

Sommario

1. Electrical Connections Manual	3
2. Information	3
2.1 Release	3
2.2 Specifications	3
3. Hardware and Connections	4
3.1 C1-R44-FF30	4
3.1.1 C1-R44: Power Supply	5
3.1.2 Connectivity	6
3.1.3 Digital Inputs	9
3.1.4 Digital Outputs	12
3.1.5 Bidirectional Count Inputs	15
3.1.6 Analog Inputs	34
3.1.7 Analog Outputs	35
3.2 A1-IPC-TC101: Panel PC	36
3.2.1 A1-IPC-TC101: Panel PC	36
3.2.2 IQ023/A/USB/50	37
3.3 RMC-3M B01 DD	39
3.3.1 RMC-3M B01 DD: CN1 - Power Supply	40
3.3.2 Connections	41
3.3.3 RMC-3M B01 DD: Digital output	42
3.3.4 SLOT 3 (H1-P16 : Out +24 Volt, 500 mA)	42
3.3.5 SLOT 4 (H1-P16 : Out +24 Volt, 500 mA)	42
3.3.6 SLOT 5 (H1-P16 : Out +24 Volt, 500 mA)	42
3.3.7 SLOT 6 (H1-P16 : Out +24 Volt, 500 mA)	43
3.3.8 SLOT 7 (H1-P16 : Out +24 Volt, 500 mA)	43
3.4 RMC-3M B01 MV	44
3.4.1 RMC-3M B01 MV- Power supply	45
3.4.2 Connections	46
3.4.3 RMC-3M B01 MV: Digital Inputs	47
3.4.4 SLOT 3 (H1- I16)	47
3.4.5 SLOT 4 (H1- I16)	47
3.4.6 SLOT 5 (H1- I16)	48
3.4.7 SLOT 6 (H1- I16)	48
3.4.8 RMC-3M B01 MV: Analogic Inputs	49
3.4.9 SLOT 7 (H1-A41)	49
3.5 RMC-3M B01 MZ	50
3.5.1 RMC-3M C01 D5- Power supply	51
3.5.2 Connections	52
3.5.3 RMC-3M B01 MZ: Analogic inputs	53
3.5.4 SLOT 3 (H1-A41)	53
3.5.5 SLOT 4 (H1-A41)	53
3.5.6 SLOT 5 (H1-A41)	53
3.5.7 SLOT 6 (H1-A41)	54
4. Support	55
Repair	55
Shipping	55

1. Electrical Connections Manual

2. Information

2.1 Release

			
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2.2 Specifications

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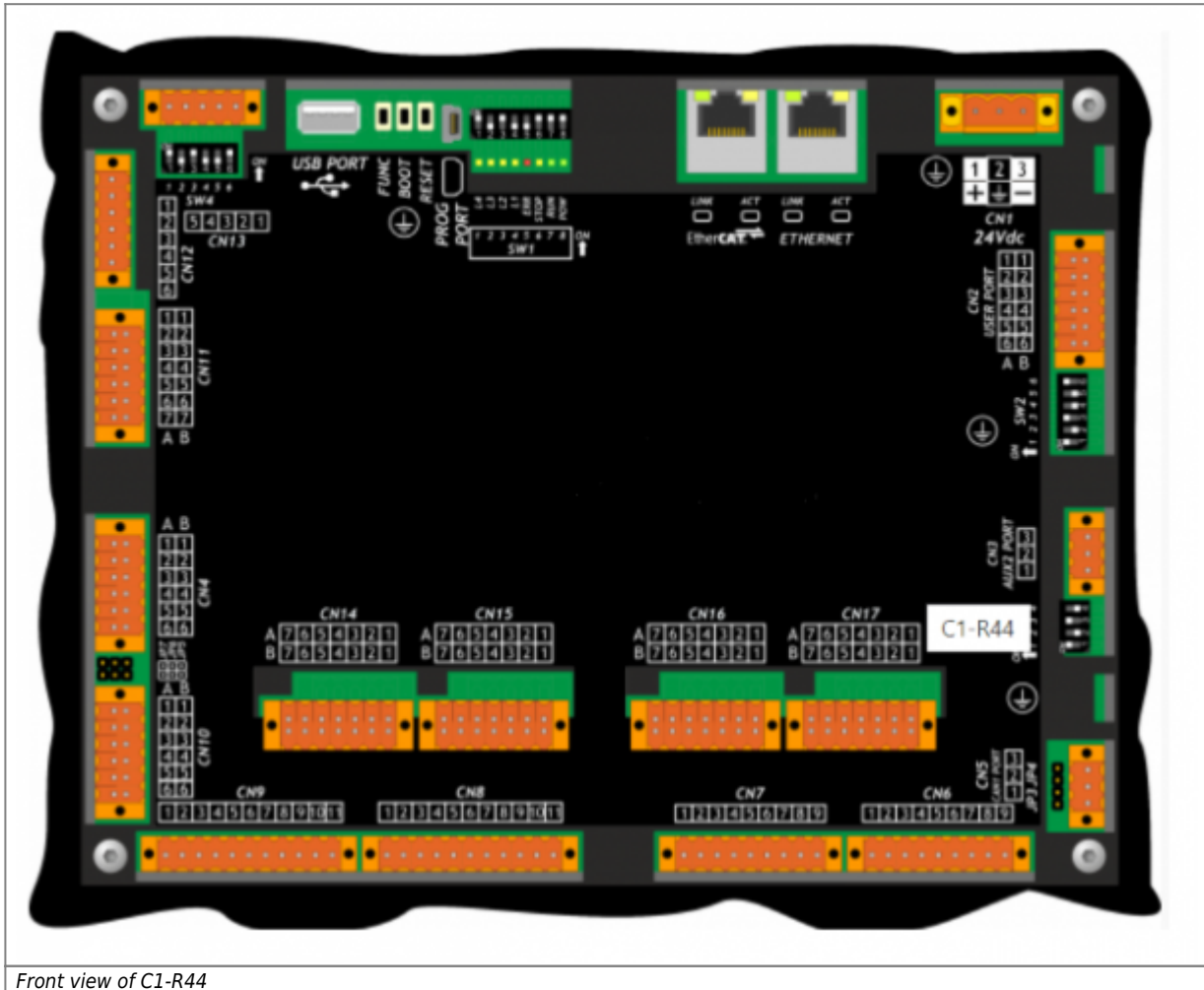
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3. Hardware and Connections

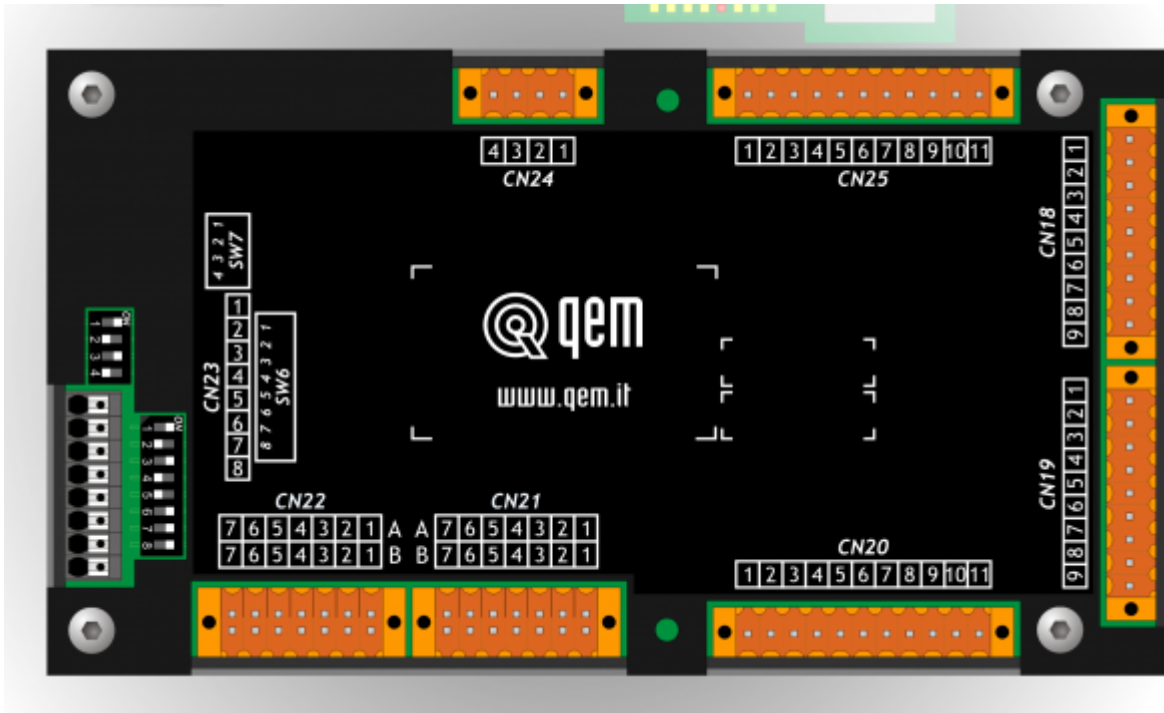
The device models used for this application are as follows:

- **C1-R44-FF30**: motion control CPU unit and automation logic;
- **A1-IPC-TC101-AC/W10**: Industrial Panel PC with a 10.1" display and capacitive touch screen;
- **IQ023/A/USB/50**: panel PC input module;
- **RMC-3M B01 MV /I16/I16/I16/I16/A41/24V**: Digital inputs + multiple analog inputs module;
- **RMC-3M B01 MZ /A41/A41/A41/A41/0/24V**: Multiple analog inputs module;
- **RMC-3M B01 DD /P16/P16/P16/P16/P16/24Vdc**: Multiple output module;

3.1 C1-R44-FF30



Front view of C1-R44



1MG2F Expansion

3.1.1 C1-R44: Power Supply

3.1.1.1 C1-R44: CN1

The device must be powered at 24Vdc. Provide an external fuse in series with the positive conductor +24Volt.

CN1		Terminal	Symbol	Description
	1	1	+	Positive power supply
	2	2	GROUND	Ground-PE (signals)
	3	3	-	0V power supply

3.1.2 Connectivity

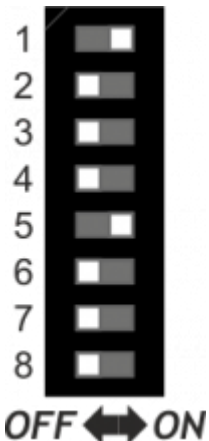
- PROG PORT → Serial with TTL logic standard for programming.
- USER PORT → Multistandard serial (RS232, RS422, RS485).
- AUX RS485 PORT → Multistandard serial (RS232, RS422, RS485).
- ETHERNET PORT → RJ45 Connector
- CAN PORT → Canbus type “fieldbus.”

3.1.2.1 ETHERNET port

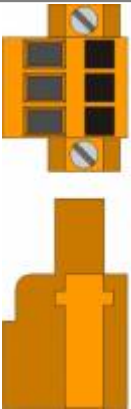
ETHERNET PORT	Description
	Connector RJ45. LED: * LINK: green led = cable connected (led on signals the cable is connected to both ends) * DATA: yellow led = data transmission (flashing led signals data transmission)

3.1.2.2 PROG PORT and USER PORT baud-rate selector

SET TRANSMISSION SPEED CAN TO 500 KB/S

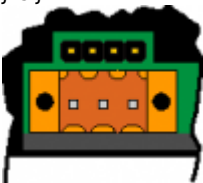
SW 1	Dip	Dip Settings				Function
	1	OFF	Baud-rate 57600			Selection of transmission speed PROG PORT
		ON	Baud-rate 115200			
	2	OFF	Baud-rate 57600			Selection of transmission speed USER PORT
		ON	Baud-rate 115200			
	3	OFF	Usable also by SERCOM and MODBUS devices			Selection of operating mode PROG PORT
		ON	Not usable by SERCOM and MODBUS devices			
	4	OFF	ON	OFF	ON	CANbus transmission speed (CanOpen)
	5	OFF	OFF	ON	ON	
		Baud-rate\ 125KB/S	Baud-rate\ 250KB/S	Baud-rate\ 500KB/S	Baud-rate\ 1MB/S	
	6	OFF	MMC/SD			External media device selection in system functions
		ON	USB			
	7	Reserved for internal use. Leave OFF				
	8	OFF	Normal PROG PORT			Select USER PORT as PROG PORT
		ON	PROG PORT on USER PORT connector			

3.1.2.3 C1-R44: CN5 - CAN PORT

CN5	Terminal	Symbol	Description
	1	0V	Common CAN
	2	CAN L	CAN L Terminal
	3	CAN H	CAN H Terminal

3.1.2.4 Termination Resistor Settings

Check the [CAN connection](#) to determine termination resistor activation

	Jumper Name	Setting	Function
JP3 JP4 	JP3	INSERTED	Termination CAN activated
	JP4		

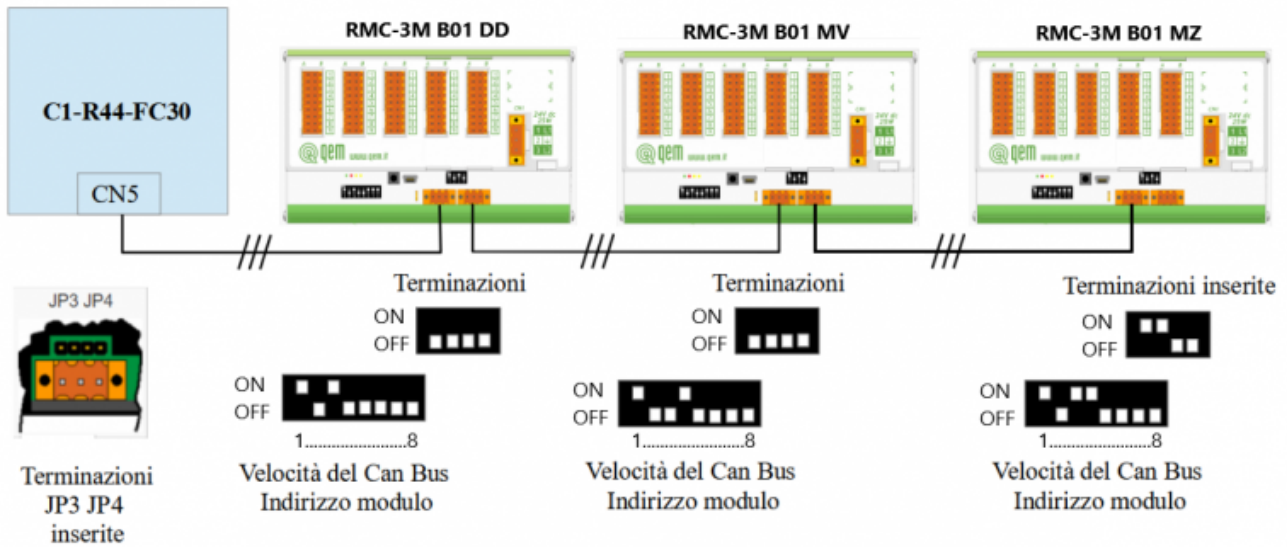
3.1.2.5 CAN Cable Connection Example



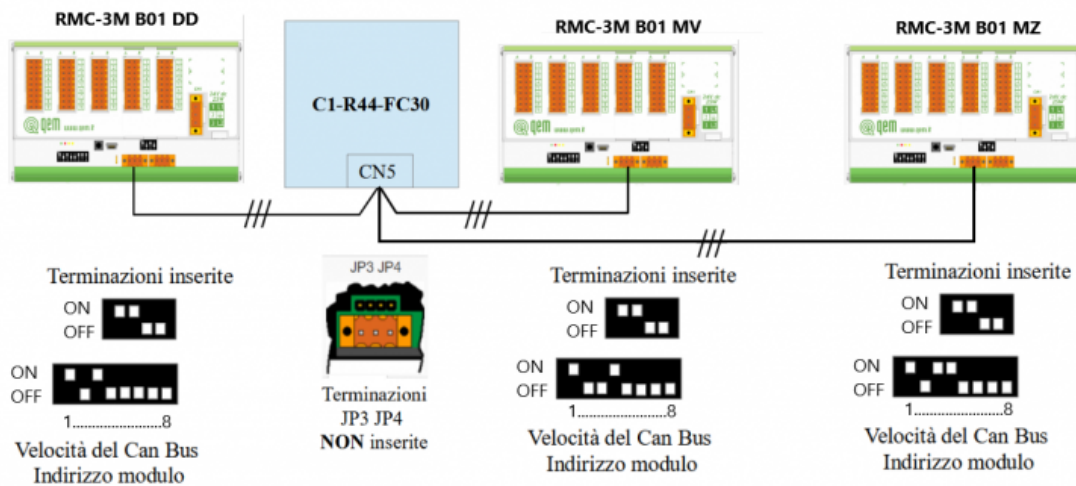
The CAN module RMC-3M B01 MZ is only present with the abrasive thickness reading implementation; therefore, the module is optional.

There are two ways to connect:

1st way:



2nd way:



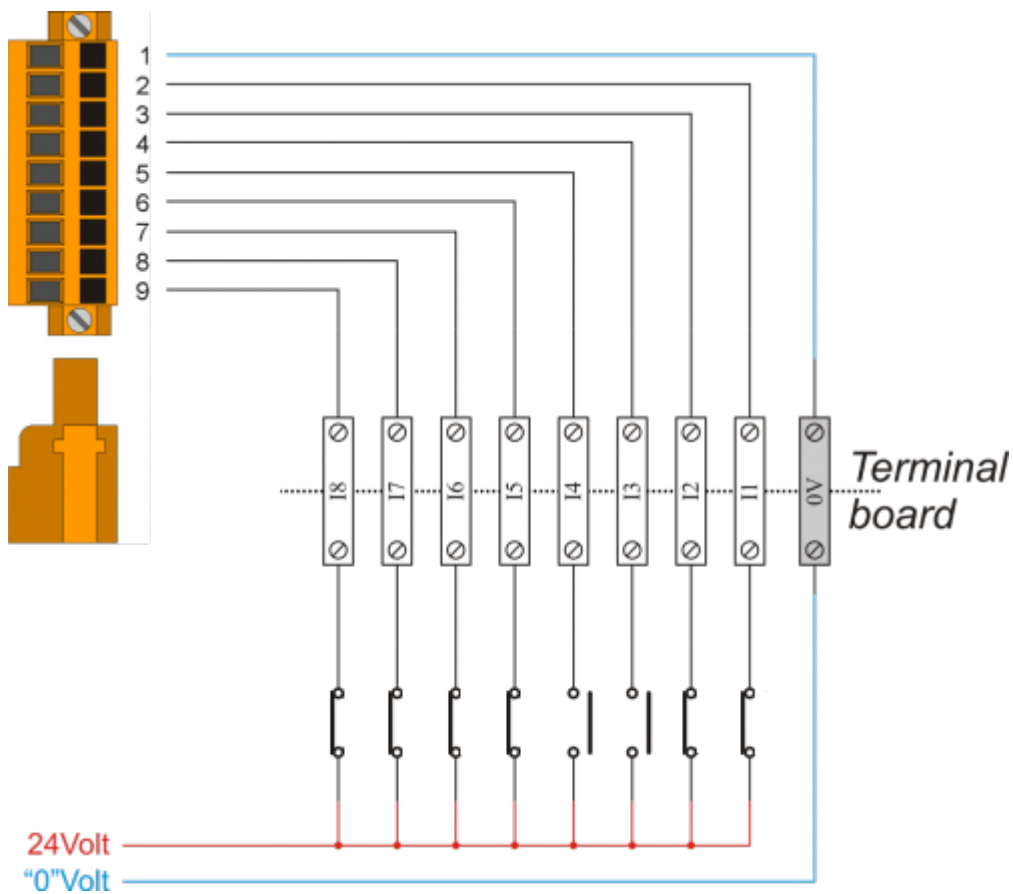
3.1.3 Digital Inputs

S = State	A = Action	ID
NO = Normally Open	I = Impulsive	ID = Software
NC = Normally Closed	C = Continuous	

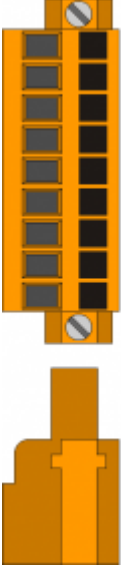
3.1.3.1 C1-R44: CN7

CN 7	Pin	ID	Description	S	A
	1	0V	0 Volt (common inputs I1 ÷ I8)		
	2	I1	Thermal head	NC	C
	3	I2	Master Bridge Fault		
	4	I3	Belt Fault	NC	C
	5	I4	Roller Fault		
	6	I5	Air Pressure	NC	C
	7	I6	Water Pressure		
	8	I7	Forward Bridge LS		
	9	I8	Backward Bridge LS		

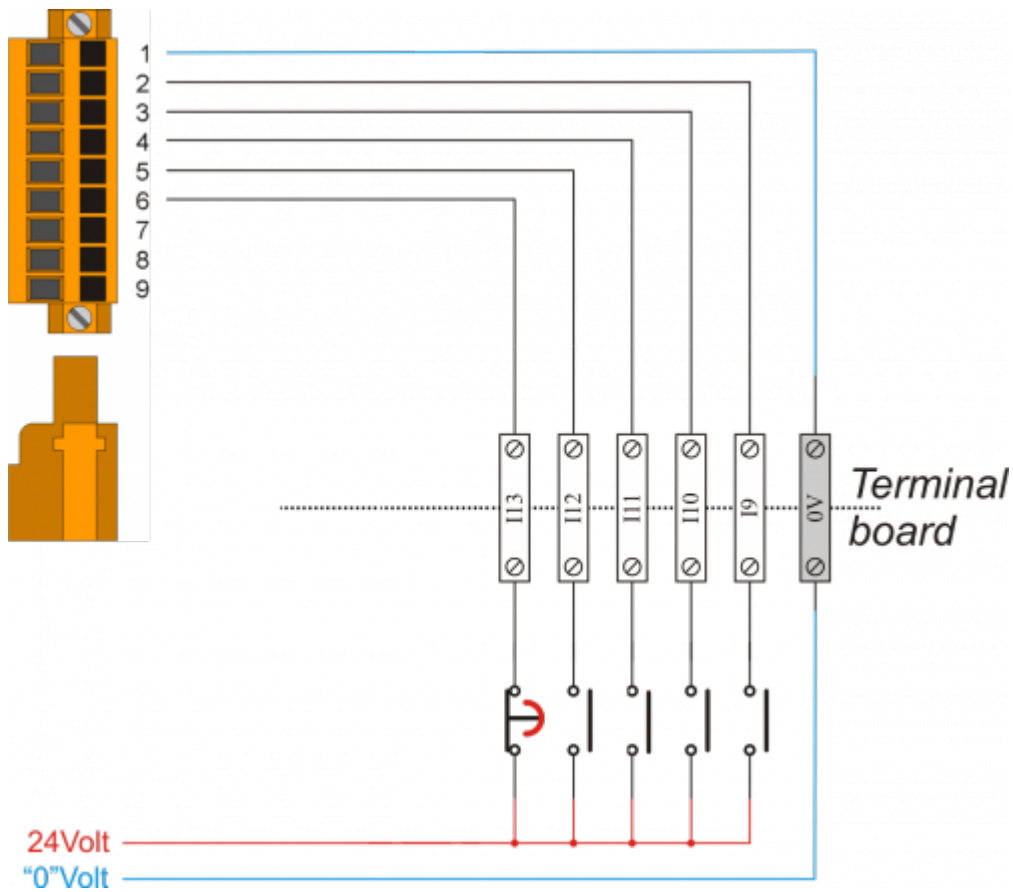
3.1.3.1.1 Connection Example



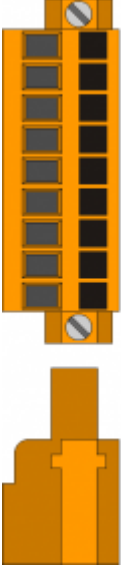
3.1.3.2 C1-R44: CN6

CN 6	Pin	ID	Description	S	A
	1	0V	0 Volt (common inputs I9 ÷ I16)		
	2	I9	Master Bridge Zero Sensor	NO	
	3	I10	Slab Presence Sensor	End of Roller	I
	4	I11		Start of Belt	
	5	I12	Worn Abrasive Sensor	-	
	6	I13	Emergency	-	NC C
	7	I14	Pressurized Lubrication Circuit Feedback	NO	I
	8	I15	External Consent ON	-	NC C
	9	I16	Auxiliary Enable	-	

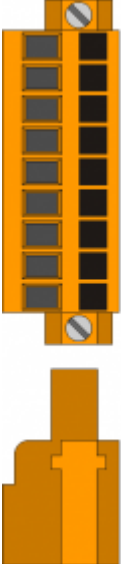
3.1.3.2.1 Connection Example



3.1.3.3 C1-R44: CN18

CN 18	Pin	ID	Description	S	A
	1	0V	0 Volt (common inputs I9 ÷ I16)		
	2	I17	N/A		
	3	I18	Bridge Jog	Forward	
	4	I19		Backward	
	5	I20	START		
	6	I21	STOP	NO	I
	7	I22	Abrasive Change		
	8	I23	MAN/AUTO		
	9	I24	STAND-BY		

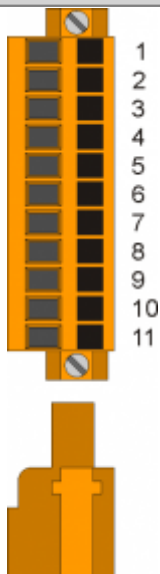
3.1.3.4 C1-R44: CN19

CN 19	Pin	ID	Description	S	A
	1	0V	0 Volt (common inputs I9 ÷ I16)		
	2	I25	Slave Bridge Zero Sensor	NO	I
	3	I26	Slave Bridge Fault	NC	C
	4	I27	N/A		
	5	I28	N/A		
	6	I29	N/A		
	7	I30	N/A		
	8	I31	N/A		
	9	I32	N/A		

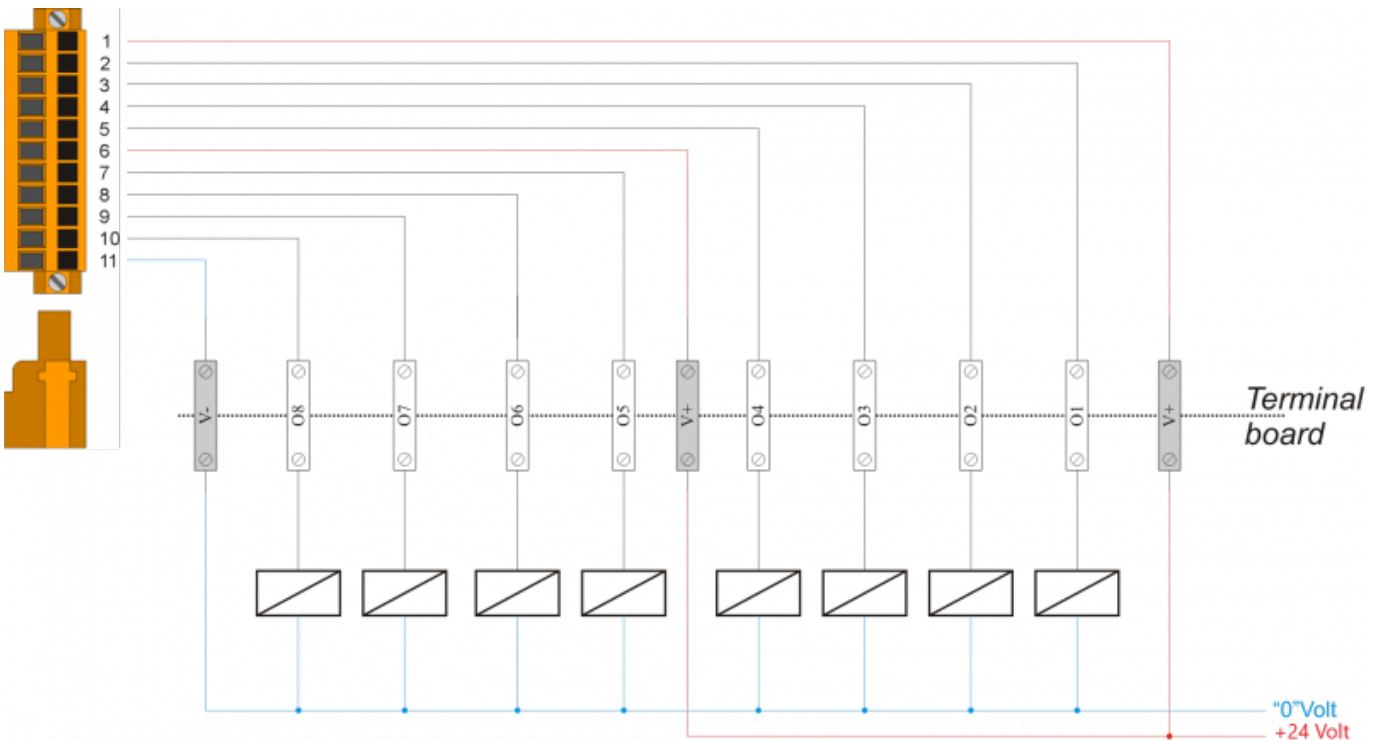
3.1.4 Digital Outputs

S = State	ID
OFF = Off	ID = Software
ON = On	

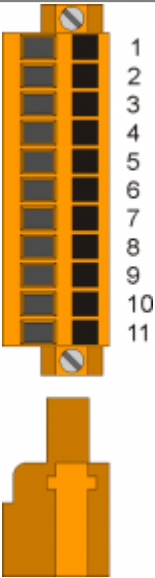
3.1.4.1 C1-R44: CN9 (Out +24 Volt, 500 mA)

CN 9	Pin	ID	Description	S
	1	V+	+ 24 Volt (common outputs 01 ÷ 04)	
	2	O1	ON/OFF master bridge	-
	3	O2	ON/OFF belt	-
	4	O3	ON/OFF rollers	-
	5	O4	Up / Down Brush	-
	6	V+	+24 Volt (common outputs 05 ÷ 08)	
	7	O5	ON/OFF previous machine	-
	8	O6	Lubrication (optional)	-
	9	O7	Stop Belt	-
	10	O8	Alarm Status	-
	11	0V	0 Volt (common outputs 01 ÷ 08)	

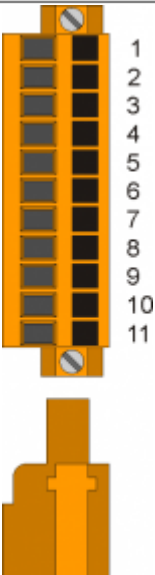
3.1.4.1.1 Connection Example



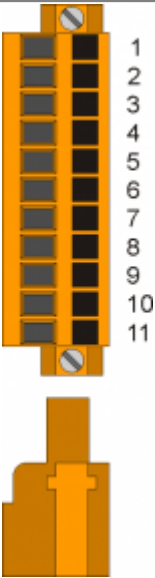
3.1.4.2 C1-R44: CN8 (Out +24 Volt, 500 mA)

CN 8	Pin	ID	Description	S
	1	V+	+24 Volt (common outputs O09÷O12)	
	2	O09	ON/OFF slave bridge	OFF
	3	O10	Unlock electromechanical locks	OFF
	4	O11	Forward belt	OFF
	5	O12	Backward belt	OFF
	6	V+	+24 Volt (common outputs O13÷O16)	
	7	O13	Reset belt drive/inverter	OFF
	8	O14	Reset Master Bridge1 drive/inverter	OFF
	9	O15	Reset Slave Bridge2 drive/inverter	OFF
	10	O16	N/A	-
	11	0V	0 Volt (common outputs O09÷O16)	

3.1.4.3 C1-R44: CN 25 (Out +24 Volt, 500 mA)

CN 25	Pin	ID	Description	S
	1	V+	+24 Volt (common output)	
	2	O17	Alarm indicator light	OFF
	3	O18	Green light indicator	OFF
	4	O19	Yellow light indicator	OFF
	5	O20	n.u	
	6	V+	+24 Volt (common output)	
	7	O21	n.u	
	8	O22	n.u	
	9	O23	n.u	
	10	O24	n.u	
	11	0V	0 Volt (common output)	

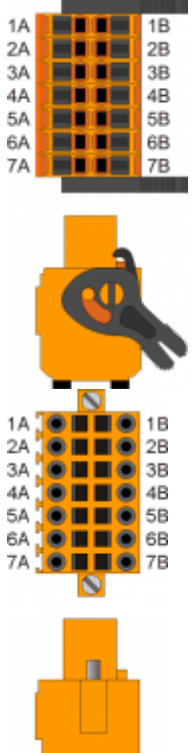
3.1.4.4 C1-R44: CN 20 (Out +24 Volt, 500 mA)

CN 20	Pin	ID	Description	S
	1	V+	+24 Volt (common output)	
	2	O25	n.u.	
	3	O26	n.u.	
	4	O27	n.u.	
	5	O28	n.u.	
	6	V+	+24 Volt (common output)	
	7	O29	n.u.	
	8	O30	n.u.	
	9	O31	n.u.	
	10	O32	n.u.	
	11	0V	0 Volt (common output)	

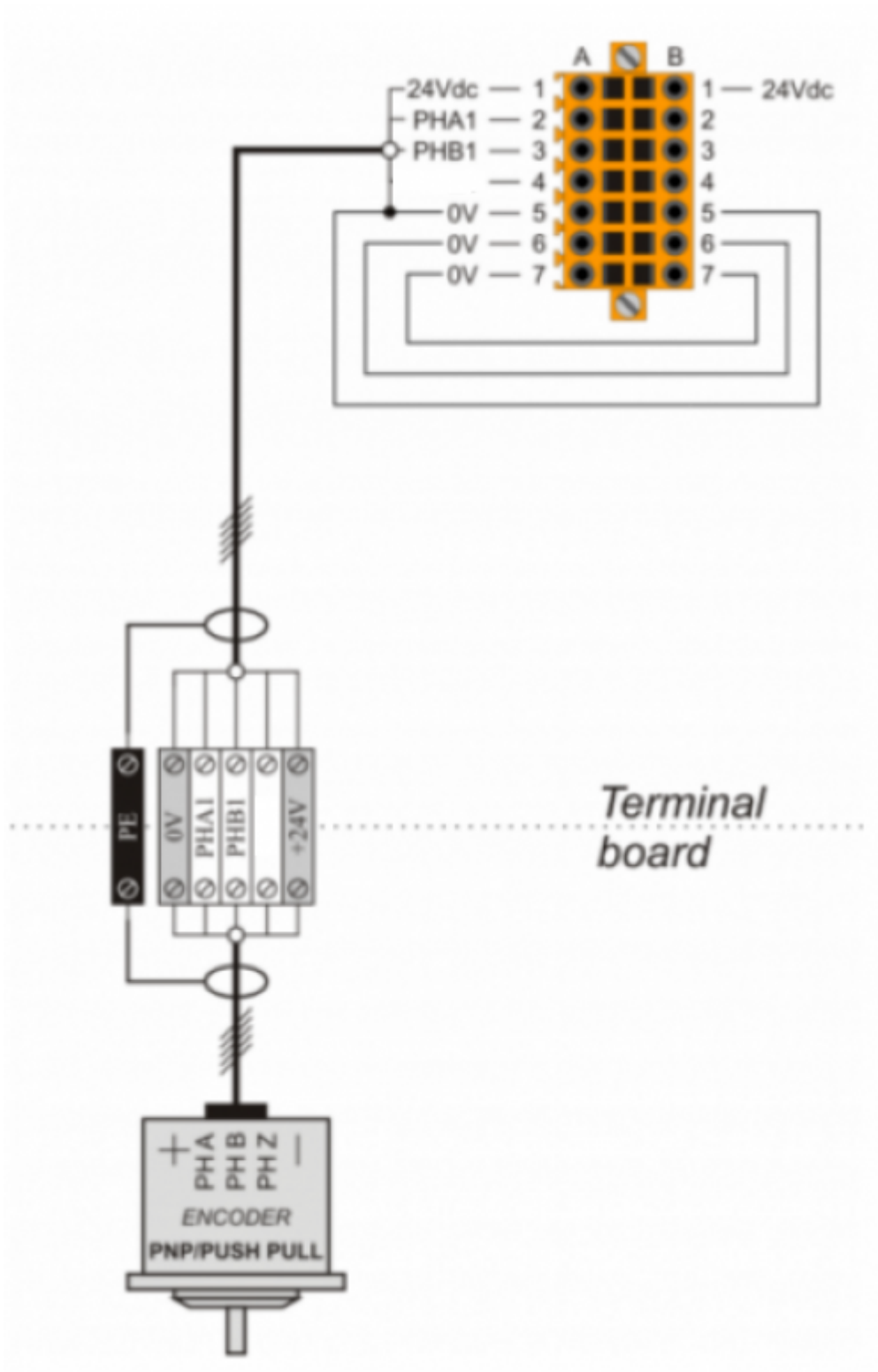
3.1.5 Bidirectional Count Inputs

3.1.5.1 For "Push Pull" Encoder Type

3.1.5.1.1 C1-R44: CN14

CN 14 (Push Pull)	PIN	ID		Description	
 The diagram shows the CN 14 connector with pins 1A through 7A on the left and 1B through 7B on the right. It includes a top view of the connector, a side view showing the encoder being connected, and a bottom view of the connector.	1B	+24V IN	Input +24 Volt	Master Bridge Counting	
	1A	+24V OUT	Encoder power supply		Encoder power supply
	2A	PHA1	Phase A+		
	3A	PHB1	Phase B+		
	4A	-	-		
	5A	0V n	Connect to 5B		Common for counting inputs. Internally connected to 0Volt (PIN 3 - CN1)
	6A	0V n	Connect to 6B		
	7A	0V n	Connect to 7B		

3.1.5.1.2 Connection Example

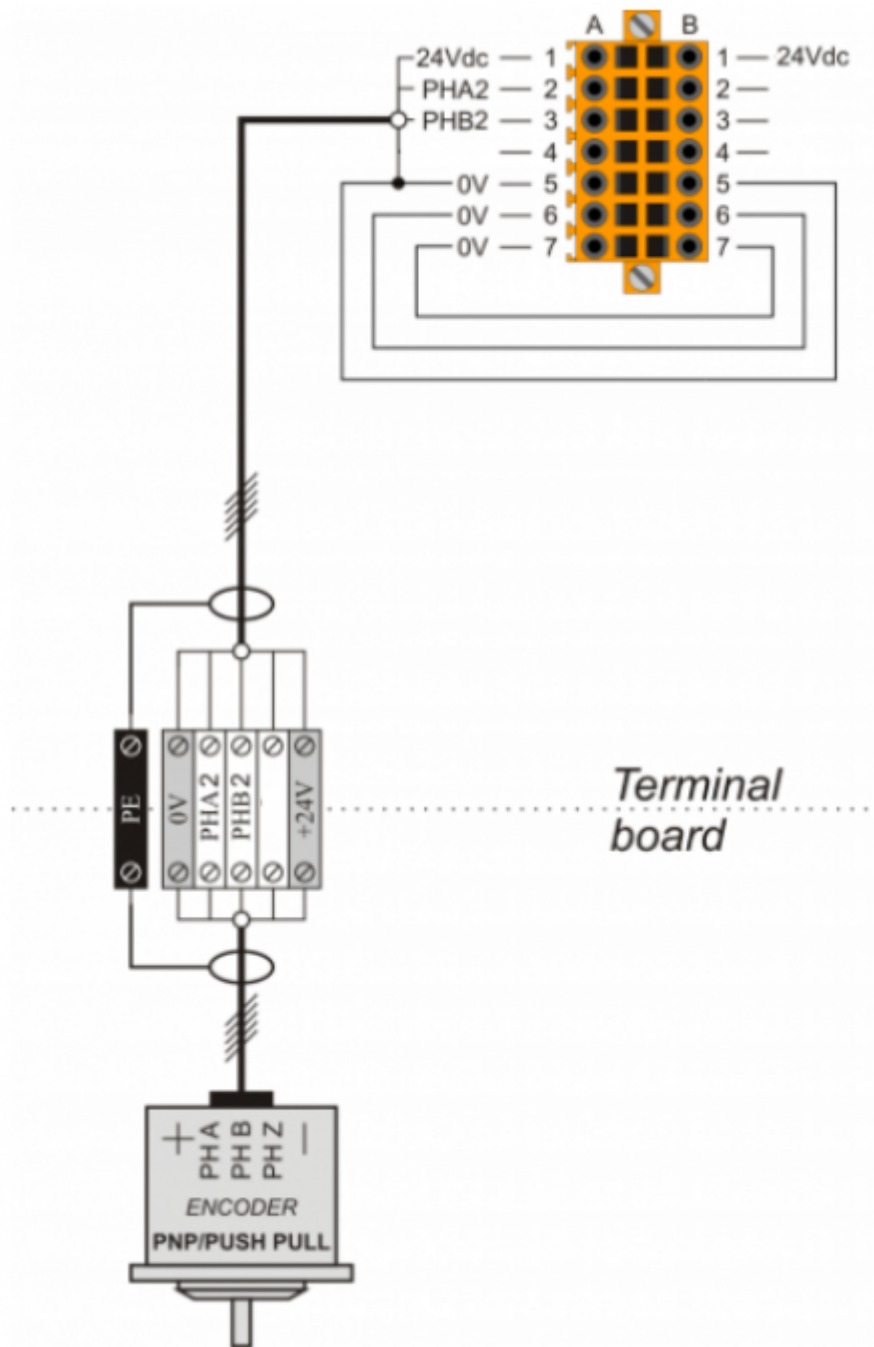


Click [here](#) for more connection examples

3.1.5.1.3 C1-R44: CN15

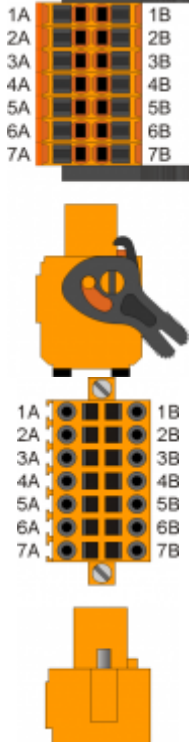
CN15 (Push Pull)	PIN		ID		Description	COMMENTS
	1B	+24V IN	Input +24 Volt	Belt Counting		
	1A	+24V OUT	Output +24 Volt		Encoder power supply	
	2A	PHA2	Phase A+			
	3A	PHB2	Phase B+			
	4A	-	-			
	5A	0V n	Connect to 5B		Common for counting inputs. Internally connected to 0Volt (PIN 3 - CN1)	
	6A	0V n	Connect to 6B			
	7A	0V n	Connect to 7B			

3.1.5.1.4 Connection Example

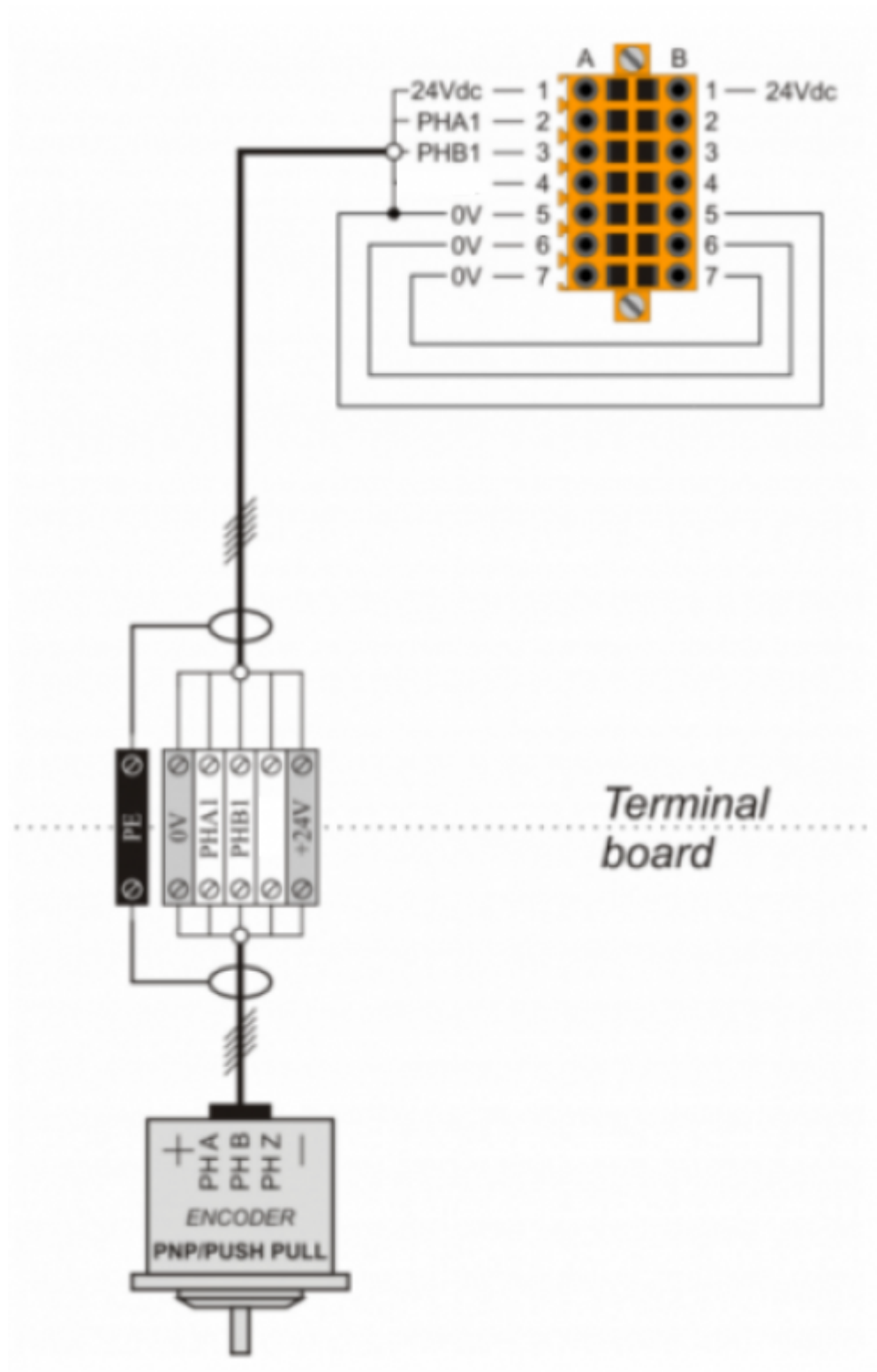


Click [here](#) for more connection examples

3.1.5.1.5 C1-R44: CN16

CN 16 (Push Pull)	PIN	ID	DESCRIPTION		COMMENTI
	1B	+24V IN	Input +24 Volt	Bridge slave counting	
	1A	+24V OUT	Output +24 Volt		Encoder power supply
	2A	PHA3	Phase A		-
	3A	PHB3	Phase B		-
	4A	-	-		-
	5A	0V n	Connect to PIN 5B		Counting inputs common. Internal connected to 0V (PIN 3 - CN1)
	6A	0V n	Connect to PIN 6B		
	7A	0V n	Connect to PIN 7B		

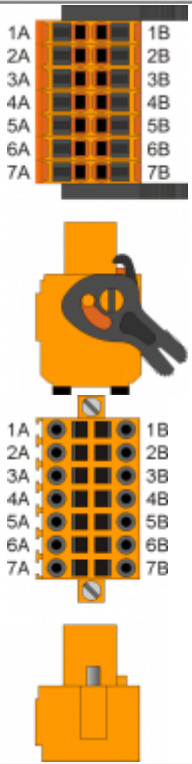
3.1.5.1.6 Esempio di collegamento



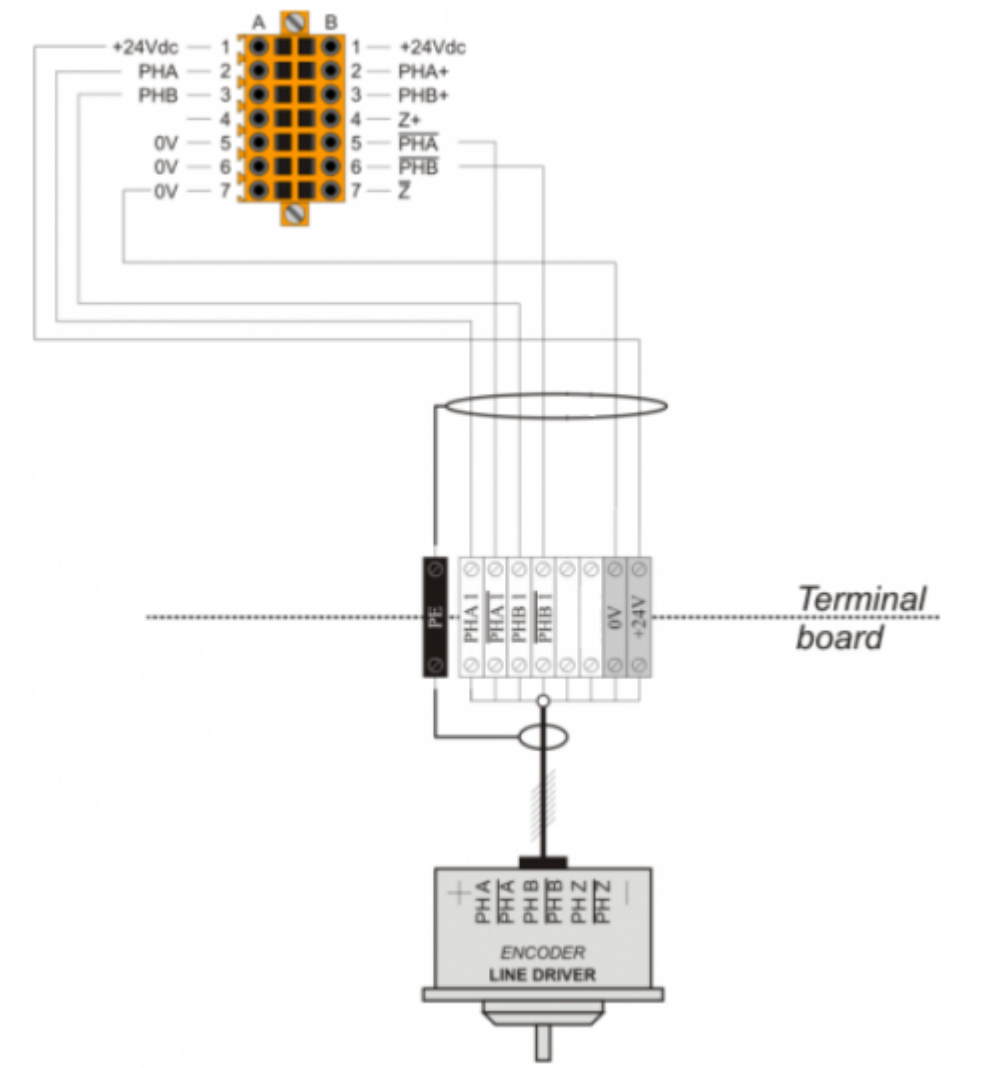
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3.1.5.2 For "Line Driver 24 Volt" Encoder Type

3.1.5.2.1 C1R44: CN14

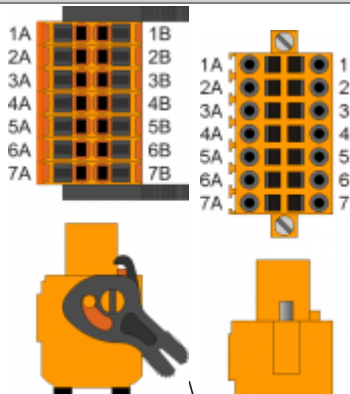
CN 14 (Line Driver 24 Volt)	PIN		ID		Description
 The diagram shows the pinout for the CN14 connector. It includes a top view of the connector with pins labeled 1A through 7B. Below this, there are three physical views of the connector: a side view, a top view, and a bottom view. The pins are arranged in two columns: 1A, 2A, 3A, 4A, 5A, 6A, 7A on the left and 1B, 2B, 3B, 4B, 5B, 6B, 7B on the right.	1B	+24V IN	Input +24 Volt	Master Bridge Counting	
	1A	+24V OUT	Encoder power supply		
	2A	PHA1	Phase A+		
	3A	PHB1	Phase B+		
	4A	-	-		
	5B	PHA1-	Phase A-		
	6B	PHB1-	Phase B-		
	7B	-	-		

3.1.5.2.2 Connection Example

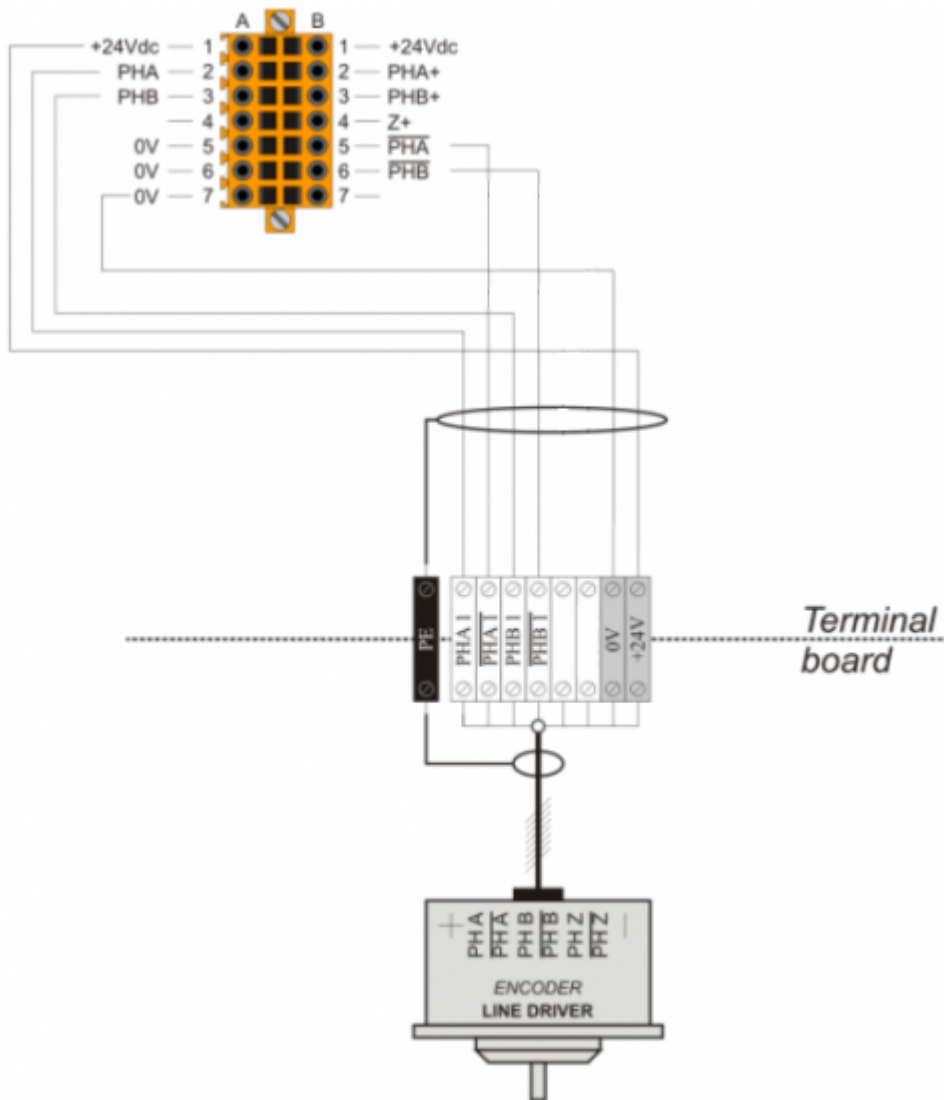


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3.1.5.2.3 C1R44: CN15

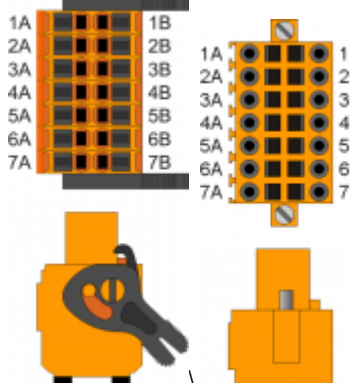
CN15 (Line Driver 24 Volt)		PIN	ID	DESCRIPTION	Count Tape
		1B	+24V IN	Input +24 Volt	
		1A	+24V OUT	Encoder Supply	
		2A	PHA2	Phase A+	
		3A	PHB2	Phase B+	
		4A	-	-	
		5B	PHA2-	Phase A-	
		6B	PHB2-	Phase B-	
		7B	-	-	

3.1.5.2.4 Wiring Example

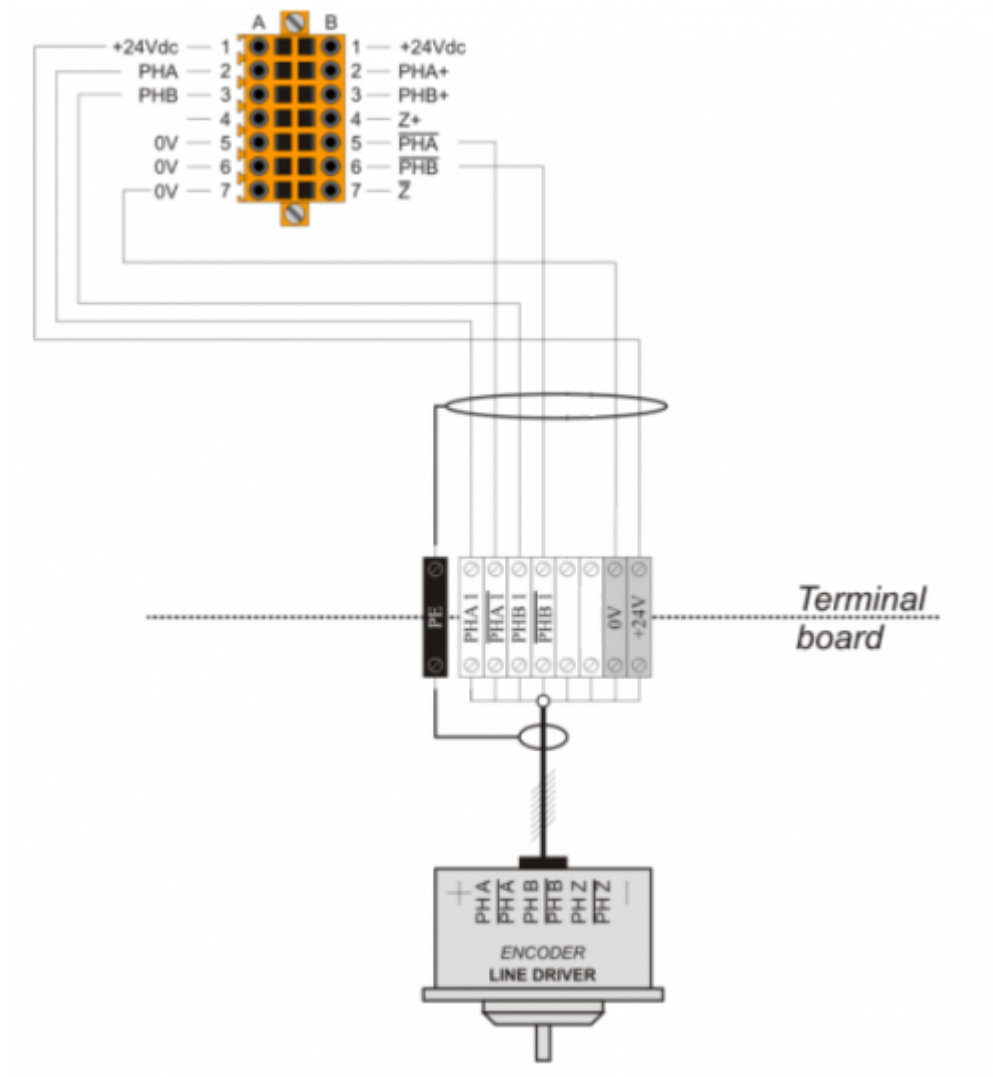


Press [here](#) for other wiring examples

3.1.5.2.5 C1R44: CN16

CN 16 (Line Driver 24 Volt)		PIN	ID	DESCRIPTION	Count Bridge Slave
	1B	+24V IN	Input +24 Volt		
	1A	+24V OUT	Encoder Supply		
	2A	PHA3	Phase A+		
	3A	PHB3	Phase B+		
	4A	-	-		
	5B	PHA3-	Phase A-		
	6B	PHB3-	Phase B-		
	7B	-	-		

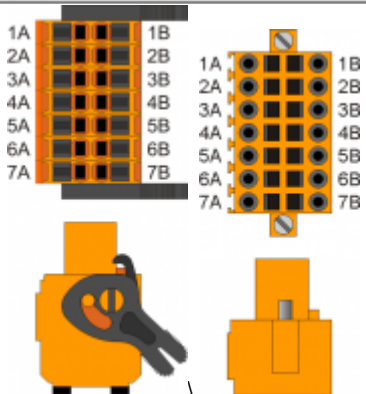
3.1.5.2.6 Wiring Example



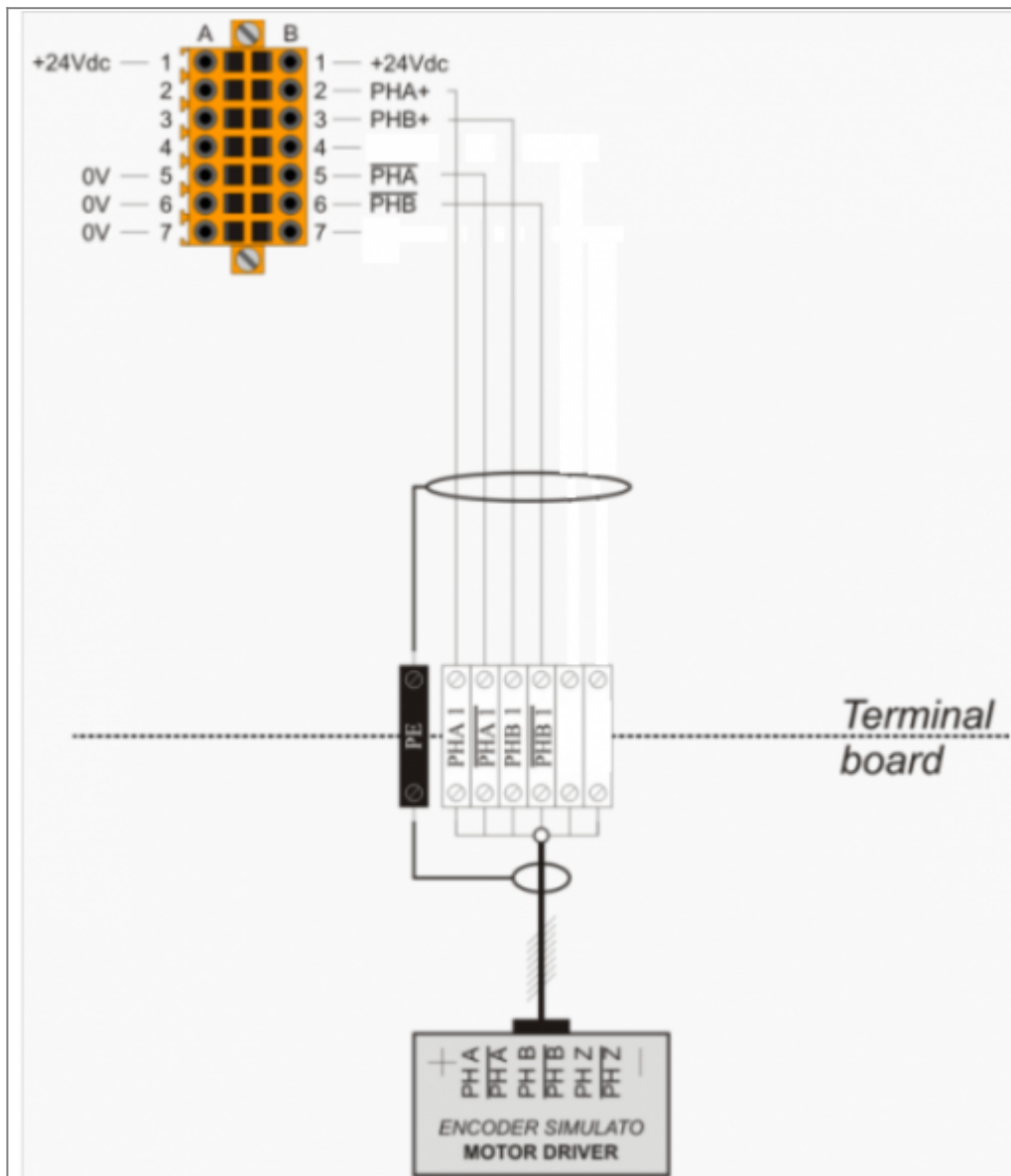
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3.1.5.3 For Simulated 5 Volt Line Driver Encoders

3.1.5.3.1 C1R44: CN14

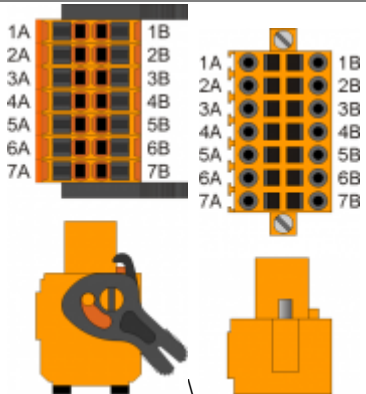
CN 14 (Simulated 5 Volt Line Driver)		PIN	ID	DESCRIPTION
 Diagram showing the pin layout for CN 14 (Simulated 5 Volt Line Driver). The connector has two rows of pins. The left row is labeled 1A through 7A, and the right row is labeled 1B through 7B. Below the pin layout, there are two physical component images: a yellow connector with a black plug and a yellow connector with a black plug.	1B	2B	PHA1+	Phase A+
	2B	3B	PHB1+	Phase B+
	3B	4B	-	-
	4B	5B	PHA1-	Phase A-
	5B	6B	PHB1-	Phase B-
	6B	7B	-	-
	7B			
				Count Bridge Master

3.1.5.3.2 Wiring Example

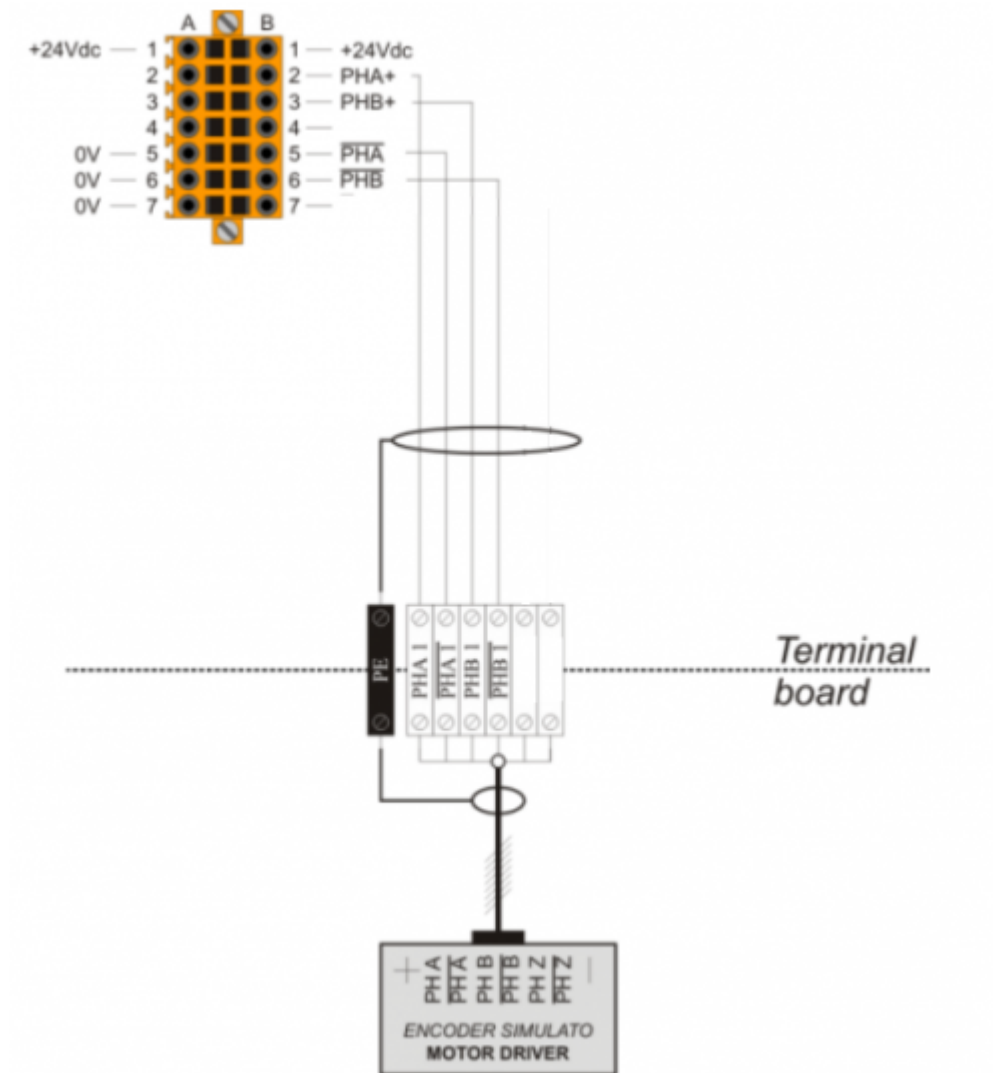


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3.1.5.3.3 C1R44: CN15

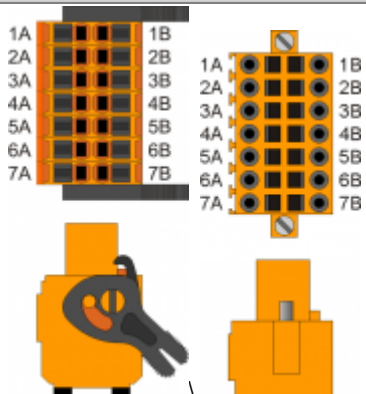
CN15 (Simulated 5 Volt Line Driver)		PIN	ID	DESCRIPTION	
	1A	2B	PHA2+	Phase A+	Count Belt
	2A	3B	PHB2+	Phase B+	
	3A	4B	-	-	
	4A	5B	PHA2-	Phase A-	
	5A	6B	PHB2-	Phase B-	
	6A	7B	-	-	
	7A				

3.1.5.3.4 Wiring Example

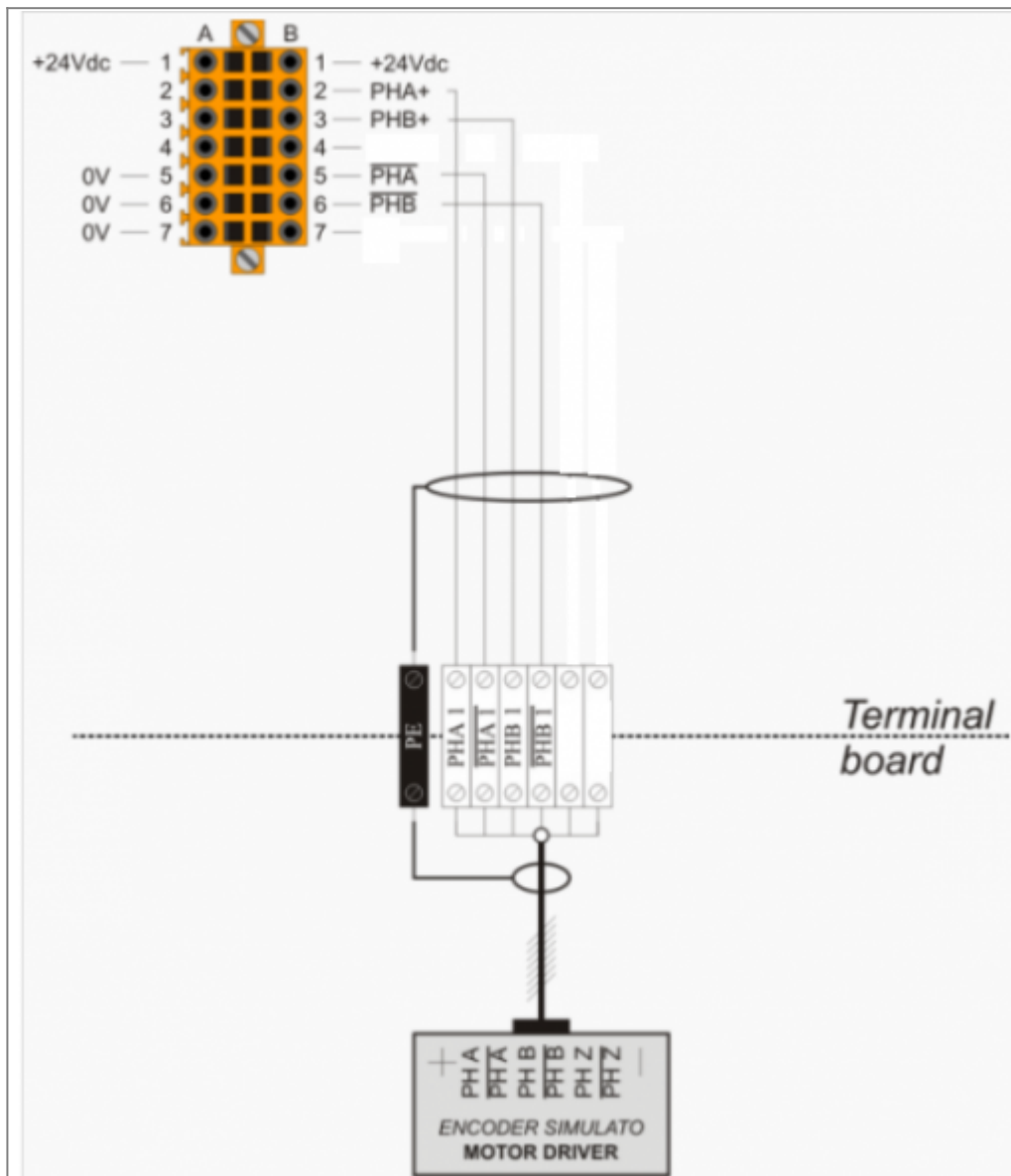


Press [here](#) for other wiring examples

3.1.5.3.5 C1R44: CN16

CN 16 (Simulated 5 Volt Line Driver)		PIN	ID	DESCRIPTION	Count Bridge Slave
	2B	PHA3+	Phase A+		
	3B	PHB3+	Phase B+		
	4B	-	-		
	5B	PHA3-	Phase A-		
	6B	PHB3-	Phase B-		
	7B	-	-		

3.1.5.3.6 Wiring Example



Press [here](#) for other wiring examples

3.1.6 Analog Inputs

3.1.6.1 C1-R44: CN13

CN13	Terminal	Symbol	Description
	1	VREF	Reference voltage ¹⁾
	2	AI1	n.a.
	3	AI2	n.a.
	4	AI3	n.a.
	5	GAI	Common analog inputs

Configuration of Analog Inputs

SW4	Dip No.\ Dip	Analog Input 1			Analog Input 2			Analog Input 3		
		Pot.	0-10V	0-20mA	Pot.	0-10V	0-20mA	Pot.	0-10V	0-20mA
	1	OFF	OFF	ON	X	X	X	X	X	X
	2	OFF	ON	OFF	X	X	X	X	X	X
	3	X	X	X	OFF	OFF	ON	X	X	X
	4	X	X	X	OFF	ON	OFF	X	X	X
	5	X	X	X	X	X	X	OFF	OFF	ON
	6	X	X	X	X	X	X	OFF	ON	OFF

X = irrelevant setting

Pot. = potentiometric input

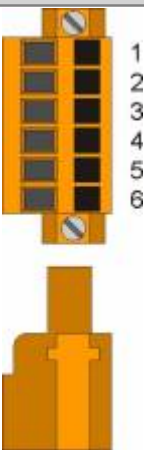
0-10V = voltmeter input

0-20mA = amperometric input

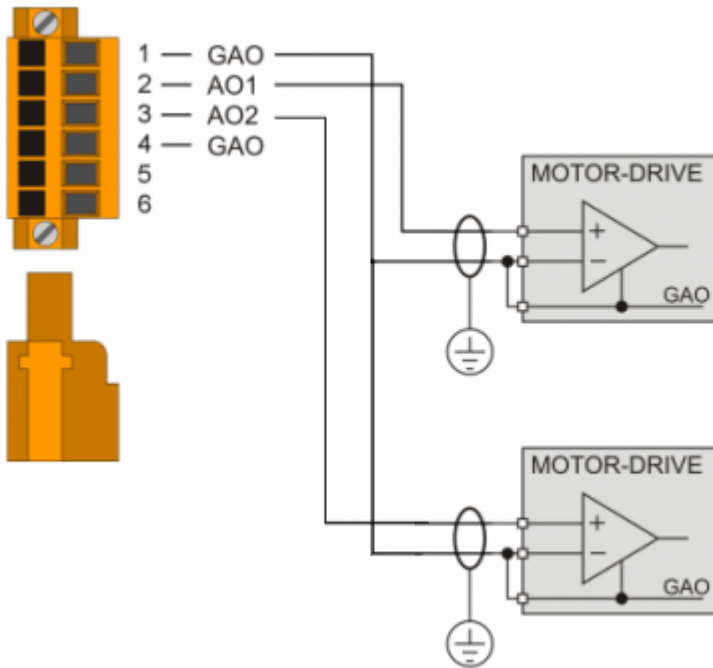
¹⁾ For potentiometric inputs

3.1.7 Analog Outputs

3.1.7.1 C1-R44: CN12

CN 12	Pin	ID	Description
	1	GA01	Common for analog outputs AO1÷AO2
	2	AO1	Bridge Master: +/- 10 Volt control
	3	AO2	Tape: 0/10 Volt control
	4	GA02	Common for analog outputs AO3÷AO4
	5	AO3	Bridge Slave: +/- 10 Volt control
	6	AO4	n.a.

3.1.7.1.1 Wiring Example



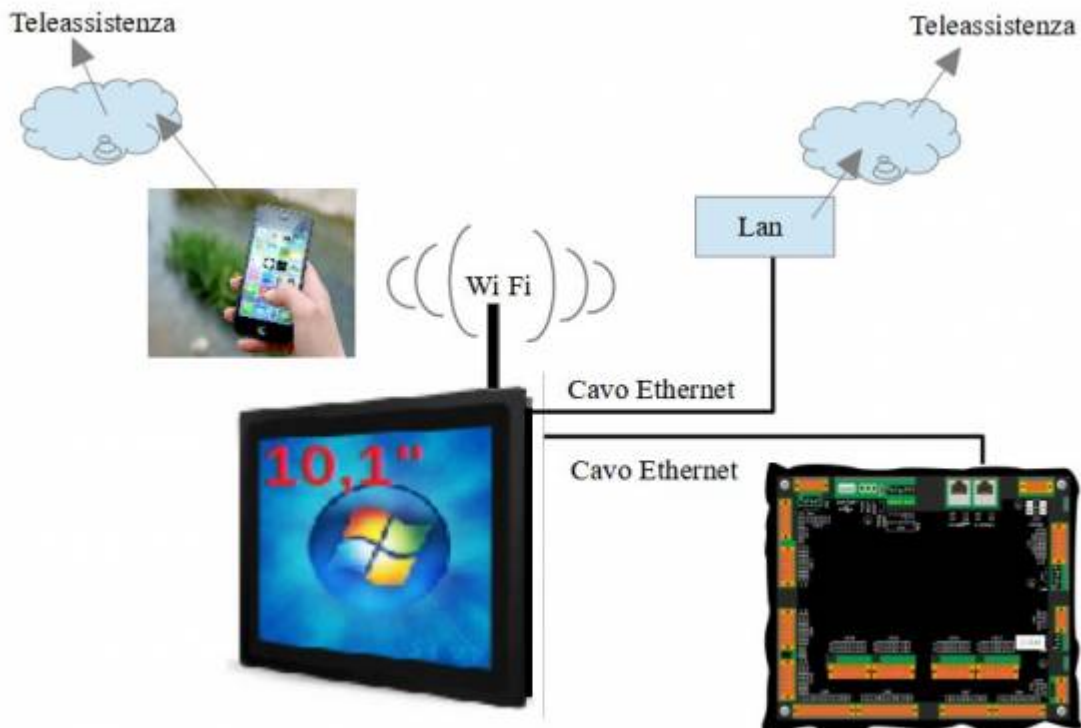
3.2 A1-IPC-TC101: Panel PC

3.2.1 A1-IPC-TC101: Panel PC



3.2.1.1 Connection

The Panel PC has two Ethernet lines. The first one connects to the company LAN network, and the second one connects to the R44. Connection to the company LAN network is also possible via WiFi.



3.2.2 IQ023/A/USB/50

IQ023 makes available to the PC 24 digital inputs, 8 analog inputs, and 4 encoder inputs.



3.2.2.1 Power Supply

IQ023 is powered by the 5V from the USB port.

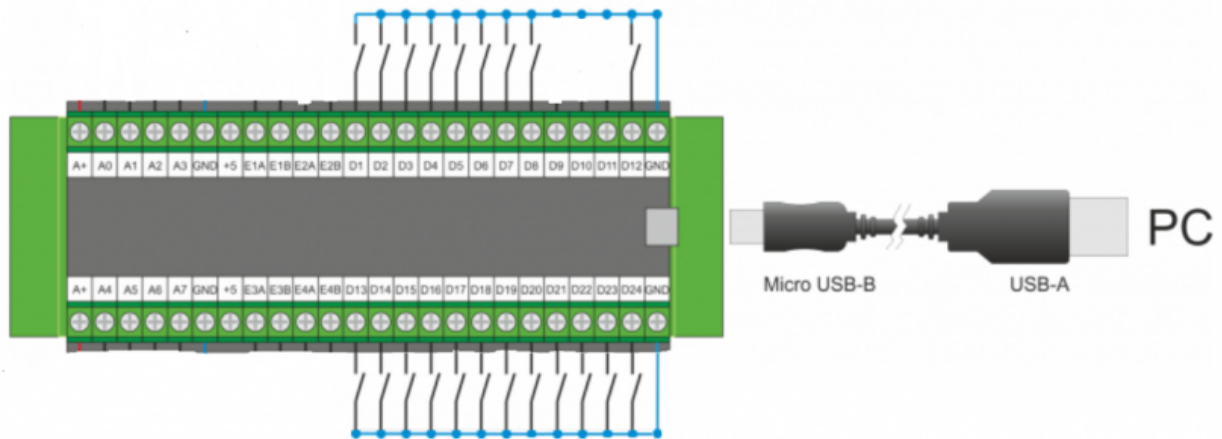
3.2.2.2 Connectors

A+	A0	A1	A2	A3	GND	+5	E1A	E1B	E2A	E2B	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	GND
A+	A4	A5	A6	A7	GND	+5	E3A	E3B	E4A	E4B	D13	D14	D15	D16	D17	D18	D19	D20	D21	D22	D23	D24	GND

3.2.2.3 Digital Inputs

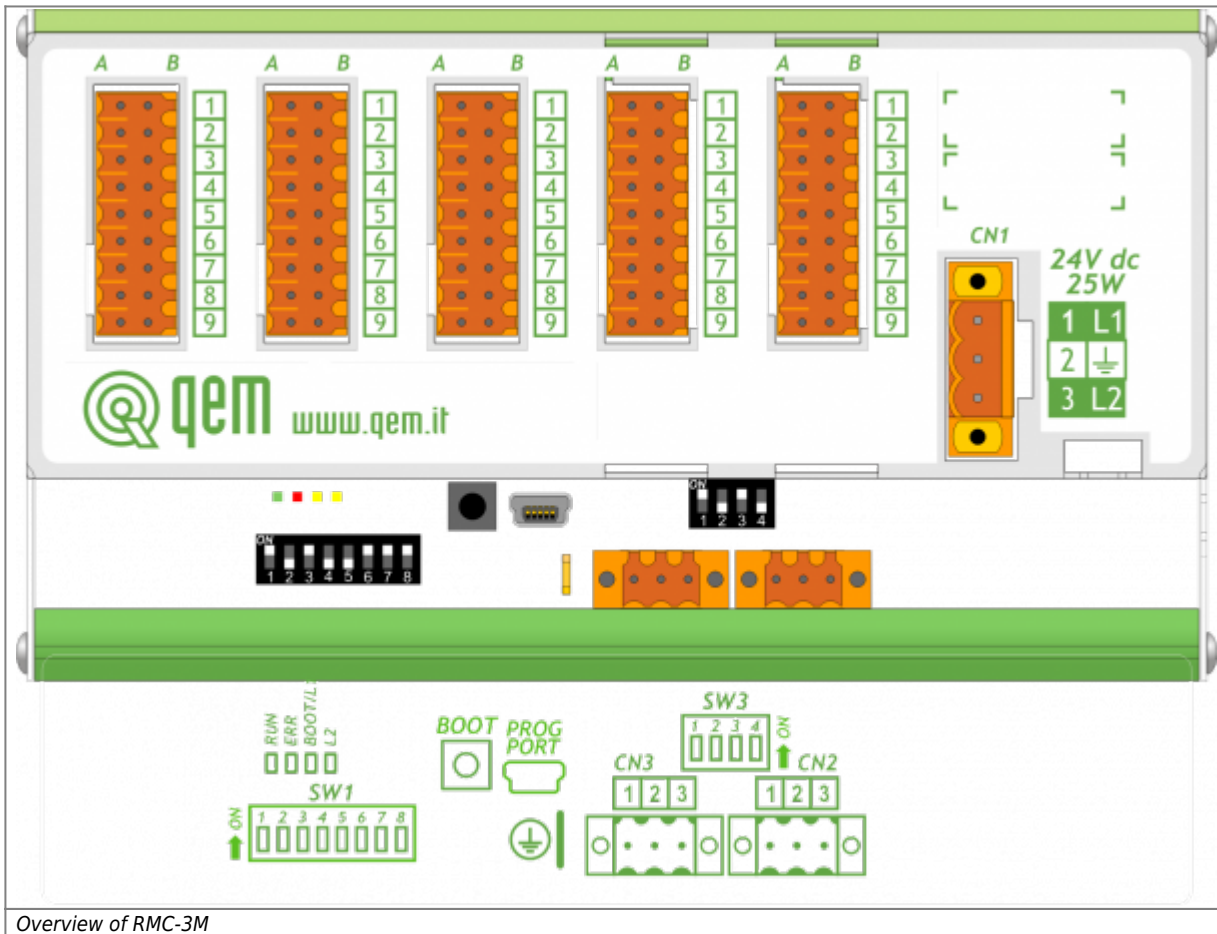
S = Status		A = Action		ID			
NO = Normally Open		I = Impulsive		ID = Software			
NC = Normally Closed		C = Continuous					
Pin	ID	Description			S	A	
D1	I97	HEAD UP SELECTOR			Head 1	NO	I
D2	I98				Head 2		
D3	I99				Head 3		
D4	I100				Head 4		
D5	I101				Head 5		
D6	I102				Head 6		
D7	I103				Head 7		
D8	I104				Head 8		
D9	I105				Head 9		
D10	I106				Head 10		
D11	I107				Head 11		
D12	I108				Head 12		
GND	0 V	0 Volt					
D13	I109	HEAD DOWN SELECTOR			Head 1	NO	I
D14	I110				Head 2		
D15	I111				Head 3		
D16	I112				Head 4		
D17	I113				Head 5		
D18	I114				Head 6		
D19	I115				Head 7		
D20	I116				Head 8		
D21	I117				Head 9		
D22	I118				Head 10		
D23	I119				Head 11		
D24	I120				Head 12		
GND	0 V	0 Volt					

3.2.2.4 Connection Examples

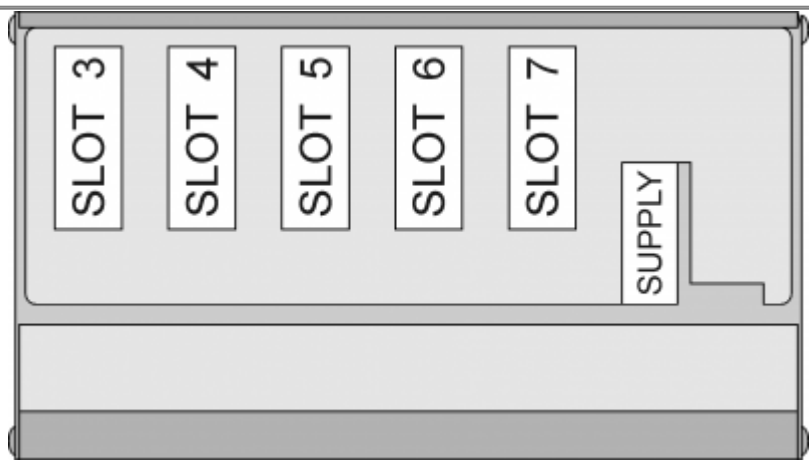


Product Link: [IQ023](#)

3.3 RMC-3M B01 DD

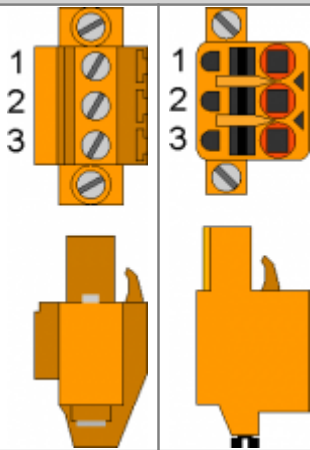


Overview of RMC-3M



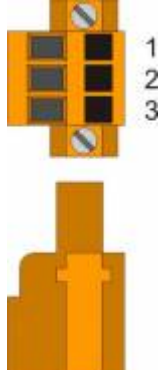
RMC-3M Bus Composition

3.3.1 RMC-3M B01 DD: CN1 - Power Supply

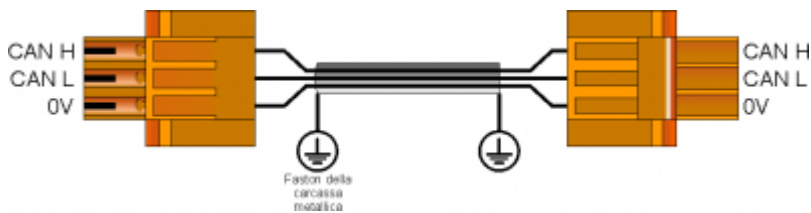
CN 1		Clamp	Symbol	Description
	1	1	—	0V
	2	2	GROUND	Ground (signals)
	3	3	+	+24 V

3.3.2 Connections

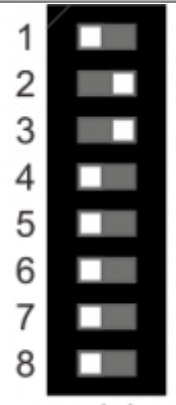
3.3.2.1 RMC-3M-DD: CN2 - CN3 - CAN PORT

	1	0 Volt - Common port CanOpen
	2	CAN L
	3	CAN H

3.3.2.1.1 Connection example

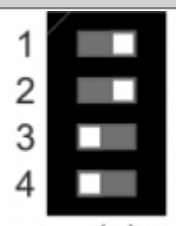


3.3.2.2 Switch 1

SW1	Num. DIP	Set	Function
	1	OFF	DIP 1-2: Transmission speed (500 Kbit/s)
	2	ON	
	3	ON	DIP 3-8: Module address(address 1)
	4	OFF	
	5	OFF	
	6	OFF	
	7	OFF	
	8	OFF	

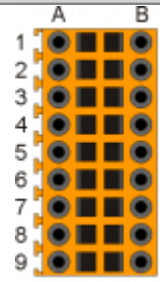
3.3.2.3 Switch 3

Check [connection CAN](#) to determine the activation of the terminating resistor

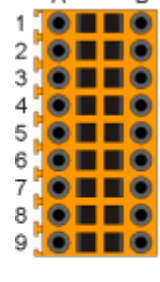
SW3	Num. Dip	Name Dip	Setup DIP	Function
	1	JP1	ON	Termination CAN PORT
	2	JP2	ON	
	3			
	4			

3.3.3 RMC-3M B01 DD: Digital output

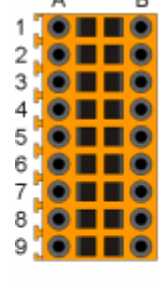
3.3.4 SLOT 3 (H1-P16 : Out +24 Volt, 500 mA)

n.Out	Head	Description	Pin	Connector SLOT 3		Pin	n.Out	Head	Description
33	1	ON	1A			1B	41	3	Down
34	1	Up	2A			2B	42	4	ON
35	1	Down	3A			3B	43	4	Up
36	2	ON	4A			4B	44	4	Down
37	2	Up	5A			5B	45	5	ON
38	2	Down	6A			6B	46	5	Up
39	3	ON	7A			7B	47	5	Down
40	3	Up	8A			8B	48	6	ON
V+		+24 Volt	9A			9B	V+		+24 Volt

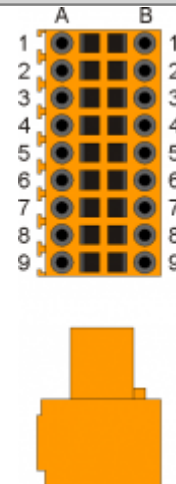
3.3.5 SLOT 4 (H1-P16 : Out +24 Volt, 500 mA)

n.Out	Head	Description	Pin	Connector SLOT 4		Pin	n.Out	Head	Description
49	6	Up	1A			1B	57	9	ON
50	6	Down	2A			2B	58	9	Up
51	7	ON	3A			3B	59	9	Down
52	7	Up	4A			4B	60	10	ON
53	7	Down	5A			5B	61	10	Up
54	8	ON	6A			6B	62	10	Down
55	8	Up	7A			7B	63	11	ON
56	8	Down	8A			8B	64	11	Up
V+		+24 Volt	9A			9B	V+		+24 Volt

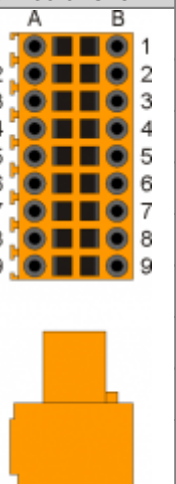
3.3.6 SLOT 5 (H1-P16 : Out +24 Volt, 500 mA)

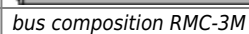
n.Out	Head	Description	Pin	Connector SLOT 5		Pin	n.Out	Head	Description
65	11	Down	1A			1B	73	14	Up
66	12	ON	2A			2B	74	14	Down
67	12	Up	3A			3B	75	15	ON
68	12	Down	4A			4B	76	15	Up
69	13	ON	5A			5B	77	15	Down
70	13	Up	6A			6B	78	16	ON
71	13	Down	7A			7B	79	16	Up
72	14	ON	8A			8B	80	16	Down
V+		+24 Volt	9A			9B	V+		+24 Volt

3.3.7 SLOT 6 (H1-P16 : Out +24 Volt, 500 mA)

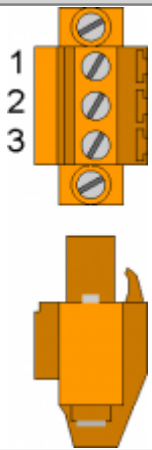
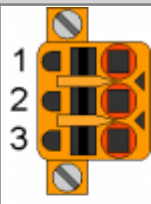
n.Out	Head	Description	Pin	Connector SLOT 6		Pin	n.Out	Head	Description
81	17	ON	1A			1B	89	19	Down
82	17	Up	2A			2B	90	20	ON
83	17	Down	3A			3B	91	20	Up
84	18	ON	4A			4B	92	20	Down
85	18	Up	5A			5B	93	21	ON
86	18	Down	6A			6B	94	21	Up
87	19	ON	7A			7B	95	21	Down
88	19	Up	8A			8B	96	22	ON
V+	+24 Volt		9A			9B	V+		+24 Volt

3.3.8 SLOT 7 (H1-P16 : Out +24 Volt, 500 mA)

n.Out	Head	Description	Pin	Connector SLOT 7		Pin	n.Out	Description
97	22	Up	1A			1B	105	<i>n.u.</i>
98	22	Down	2A			2B	106	<i>n.u.</i>
99		<i>n.u.</i>	3A			3B	107	<i>n.u.</i>
100		<i>n.u.</i>	4A			4B	108	<i>n.u.</i>
101		<i>n.u.</i>	5A			5B	109	<i>n.u.</i>
102		<i>n.u.</i>	6A			6B	110	<i>n.u.</i>
103		<i>n.u.</i>	7A			7B	111	<i>n.u.</i>
104		<i>n.u.</i>	8A			8B	112	<i>n.u.</i>
V+		+24 Volt	9A			9B	V+	+24 Volt

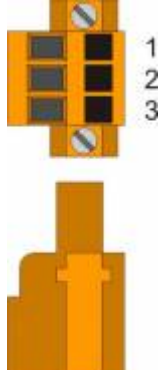


3.4.1 RMC-3M B01 MV- Power supply

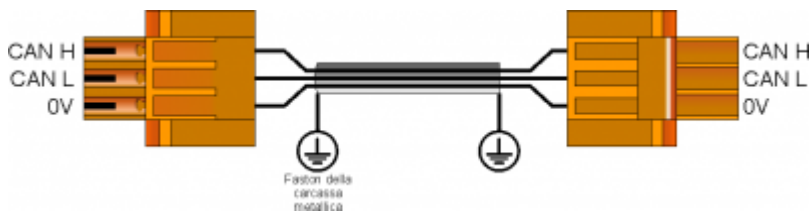
CN 1		Clamp	Symbol	Description
		1	—	0V
		2	GROUND	Ground
		3	+	+24 V

3.4.2 Connections

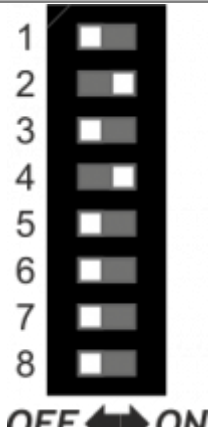
3.4.2.1 RMC-3M B01 MV: CN2 - CN3 - CAN PORT

	1	0 Volt - CanOpen common port
	2	CAN L
	3	CAN H

3.4.2.1.1 Wiring example

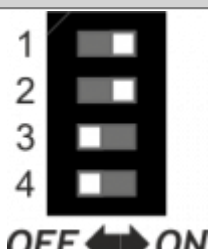


3.4.2.2 Switch 1

SW1	Num. DIP	Set	Function
	1	OFF	DIP 1-2: Transmission speed (500 Kbit/s)
	2	ON	
	3	OFF	DIP 3-8: Module address (address 2)
	4	ON	
	5	OFF	
	6	OFF	
	7	OFF	
	8	OFF	

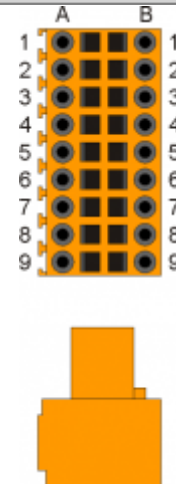
3.4.2.3 Switch 3

Check [connection CAN](#) to determine the activation of the terminating resistor

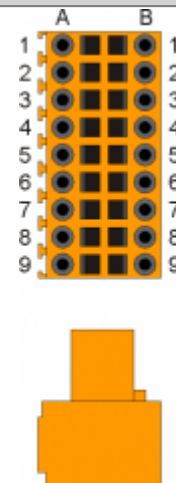
SW3	Num. Dip	Name Dip	Setting DIP	Function
	1	JP1	ON	Termination CAN PORT
	2	JP2	ON	
	3			
	4			

3.4.3 RMC-3M B01 MV: Digital Inputs

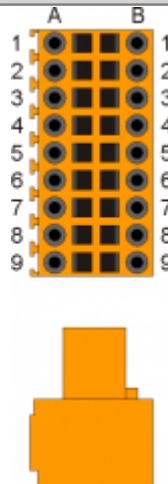
3.4.4 SLOT 3 (H1- I16)

n.In	Sensor	Description	Pin	Connector SLOT 3	Pin	Description	Sensor	n.In
+24V		Out 24 Volt	1A		1B	0Vdc		0V
33	1		2A		2B		9	41
34	2		3A		3B		10	42
35	3		4A		4B		11	43
36	4		5A		5B		12	44
37	5		6A		6B		13	45
38	6		7A		7B		14	46
39	7		8A		8B		15	47
40	8		9A		9B		16	48

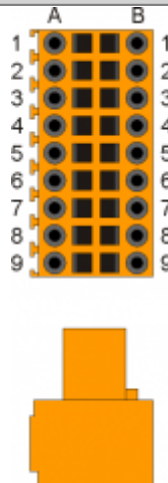
3.4.5 SLOT 4 (H1- I16)

n.In	Sensor	Description	Pin	Connector SLOT 4	Pin	Description	Sensor	n.In
+24V		Out 24 Volt	1A		1B	0Vdc		0V
49	17		2A		2B		25	57
50	18		3A		3B		26	58
51	19		4A		4B		27	59
52	20		5A		5B		28	60
53	21		6A		6B		29	61
54	22		7A		7B		30	62
55	23		8A		8B		31	63
56	24		9A		9B		32	64

3.4.6 SLOT 5 (H1- I16)

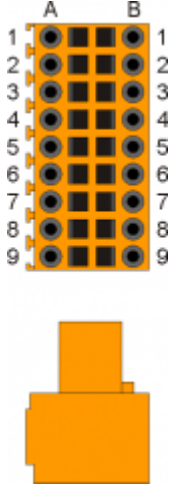
n.In	Sensor	Description	Pin	Connector SLOT 5	Pin	Description	Sensor	n.In
+24V		Out 24 Volt	1A		1B	0Vdc		0V
65	33		2A		2B		41	73
66	34		3A		3B		42	74
67	35		4A		4B		43	75
68	36		5A		5B		44	76
69	37		6A		6B		45	77
70	38		7A		7B		46	78
71	39		8A		8B		47	79
72	40		9A		9B		48	80

3.4.7 SLOT 6 (H1- I16)

n.In	Sensor	Description	Pin	Connector SLOT 6	Pin	Description	Sensor	n.In
+24V		Out 24 Volt	1A		1B	0Vdc		0V
81	49		2A		2B		57	89
82	50		3A		3B		58	90
83	51		4A		4B		59	91
84	52		5A		5B		60	92
85	53		6A		6B		61	93
86	54		7A		7B		62	94
87	55		8A		8B		63	95
88	56		9A		9B		64	96

3.4.8 RMC-3M B01 MV: Analogic Inputs

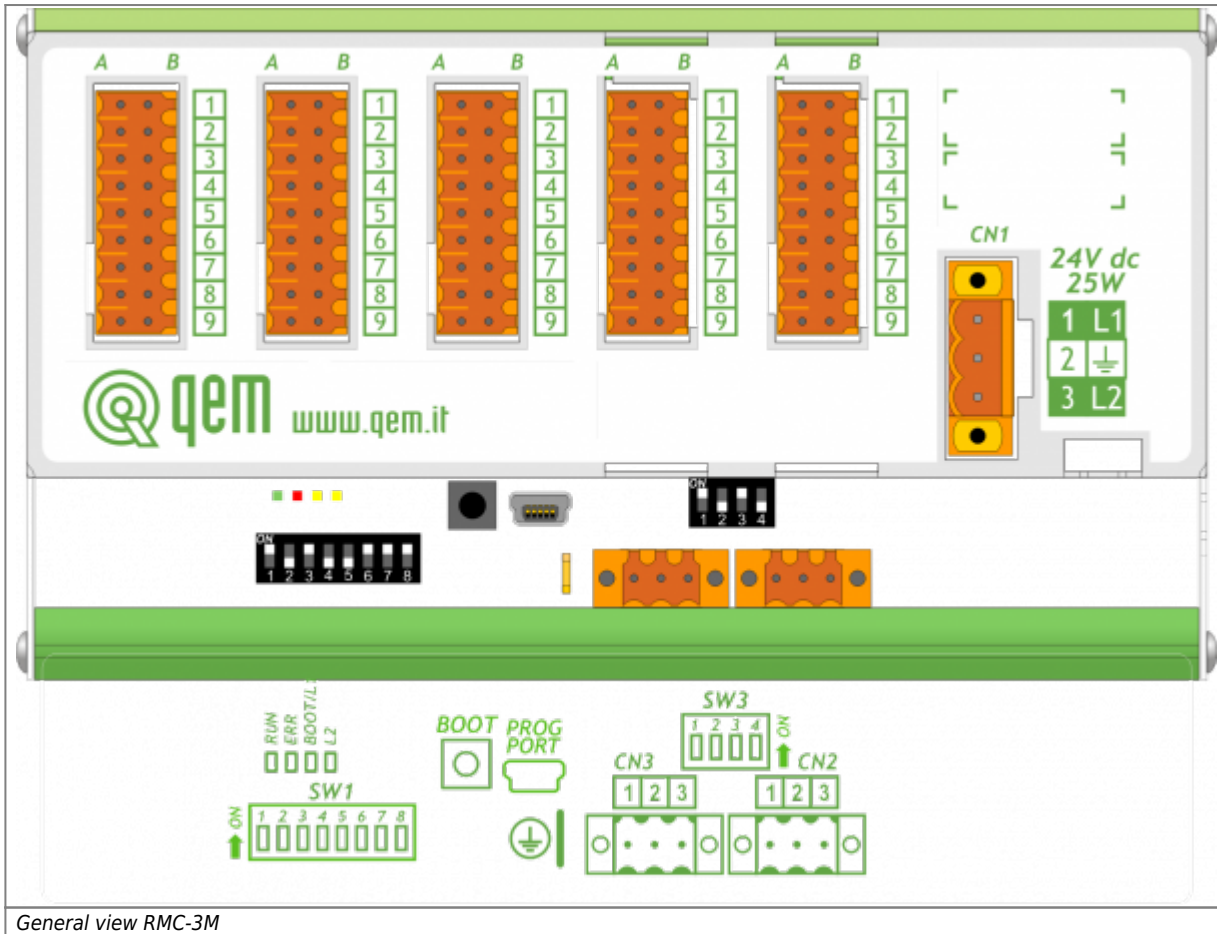
3.4.9 SLOT 7 (H1-A41)

Connector SLOT 7		Pin	Name	Description
	1A			
	2A			
	3A			
	4A			
	5A			n.c
	6A			
	7A	AI4	Slab Height	
	8A			n.c
	9A	GAI		Common analogic inputs
	1B			
	2B			
	4B			
	5B			n.c
	6B			
	7B	AI5		n.c
	8B	AI6		n.c
	9B	GAI		Common analogic inputs

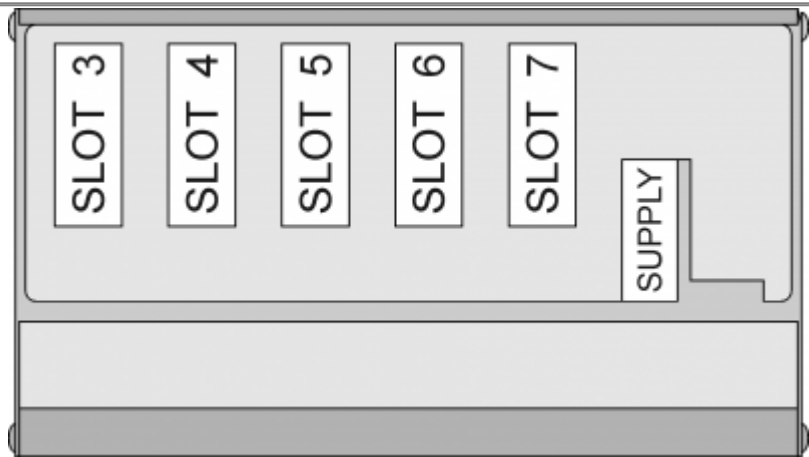
3.5 RMC-3M B01 MZ



Optional module in case the reading of abrasive consumption is required

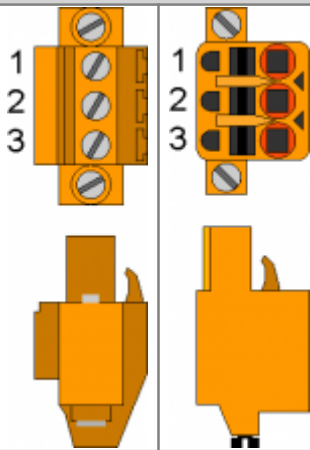
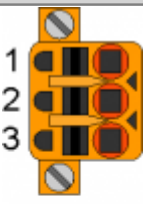


General view RMC-3M



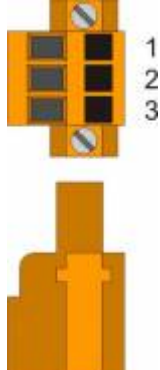
Bus composition del RMC-3M

3.5.1 RMC-3M C01 D5- Power supply

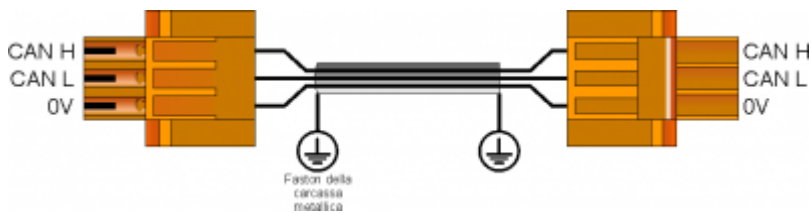
CN 1		Clamp	Symbol	Description
		1	—	0V
		2	GROUND	Ground
		3	+	+24 V

3.5.2 Connections

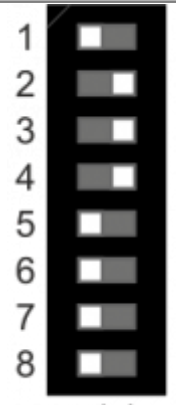
3.5.2.1 RMC-3M B01 MZ: CN2 - CN3 - PORTA CAN

	1	0 Volt - Common port CanOpen
	2	CAN L
	3	CAN H

3.5.2.1.1 Wiring example



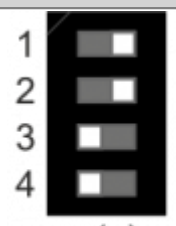
3.5.2.2 Switch 1

SW1	Num. DIP	Set	Function
	1	OFF	DIP 1-2: Transmission speed (500 Kbit/s)
	2	ON	
	3	ON	DIP 3-8: Module address (address 3)
	4	ON	
	5	OFF	
	6	OFF	
	7	OFF	
	8	OFF	

OFF ↔ ON

3.5.2.3 Switch 3

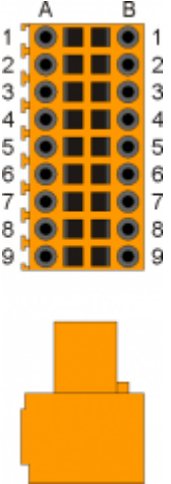
Check [wiring CAN](#) to determine the activation of the terminating resistor

SW3	Num. Dip	Name Dip	Setting DIP	Function
	1	JP1	ON	Termination CAN PORT
	2	JP2	ON	
	3			
	4			

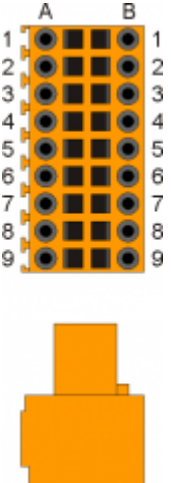
OFF ↔ ON

3.5.3 RMC-3M B01 MZ: Analogic inputs

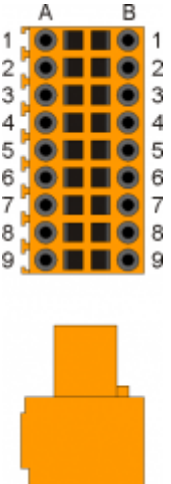
3.5.4 SLOT 3 (H1-A41)

Connector SLOT 3	Pin	Name	Description
	1A	+24V	+24V dc
	2A		
	3A		
	4A		-
	5A		
	6A		
	7A	AI7	Abrasive 1
	8A	VREF	Reference voltage
	9A		
	1B		
	2B		
	4B		-
	5B		
	6B		
	7B	AI8	Abrasive 2
	8B	AI9	Abrasive 3
	9B	GAI	Common analogic inputs

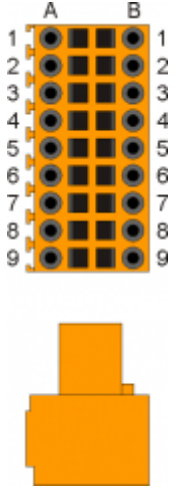
3.5.5 SLOT 4 (H1-A41)

Connector SLOT 4	Pin	Name	Description
	1A	+24V	Uscita +24V dc
	2A		
	3A		
	4A		-
	5A		
	6A		
	7A	AI10	Abrasive 4
	8A	VREF	Reference voltage
	9A		
	1B		
	2B		
	4B		-
	5B		
	6B		
	7B	AI11	Abrasive 5
	8B	AI12	Abrasive 6
	9B	GAI	Common analog inputs

3.5.6 SLOT 5 (H1-A41)

Connector SLOT 5	Pin	Name	Description
	1A	+24V	+24Vdc
	2A		
	3A		
	4A		-
	5A		
	6A		
	7A	AI13	Abrasive 7
	8A	VREF	Reference voltage
	9A		
	1B		
	2B		
	4B		-
	5B		
	6B		
	7B	AI14	Abrasive 8
	8B	AI15	Abrasive 9
	9B	GAI	Common analogic inputs

3.5.7 SLOT 6 (H1-A41)

Connector SLOT 6		Pin	Name	Description
	A	1A	+24V	+24Vdc
	B	2A		
		3A		
		4A		-
		5A		
		6A		
		7A	AI16	Abrasive 10
		8A	VREF	Reference voltage
		9A		
		1B		
		2B		
		4B		-
		5B		
		6B		
		7B	AI17	Abrasive 11
		8B	AI18	Abrasive 12
		9B	GAI	Common analogic inputs

4. Support

For supplying you fast service, at the lowest cost, we need your support.

	
Follow all instructions provided in the MIMAT manual	If the problem remains, fill out the "Request Form for assistance" on the page Contacts at www.qem.it site. Our technicians will get elements essential for the understanding of your problem.

Repair

To provide you with an efficient service, please read and adhere to the instructions given [here](#)

Shipping

It is recommended to pack the instrument with materials that are able to cushion any falls.

		
Use the original package: it must protect the instrument during transport.	Attach: 1. A description of the anomaly; 2. A part of the electric scheme where the equipment is inserted 3. The planning of the equipment (set up, quotas of job, parameters...). 4. Request a quote for repair; if not required, the cost will be calculated in the final balance.	A full description of the problem, will help identify and resolve your problems fast. A careful packaging will avoid further inconveniences.

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