

Sommario

MCE_P1R44F-009: Electrical Connections Manual	3
1. Informations	3
1.1 Release	3
1.2 Specifications	3
2. Hardware and connections	4
2.1 C1-R44-FF30	4
2.1.1 C1-R44: Power supply	5
2.1.2 Connectivity	5
2.1.3 Digital Input	10
2.1.4 Digital output	12
Duplication of outputs (to facilitate wiring)	13
2.1.5 Bidirectional counting inputs	15
2.1.6 Analog outputs	27
2.2 A1-HMI-QC104	28
2.2.1 A1-HMI-QC104: Power supply	29
2.2.2 Connectivity	30
2.2.3 Digital input	32
2.2.4 Digital outputs	34
2.3 RMC-3M-DD	35
2.3.1 RMC-3M-DD: CN1 - Power supply	36
2.3.2 Connectivity	36
2.3.3 RMC-3M-DD: Digital Outputs	38
2.3.4 SLOT 3 (H1-P16 : Out +24 Volt, 500 mA)	38
2.3.5 SLOT 4 (H1-P16 : Out +24 Volt, 500 mA)	38
2.3.6 SLOT 5 (H1-P16 : Out +24 Volt, 500 mA)	38
2.3.7 SLOT 6 (H1-P16 : Out +24 Volt, 500 mA)	39
2.3.8 SLOT 7 (H1-P16 : Out +24 Volt, 500 mA)	39
2.4 RMC-3M-D5	40
2.4.1 RMC-3M-D5: CN1- Power supply (Power Input - 24 Vdc)	41
2.4.2 RMC-3M-D5: CN2 - CN3 - CAN PORT	42
2.4.3 RMC-3M-D5: Digital inputs	43
2.4.4 SLOT 3 (H1- I1÷16)	43
2.4.5 SLOT 4 (H1- I17÷32)	43
2.4.6 SLOT 5 (H1- I33÷48)	43
2.4.7 SLOT 6 (H1- I49÷64)	44
3. Support	45
Request for assistance	45
Repair	45
Shipping	45

MCE_P1R44F-009: Electrical Connections Manual

1. Informations

1.1 Release

			
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01	New manual		21/04/2020
02	Manual update		03/08/2020
03	Manual update		13/10/2022

1.2 Specifications

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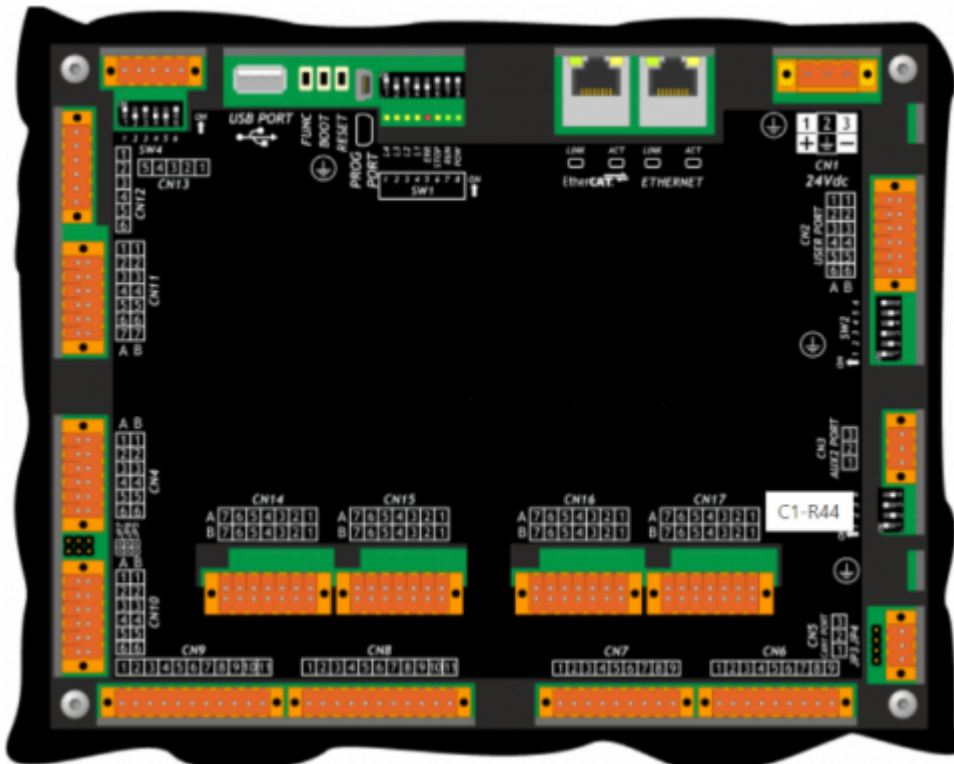
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2. Hardware and connections

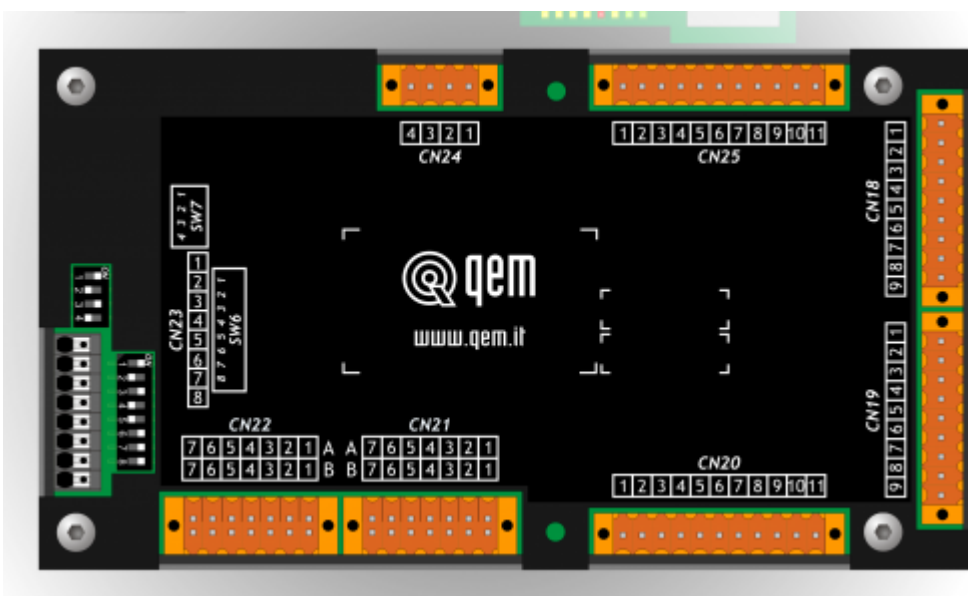
The models of devices used for this application are:

- **C1-R44-FF30**: CPU unit for motion control and automation logic;
- **A1-HMI-QC104-03/TP01/G16**: operator terminal 10.4 ", touch screen, 256 colors;
- **RMC-3M B01 DD /I16/I16/I16/I16/0/24 Vdc**: Multi-board remote I / O module;
- **RMC-3M C01 D5 /P16/P16/P16/P16/P16/24 Vdc**: Multi-board remote I / O module;

2.1 C1-R44-FF30



C1-R44 front view

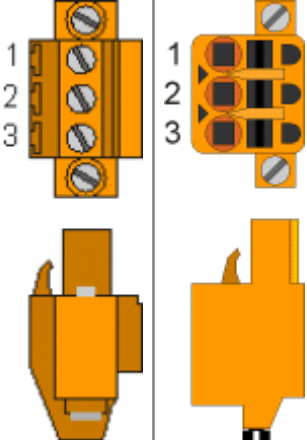


Expansion 1MG2F

2.1.1 C1-R44: Power supply

2.1.1.1 C1-R44: CN1

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

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

2.1.2 Connectivity

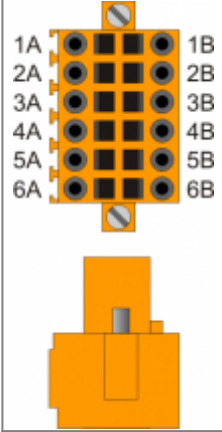
- PROG PORT → Serial with TTL logic standard for programming.
- USER PORT → Multistandard serial (RS232, RS422, RS485).
- AUX RS485 PORT → Multistandard serial (RS232, RS422, RS485).
- ETHERNET PORT → RJ45 connector
- CAN PORT → “field bus” type Canbus.

2.1.2.1 ETHERNET port

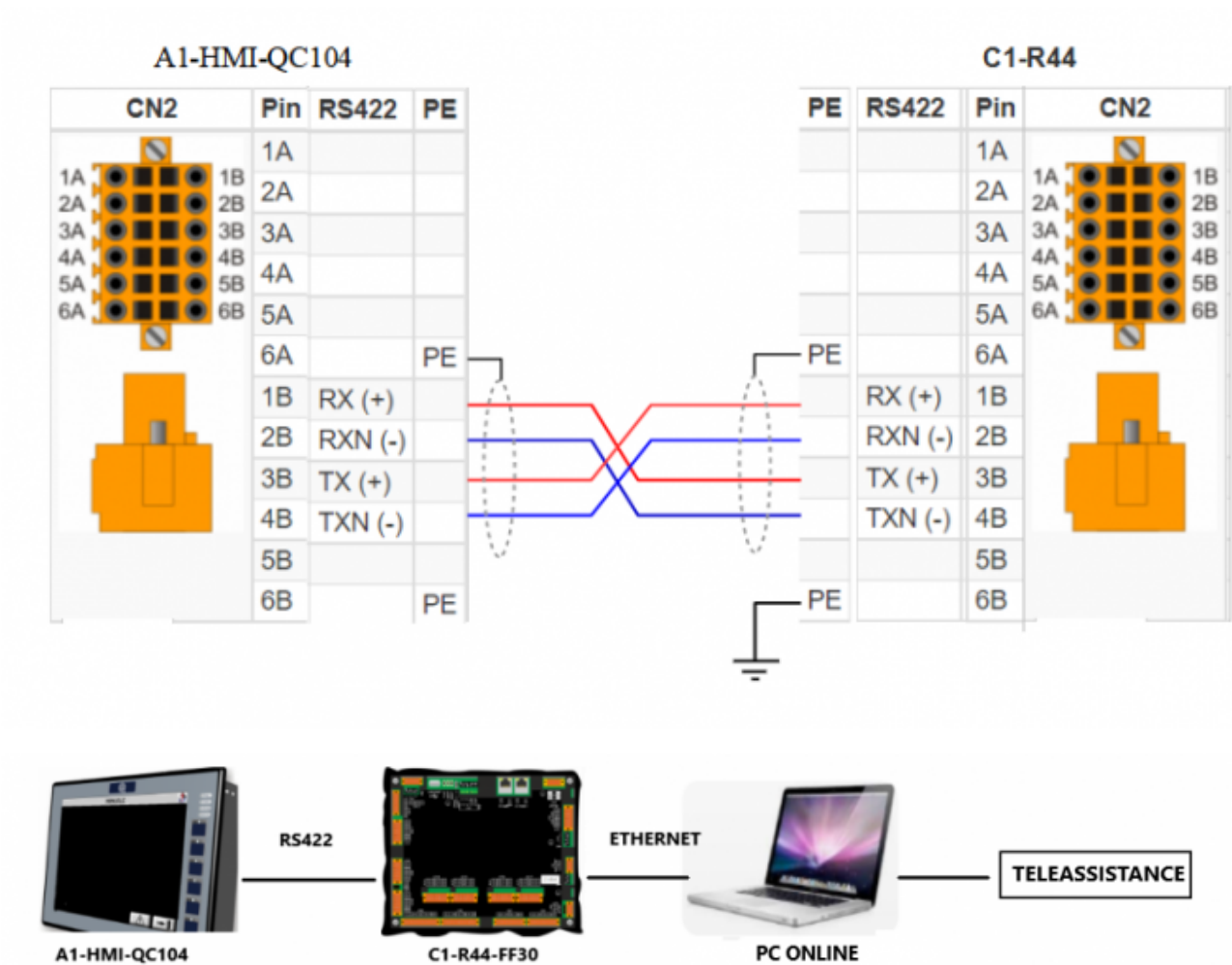
ETHERNET PORT	Descrizione
	Connettore RJ45. LED: * LINK: led verde = cavo collegato (il led acceso indica che il cavo è connesso ad entrambi i capi) * DATA: led giallo = scambio dati (il led lampeggiante indica lo scambio dati tra i dispositivi collegati)

2.1.2.2 C1-R44: CN2 - PORTA USER

Serial port used to connect the A1-HMI-QC104 operator terminal. Set RS422 serial.

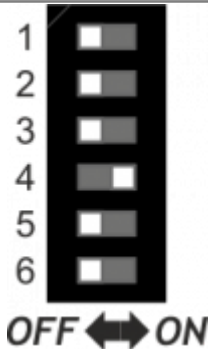
CN2	Pin	RS485	RS232	RS422	PE
	1A	Canal A			
	2A	Canal B			
	3A	Common 0 Volt			
	4A		Common 0 Volt		
	5A		TX		
	6A				PE
	1B			RX (+)	
	2B			RXN (-)	
	3B			TX (+)	
	4B			TXN (-)	
	5B		RX		
	6B				PE

Connection example:



2.1.2.3 USER PORT electrical standard setting

Attention: Select the electrical standard RS422.

SW2	Num. Dip	Name DIP	Setup DIP			Function
	1	JP2	ON	X ¹⁾	X ²⁾	RS485 termination
	2	JP3	ON	X ³⁾	X ⁴⁾	RS485 polarization
	3	JP1	ON	X ⁵⁾	X ⁶⁾	
	4		OFF	ON	OFF	USER PORT electric standard selection
	5		ON	OFF	OFF	
	6		OFF	OFF	ON	
			RS485	RS422	RS232⁷⁾	

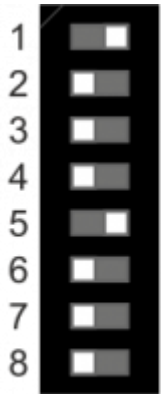
^{1), 2), 3), 4), 5), 6)} X = non-influential setting

⁷⁾ It is possible to use the USER PORT as PROG PORT with RS232 electrical standard, setting the DIP-8 of **SW1** to ON and the DIP-6 of **SW2** to OFF

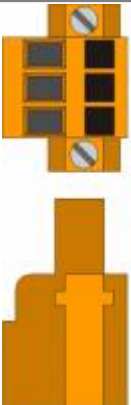
2.1.2.4 PROG PORT and USER PORT baud-rate selector

SET PROG PORT 115200

SET USER PORT 57600

SW 1	Dip	DIP setting				Function
 OFF  ON	1	OFF	Baud rate 57600			Transmission speed selection PROG PORT
		ON	Baud rate 115200			
	2	OFF	Baud rate 57600			Baud rate selection USER PORT
		ON	Baud rate 115200			
	3	OFF	Can also be used by SERCOM and MODBUS			devices Operating mode selection PROG PORT
		ON	Not usable by SERCOM and MODBUS devices			
	4	OFF	ON	OFF	ON	CANbus baud rate (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	PROG PORT normal			Select the USER PORT as PROG PORT
		ON	PROG PORT on the USER PORT connector			

2.1.2.5 C1-R44: CN5 - CAN PORT

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

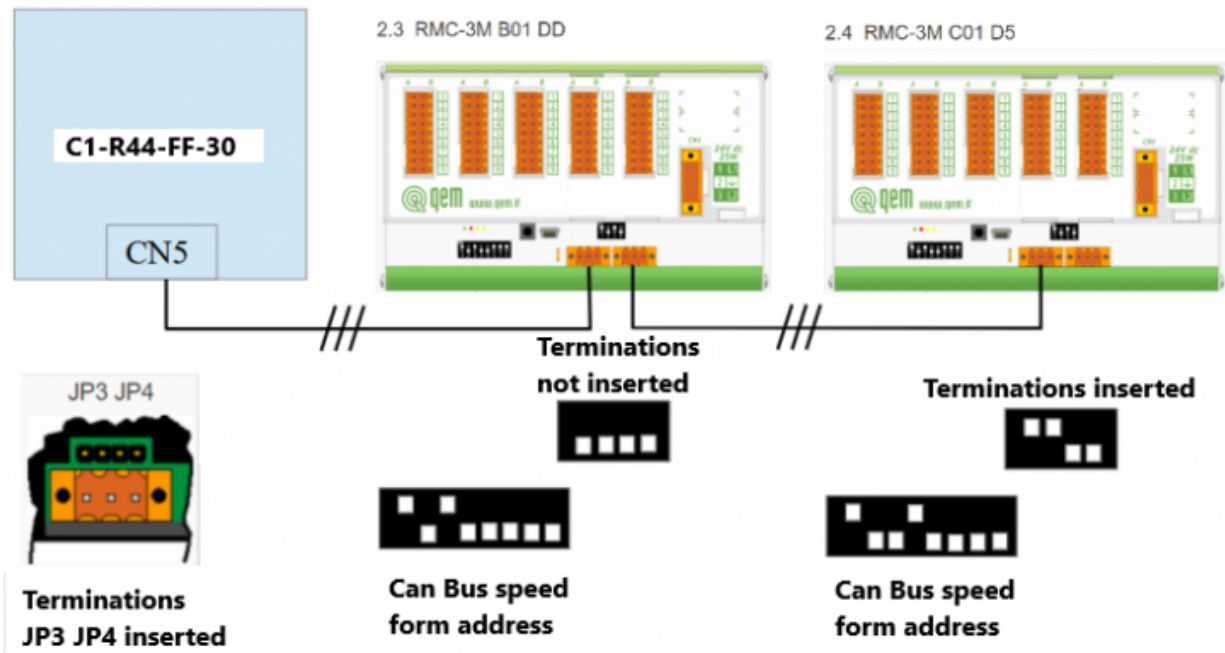
2.1.2.6 Termination resistors setting

	Name jumper	Setting	Function
	JP3	INSERTED	CAN termination activated
	JP4		

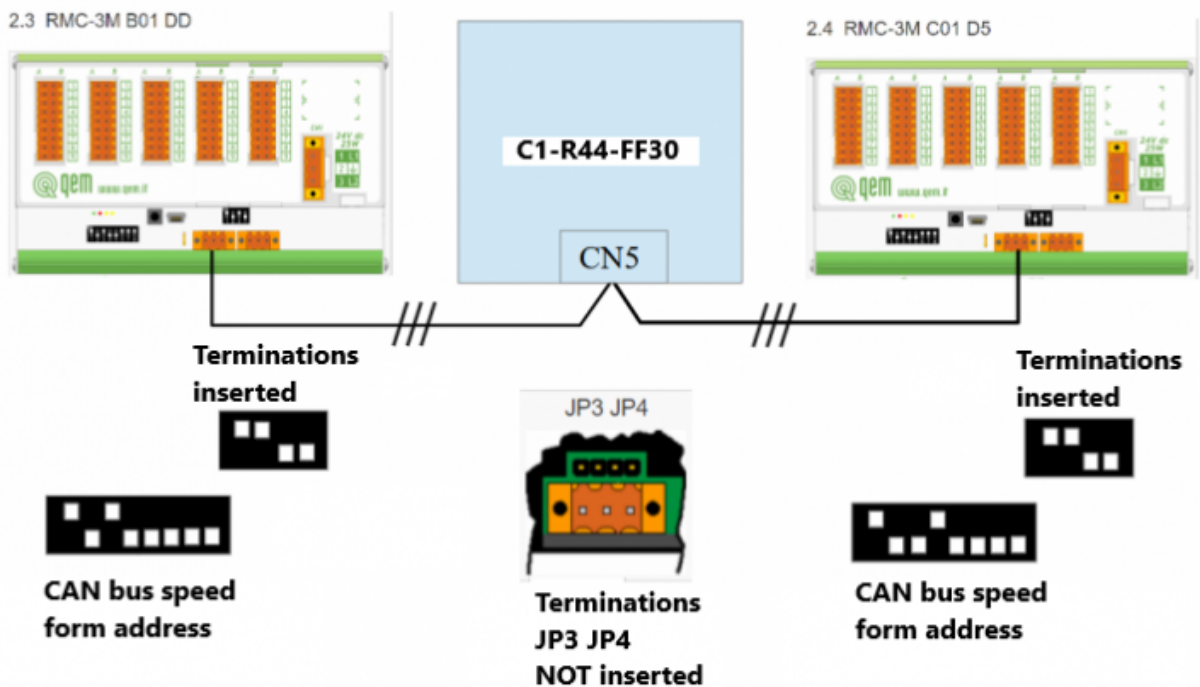
2.1.2.7 CAN cable connection example

There are two ways of connecting:

1st way:



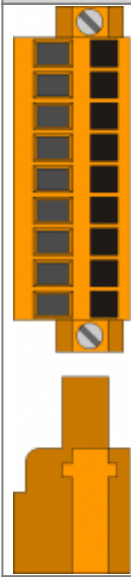
2nd way:



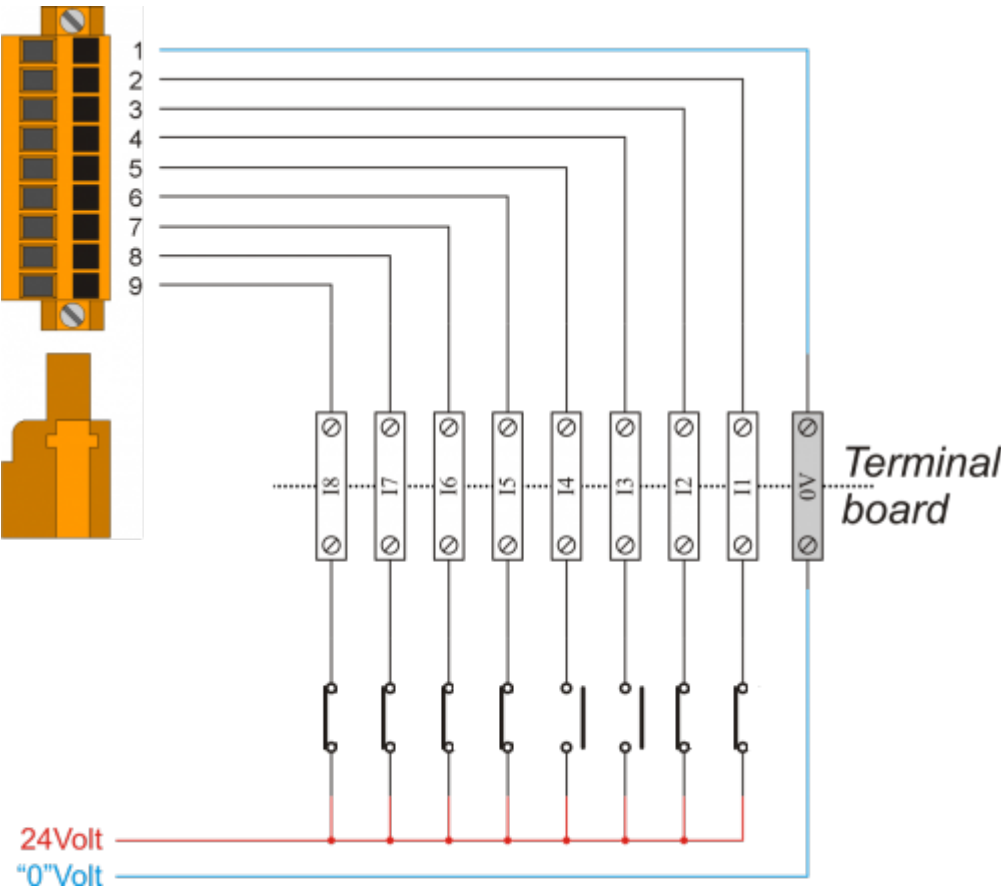
2.1.3 Digital Input

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

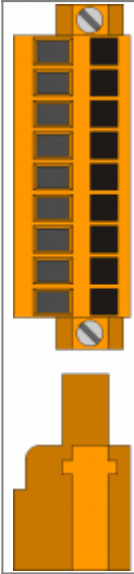
2.1.3.1 C1-R44: CN7

CN 7	Pin	ID	Description	S	A
	1	0V	0 Volt (common inputs I1 ÷ I8)		
	2	I1	Thermal heads	-	NC C
	3	I2	Bridge fault	-	
	4	I3	Conveyor belt fault	-	NO I
	5	I4	Roller conveyor fault	-	
	6	I5	Air pressure	-	NC C
	7	I6	Water pressure	-	
	8	I7	Forward bridge sensor	-	
	9	I8	Back bridge sensor	-	

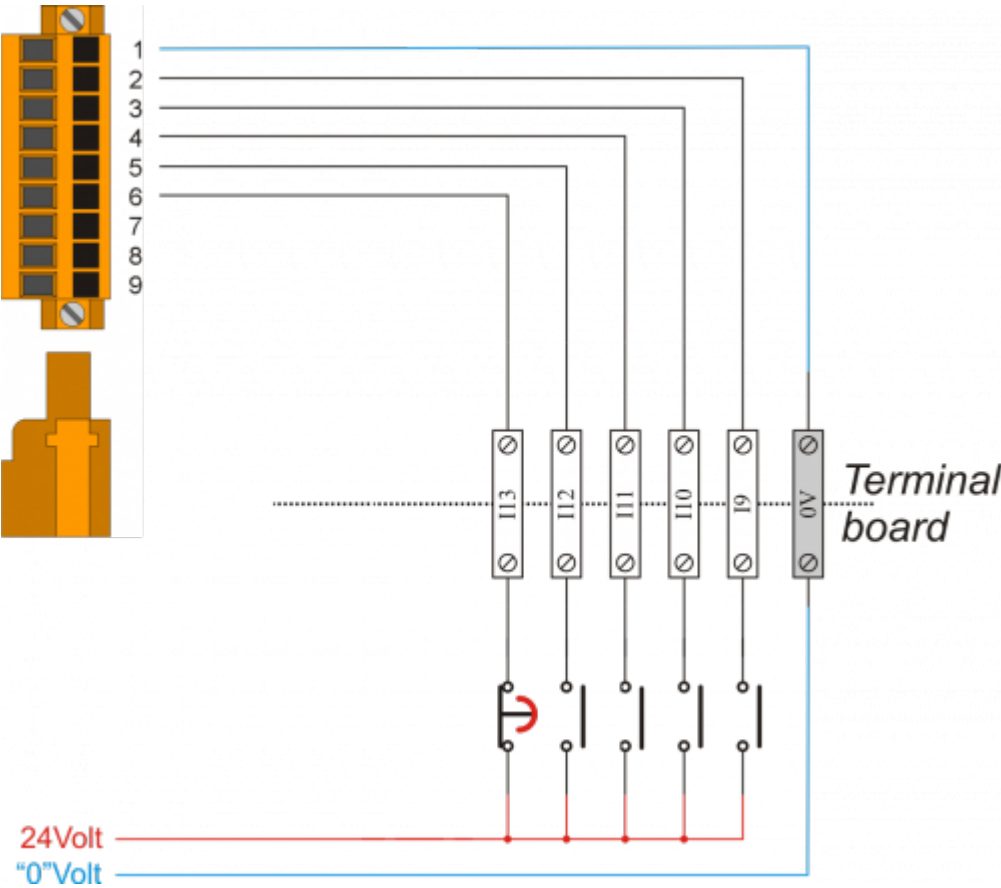
2.1.3.1.1 Example of connection



2.1.3.2 C1-R44: CN6

CN 6	Pin	ID	Description	S	A
	1	0V	0 Volt (common inputs I9 ÷ I16)		
	2	I9	Bridge zero sensor -	NO	I
	3	I10	Slab presence sensor		
	4				
	5				
	6	I12	Abrasive sensor worn -		
	7	I13	Emergency -	NC	C
	8	I14	n.u. Free		
	9	I15	n.u. Free		

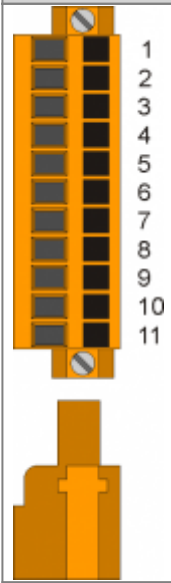
2.1.3.2.1 Example of connection



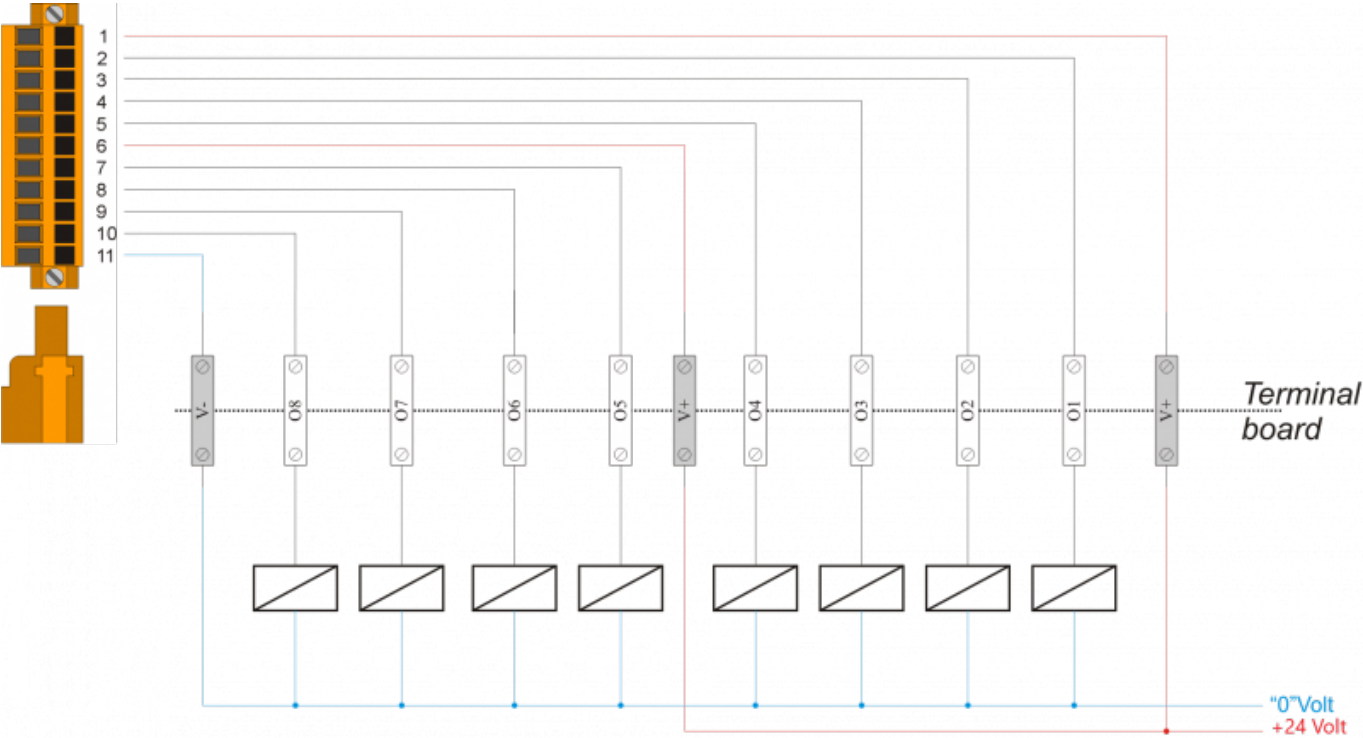
2.1.4 Digital output

S = State	ID
OFF	ID = Software
ON	

2.1.4.1 C1-R44: CN9

CN 9	Pin	ID	Description	S
	1	V+	+ 24 Volt (common outputs 01 ÷ 04)	
	2	O1	ON/OFF Bridge	-
	3	O2	ON/OFF Conveyor belt	-
	4	O3	ON/OFF Roller conveyor	-
	5	O4	Up / Down Brush	-
	6	V+	+24 Volt (common outputs 05 ÷ 08)	
	7	O5	ON/OFF Previous Machine	-
	8	O6	Lubrication	-
	9	O7	Stop Conveyor belt	-
	10	O8	Alarm state	-
	11	0V	0 Volt (common outputs 01 ÷ 08)	

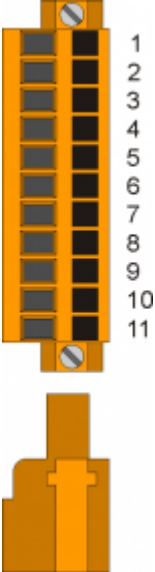
2.1.4.1.1 Example of connection



Duplication of outputs (to facilitate wiring)

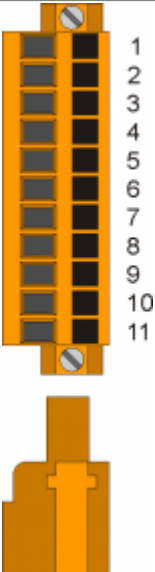
Some outputs of QC104 and RMC-3M B01 DD module are duplicated on C1-R44-FF30:

2.1.4.2 C1-R44: CN 8 (Out +24 Volt, 500mA)

CN 8	Pin	ID	Description	Head	S
	1	V+	+24 Volt (common outputs O25÷O34)		
	2	O17	AUTO LAMP ON		OFF
	3	O18	ALARM LAMP		
	4	O25	ON/OFF	1	
	5	O28		2	
	6	V+	+24 Volt (common outputs O37÷O46)		
	7	O31	ON/OFF	3	OFF
	8	O34		4	
	9	O37		5	
	10	O40		6	
	11	0V	0 Volt (common outputs O25÷O46)		

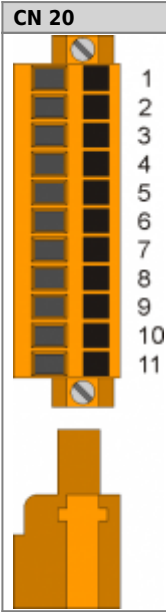
2.1.4.3 C1-R44: CN 25 (Out +24 Volt, 500 mA)

Engine starter duplication

CN 25	Pin	ID	Description	Head	S
	1	V+	+24 Volt (common outputs O49÷O58)		
	2	O43	ON/OFF	7	OFF
	3	O46		8	
	4	O49		9	
	5	O52		10	
	6	V+	+24 Volt (common outputs O61÷O70)		
	7	O55	ON/OFF	11	OFF
	8	O58		12	
	9	O61		13	
	10	O64		14	
	11	0V	0 Volt (common outputs O49÷O70)		

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

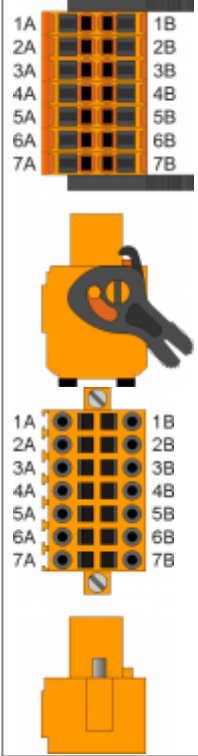
Engine starter duplication

CN 20	Pin	ID	Description	Head	S
	1	V+	+24 Volt (common outputs O73÷O82)		
	2	O67	ON/OFF	15	OFF
	3	O70		16	
	4	O73		17	
	5	O76		18	
	6	V+	+24 Volt (common outputs O85÷O88)		
	7	O79	ON/OFF	19	OFF
	8	O82		20	
	9	O85		21	
	10	O88		22	
	11	0V	0 Volt (common outputs O73÷O18)		

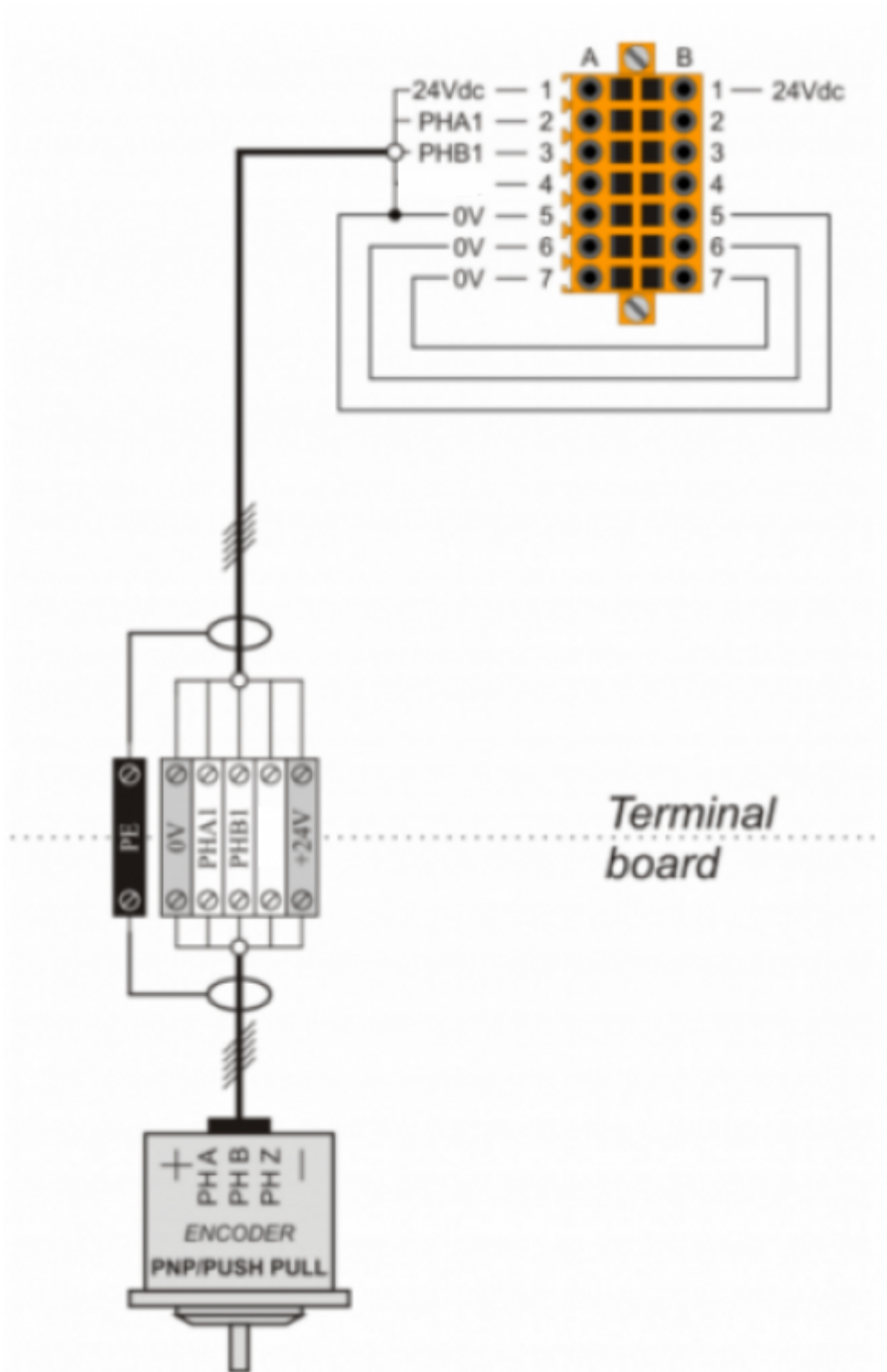
2.1.5 Bidirectional counting inputs

2.1.5.1 Encoder Push Pull

2.1.5.1.1 C1-R44: CN14

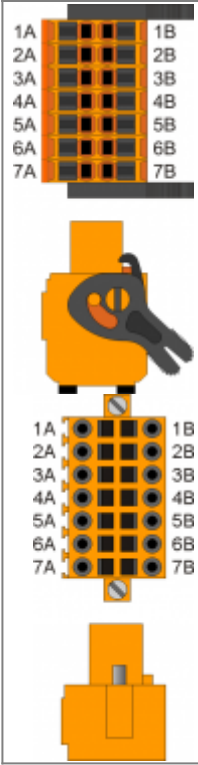
CN 14 (Push Pull)	PIN	ID	DESCRIPTION		COMMENTS
	1B	+24V IN	Input +24 Volts	Bridge Count	
	2B				
	1A	+24V OUT	Output +24 Volts		Encoder power supply
	3B				
	4B				
	5B				
	6B				
	7B				
	2A	PHA1	Phase A		-
	3A	PHB1	Phase B		-
	4A	-	-		-
	5A	0V n	Connect to PIN 5B		Common of counting inputs. Internally connected to 0Volt (PIN 3 - CN1)
	6A	0V n	Connect to PIN 6B		
	7A	0V n	Connect to PIN 7B		

2.1.5.1.2 Connection example

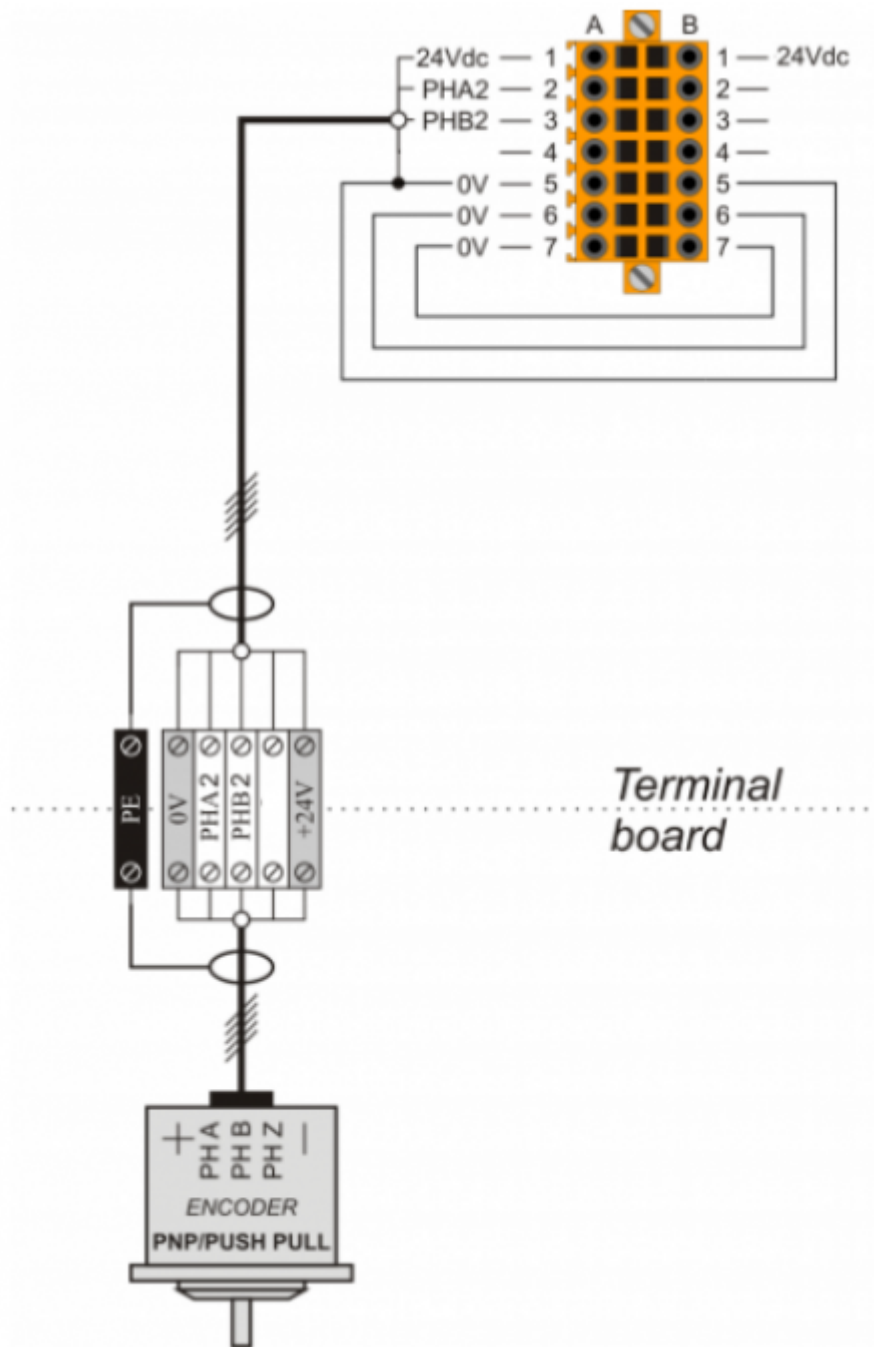


Press [here](#) for more connection examples

2.1.5.1.3 C1-R44: CN15

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

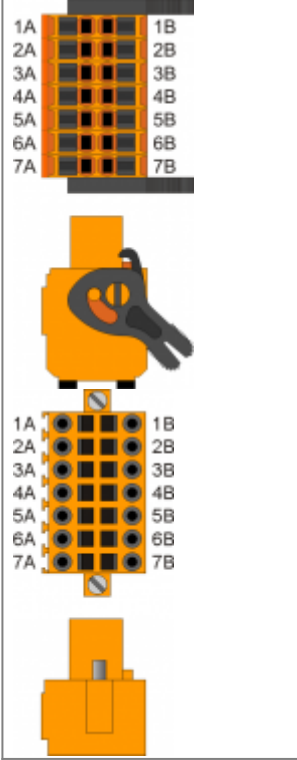
2.1.5.1.4 Connection example



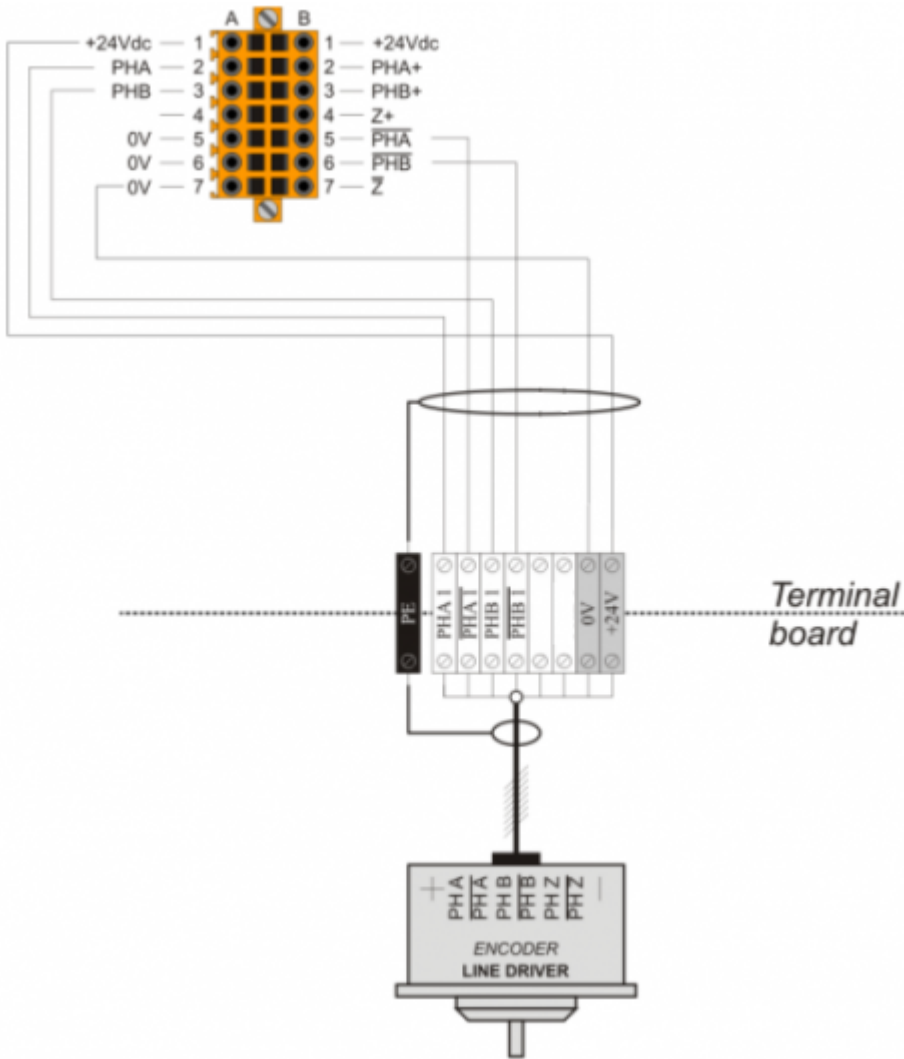
Press [here](#) for more connection examples

2.1.5.2 Encoder Line Driver 24 Volt

2.1.5.2.1 C1R44: CN14

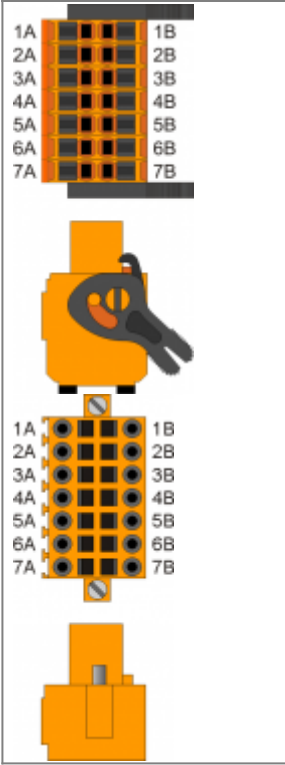
CN 14 (Line Driver 24 Volt)	PIN	ID	DESCRIPTION	
	1B	+24V IN	Input +24 Volts	Bridge Count
	1A	+24V OUT	Encoder power supply	
	2A	PHA1	Phase A+	
	3A	PHB1	Phase B+	
	4A	-	-	
	5B	PHA1-	Phase A-	
	6B	PHB1-	Phase B-	
	7B	-	-	

2.1.5.2.2 Connection example

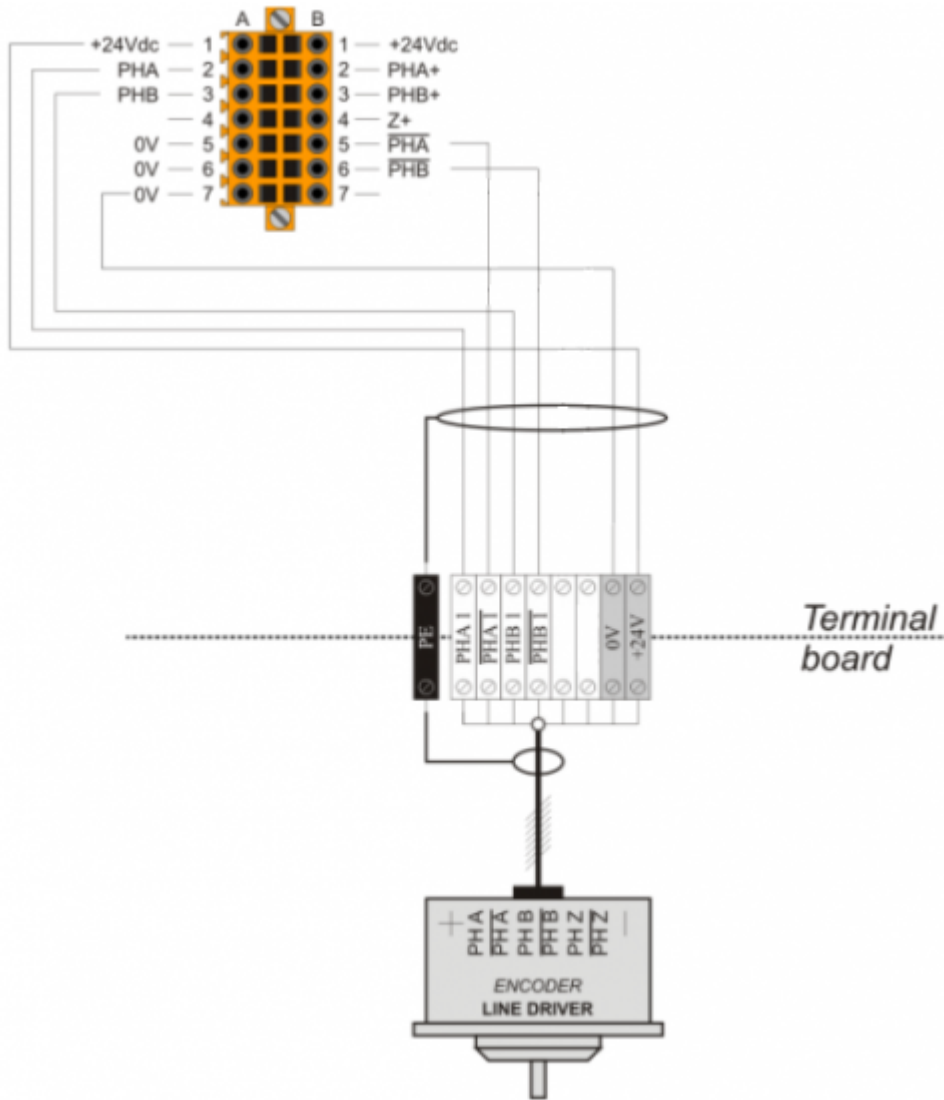


Press [here](#) for more connection examples

2.1.5.2.3 C1R44: CN15

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

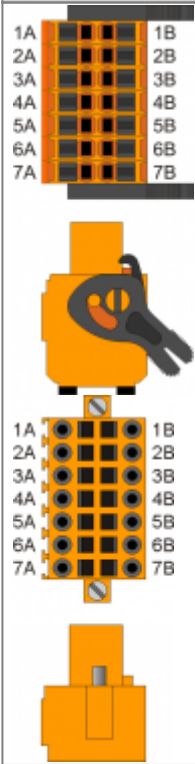
2.1.5.2.4 Connection example



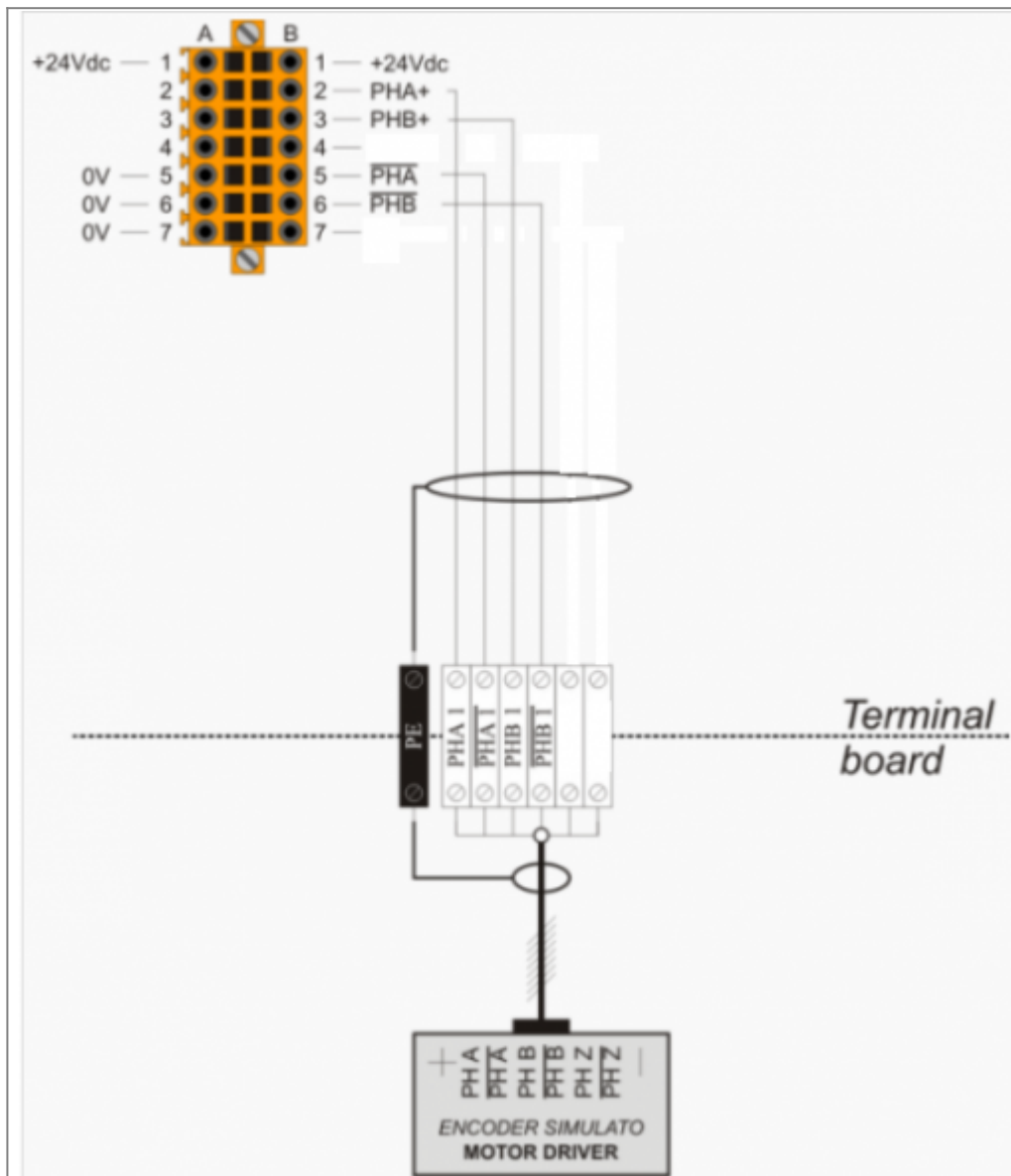
Press [here](#) for more connection examples

2.1.5.3 5 Volt simulated line driver encoder

2.1.5.3.1 C1R44: CN14

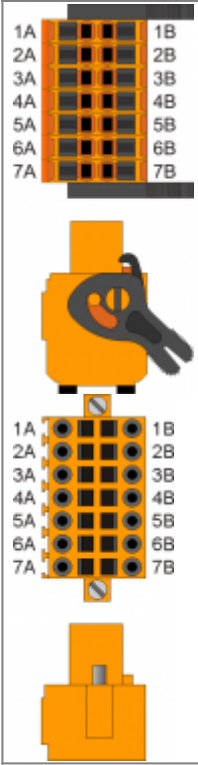
CN 14 (5 Volt Simulated Line Driver)	PIN	ID	DESCRIPTION	
	2B	PHA1+	Phase A+	Bridge Count
	3B	PHB1+	Phase B+	
	4B	-	-	
	5B	PHA1-	Phase A-	
	6B	PHB1-	Phase B-	
	7B	-	-	

2.1.5.3.2 Connection example

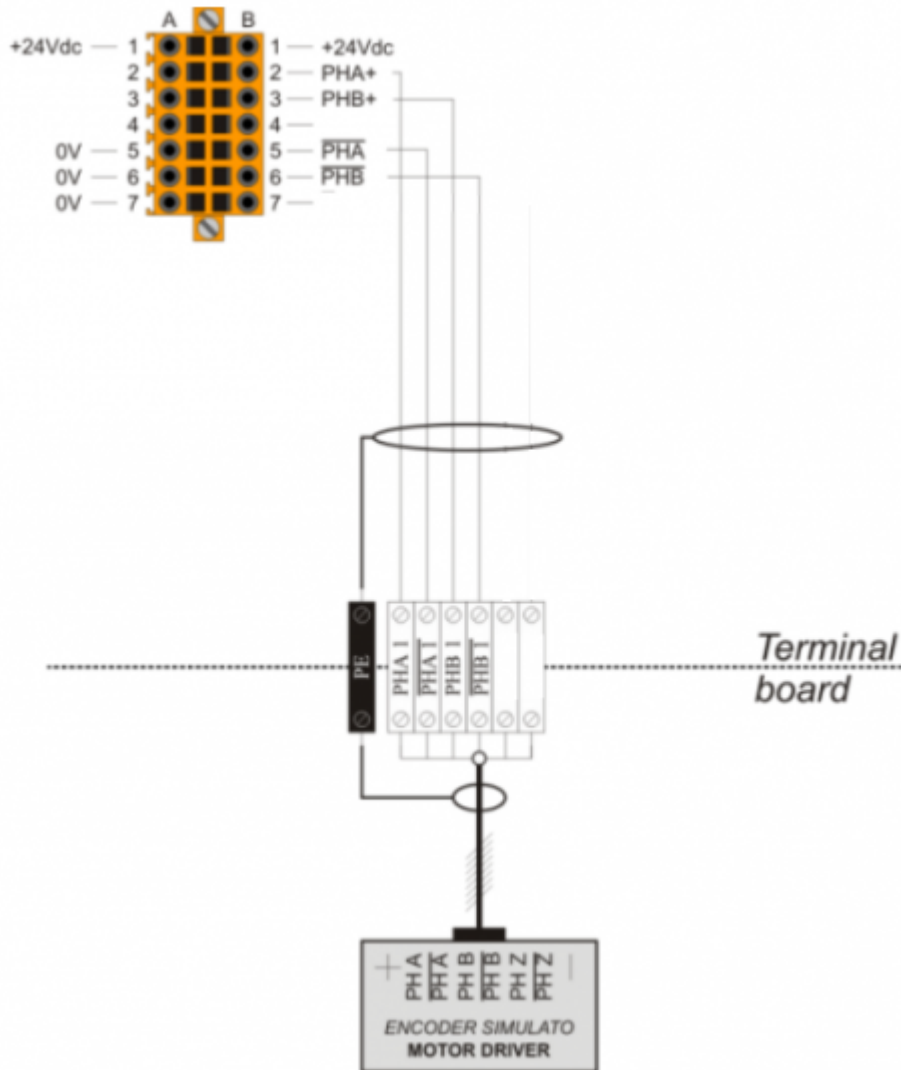


Press [here](#) for more connection examples

2.1.5.3.3 C1R44: CN15

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

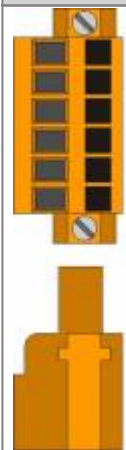
2.1.5.3.4 Connection example



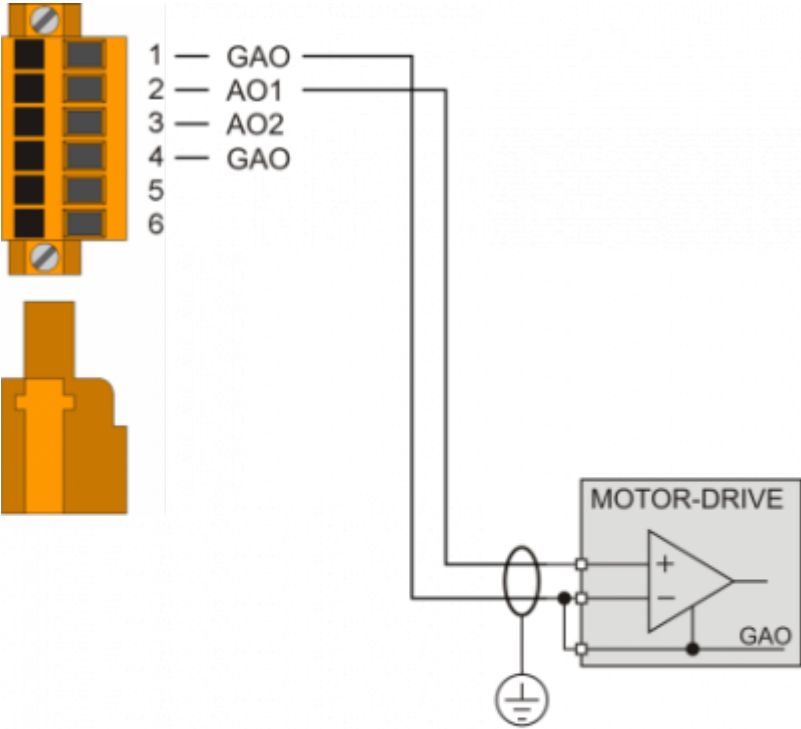
Press [here](#) for more connection examples

2.1.6 Analog outputs

2.1.6.1 C1-R44: CN12

CN 12	Pin	ID	Description
	1	GA01	Common analog output AO1÷AO2
	2	AO1	Bridge command: +/- 10 V
	3	AO2	
	4	GA02	Common analog output AO3÷AO4
	5	AO3	n.u.
	6	AO4	n.u.

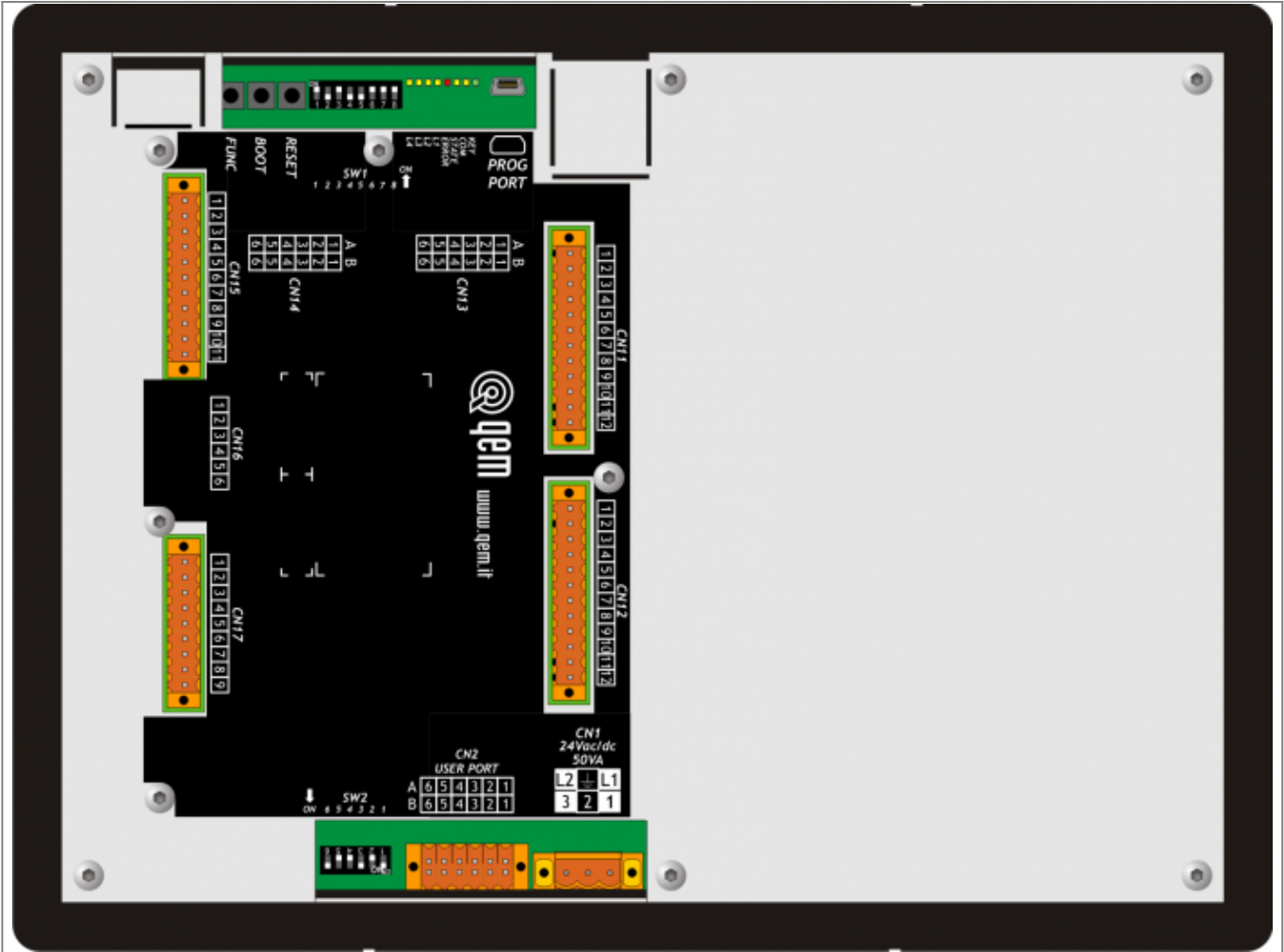
2.1.6.1.1 Connection example



2.2 A1-HMI-QC104



Front view

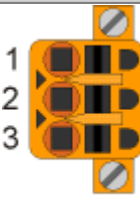
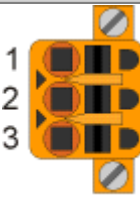


Rear view

2.2.1 A1-HMI-QC104: Power supply

2.2.1.1 A1-HMI-QC104: CN 1

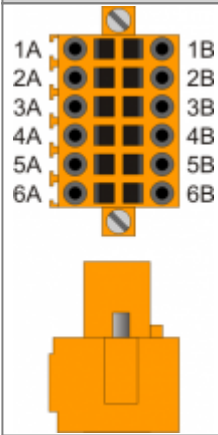
The instrument must be powered at 24Vdc. Provide an external fuse in series with the + 24Volt positive conductor.

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

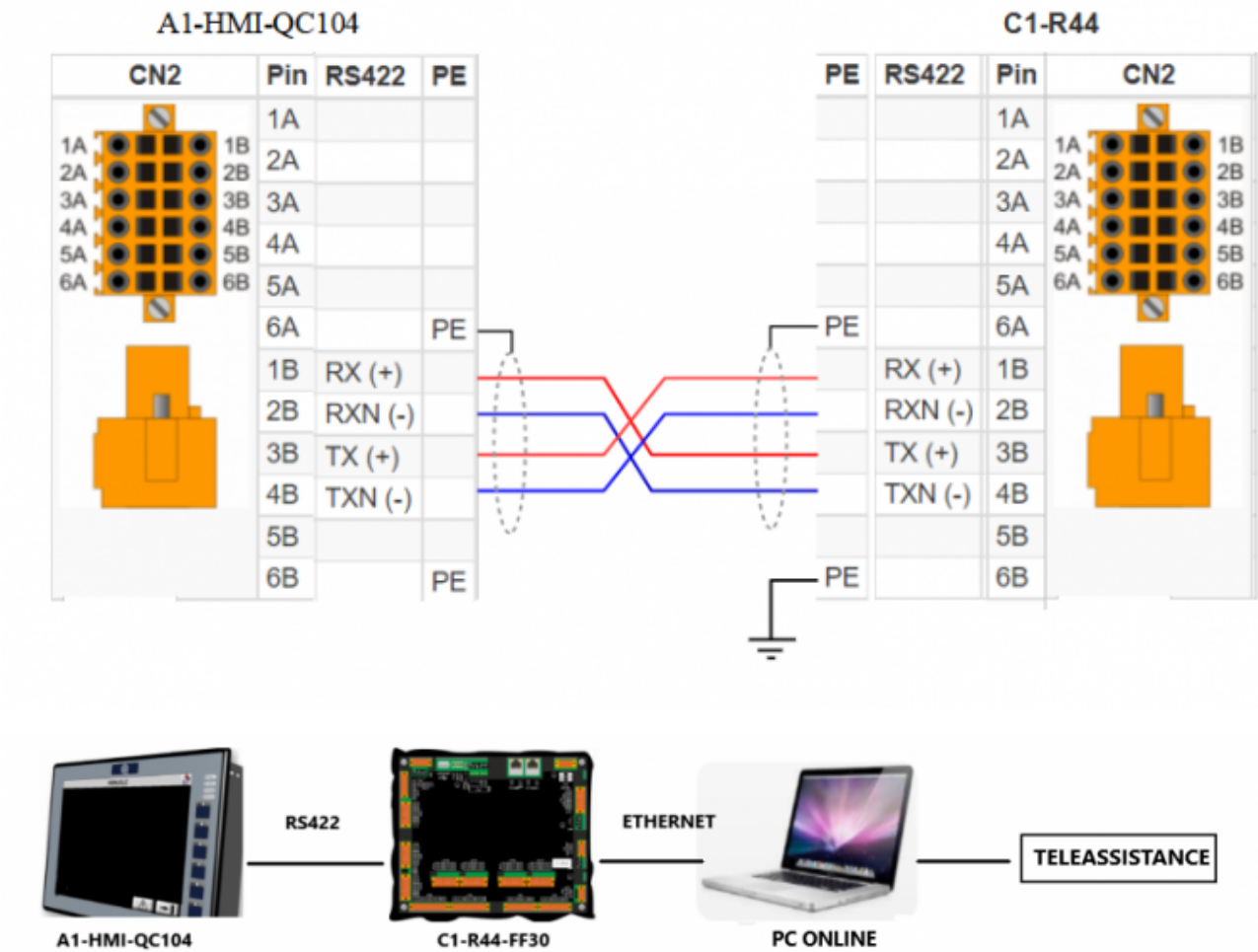
2.2.2 Connectivity

2.2.2.1 A1-HMI-QC104: CN2 - USER PORT

Serial port used to connect the A1-HMI-QC104 operator terminal to the C1-R44-FC30 controller. Use the RS422 serial.

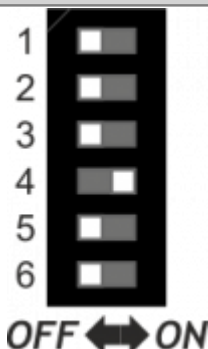
CN2	Pin	RS485	RS232	RS422	PE
	1A	Channel A			
	2A	Channel B			
	3A	Common 0 Volts			
	4A		Common 0 Volts		
	5A		TX		
	6A				PE
	1B			RX (+)	
	2B			RXN (-)	
	3B			TX (+)	
	4B			TXN (-)	
	5B		RX		
	6B				PE

Connection example:



2.2.2.1.1 USER PORT electrical standard setting

N.B. Select the RS422 electrical standard.

SW2	Num. Dip	Name DIP	Setup DIP			Function
	1	JP2	ON	X ¹⁾	X ²⁾	RS485 termination
	2	JP3	ON	X ³⁾	X ⁴⁾	RS485 polarization
	3	JP1	ON	X ⁵⁾	X ⁶⁾	
	4		OFF	ON	OFF	USER PORT electric standard selection
	5		ON	OFF	OFF	
	6		OFF	OFF	ON	
			RS485	RS422	RS232 ⁷⁾	

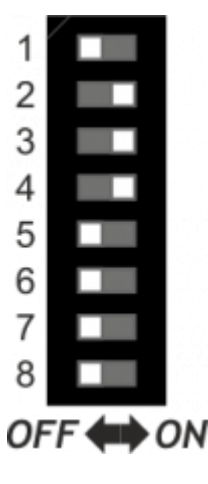
^{1), 2), 3), 4), 5), 6)} X = non-influential setting

⁷⁾ It is possible to use the USER PORT as PROG PORT with RS232 electrical standard, setting the DIP-8 of SW1 to ON and the DIP-6 of SW2 to OFF

2.2.2.2 PROG PORT and USER PORT baud-rate selector

SET PROG PORT 115200

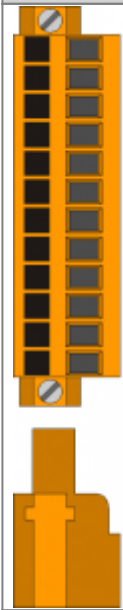
SET USER PORT 57600

SW 1	Dip	DIP setting				Function
	1	OFF	OFF	ON	ON	Transmission speed selection PROG PORT
	2	OFF Baud rate 38400	ON Baud rate 115200	OFF Baud rate 19200	ON Baud rate 57600	
	3	OFF	OFF	ON	ON	Baud rate selection USER PORT
	4	OFF Baud rate 38400	ON Baud rate 115200	OFF Baud rate 19200	ON Baud rate 57600	
	5	Unused				Select the USER PORT as PROG PORT
	6					
	7					
	8	OFF	ON			
		PROG PORT normal		PROG PORT to the USER PORT connector		

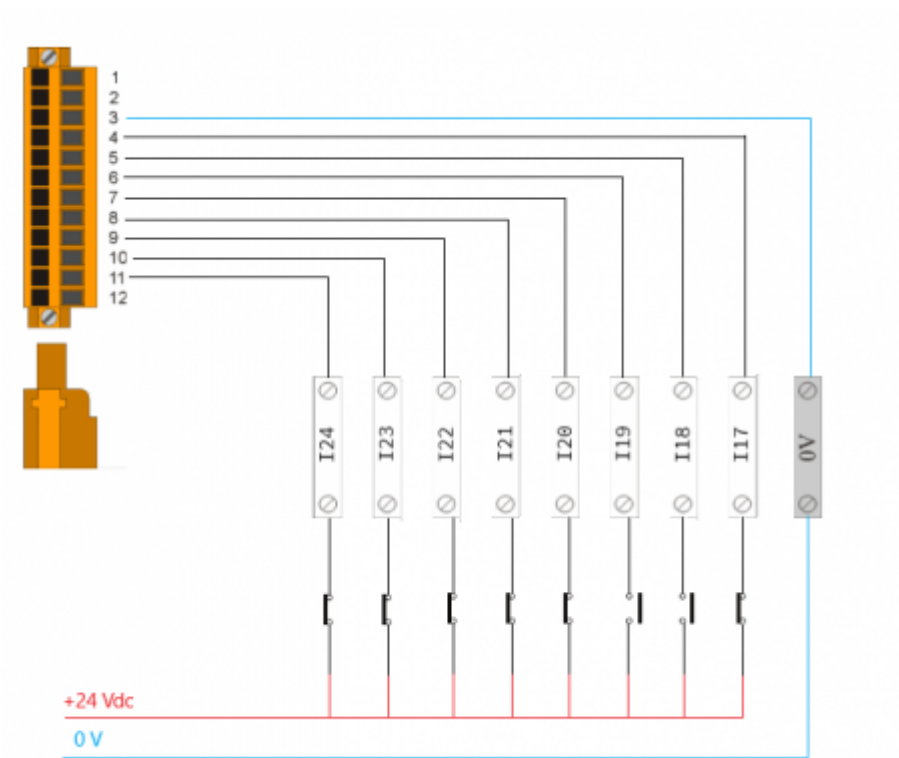
2.2.3 Digital input

S = State	A = Action	ID
NO = Normally open	I = Impulsive	ID = Software
NC = Normally closed	C = Continuous	

2.2.3.1 A1-HMI-QC104: CN11

CN 11	Pin	ID	Description	S	A
	1	-	Not used		
	2	-	Not used		
	3	0V	0 Volt (Common digital input I17÷I24)		
	4	I17	Not used		
	5	I18	Jog Bridge	NO	I
	6	I19			
	7	I20	START		
	8	I21	STOP		
	9	I22	Abrasive change		
	10	I23	MAN / AUTO		
	11	I24	STAND-BY		
	12	0V	0 Volt (Common digital input I17÷I24)		

2.2.3.1.1 Connection example



2.2.3.2 A1-HMI-QC104: CN12

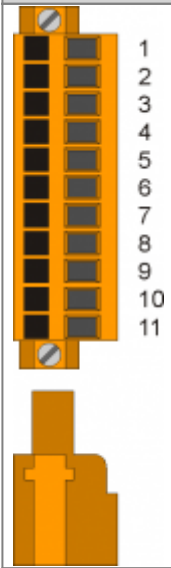
All inputs of these terminals are marked as ***n.u.*** (not used)

CN12	Terminal	Symbol	Description	Address
	1	-	n.u.	
	2	-		
	3	-		
	4	-		
	5	-		
	6	-		
	7	-		
	8	-		
	9	-		
	10	-		
	11	-		
	12	-		

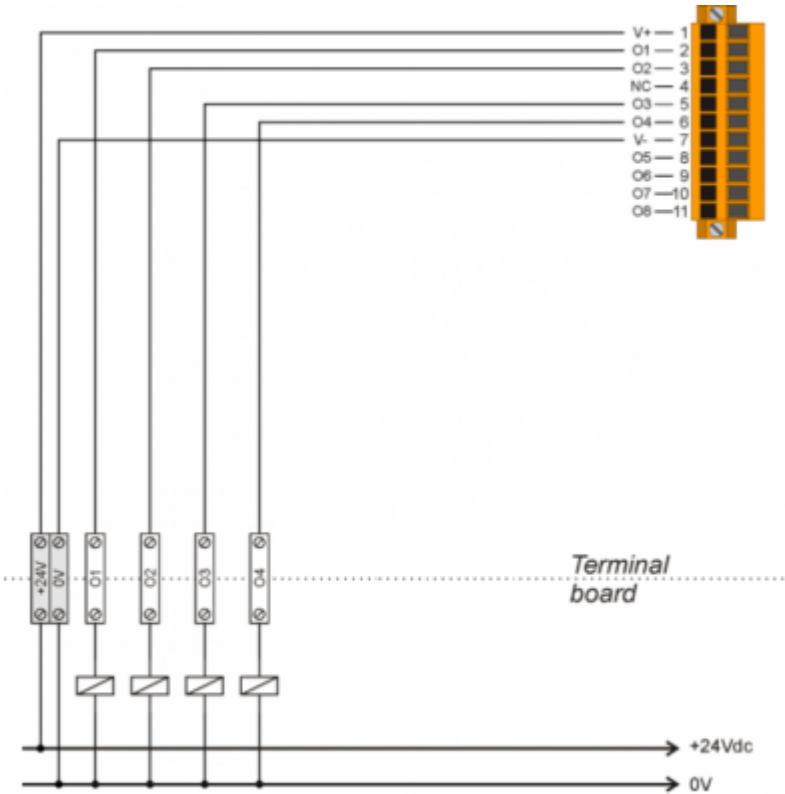
2.2.4 Digital outputs

S = State	ID
OFF	ID = Software
ON	

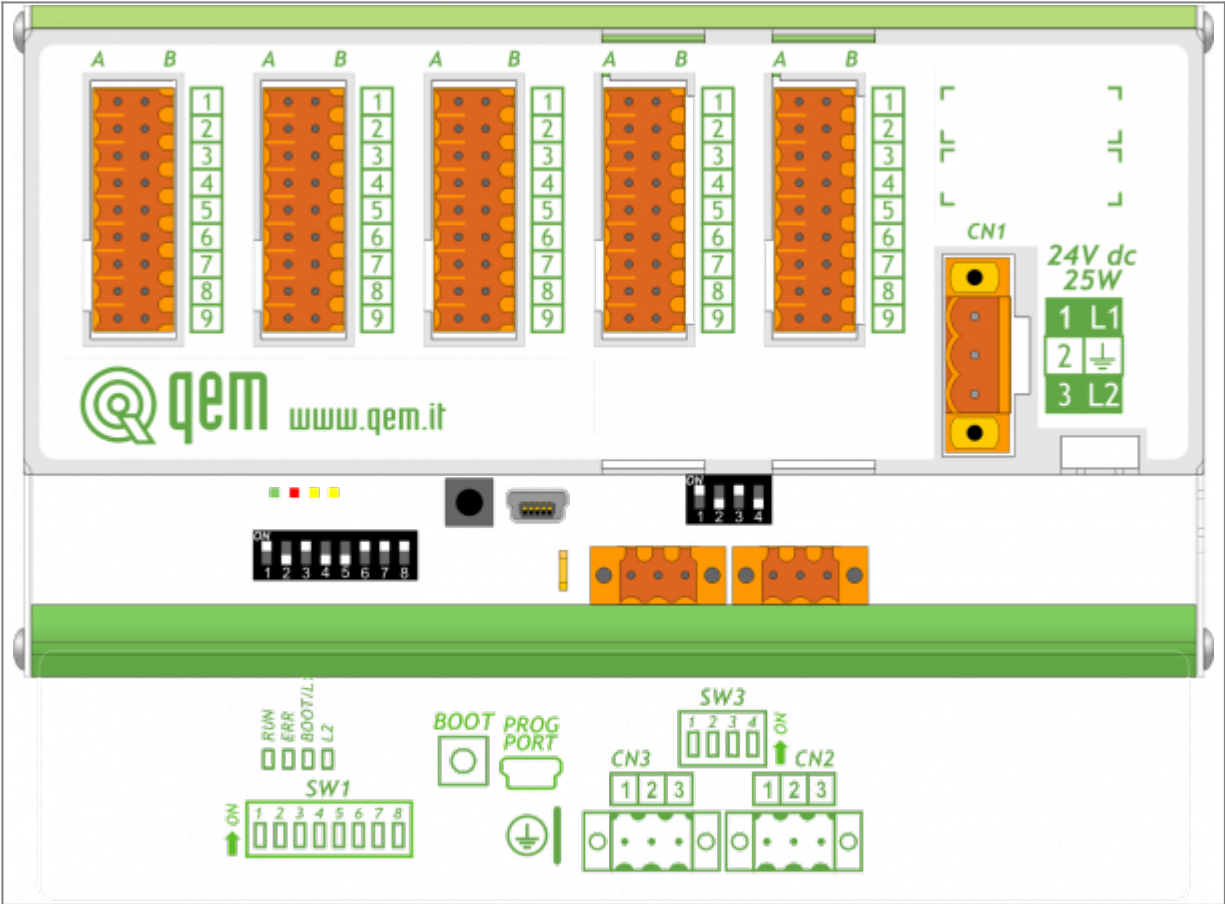
2.2.4.1 A1-HMI-QC104: CN15

	Pin	ID	Description	S
	1	V+	+ 24 Volt (common outputs 01 ÷ 04)	
	2	O1	LampAUTOMATIC ON	OFF
	3	O2		
	4	-	n.u.	
	5	O3	LampPRE-START	OFF
	6	O4		
	7	0V	0 Volt (common outputs 01 ÷ 08)	
	8	O5	n.u.	
	9	O6		
	10	O7		
	11	O8		

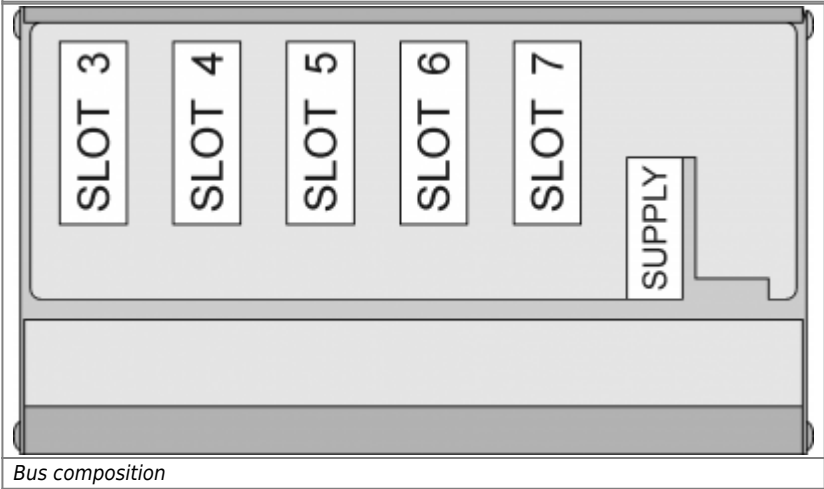
2.2.4.1.1 Connection example



2.3 RMC-3M-DD

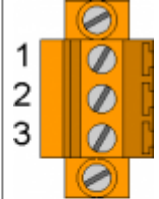


General view



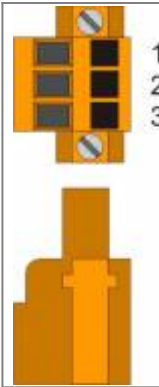
Bus composition

2.3.1 RMC-3M-DD: CN1 - Power supply

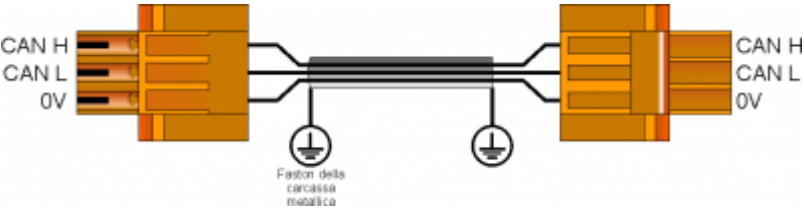
CN 1		Clamp	Symbol	Description
	1	1	—	0V power supply
	2	2	TERRA	Ground-PE (signals)
	3	3	+	Positive power supply

2.3.2 Connectivity

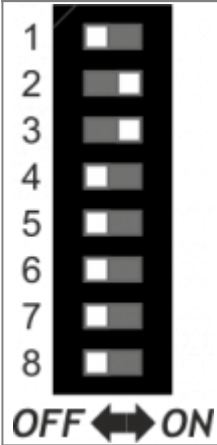
2.3.2.1 RMC-3M-DD: CN2 - CN3 - CAN PORT

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

2.3.2.1.1 Example of cable connection

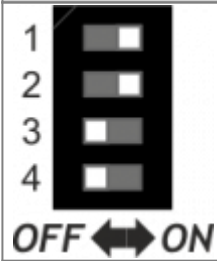


2.3.2.2 Switch 1

SW1	DIP No.	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	

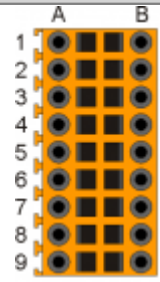
2.3.2.3 Switch 3

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

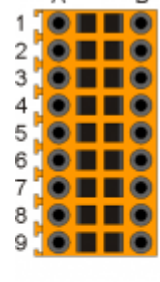
SW3	Num. Dip	Name Dip	DIP setting	Function
	1	JP1	ON	Termination CAN PORT
	2	JP2	ON	
	3			
	4			

2.3.3 RMC-3M-DD: Digital Outputs

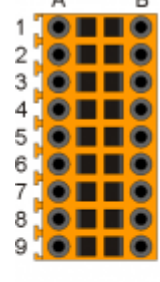
2.3.4 SLOT 3 (H1-P16 : Out +24 Volt, 500 mA)

n.Out	Head	Description	Pin	Connector SLOT 3		Pin	n.Out	Head	Description
25	1	ON	1A			1B	33	3	Down
26	1	Up	2A			2B	34	4	ON
27	1	Down	3A			3B	35	4	Up
28	2	ON	4A			4B	36	4	Down
29	2	Up	5A			5B	37	5	ON
30	2	Down	6A			6B	38	5	Up
31	3	ON	7A			7B	39	5	Down
32	3	Up	8A			8B	40	6	ON
V+		+24 Volt	9A			9B	V+		+24 Volt

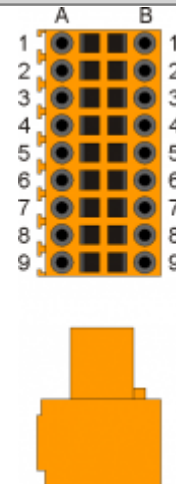
2.3.5 SLOT 4 (H1-P16 : Out +24 Volt, 500 mA)

n.Out	Head	Description	Pin	Connector SLOT 4		Pin	n.Out	Head	Description
41	6	Up	1A			1B	49	9	ON
42	6	Down	2A			2B	50	9	Up
43	7	ON	3A			3B	51	9	Down
44	7	Up	4A			4B	52	10	ON
45	7	Down	5A			5B	53	10	Up
46	8	ON	6A			6B	54	10	Down
47	8	Up	7A			7B	55	11	ON
48	8	Down	8A			8B	56	11	Up
V+		+24 Volt	9A			9B	V+		+24 Volt

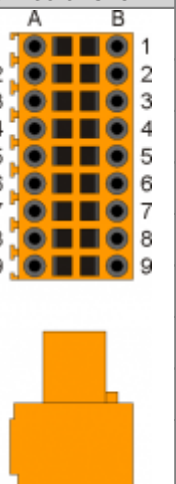
2.3.6 SLOT 5 (H1-P16 : Out +24 Volt, 500 mA)

n.Out	Head	Description	Pin	Connector SLOT 5		Pin	n.Out	Head	Description
57	11	Down	1A			1B	65	14	Up
58	12	ON	2A			2B	66	14	Down
59	12	Up	3A			3B	67	15	ON
60	12	Down	4A			4B	68	15	Up
61	13	ON	5A			5B	69	15	Down
62	13	Up	6A			6B	70	16	ON
63	13	Down	7A			7B	71	16	Up
64	14	ON	8A			8B	72	16	Down
V+		+24 Volt	9A			9B	V+		+24 Volt

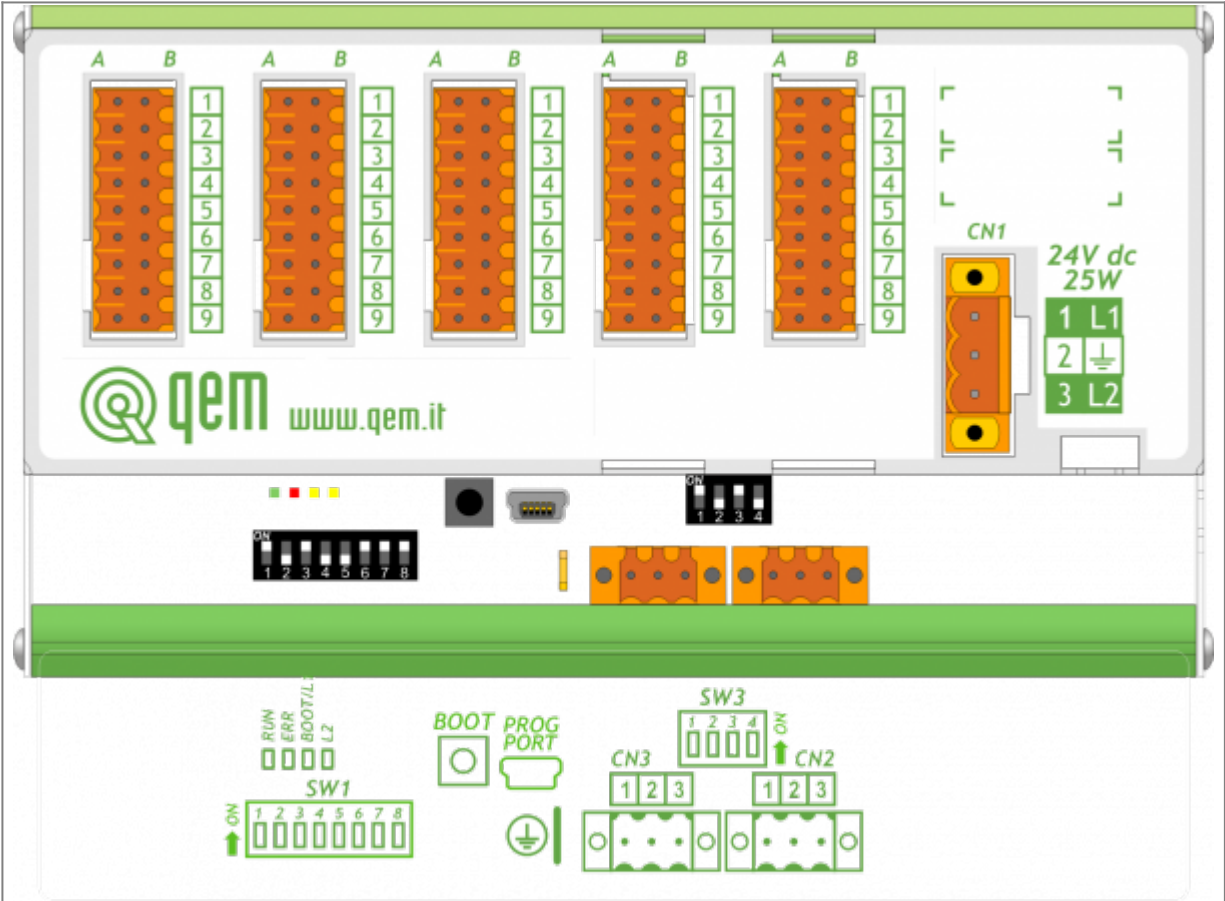
2.3.7 SLOT 6 (H1-P16 : Out +24 Volt, 500 mA)

n.Out	Head	Description	Pin	Connector SLOT 6		Pin	n.Out	Head	Description
73	17	ON	1A			1B	81	19	Down
74	17	Up	2A			2B	82	20	ON
75	17	Down	3A			3B	83	20	Up
76	18	ON	4A			4B	84	20	Down
77	18	Up	5A			5B	85	21	ON
78	18	Down	6A			6B	86	21	Up
79	19	ON	7A			7B	87	21	Down
80	19	Up	8A			8B	88	22	ON
V+	+24 Volt		9A			9B	V+		+24 Volt

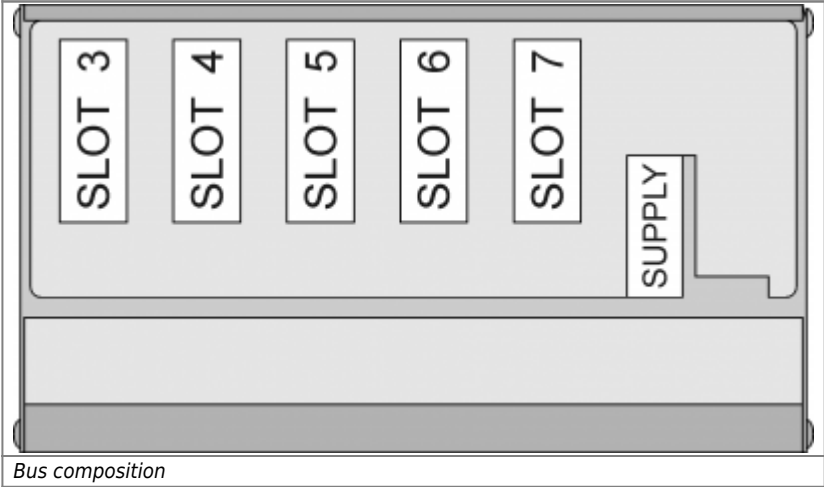
2.3.8 SLOT 7 (H1-P16 : Out +24 Volt, 500 mA)

n.Out	Head	Description	Pin	Connector SLOT 7		Pin	n.Out	Description
89	22	Up	1A			1B	97	reserve
90	22	Down	2A			2B	98	reserve
91		reserve	3A			3B	99	reserve
92		reserve	4A			4B	100	reserve
93		reserve	5A			5B	101	reserve
94		reserve	6A			6B	102	reserve
95		reserve	7A			7B	103	reserve
96		reserve	8A			8B	104	reserve
V+		+24 Volt	9A			9B	V+	+24 Volt

2.4 RMC-3M-D5

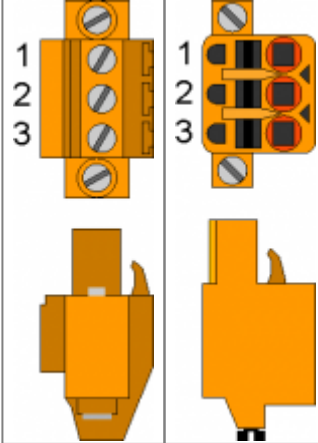


General view

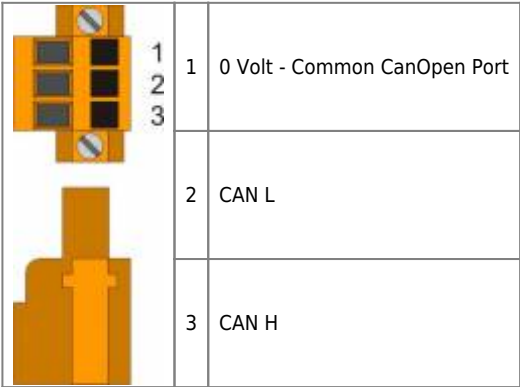


Bus composition

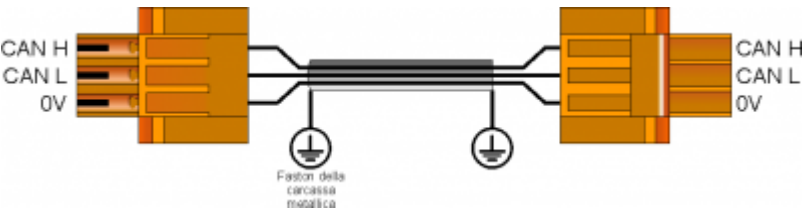
2.4.1 RMC-3M-D5: CN1- Power supply (Power Input - 24 Vdc)

CN 1		Terminal	Symbol	Description
	1		—	0V power supply
	2		GROUND	Ground-PE (segnali)
	3		+	Positive power supply

2.4.2 RMC-3M-D5: CN2 - CN3 - CAN PORT



2.4.2.0.1 Example of cable connection



2.4.2.1 Switch 1

SW1	DIP No.	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	

2.4.2.2 Switch 3

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

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

2.4.3 RMC-3M-D5: Digital inputs

2.4.4 SLOT 3 (H1- I1÷16)

n.In	Sensor	Description	Pin	Connector SLOT 3	Pin	Description	Sensor	n.In
+24V		Out 24 Volt	1A		1B	Common 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

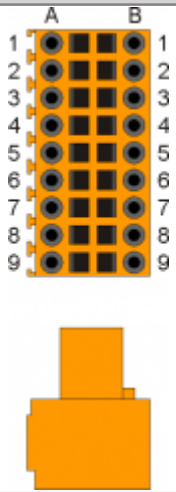
2.4.5 SLOT 4 (H1- I17÷32)

n.In	Sensor	Description	Pin	Connettore SLOT 4	Pin	Description	Sensor	n.In
+24V		Out 24 Volt	1A		1B	Common 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

2.4.6 SLOT 5 (H1- I33÷48)

n.In	Sensor	Description	Pin	Connettore SLOT 5	Pin	Description	Sensor	n.In
+24V		Out 24 Volt	1A		1B	Common 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

2.4.7 SLOT 6 (H1- I49÷64)

n.In	Sensor	Description	Pin	Connettore SLOT 7	Pin	Description	Sensor	n.In
+24V		Out 24 Volt	1A		1B	Common 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. Support

Request for assistance

In order to be able to provide you a quick service, at the minimum cost, we need your help.

	
Follow all the instructions provided in the manual MIMAT	If the problem persists, fill in the “Assistance request form” on the page Contacts of the site www.qem.it . Our technicians will obtain essential elements for understanding your problem.

Repair

In order to provide you with an efficient service, please read and follow the instructions here [reported](#)

Shipping

It is recommended to pack the instrument with materials that can absorb any falls.

		
Use the original packaging: it must protect the instrument during transport.	Attach: 1. A description of the anomaly; 2. Part of the wiring diagram where the instrument is inserted 3. Programming the instrument (set up, work quotas, parameters ...).	A thorough description of the problem will allow us to quickly identify and resolve your problem. Careful packaging will avoid further inconveniences.

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