Product Data





JVL ...when motors must be controlled

Multi-axis high-speed RS485 Expansion Modules for MAC motors. Types MACOO-FS1 and MACOO-FS4



A range of integrated AC servo motors makes JVL a world leader within motion control. The numerous features of these motors include a modular concept that makes it extremely easy to adapt the motors to a very wide range of applications.

JVL now announces new expansion modules for the integrated MAC motors (MACOO-FS1 with D-Sub connectors and MACOO-FS4 with M12 connectors). They can be used in multi-axis, high-speed applications with up to 255 units on the same RS485 bus with repeaters.

4 inputs and 2 outputs, position, error status, etc., are scanned locally and can be read very quickly from a PC or PLC. For example, 16 motors can be scanned in just 12ms. New positional data can be sent to 255 motors in just 133 ms. This is a very important feature in machines where multiple axes must be adjusted quickly and simultaneously.

All motor parameters can also be read/written, and a group command can be used to write to several motors simultaneously.

All 24V I/O and RS 485 are galvanically isolated to ensure error-free function. 2 of the 4 inputs can be set up as a limit switch. Dual supply ensures position and communication at emergency stop. Up to 921.6 Kbit communication and other connector types can be delivered on request. The new extended features in the FS1 and FS4 Expansion Modules are fully supported in the new improved MACComm OCX (ActiveX component). This component makes it easy to develop Windows software such as Visual basic applications, Labviews, etc., that can control up to 255 MAC motors.

The modular construction of JVL's integrated MAC motors makes them particularly well suited for a large number of fieldbus applications. The series also includes Profibus, CANopen (DSP402), DeviceNet, USB and Bluetooth models. New modules are under development, including for example models for Ethernet and Zigbee wireless communication.





Multiaxis control with Expansion module FS1 and MacTalk through JVL OCX driver



Fast I/O module

Connections FS4



The Fast I/O module PA0120 connected to the PC via Q.link makes further 24 digital inputs and 22 digital outputs available for various purposes. (38.400 baud or higher)



101 PWR Basic I/O's Power supply MI2 - 8pin male M12 - Spin male connector including: connector including: Digital inputs I to 4, and P+ (primary supply), and CV O1, O2, IO supply. (secondary supply) and P-102 Extended I/O's COM MI2 - 8pin female RS485 Communication connector including: MI2 - 5pin female Multifunction I/O's (A+. ector including: analogue input AIN, and RS485 Interface. RS232 interface and GND

Application:

Positioning of axes etc.

Function

- The solution gives full access to all functions and registers in the MAC motor.
- Provides group command so that a group of motors can start or receive commands simultaneously.
- Status command that gives information about module and motor.
- Command queue can hold 32 parameters.
- Local scanning of position and speed for fast access via RS485 bus.
- Baud rates 19200 to 921000.
- Can be used with all standard RS485 serial ports.
- Special position search and endlimit function.

Ordering information

MAC050-A1 to MAC141A1: MAC motor up to 140W MAC400-D1 or MAC800-D1: MAC motor up to 750W MAC00-FS1: Expansion module with D-Sub connectors MAC00-FS4: Expansion module with M12 connectors MACcomm OCX: ActiveX component for PC

PC-CP-124UL: 4 ports RS485 PCI board for PC RS485-USB1.1: USB to RS485 isolated



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