



MAC00-B4

RS232/485, Clk/Dir Enc, M12 conn., IP67

MAC00 modules are control- and -interface modules for the MAC motor® series of integrated (all-in-one) servo motors with shaft power from 46 W to 4500 W.

Choose between a wide range of control modules

- Ethernet modules support all protocols: Profinet, EtherNet/IP, EtherCAT, SERCOS, Powerlink and ModbusTCP/UDP
- Ethernet modules have built-in Switch for easy daisy-chaining of cables from motor-to-motor
- Wireless modules: WLAN or BlueTooth
- CANopen, Devicenet or Profibus or ePLC modules
- Serial communication modules, RS232 and/or RS485

Unique Ethernet functionality: use MacTalk® (PC software) to change freely between all the different Ethernet protocols, you don t need several different types on stock ONE is enough.



General information

Description	RS232/485, Clk/Dir Enc, M12 conn., IP67, RS232/485, Clk/Dir Enc, M12 conn., IP67		
Manufacture	JVL	For motor type	MAC
Color	Black	Protection house	IP67
Software	MacTalk	Interface	RS232/485
Connectivity - Busses	RS232/RS485		
Control voltage (CVI/O+) [V]	n/a	Main supply [V]	12-48
Expansion connector	Generation 1		
Integrated PLC	No	PLC no. of DI	n/a
PLC no. of AIN	1	PLC no. of DO	2
Multifunction IOs	1	PLC no. of DIO	n/a



MAC00-B4

RS232/485, Clk/Dir Enc, M12 conn., IP67

Mechanical information

Customer Sealing

Datasheet - pdf



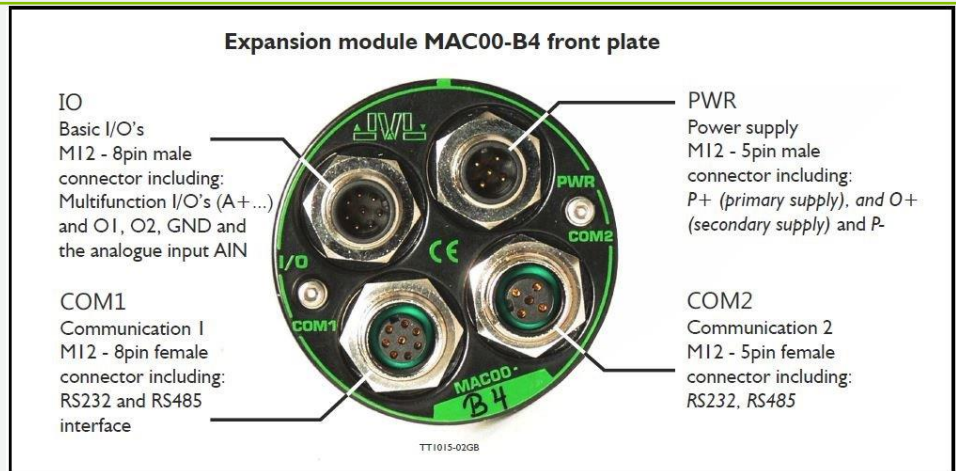
MAC00-B4

RS232/485, Clk/Dir Enc, M12 conn., IP67

Connector information

Expansion connector Generation 1

Picture connectors



Connector 1 label	PWR	Connector 1	M12 5-pin male A-coded
Connector 2 label	COM2	Connector 2	M12 5-pin female A-coded
Connector 3 label	COM1	Connector 3	M12 8-pin female A-coded
Connector 4 label	I/O	Connector 4	M12 8-pin male A-coded
Connector 2 RS232	Yes	Connector 2 RS485	Yes
Connector 3 RS232	Yes	Connector 3 RS485	Yes
Connector 4 RS232	n/a	Connector 4 RS485	n/a

Picture CN1

"PWR" - Power input. M12 - 5pin male connector

Signal name	Description	Pin no.	JVL Cable W11000-M12F5T05N	Isolation group
P+	Main supply +12-48VDC. Connect with pin 2 *	1	Brown	1
P+	Main supply +12-48VDC. Connect with pin 1 *	2	White	1
P-	Main supply ground. Connect with pin 5 *	3	Blue	1
O+	Output supply / Control voltage +12-30VDC.	4	Black	1
P-	Main supply ground. Connect with pin 3 *	5	Grey	1

* Note: P+ and P- are each available at 2 terminals. Make sure that both terminals are connected in order to split the supply current in 2 terminals and thereby avoid an overload of the connector.

Picture CN2

"IO" - Basic I/O's. M12 - 8pin male connector.

Signal name	Description	Pin no.	JVL Cable W11000-M12F5T05N	Isolation group
A+	Multifunction I/O terminal A+	1	White	1
A-	Multifunction I/O terminal A-	2	Brown	1
B+	Multifunction I/O terminal B+	3	Green	1
B-	Multifunction I/O terminal B-	4	Yellow	1
O1	Digital output 1 - PNP output	5	Grey	1
O2	Digital output 2 - PNP output	6	Pink	1
OCM	Ground intended to be used together with the other signals in this connector.	7	Blue	1
AIN	Analogue input +/- 10V or used for Zero search Use the OCM terminal (pin 7) as ground for the analogue input.	8	Red	1



MAC00-B4

RS232/485, Clk/Dir Enc, M12 conn., IP67

Connector information

Picture CN3

"COM1" - Communication connector 1. M12 - 8pin female connector.				
Signal name	Description	Pin no.	JVL Cable WI1000-M12 M8T05N	Isolation group
	Not used	1	White	
RS232: TX	RS232 interface. Transmit terminal Leave open if unused.	2	Brown	1
RS232: RX	RS232 interface. Receive terminal Leave open if unused.	3	Green	1
GND	Ground intended to be used together with the other signals in this connector.	4	Yellow	1
RS485: B+	RS485 interface. Leave open if unused	5	Grey	1
RS485: A-	RS485 interface. Leave open if unused	6	Pink	1
	Not used	7	Blue	
	Not used	8	Red	

Picture CN4

"COM2" - Communication connector 2. M12 - 5pin female connector				
Signal name	Description	Pin no.	JVL Cable WI1000M12 M5T05N	Isolation group
RS232 Rx	RS232 interface receive terminal. Leave open if unused	1	Brown	1
RS232 Tx	RS232 interface transmit terminal. Leave open if unused	2	White	1
RS485 B+	RS485 interface. Leave open if unused	3	Blue	1
RS485 A-	RS485 interface. Leave open if unused	4	Black	1
GND	Interface ground (same as main ground).	5	Grey	1



MAC00-B4

RS232/485, Clk/Dir Enc, M12 conn., IP67

Electrical information

Control voltage (CVI/O+) [V]	n/a	Control Voltage (CVI) Min-Max [V]	
Max current CVI [A]			
Main supply [V]	12-48	Main supply Min-Max [V]	10-50
Max current (P+) [A]		P- isolated from Earth	
		PLC no. of DI	n/a
Dig. Input impedans		PLC no. of DO	2
PLC DO max current [mA]	100mA - PNP	PLC no. of DIO	n/a
		PLC no. of AIN	1
PLC AIN voltage [VDC]	-10 to +10	PLC AIN Min-Max [VDC]	-10 to +32
PLC AIN Max Tol. [%]	5.0	Multifunction IOs	1
PLC MF low level [VDC]	2.0	PLC MF high level [VDC]	3.0
PLC MF Max level [VDC]	5.5	MTBF 30% [Year]	
MTBF 100% [Year]			