

## Process Control Modules for Integrated Servo Motors MAC400 & MAC800 from JVL



JVL Industri Elektronik A/S is a world leader in integrated servo and stepper motors. JVL develops and manufactures integrated servo motors in the power range of 50 W to 3000 W, where the driver, controller and interface are built into one unit. JVL is known for its unique expansion module concept where you choose the motor size and then the expansion module which is very easy to plug into the motor. JVL has one of the widest range of communication programs to choose from: Modbus, CANopen, Devicenet, Profibus, Bluetooth, EtherCAT, Ethernet I/P, Powerlink, RS232/485 and many more.

JVL is now introducing two new process control expansion modules for the MAC400 (400 W) and MAC3000 (3000 W) motors. The expansion modules are aimed at process control applications with 4-20 mA analog control signals. The interface consists of a 4-20 mA (12 bit) input for controlling the motor position and a 4-20 mA (12 bit) feed-back output that indicates the actual position. Both signals have full galvanic isolation from other electrical circuits in the motor. Additionally, there is a galvanically isolated digital error output indicating errors preventing the motor from performing the commanded movement.

Additionally the P4/P5 module enables a second motor to function as a Slave motor with a very high degree of signal integrity.

After configuring both Master and Slave motors, their built-in high-speed communications interface together with the communications protocol ensuring that the slave will always follow the master. Should an error arise in either the slave or the master then further movement is stopped in *both* motors.

- Standard M12 connectors (MAC00-P4) for industrial use
- Standard M12 and Harting connectors (MAC00-P5) for even higher reliability, e.g. for use in processing and power plants
- 4-20 mA analog input. Resolution 16 bit (65.535 step). Galvanically isolated
- 4-20 mA analog output. Resolution 16 bit (65.535 step). Galvanically isolated
- Error output, digital. Galvanically isolated
- Communication interface for Slave motor (incl. +24V control voltage for slave motor)
- Optically isolated communication via RS232 or RS485
- Full RS232 protocol support using standard serial cables
- RS232 communication interface for PC setup and monitoring
- Input for 24 VDC control voltage which could also be used for a possible slave motor

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