



GLOBAL CONNECT

Data centre - downtime is not an option





Leading data centre builds Tier III compliant system with DEIF's AGC-4 controller

Hosting approx 30% of all data traffic in Denmark, GlobalConnect is dependent on a redundant and reliable solution

Leading colocation provider gets redundancy and reliability with DEIF solution

In an increasingly data-dependent world, data centres need to offer consistent uptime. When GlobalConnect, Denmark's leading colocation provider, built a new data centre hall, they chose DEIF AGC-4 automatic genset controllers for their ability to provide redundancy and reliability – and for the competent DEIF support. *"They play a key role in our power delivery value chain"*, says a satisfied Tore Heide Villund from GlobalConnect.

What is the similarity between your travel agent order history, your bank balance, and that amusing video your best friend shared on social media last night? That's right: All of them are stored as data somewhere – along with an ever-increasing amount of data from countless other sources including Internet of Things (IoT) devices such as cars, refrigerators, and industrial equipment.

The world generates more and more data, and increasingly depends on data, too, and reliable data centres are therefore of paramount importance.

"People talk about the cloud a lot, but in fact the cloud is just a server in a data centre somewhere. I usually say that nothing happens without a data centre", comments Tore Heide Villund, Vice President of Data

Centres at Danish network and colocation provider GlobalConnect.

Data centre downtime is not an option

GlobalConnect is Denmark's largest colocation provider, hosting approximately 30% of all data traffic in the country. The company offers resilient data storage to an ever-growing number of customers from various businesses – and downtime is not an option. *“For our customers, it's incredibly important that their data is stored securely, and that the servers are always up”*, says Project Manager Freddy Nielsen who is responsible for data centre design and operations at GlobalConnect. *“In our daily operations, the most important thing by far is reliability: that all systems always work”*. GlobalConnect must therefore do everything it can to ensure uninterrupted uptime. *“In general, companies today are so reliant on IT that without it, their production would grind to a halt”*, remarks Tore Heide Villund.

Growing customer demand for not just storage space but resilient and reliable 24/7 data access recently prompted GlobalConnect to expand its data centre in Høje Taastrup with a new hall with state-of-the-art power, cooling, and security systems – and DEIF genset controllers. According to Freddy Nielsen, the positive experience from using DEIF controllers at other GlobalConnect locations was an important factor when GlobalConnect opted for DEIF again. *“We chose DEIF controllers because we have seen over a long period of time that they offer high reliability. We think it's a really good system”*, he says.

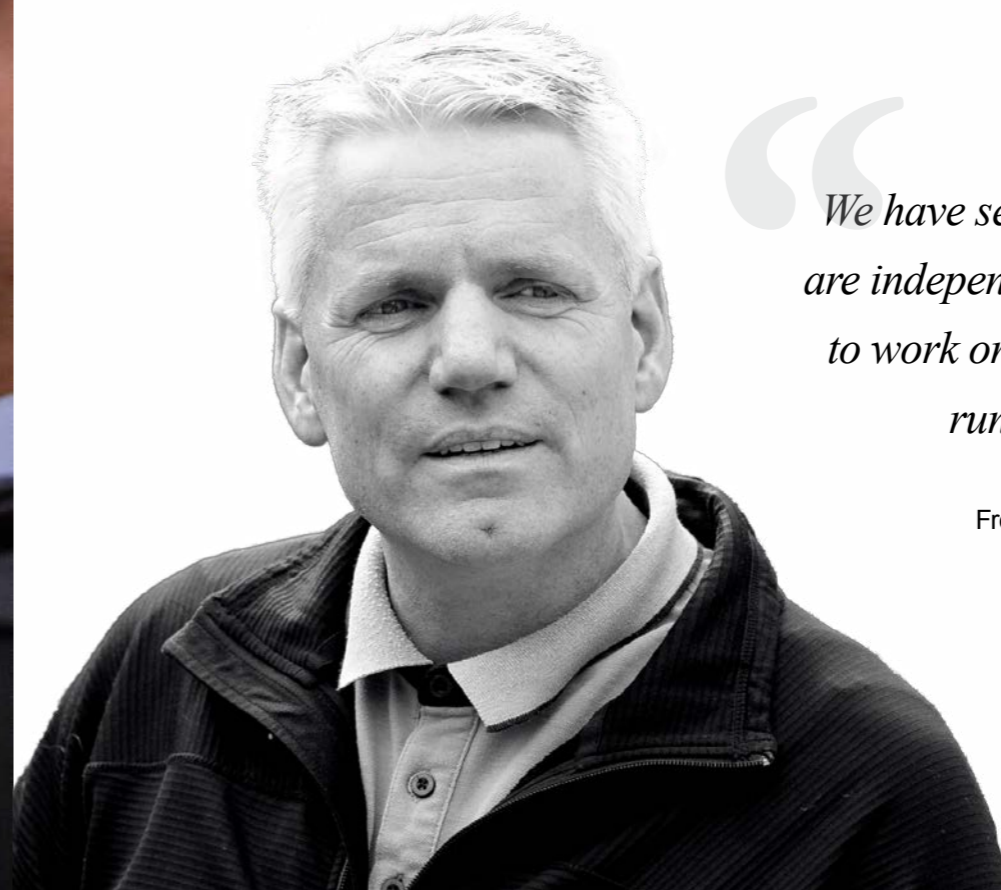
For the new hall, GlobalConnect chose the AGC-4 automatic genset controller for its ability to provide controller redundancy and its robust performance – and for the competent DEIF support.



N+1 configuration with the DEIF AGC-4

“The critical power solution we have here was designed according to the Tier III principles defined by the Uptime Institute”, explains Freddy Nielsen. *“In other words, we have a complete A system and a complete B system. Both systems are backed up by the DEIF system, and they are separate so that one system is not connected to the other. We have an N+1 configuration, meaning that for every component that could fail, there's a backup component ready to take over. This applies to our power supply, our UPS units, and our gensets – to all systems in the data centre”*.

The DEIF AGC-4 controllers contribute to the N+1 configuration by providing controller redundancy. The controllers are interconnected, and each of them can assume the master controller role: if one controller should fail, another automatically takes over. *“We have seen that the DEIF controllers are independently serviceable. If we need to work on one controller, we can keep running using the others”*, adds Freddy Nielsen.



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Freddy Nielsen | Global Connect

System testing the hard way

So far, however, controller failure or malfunctions have not been an issue at the Høje Taastrup facility which is Denmark's largest colocation facility. GlobalConnect tests its critical power systems twice a month, and the AGC-4s consistently pass with flying colours.

"Every other test is just a start-up test where we make sure that the gensets will start", says Freddy Nielsen. "But once a month we test how the system responds to a power failure, and we do this the hard way by

switching off the net sensing feature, thereby cutting the power. Everything gets dark because the cooling systems and the lights go out. Then the critical power systems and battery systems for the light kick in, and the gensets must start and deliver full power within 20 seconds".

On every test, the AGC-4 controllers have performed as expected, delivering the robust and consistent performance needed.



Competent local support

The competent local support offered by DEIF is a third, and very important, reason why GlobalConnect chose a DEIF solution. *"We have a great collaboration with DEIF", says Freddy Nielsen. "If we need something fixed in a hurry, they can quickly send a technician to our facility. We often call the technicians directly to get the support we need".*

He adds that quick delivery of spare parts is also an important reason why GlobalConnect is satisfied with DEIF. Tore Heide Villund agrees. *"The willingness to make the necessary adjustments in case of product issues means a lot to us",* he says. In addition to providing genset controllers, DEIF support staff were involved in commissioning the new critical power system.

An exponentially expanding business

The data centre business is booming and shows no signs of slowing down anytime soon. *"Data volumes expand exponentially, and I simply don't see that changing. You try asking people to reduce their data usage!"* remarks Tore Heide Villund. Industry intelligence backs him up: In 2018, an IDC whitepaper estimated that the global datasphere will grow from 33 zettabytes in 2018 to 175 zettabytes in 2025, and according to a 2019 MarketWatch press release, the global data centre colocation market could grow from USD 25.52 billion in 2017 to USD 47.34 billion by 2023.

As the market expands, so does GlobalConnect. Tore Heide Villund is very clear on why the company is successful. *"The fact that we've been able to deliver high uptime is definitely a factor in our success",* he says. *"It's a combination of having a reliable infrastructure and reliable control".* With full redundancy and robust

performance, the DEIF AGC-4s deliver that control reliability.

While renewables could one day play an important role in providing critical power in data centres, gensets will likely remain the only feasible backup power source for some time yet. Accordingly, GlobalConnect is planning to install gensets at its upcoming data centres, and chances are good that those gensets will have DEIF controllers. *"I find it hard to imagine that we'll opt for anything else than gensets as we continue expanding",* concludes Tore Heide Villund. *"As long as DEIF keeps delivering the value and solutions we need, I'm sure they will be part of the journey. They deliver a reliable and stable product, and that's what's important. They play a key role in our power delivery value chain".*





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