

## KEB F6 drive controllers allow smooth, cost effective upgrade of high-bay warehouse storage and retrieval machine

KEB Automation has helped a customer in Germany convert its high-bay warehouse storage and retrieval machine from an old-generation frequency inverters to the new COMBIVERT F6 drive controller from KEB. The warehouse is owned and operated by a mail order business that was looking for a modern, cost effective retrofit solution that would not require the existing motors to be replaced.

The high-bay warehouse currently comprises of nine aisles. Each aisle has 106 positions along its length (on both sides of the aisle) and 28 positions in height (on both sides). Jorg Buchwald-Hörnchen, PLC technician at the warehouse comments: "The main focus was on costs. Of course other competitors also submitted bids for their products, but the statements from them were always the same, 'We cannot work with your existing motors'. At KEB, this was not an issue at all from the start. They said it didn't matter what kind of motor was there, we can run all motors with our COMBIVERT F6."

With the COMBIVERT F6, users can operate KEB's own motors as well as a variety of other motor types from different manufacturers. "And that's how it turned out. It was very easy to get the existing motors working with the inverters using automatic calibration. The aim was to replace only the frequency inverters, from the COMBIVERT F4 series to the F6," adds Jorg Buchwald-Hörnchen.

The COMBIVERT F6 range of high performance single-axis drive controllers are extremely compact, energy efficient and flexible for a wide variety of control applications in automated, safety-oriented machines. The drives provide optimal motor control in real time, as well as integrated safety functionality. The drive controllers are 100% in-house designed and built by KEB Automation. The drives are available in seven different enclosure sizes and power ranges from

4kW up to 400kW. The drives are air- or liquid-cooled (integral or push-through mounting) and can be customised with a variety of design options to suit the specific application. Safety functionality can be selected in modules to suit the requirements of the machine. In addition to the control of widely-supported motor types such as synchronous, asynchronous, permanent magnet, synchronous reluctance, linear, high-torque motor and high speed motor, the COMBIVERT F6 offers additional functions such as automatic anti-cogging and optimised torque pre-control for linear and non-linear kinematics.

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### Future-proof storage and retrieval system

KEB Automation's regional industrial partner Vogel-Hemer assisted the customer by installing the new hardware in the warehouse, including the F6 drive controller, S6 servo drive and a C6 industrial PC. As Manfred Vogel explains: "Using modern drives here is a win-win situation. It is also clearly noticeable in the wallet. For many customers, loss of time is very decisive. Operational safety was also a concern for the customer. The system must run 24/7. The bottom line is that the solution must fit the customer. I think we've done an optimal job here. The project proceeded without interruption, everything worked perfectly."

According to Jorg Buchwald-Hörnchen, the warehouse also relies on a C6 industrial PC from KEB. He explains: "We also work with an interface from KEB, the C6, a small industrial PC. This quickly proved to be cost-neutral. We then simply started a test at our desk to see whether we could connect the new drive controller to our existing control system. This was also successful very quickly and it all worked well. Vogul-Hemer supported us in the hardware installation."

[www.keb.co.uk](http://www.keb.co.uk)



## Security fastener helps prevent businesses becoming victims of crime

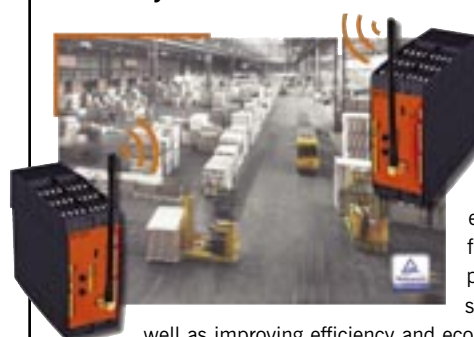
A new range of security fasteners has been launched to help businesses to cut the cost of being a victim of crime from their overheads. The innovative 5-Lobe pin from TR Fastenings is the first complete range of security fasteners made from corrosion-resistant A4-70 stainless steel – the perfect product for outdoor use, in particular in marine, health and medical sectors because of its non-reactive qualities. The fastener's five-sectioned screw head means that it can only be undone by someone with specialist tools, preventing its removal by an opportunist criminal.

Paul Standing, product manager at TR Fastenings, said: "Opportunist thieves and vandals are always on the look out for an easy target so it's vital that businesses have the right level of security to defend themselves and their property. Our new 5-lobe pin fasteners provide a low-cost, long-lasting line of defence against intruders that could cut the amount of money businesses lose in theft, damages, disruption and increased insurance premiums because of crime."

[www.trfastenings.com](http://www.trfastenings.com)



## Safety and control functions via radio



Whether in bidirectional pair operation or unidirectional group operation, the innovative SAFEMASTER W wireless safety system UH 6900 ensures safe wireless transmission of emergency stop and control functions. The safety system provides greater flexibility in safeguarding hazardous areas as

well as improving efficiency and economy. The wireless safety system comes into its own in mobile, AGV and large area installations where wiring is not possible or would be extremely complex.

The PLe / Cat. 4 or SIL 3, TÜV-certified system consists of two or up to 256 compact 45mm wide wireless safety modules. The system has a safety-related bidirectional radio transmission range of 800m in open country and as a result, it achieves a greater availability than other comparable systems.

[www.dold.com](http://www.dold.com)

## Carpanelli motors direct from the manufacturer with cost savings

Carpanelli is describing the ending of its distribution agreement with Lenze as an opportunity for users to get original products straight from the manufacturer with what should be substantial cost savings. Some of the products previously supplied to Lenze would have been in some way special, built with encoders, forced ventilation, special brakes or perhaps with an array of special voltages and UL/CSA or ATEX certification. Users can now get the same service direct. Further, Carpanelli says Lenze has also dropped Hydromec gearboxes from its portfolio. Where customers are looking to replace this supply, Carpanelli says it supplies standard and special motors with and without gearboxes, and can certainly offer the Carpanelli motor with the Hydromec gearbox. Carpanelli supplies many companies in the UK direct from Italy on a 4-5 week lead time, or less for stock orders.

[www.carpanelli.co.uk](http://www.carpanelli.co.uk)

