirements are becoming increasingly stringent.

Positioning itself as a comprehensive partner in this transformation, Johnson Controls says it supports both the rapid growth of AI and the imperative for environmental responsibility. With its deep expertise spanning thermal management, fire suppression, security systems and intelligent building automation, the company delivers

"The YVAA platform has the ability to run to both hot and low temperatures, allowing data centres to scale"

MIHIR NANDKEOLYAR

TITLE: DATACENTER GLOBAL BUSINESS DEVELOPMENT MGR, GLOBAL DATA CENTER SOLUTIONS

Mihir Nandkeolyar has been in the HVAC industry, and closely supporting the data centre thermal management vertical for 12 years. In prior roles, Mihir managed Applications Engineering teams in APAC and the Americas. He currently leads technology strategy and business development for thermal management within the Global Data Center Solutions business unit at Johnson Controls.

ANTHONY SEILER

TITLE: STRATEGY AND GTM DIRECTOR FOR GLOBAL DATA CENTER SOLUTIONS

Anthony specialises in strategy and innovation for go-to-market (GTM) motions within Johnson Controls' Global Data Center Solutions. His global scope ensures alignment with customers as the business scales and expands in this high-growth industry.

fully integrated solutions tailored to the complex needs of modern data centres.

"We want to become the market leading innovative experts globally within the data centre market on how we optimise the cold chain," Todd says. "Our vision is to be the thermal experts that allow our customers to utilise their resources more to power up the chips that they get their revenue from."

Anthony Seiler, Industry Director for GDCS at Johnson Controls, emphasises the company's global ambitions further: "We're not just at the table for what we offer, but for the clarity, the speed and the expertise we bring when it matters most."

The partnership approach extends beyond equipment supply, with Johnson Controls providing lifecycle services throughout facility operation – including predictive maintenance and optimisation services to ensure continued peak performance throughout the data centre.

Likewise, the testing capabilities at the JADEC facility enable validation of next-generation solutions, with the company collaborating with customers and other industry stakeholders to help anticipate risks and drive innovation ahead.

Ultimately, the comprehensive approach of Johnson Controls means it can address the full spectrum of data centre requirements. From initial design to optimisation and scaling, it offers integrated expertise from start to finish – with its holistic approach giving it a competitive edge.

"We're engineering outcomes in one of the most dynamic industries on the planet," Anthony adds. "Innovation is how we stay ahead."

Todd says: "Our relationship with our customers is not transactional. It's that intimacy that sets us apart."

"Our core strategy is to be the most trusted partner across the entire data centre lifecycle – from design and construction to optimisation and sustainability"

ANTHONY SEILER
STRATEGY AND GTM DIRECTOR FOR GLOBAL DATA CENTER SOLUTIONS, JOHNSON CONTROLS

RELIABLE AND EFFICIENT AT ALL STAGES

Johnson Controls delivers a comprehensive, end-to-end portfolio tailored for data centres – spanning thermal management, security, fire suppression and intelligent building automation. Backed by lifecycle service expertise, Johnson Controls ensures these integrated solutions perform reliably and efficiently from design through ongoing operations.

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