

Module connections for modules with generation 1 and 2 connectors to motor.

Pin No.	Pin	Description	Color	Iso. Group	Pin No.	Pin	Description	Color	Iso. Group
1: MAC00-xxx: Power cable M12 5-pin Male A-code, Eg, WI1000-M12F5TxxN					10: MAC00-FP4: Profibus cable M12 5-pin Male/Female D-code, Eg, WI1026-M12F/M55xxN				
1	P+	Main supply +12-48VDC.	Brown	1	1	- / 5VDC	-	-	2
2	P+	Main supply +12-48VDC.	White	1	2	A-	Terminal A for the Profibus interface	Green	2
3	P-	Main supply ground.	Blue	1	3	DGnd	Profibus-DP interface ground	-	2
4	O+	Output Supply / Control Voltage	Black	1	4	B+	Terminal B for the Profibus interface	Red	2
5	P-	Main supply ground.	Grey	1	5	Shield	Cable shield. Internally con. to motor housing.	Shield	2
2: MAC00-B4: IO cable M12 8-pin Male A-code, Eg, WI1000-M12F8TxxN					11: MAC00-FS4: COM High Speed cable M12 5-pin Female A-code, Eg, WI1000-M12M5TxxN				
1	A+	Multifunction I/O terminal A+	White	1	1	-	Leave open	Brown	1
2	A-	Multifunction I/O terminal A-	Brown	1	2	-	Leave open	White	1
3	B+	Multifunction I/O terminal B+	Green	1	3	RS485 - A-	RS485 interface Positive terminal.	Blue	2
4	B-	Multifunction I/O terminal B-	Yellow	1	4	RS485 - B+	RS485 interface Negative terminal.	Black	2
5	O1	Digital output 1 - PNP output	Grey	1	5	Gnd	Ground	Grey	2
6	O2	Digital output 2 - PNP output	Pink	1	12: MAC00-FS4, -B42, -R4: IO cable M12 8-pin Male A-code, Eg, WI1000-M12F8TxxN				
7	OCM	Ground	Blue	1	1	IN1	Digital input 1	White	3/2
8	AIN	Analogue Input	Red	1	2	IN2	Digital input 1	Brown	3/2
3: MAC00-B4: COM+IO cable M12 8-pin Female A-code, Eg, WI1000-M12M8TxxN					13: MAC00-FS4: COM+IO cable M12 8-pin Female A-code, Eg, WI1000-M12M8TxxN				
1	NC	Leave open	White	1	1	AIN1	Analogue Input 1	White	1
2	RS232 - TX	RS232 interface. Transmit terminal	Brown	1	2	RS232 - TX	RS232 interface - transmit output	Brown	1
3	RS232 - RX	RS232 interface. Receive terminal	Green	1	3	RS232 - RX	RS232 interface - receive input	Green	1
4	Gnd	Ground	Yellow	1	4	Gnd	Ground	Yellow	1
5	RS485 - B+	RS485 interface.	Grey	1	5	A+	Multifunction I/O 1 terminal A+	Grey	1
6	RS485 - A-	RS485 interface.	Pink	1	6	A-	Multifunction I/O 1 terminal A-	Pink	1
7	NC	Leave open	Blue	1	7	B+	Multifunction I/O 1 terminal B+	Blue	1
8	NC	Leave open	Red	1	8	B-	Multifunction I/O 1 terminal B-	Red	1
4: MAC00-B4, -B42, -R4: COM cable M12 5-pin Female A-code, Eg, WI1000-M12M5TxxN					14: MAC00-Ex4: COM+IO cable M12 8-pin Female A-code, Eg, WI1000-M12M8TxxN				
1	RS232 - RX	RS232 interface. Receive terminal	Brown	1	1	O1	Output 1 - PNP/Sourcing output	White	2
2	RS232 - TX	RS232 interface. Transmit terminal	White	1	2	RS232 - TX	RS232 interface - transmit output	Brown	1
3	RS485 - B+	RS485 interface.	Blue	1	3	RS232 - RX	RS232 interface - receive input	Green	1
4	RS485 - A-	RS485 interface.	Black	1	4	Gnd	Ground	Yellow	1
5	Gnd	Ground	Grey	1	5	AIN1	Analogue Input 1	Grey	1
5: MAC00-B41: IO cable M12 8-pin Male A-code, Eg, WI1000-M12F8TxxN					15: MAC00-Ex41: COM+IO cable M12 17-pin Female A-code, Eg, WI1009-M12M17TxxN				
1	DIO1	I/O channel 1 - Either Input or Output	White	1	1	IN1	Input channel 1.	Brown	2
2	DIO2	I/O channel 2 - Either Input or Output	Brown	1	2	Gnd	Ground	Blue	1
3	DIO3	I/O channel 3 - Either Input or Output	Green	1	3	IN2	Input channel 2.	White	2
4	DIO4	I/O channel 4 - Either Input or Output	Yellow	1	4	IN3	Input channel 3.	Green	2
5	DIO5	I/O channel 5 - Either Input or Output	Grey	1	5	B2-	Multifunction I/O 2 terminal B-	Pink	1
6	DIO6	I/O channel 6 - Either Input or Output	Pink	1	6	IN4	Input channel 4.	Yellow	2
7	CVO	Supply output. Connected internally to the CVI	Blue	1	7	A2-	Multifunction I/O 2 terminal A-	Black	1
8	Gnd	Ground	Red	1	8	B2+	Multifunction I/O 2 terminal B+	Grey	1
6: MAC00-B41: COM cable M12 8-pin Female A-code, Eg, WI1000-M12M8TxxN					16: MAC00-Ex4 and -Ex41: Ethernet cable M12 4-pin Female D-code, Eg, WI1046-M12M4Txxy				
1	USB - D-	USB interface. Negative data terminal	White	2	1	Tx0-P	Ethernet Transmit channel 0/1 - positive terminal	Brown/White	3/4
2	RS232 - TX	RS232 interface - transmit output	Brown	2	2	Rx0-P	Ethernet Receive channel 0 - positive terminal	Blue/White	3/4
3	RS232 - RX	RS232 interface. Receive terminal	Green	2	3	Tx0-N	Ethernet Transmit channel 0/1 - negative terminal	Brown	3/4
4	Ignd	Isolated interface ground	Yellow	2	4	Rx0-N	Ethernet Receive channel 0 - negative terminal	Blue	3/4
5	RS485 - A-	RS485 interface.	Grey	2	5	-	Shield	Shield	1
6	RS485 - B+	RS485 interface.	Pink	2	17: MAC00-Ex4 and -Ex41: Alt. Ether. cable M12 4-pin Female D-code, Eg, WI1046-M12MFTxxy				
7	USB - D+	USB interface. Positive data terminal	Blue	2	1	Tx0-P	Ethernet Transmit channel 0/1 - positive terminal	Orange/White	3/4
8	USB - VBUS	USB interface. Supply input 5VDC nominal	Red	2	2	Rx0-P	Ethernet Receive channel 0 - positive terminal	Green/White	3/4
7: MAC00-B41: IO cable M12 12-pin Female A-code, Eg, WI1009-M12M12TxxN					18: MAC00-FC4, -FC41, -FD4, -FP4: COM+IO, M12 8-pin Female A-code, Eg, WI1000-M12M8TxxN				
1	A1+	Multifunction I/O 1 terminal A+	Brown	1	1	IOC	I/O terminal C.	White	3
2	Gnd	Ground	Blue	1	2	RS232 - TX	RS232 interface - transmit output	Brown	1
3	A1-	Multifunction I/O 1 terminal A-	White	1	3	RS232 - RX	RS232 interface - receive input	Green	1
4	B1+	Multifunction I/O 1 terminal B+	Green	1	4	Gnd	Ground	Yellow	1
5	A2+	Multifunction I/O 2 terminal A+	Pink	1	5	IOA	I/O terminal A.	Grey	3
6	B1-	Multifunction I/O 1 terminal B-	Yellow	1	6	IOB	I/O terminal B.	Pink	3
7	B2+	Multifunction I/O 2 terminal B+	Black	1	7	IO-	I/O ground to be used with IOA, -B, -C, -D	Blue	3
8	A2-	Multifunction I/O 2 terminal A-	Grey	1	8	IOD	I/O terminal D.	Red	3
9	5VO	5V out - max 100mA	red	1	19: MAC00-B4/-41: COM cable M12 5-pin Female A-code, Eg, RS232-M12-1-5-5				
10	B2-	Multifunction I/O 2 terminal B-	Violet	1	1	RS232 - RX	RS232 interface. Receive terminal	Brown	1
11	AIN1	Analogue Input 1	Grey/Pink	1	2	RS232 - TX	RS232 interface. Transmit terminal	White	1
12	AIN2	Analogue Input 2	Red/Blue	1	3	NC			1
8: MAC00-FC4/-41: CAN cable M12 5-pin Male/Female A-code, Eg, WI1006-M12F5/(M5)TxxN					20: MAC00-R4: IO cable M12 8-pin Male A-code, Eg, WI1000-M12M8TxxN				
1	CAN-Shield	Shield for the CAN interface	Shield	2	1	IN5	Digital input 5	White	2
2	CAN-V+ (NC)	Reserved for FD4	Red	2	2	IN6	Digital input 6	Brown	2
3	CAN-gnd	CAN interface ground	Black	2	3	IN7	Digital input 7	Green	2
4	CAN-H	CAN interface. Positive signal line	White	2	4	IN8	Digital input 8	Yellow	2
5	CAN-L	CAN interface. Negative signal line	Blue	2	5	O3	Digital output 3 - PNP output	Grey	2
9: MAC00-FC4, -FC41, -FD4, -FP4: COM+IO, M12 8-pin Female A-code, Eg, WI1000-M12M8TxxN					21: MAC00-B4/-41: COM cable M12 8-pin Female A-code, Eg, RS232-M12-1-5-8				
1	IOC	I/O terminal C.	White	3	1	NC			1
2	RS232 - TX	RS232 interface - transmit output	Brown	1	2	RS232 - TX	RS232 interface. Transmit terminal	Brown	1
3	RS232 - RX	RS232 interface - receive input	Green	1	3	RS232 - RX	RS232 interface. Receive terminal	Green	1
4	Gnd	Ground	Yellow	1	4	Gnd	Ground	Yellow	1
5	IOA	I/O terminal A.	Grey	3	5	NC			1
6	IOB	I/O terminal B.	Pink	3	6	NC			1
7	IO-	I/O ground to be used with IOA, -B, -C, -D	Blue	3	7	NC			1
8	IOD	I/O terminal D.	Red	3	8	NC			1
18: MAC00-B4, -B42, -R4: COM cable M12 5-pin Female A-code, Eg, RS232-M12-1-5-5					19: MAC00-B4/-41: COM cable M12 8-pin Female A-code, Eg, RS232-M12-1-5-8				
1	RS232 - RX	RS232 interface. Receive terminal	Brown	1	1	NC			1
2	RS232 - TX	RS232 interface. Transmit terminal	White	1	2	RS232 - TX	RS232 interface. Transmit terminal	Brown	1
3	NC			1	3	RS232 - RX	RS232 interface. Receive terminal	Green	1
4	NC			1	4	Gnd	Ground	Yellow	1
5	Gnd	Ground	Grey	1	5	NC			1

For MAC modules with only the 17-pin connector for RS232 it can be useful to select the PA0190 + RS232-M12-1-5-8 to split RS232 and IO.