Module connections for modules with generation 2 connector to motor.

No.	Pin No.	Pin	Description	Color	Iso. Group
1:	**MAC00-xxx: Power cable M12 5-pin Male A-code, Eg, WI1000-M12F5TxxN**				
	1	P+	Main supply +12-48VDC.	Brown	1
	2	P+	Main supply +12-48VDC.	White	1
	3	P-	Main supply ground.	Blue	1
	4	O+	Output Supply / Control Voltage	Black	1
	5	P-	Main supply ground.	Grey	1
4:	**MAC00-B42: COM cable M12 5-pin Female A-code, Eg, WI1000-M12M5TxxN**				
	1	RS232 - RX	RS232 interface. Receive terminal	Brown	1
	2	RS232 - TX	RS232 interface. Transmit terminal	White	1
	3	RS485 - B+	RS485 interface.	Blue	1
	4	RS485 - A-	RS485 interface.	Black	1
	5	Gnd	Ground	Grey	1
5:	**MAC00-B41: IO cable M12 8-pin Male A-code, Eg, WI1000-M12F8TxxN**				
	1	DIO1	I/O channel 1 - Either Input or Output	White	1
	2	DIO2	I/O channel 2 - Either Input or Output	Brown	1
	3	DIO3	I/O channel 3 - Either Input or Output	Green	1
	4	DIO4	I/O channel 4 - Either Input or Output	Yellow	1
	5	DIO5	I/O channel 5 - Either Input or Output	Grey	1
	6	DIO6	I/O channel 6 - Either Input or Output	Pink	1
	7	CVO	Supply output. Connected internally to the CVI	Blue	1
	8	Gnd	Ground	Red	1
6:	**MAC00-B41: COM+IO cable M12 8-pin Female A-code, Eg, WI1000-M12M8TxxN**				
	1	USB - D-	USB interface. Negative data terminal	White	2
	2	RS232 - TX	RS232 interface - transmit output	Brown	2
	3	RS232 - RX	RS232 interface. Receive terminal	Green	2
	4	Ignd	Isolated interface ground	Yellow	2
	5	RS485 - A-	RS485 interface.	Grey	2
	6	RS485 - B+	RS485 interface.	Pink	2
	7	USB - D+	USB interface. Positive data terminal	Blue	2
	8	USB - VBUS	USB interface. Supply input 5VDC nominal	Red	2
7:	**MAC00-B41: IO cable M12 12-pin Female A-code, Eg, WI1009-M12M12TxxN**				
	1	A1+	Multifunction I/O 1 terminal A+	Brown	1
	2	Gnd	Ground	Blue	1
	3	A1-	Multifunction I/O 1 terminal A-	White	1
	4	B1+	Multifunction I/O 1 terminal B+	Green	1
	5	A2+	Multifunction I/O 2 terminal A+	Pink	1
	6	B1-	Multifunction I/O 1 terminal B-	Yellow	1
	7	B2+	Multifunction I/O 2 terminal B+	Black	1
	8	A2-	Multifunction I/O 2 terminal A-	Grey	1
	9	5VO	5V out - max 100mA	red	1
	10	B2-	Multifunction I/O 2 terminal B-	Violet	1
	11	AIN1	Analogue Input 1	Grey/Pink	1
	12	AIN2	Analogue Input 2	Red/Blue	1
8:	**MAC00-FC41: CAN cable M12 5-pin Male/Female A-code, Eg, WI1006-M12F5(/M5)TxxN**				
	1	CAN-Shield	Shield for the CAN interface	Shield	2
	2	CAN-V+ (NC)	Reserved for FD4	Red	2
	3	CAN-gnd	CAN interface ground	Black	2
	4	CAN-H	CAN interface. Positive signal line	White	2
	5	CAN-L	CAN interface. Negative signal line	Blue	2
9:	**MAC00-FC41: Com+IO cable M12 8-pin Female A-code, Eg, WI1000-M12M8TxxN**				
	1	IOC	I/O terminal C.	White	3
	2	RS232 - TX	RS232 interface - transmit output	Brown	1
	3	RS232 - RX	RS232 interface - receive input	Green	1
	4	Gnd	Ground	Yellow	1
	5	IOA	I/O terminal A.	Grey	3
	6	IOB	I/O terminal B.	Pink	3
	7	IO-	I/O ground to be used with IOA, -B, -C, -D	Blue	3
	8	IOD	I/O terminal D.	Red	3
18:	**MAC00-B42: COM cable M12 5-pin Female A-code, Eg, RS232-M12-1-5-5**				
	1	RS232 - RX	RS232 interface. Receive terminal	Brown	1
	2	RS232 - TX	RS232 interface. Transmit terminal	White	1
	3	NC			1
	4	NC			1
	5	Gnd	Ground	Grey	1

No.	Pin No.	Pin	Description	Color	Iso. Group
12:	**MAC00-B42: IO cable M12 8-pin Male A-code, Eg, WI1000-M12F8TxxN**				
	1	IN1	Digital input 1	White	2
	2	IN2	Digital input 1	Brown	2
	3	IN3	Digital input 1	Green	2
	4	IN4	Digital input 1	Yellow	2
	5	O1	Digital output 1 - PNP output	Grey	2
	6	O2	Digital output 1 - PNP output	Pink	2
	7	O+	Output supply +5-32VDC. Used for O1-4.	Blue	2
	8	IO-	I/O ground	Red	2
13:	**MAC00-B42: COM+IO cable M12 8-pin Female A-code, Eg, WI1000-M12M8TxxN**				
	1	AIN1	Analogue Input 1	White	1
	2	RS232 - TX	RS232 interface - transmit output	Brown	1
	3	RS232 - RX	RS232 interface - receive input	Green	1
	4	Gnd	Ground	Yellow	1
	5	A+	Multifunction I/O 1 terminal A+	Grey	1
	6	A-	Multifunction I/O 1 terminal A-	Pink	1
	7	B+	Multifunction I/O 1 terminal B+	Blue	1
	8	B-	Multifunction I/O 1 terminal B-	Red	1
14:	**MAC00-Ex4: COM+IO cable M12 8-pin Female A-code, Eg, WI1000-M12M8TxxN**				
	1	O1	Output 1 - PNP/Sourcing output	White	2
	2	RS232 -TX	RS232 interface - transmit output	Brown	1
	3	RS232 - RX	RS232 interface - receive input	Green	1
	4	Gnd	Ground	Yellow	1
	5	AIN1	Analogue Input 1	Grey	1
	6	IN1	Digital input 1 - 12-32V tolerant.	Pink	2
	7	IO-	I/O ground for IN1 and O1	Blue	2
	8	O+	Positive supply input for O1 (5-32VDC)	Red	2
15:	**MAC00-Ex41: COM+IO cable M12 17-pin Female A-code, Eg, WI1009-M12M17TxxN**				
	1	IN1	Input channel 1.	Brown	2
	2	Gnd	Ground	Blue	1
	3	IN2	Input channel 2.	White	2
	4	IN3	Input channel 3.	Green	2
	5	B2-	Multifunction I/O 2 terminal B-	Pink	1
	6	IN4	Input channel 4.	Yellow	2
	7	A2-	Multifunction I/O 2 terminal A-	Black	1
	8	B2+	Multifunction I/O 2 terminal B+	Grey	1
	9	Out+	Positive supply input for O1/2 (5-32VDC)	Red	2
	10	A2+	Multifunction I/O 2 terminal A+	Violet	1
	11	O1	Output 1	Grey/Pink	2
	12	O2	Output 2	Red/blue	2
	13	AIN1	Analogue Input 1	White/Green	1
	14	AIN2	Analogue Input 2	Brown/Green	1
	15	RS232 - RX	RS232 interface. Receive terminal	White/Yellow	1
	16	IO-	Ground for inputs and outputs	Yellow/Brown	2
	17	RS232 - TX	RS232 interface - transmit output	White/Grey	1
16:	**MAC00-Ex4 and -Ex41: Ethernet cable M12 4-pin Female D-code, Eg, WI1046-M12M4Txxy**				
	1	Tx0-P	Ethernet Transmit channel 0/1 - positive terminal	Brown/White	3/4
	2	Rx0-P	Ethernet Receive channel 0 - positive terminal	Blue/White	3/4
	3	Tx0-N	Ethernet Transmit channel 0/1 - negative terminal	Brown	3/4
	4	Rx0-N	Ethernet Receive channel 0 - negative terminal	Blue	3/4
	5	-	Shield	Shield	1
17:	**MAC00-Ex4 and -Ex41: Alt. Ether. cable M12 4-pin Female D-code, Eg, WI1046-M12M4Txxy**				
	1	Tx0-P	Ethernet Transmit channel 0/1 - positive terminal	Orage/White	3/4
	2	Rx0-P	Ethernet Receive channel 0 - positive terminal	Green/White	3/4
	3	Tx0-N	Ethernet Transmit channel 0/1 - negative terminal	Orange	3/4
	4	Rx0-N	Ethernet Receive channel 0 - negative terminal	Green	3/4
	5	-	Shield	Shield	1
20:	**MAC00-B42: IO cable M12 8-pin Male A-code, Eg, WI1000-M12M8TxxN**				
	1	IN5	Digital input 5	White	2
	2	IN6	Digital input 6	Brown	2
	3	IN7	Digital input 7	Green	2
	4	IN8	Digital input 8	Yellow	2
	5	O3	Digital output 3 - PNP output	Grey	2
	6	O4	Digital output 4 - PNP output	Pink	2
	7	AIN1	Output supply +5-32VDC. Used for O1-4.	Blue	1
	8	Gnd	Ground AIN1	Red	1
19:	**MAC00-B41: COM cable M12 8-pin Female A-code, Eg, RS232-M12-1-5-8**				
	1	NC			1
	2	RS232 - TX	RS232 interface. Transmit terminal	Brown	1
	3	RS232 - RX	RS232 interface. Receive terminal	Green	1
	4	Gnd	Ground	Yellow	1
	5	NC			1
	6	NC			1
	7	NC			1
	8	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.