JVL A/S | Bregnerødvej 127 | DK-3460 Birkerød | Denmark | Tel.(+45) 4582 4440 | www.jvl.dk | sales@jvl.dk

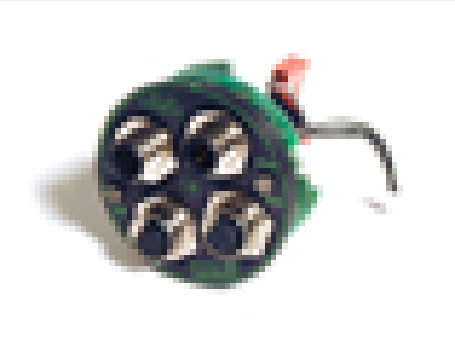
MAC00-R4

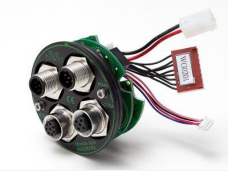
ePLC 8DI+4DO+1AI, M12 IP67

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	ePLC 8DI+4DO+1AI, M12 IP67, Nano-PLC 8DI+4DO+1AI, M12 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	Yes	**PLC no. of DI**	8
PLC no. of AIN	1	**PLC no. of DO**	4
Multifunction IOs		**PLC no. of DIO**	n/a

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Mechanical information

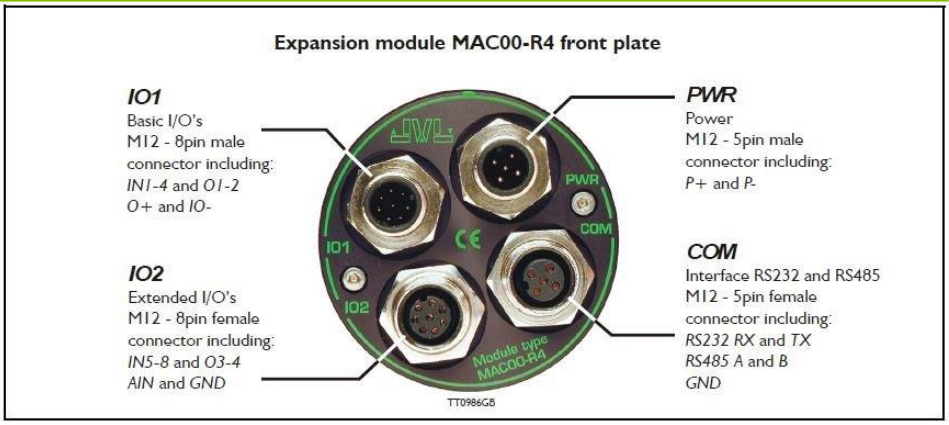
Customer Sealing	**Datasheet - pdf**

MAC00-R4 ePLC 8DI+4DO+1AI, M12 IP67

Connector information

Expansion connector Generation 1

Picture connectors



Connector 1 label	PWR	**Connector 1**	M12 5-pin male A-coded
Connector 2 label	COM	**Connector 2**	M12 5-pin female A-coded
Connector 3 label	IO2	**Connector 3**	M12 8-pin female A-coded
Connector 4 label	IO1	**Connector 4**	M12 8-pin male A-coded
Connector 2 RS232	Yes	**Connector 2 RS485**	Yes
Connector 3 RS232	n/a	**Connector 3 RS485**	n/a
Connector 4 RS232	n/a	**Connector 4 RS485**	n/a

Picture CN1

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

Signal name	Description	Pin no.	JVL Cable WI1000M12 F5T05N	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
Unused	Future option	4	Black	-
P-	Main supply ground. Connect with pin 3 *	5	Grey	1

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

Picture CN2

"COM" - Interface RS232 and RS485. M12 - 5-pin 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. - **Important, see note1**:	2	White	1
RS485 B+	RS485 interface terminal. Leave open if unused	3	Blue	1
RS485 A-	RS485 interface terminal. Leave open if unused	4	Black	1
GND	Interface ground (same as main ground).	5	Grey	1

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Connector information

Picture CN3

"IO2" - Extended I/Os. M12 - 8-pin female connector.				
Signal name	**Description**	**Pin no.**	**JVL Cable WI1000-M12 M8T05N**	**Isolation group**
IN5	Digital input 5	1	White	2
IN6	Digital input 6	2	Brown	2
IN7	Digital input 7	3	Green	2
IN8	Digital input 8	4	Yellow	2
O3	Digital output 3 - PNP output	5	Grey	2
O4	Digital output 4 - PNP output	6	Pink	2
AIN1	Analogue input +/-10V (also used for *Zero search* sensor).	7	Blue	1
GND	Ground for AIN. This ground is shared with the main ground	8	Red	1

Picture CN4

"IO1" - Basic I/O's. M12 - 8-pin male connector.				
Signal name	**Description**	**Pin no.**	**JVL Cable WI1000-M12 F8T05N**	**Isolation group**
IN1	Digital input 1	1	White	2
IN2	Digital input 2	2	Brown	2
IN3	Digital input 3	3	Green	2
IN4	Digital input 4	4	Yellow	2
O1	Digital output 1 - PNP output	5	Grey	2
O2	Digital output 2 - PNP output	6	Pink	2
O+	Output supply +8-32VDC. Used for O1-4. Not used/necessary for using IN1-8	7	Blue	2
IO-	I/O ground. Used for IN1-8 and O1-4.	8	Red	2

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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	8
Dig. Input impedans	10kohm	**PLC no. of DO**	4
PLC DO max current [mA]	300mA - 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**	
PLC MF low level [VDC]		**PLC MF high level [VDC]**	
PLC MF Max level [VDC]		**MTBF 30% [Year]**	
MTBF 100% [Year]			