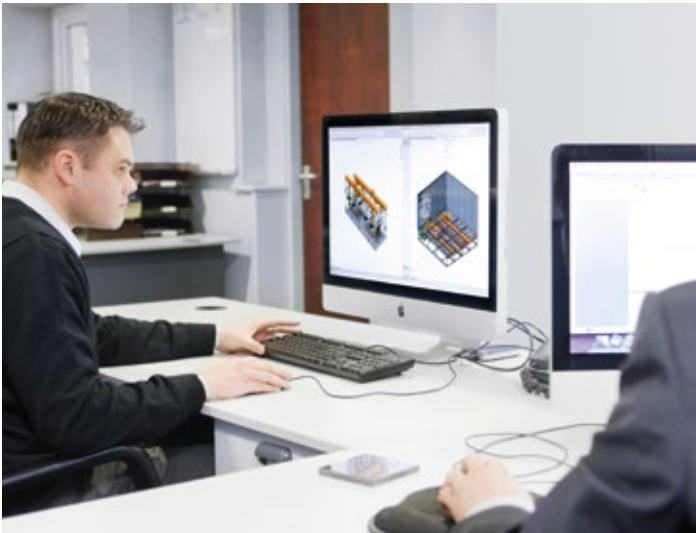


Case Ellison AC HVAC drives for pump rooms





Custom HVAC solutions, engineered entirely in-house start with CAD development.



High quality, space and energy efficient products are designed for the end user.

Passing the benefits along to their customers

ACH550 drive customer benefits	
Eliminate backplates	The drive requires no additional fabrication or materials to mount to anything from walls to din-rail.
Energy efficiency	On HVAC applications, the power requirement of the pump or fan varies by the cube of the speed. Electronically reducing the pump's motor speed by 20 percent can reduce the energy required by up to 50 percent.
Integration to building management systems	Any language that the HVAC building management system requires is one that the ACH550 is able to communicate with directly.
Support and service	Whether it is locally or globally we provide support and service for all products, in addition to expert knowledge HVAC systems.

Dedicating plant room space in buildings is becoming more and more of a challenge in the UK and across Europe. Recognizing this, Ellison AC has carved out a niche as a provider of packaged plant room solutions that are manufactured in their purpose built facility and delivered on site. They can be installed on roofs, on concrete pads or even underground.

These types of solutions are becoming quite popular with a wide range of customers, from defense to data centers, to business and shopping centers. A large part of Ellison AC's success comes from their reputation and proven track record of delivering high quality solutions and their attention to their customer's requirements and needs.

Strong client relationships are a key aspect of Ellison's success. It's the personal touch as Neil Dodgson, Projects Director at Ellison AC explains: "Customers can ring up, and they do not get lost in the system of our production. They can speak to myself, any of the guys involved on the project side, and ultimately they can speak to our managing director direct."

The plant rooms are made in modules to allow them to be easily delivered and installed on-site. Once the plant room is complete and tested in the factory, each module is packaged for delivery to site as a virtually plug-and-play solution with minimal commissioning work required. They even time lapse the build so their customers can easily monitor the progress.

As Neil Dodgson explains: "We can develop, design and build a product purely offsite. Generally we're off the critical path of the main build of a contract, so ultimately you can have the building being built 20 stories and literally as soon as the site is ready, we can deliver our equipment and install it within the space from an hour or up to a weekend."

That client relationship also means that Ellison looks to pass the benefits of the products they use inside their packaged plant solutions along to their customers. This includes even the variable speed drives they use to control the pumps.

"We have long recognized the advantage of controlling our pumps with VSD's to provide the energy efficiency essential to meet the latest building regulations." Neil Dodgson explains.



Ellison AC installs ACH550 drives on pump applications ranging from 3 kW up to 110 kW.



The drives ease of mounting and integration into building automation systems makes them highly advantageous.

In HVAC applications, using a variable speed drives on pumps and fans help reduce energy consumption significantly (compared to throttle/damper control with direct-on-line motors). With pumps and fans, a 20 percent reduction in motor speed can reduce the power required by up to 50 percent.

Neil continues, “We initially contacted ABB with regards to an inquiry we had in Manchester. We started a conversation and we developed it from there. The benefits presented to us, from our perspective, enabled us to push forward with the ABB VSD, which was done because the end user had the benefit of that product.”

Ellison AC decided to use ABB’s drive for HVAC, the ACH550, to control the pumps used in the heating, chilled water and condensed water applications in the packaged plant rooms. The design of the ACH550 even helps reduce build time and costs since it doesn’t require additional backplate mounting.

As Neil continues, a product’s capabilities alone are just part of what they are looking for. “We also know that we can rely on a high level of local support offered by ABB’s UK team to help us deal with any technical or logistical challenges.”

But the real plus side to using ABB’s drives is the benefit they deliver to their end-customers, as Neil Dodgson explains:

“We’ve got to look for a product that is of excellent quality, and offers ease of installation both for the mechanical and electrical side of things. But ultimately we’ve got to look for a product that also brings benefits to our end-users – the people who are actually working day-to-day on the contracts. The ABB product benefits us initially, but will ultimately give the client the end-benefit.”



John Ellison,
Ellison AC Managing Director

Ellison AC has designed and purpose-built their manufacturing facility in Morecombe, Lancashire, UK to streamline the production of the packaged plants.



Neil Dodgson,
Ellison AC Projects Director

The packaged approach means that the integration of all the key elements in the chiller or pump room facility – including valves, pumps, pipework and control systems – are designed, specified and assembled by highly skilled staff working in their controlled factory environment.

Contact us

For more information please contact
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