JVL News



JVL...integration in motion



Number 18

A newsletter from JVL Industri Elektronik A/S

Waterproof MAC and QuickStep motors

A range of motors for demanding environments

As one of the world's leading producers of integrated motors, JVL is experiencing increasing success with waterproof models of its motors. JVL products ranging from the smaller MAC140 and 141 (134W) to the large MAC800 (750 W) integrated servo motors, and the series of JVL QuickStep integrated step motors, MIS 231-234 (1.1 to 2.9 Nm), are available in models that offer IP55, IP65 or IP67 protection. This means that

the motors are especially well suited for applications in demanding environments, such as the chemical, medical and food processing industries.

IP65 and IP67 protection of the motors is achieved by a watertight seal on the



shaft bearing using an IP67 Rulon[®] Teflon bush. This has very low friction and requires no lubrication. The flange and shaft are manufactured of stainless steel. In the large MAC800 motor, the cooling fan is replaced by larger cooling fins. These motors have found widespread application in industries with demanding environments. Moreover their simple installation and configuration, compact design, and reliability contribute significantly to their popularity.

Additionally JVL can supply a wide range of stainless-steel, precision planetary gears that match the motors' ability

to resist aggressive environments.

It is also worth noting that the MAC800 motor with built-in power supply is UL approved. Contact us for further information.

QuickStep and MAC drawings now in 3D for CAD

2D and 3D drawings for the QuickStep and MAC motors can now be downloaded

from www.jvl.dk

In our continued efforts to provide the best possible support to customers, 2D and 3D drawings of the popular QuickStep integrated step motors and MAC integrated servo motors are now available for download from www.jvl. dk. The MAC motor drawings cover the entire programme with power ratings from 50 W to 141 W, as well as the MAC800 motors with and without brake. For the QuickStep motors, the drawings illustrate the possibilities



for configuring the motors and communication interface. These drawings greatly simplify and save time in the design and construction phases of systems. The drawings are available in the



following formats to meet the majority of customer requirements: 2D: DWG, DXF, and PDF; 3D: DWG, IGES, and STEP. All drawings are to scale.

Ergonomic baggage lifter uses wireless control

Swedish company EBL Systems AB uses JVL Bluetooth control of MAC motors

Swedish company EBL Systems AB is a well-known supplier of ergonomic baggage- and industrial material handling systems. In the development of the company's new baggage lifter, EBL Systems has chosen to use wireless control of the hoist via the lifter's gripper handle. EBL Systems thus minimise staff costs for absence caused by injuries and heavy wear on employees. In addition, downtime caused by frequent maintenance of the cable drum is minimised. EBL's new wireless system also provides much greater freedom of movement for the operator.

To raise and lower the lifter used by an operator to move baggage, a JVL MAC800 integrated servo motor is used. The MAC motor is equipped with JVL's Bluetooth module MACOO-FB4. The baggage lifter's hand-held gripper is equipped with a battery-operated Bluetooth module that sends data to the MAC800. Using two buttons on the gripper, the hoist can be moved up or down. Velocity, acceleration and end-of-travel stops are all controlled by the MAC800. The Bluetooth module is a further development of JVL's nano-PLC module. By combining these features, EBL has maintained flexibility while at the same time eliminating a significant cause of errors in the baggage handling system.





Bluetooth module MACOO-FB4, which can be mounted on all JVL MAC motors



Lifter with hand-held gripper and the box containing the built-in MAC800 servo motor





Close-up of the battery supplied gripper with buttons for controlling up and down movement of the lifter





The MAC800 motor equipped with Bluetooth module MAC00-FB4

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JVL opens new office in USA

In march 2008 JVL established its own office in Ohio in USA. The office will handle all sales and support for JVL products for the entire USA.

Mike Fisher is head of the office. He has extensive experience in the motion control industry. Dave Whelan will handle the technical support phone line. He is ready and able to answer your application, motor sizing, and other guestions.

We are confident that the establishment of JVL USA offers our customers all over the USA the very best support and service that can be obtained. The contact information is:

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Mike Fisher

Dave Whelan



New USB to CAN converter

USB/CAN converter makes setup and service of CANopen network simple

JVL's new converter can be used to gain quick and simple access to the JVL CANopen module MAC00-FC4 or to QuickStep modules equipped with CANopen. The USB-to-CAN converter's compact construction makes it ideal for use with laptops and notebook PCs when a system is to be configured or serviced. Software and in-house program source are supplied on a CD. The converter includes an optocoupler and built-in DC/DC converter that provides electrical isolation up to 500 V between the PC and the CAN network. When the converter is used together with JVL's CANopenExplorer software, it is possible to setup a functioning CANopen servo or CANopen step motor system within minutes. CANopen Explorer writes and transmits SDOs, PDOs, SYNC and "heartbeat" messages, and can additionally read EDS files. The software is available for free download from www.jvl.dk/downloads. Cable CAN1-M12F5SO5R, with DSUB and M12 connectors, can be used to connect the converter to a motor with M12 connectors.



Quality Assurance at JVL

JVL maintains focus on quality throughout all stages of the supply chain. We continuously strive to ensure that JVL products provide customers with the best product that fulfils expectations both with regard to quality and performance, and also with respect to delivery and after-sales service. To achieve these goals require continuous attention to the individual processes in the form of documentation and control procedures. Quality assurance is an area subject to continuous development and we devote a large amount of resources to ensuring our products meet these goals. Extensive use of computer-controlled test systems ensure that all the functions of each unit are tested before assembly in the final product.

We work very closely with our partners and suppliers to ensure the required quality in these stages of the supply chain. We supply products that are UL approved, which provide a high confidence level in the quality assurance of all aspects of the product. In addition, should problems arise with a delivered product, our service department is ready to provide rapid trouble-shooting and assistance with the problem without inconvenience to the customer.



Assembly and QA of MAC140 motors

JVL's completely new website

www.jvl.dk has been completely re-designed and re-structured

In 2007 we finished a complete re-design of our website to ensure that JVL information online is readily available in a more modern and user-friendly format. Each product now has its own page on the site, with direct access to the applications, accessories, software and downloads that are relevant for the individual product. In addition, all information has been revised and significantly extended.

It is now much easier for customers to quickly find relevant information on specific products and topics. For users who already know what they're looking for, there is still direct access to areas such as downloads, courses, exhibitions, applications, etc. During development of the new site, many new details of our products have been added.

www.jvl.dk is in English, but we have now also introduced translations for our German-speaking customers. We are continuing the translation process and expect most of the

site to be available in German in the course of 2008.



Visit www.jvl.dk and experience our world of the most modern equipment for integrated motor control.

JVL again at SPS/IPC/Drives



JVL on YouTube

JVL is now also represented on YouTube — so far with 3 small video clips produced by our sales director in England, Andrew Plater. These videos illustrate how easy it is to get started with the MAC800 and QuickStep motors, and how JVL's MacTalk software makes system setup a simple matter. The videos are also directly available under the downloads section of our website.





From 27th to 29th November last year, JVL took part for the third time at the SPS/IPC/Drives exhibition in Nüremberg in Germany, a dedicated event for everything in the field of automation. We experienced a very large number of visitors at the JVL stand, where interest naturally focussed on the integrated MAC motors and the QuickStep integrated step motors.



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