



QS TECHNOLOGY

F54

Milling Controller **INSTALLATION MANUAL**

By: QS Technology Co., LTD

Date: 25-04-2024

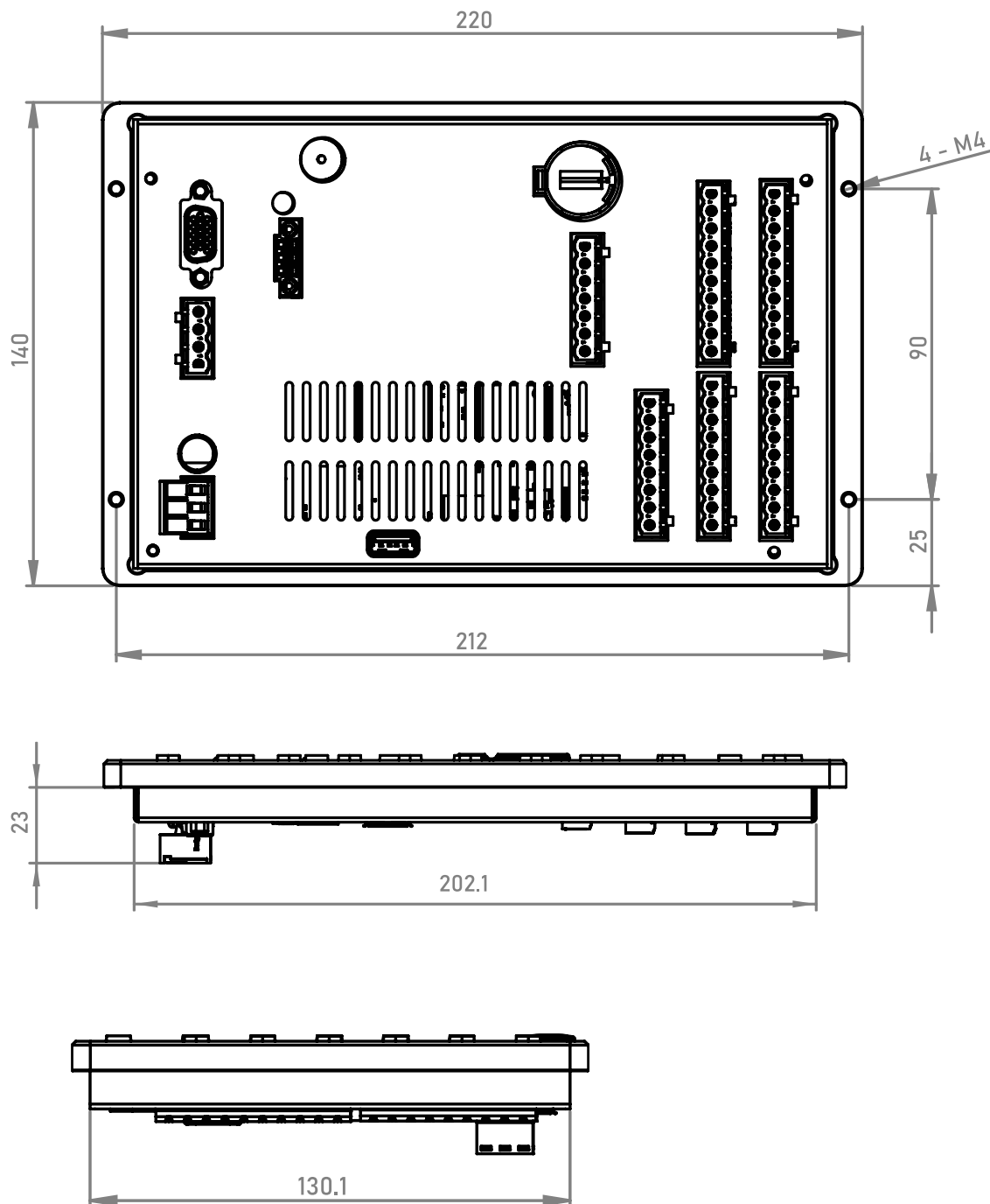
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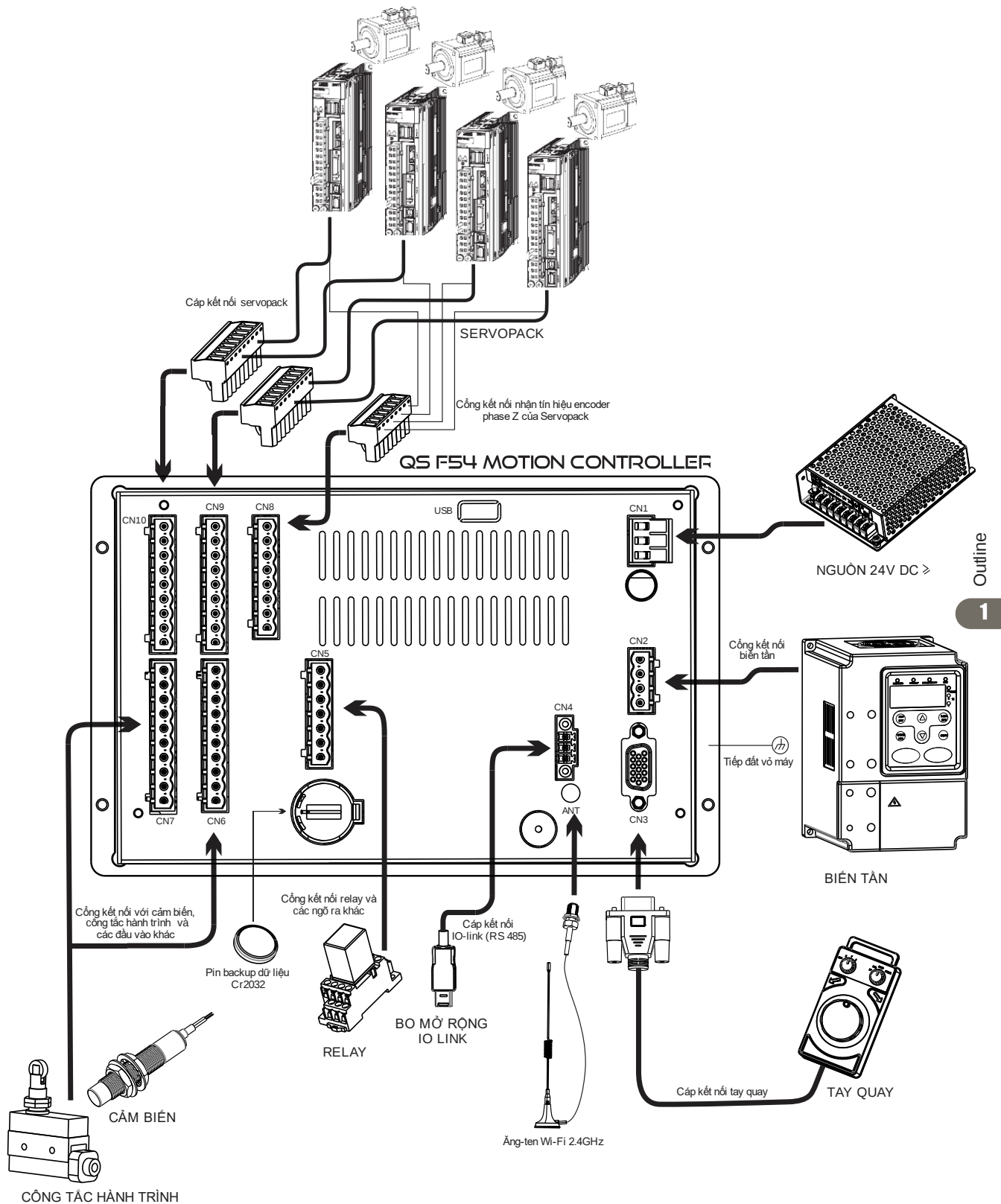
PART 1

Overview of controller

1.1 DIMENSION



1.2 INSTALLATION DIAGRAM



PART 2

Overview connection

2.1 CONNECTION DIAGRAM

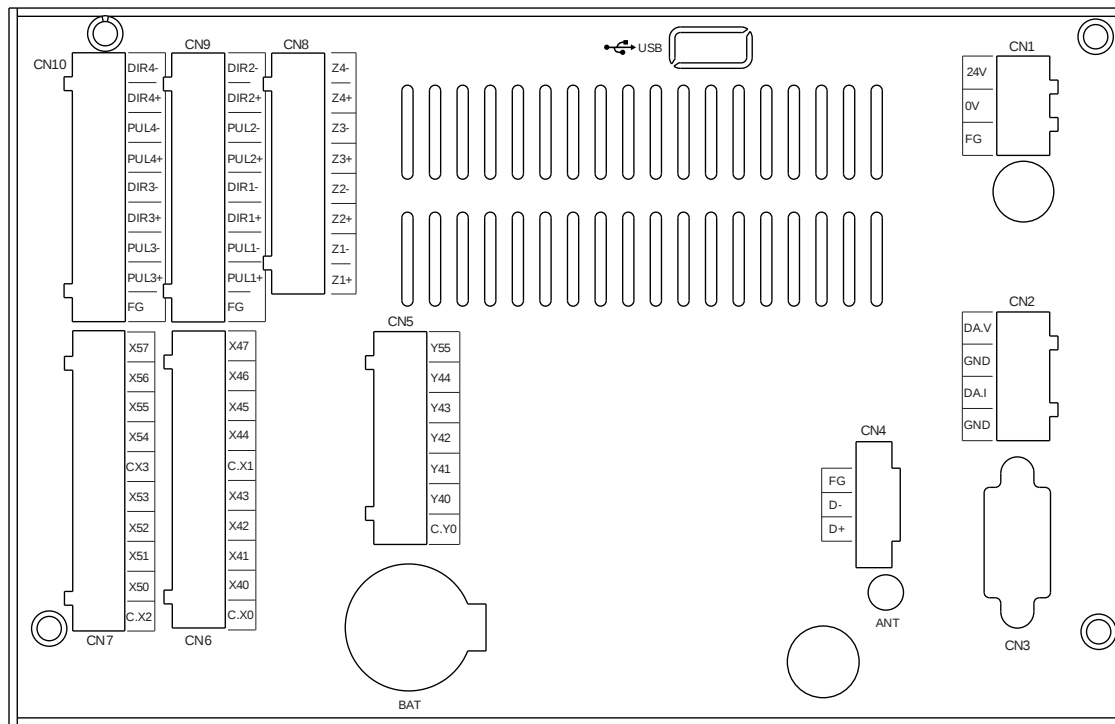


DIAGRAM TABLE

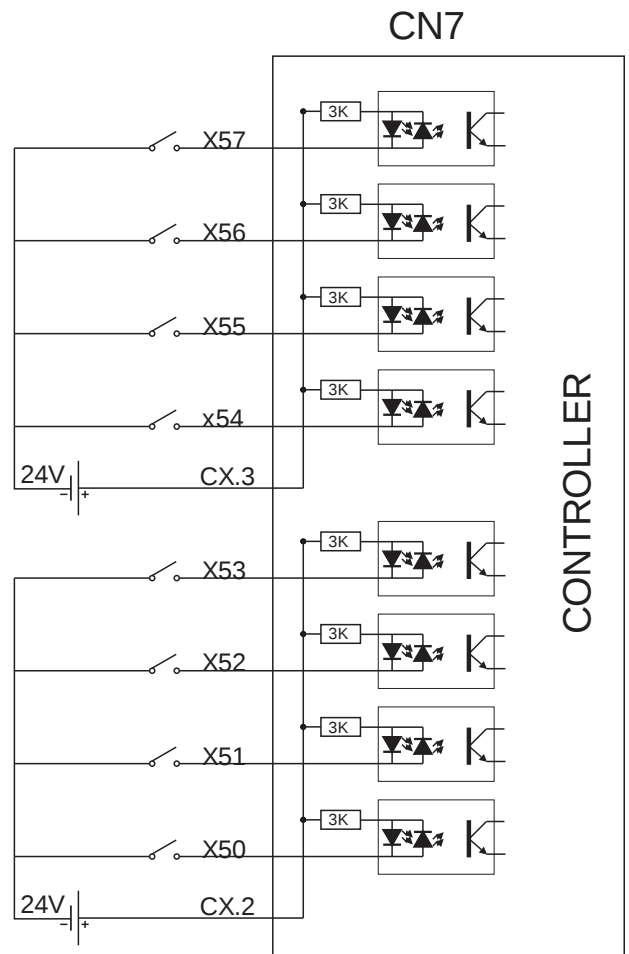
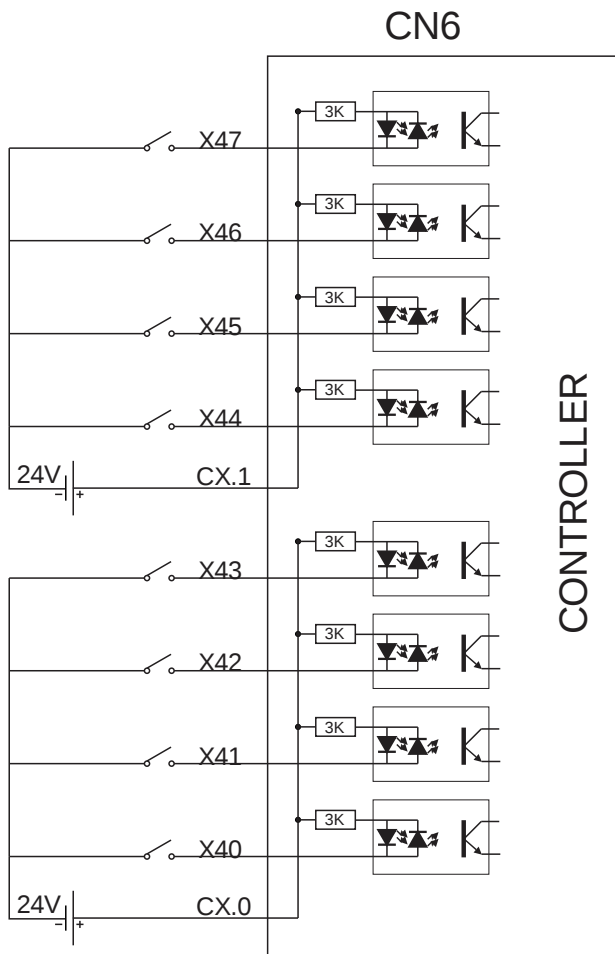
PORT	PINS	DESCRIPTION
CN10	- DIR4- - DIR4+ - PUL4- - PUL4+ - DIR3- - DIR+ - PUL3- - PUL3+ - FG	- DIR4- : Motor direction control pin (A axis) direction (-). - DIR4+ : Motor direction control pin (A axis) direction (+). - PUL4-: Motor control pulse signal (A axis) direction (-) - PUL4+: Motor control pulse signal (A axis) direction (+) - DIR3- : Motor direction control pin (Z axis) direction (-). - DIR3+ : Motor direction control pin (Z axis) direction (+). - PUL3-: Motor control pulse signal (Z axis) direction (-)

		- PUL3+: Motor control pulse signal (Z axis) direction (+) - FG: shield wire
CN9	- DIR2- - DIR2+ - PUL2- - PUL2+ - DIR1- - DIR1+ - PUL1- - PUL1+ - FG	Trong đó: - DIR2- : Motor direction control pin (Y axis) direction (-). - DIR2+ : Motor direction control pin (Y axis) direction (+). - PUL2-: Motor control pulse signal (Y axis) direction (-) - PUL2+: Motor control pulse signal (Y axis) direction (+) - DIR1- : Motor direction control pin (X axis) direction (-). - DIR1+ : Motor direction control pin (X axis) direction (+). - PUL1-: Motor control pulse signal (X axis) direction (-) - PUL1+: Motor control pulse signal (X axis) direction (+) - FG: shield wire
CN8	- Z4- - Z4+ - Z3- - Z3+ - Z2- - Z2+ - Z1- - Z1+	- Z4-: Encoder feedback signal pin (A axis) direction (-) - Z4+: Encoder feedback signal pin (A axis) direction (+) - Z3-: Encoder feedback signal pin (Z axis) direction (-) - Z3+: Encoder feedback signal pin (Z axis) direction (+)

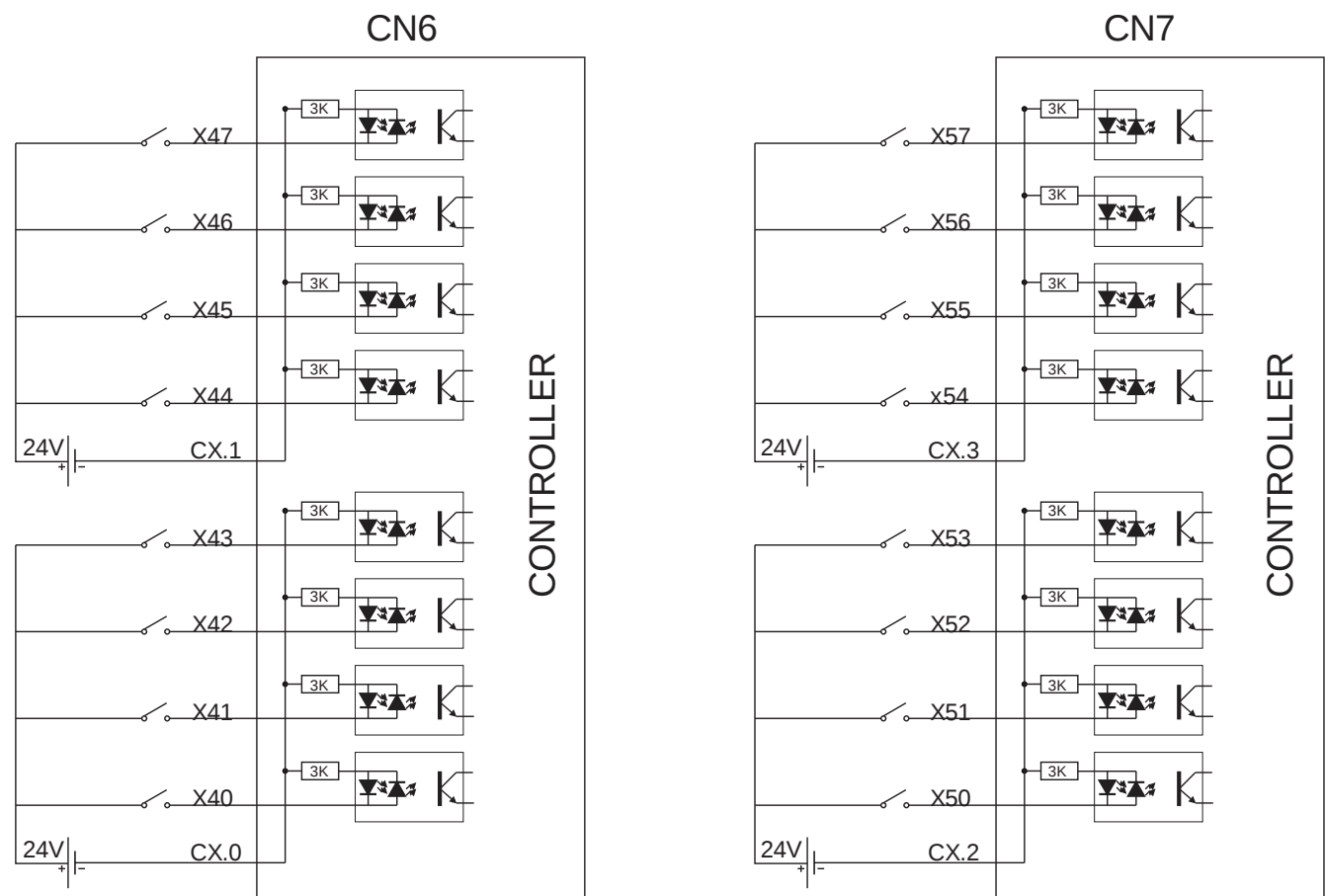
		- Z2-: Encoder feedback signal pin (Y axis) direction (-) - Z2+: Encoder feedback signal pin (Y axis) direction (+) - Z1-: Encoder feedback signal pin (X axis) direction (-) - Z1+: Encoder feedback signal pin (X axis) direction (+)
CN7	- X57 - X56 - X55 - X54 - CX3 - X53 - X52 - X51 - X50 - CX2	- X: data input signal pin - Cx: com port signal pin with input X
CN6	- X47 - X46 - X45 - X44 - CX1 - X43 - X42 - X41 - X40 - CX0	- X: data input signal pin - CX: com port signal pin with input X
CN5	- Y55 - Y44 - Y43 - Y42 - Y41 - Y40 - CY0	- Y: data output signal pin - CY: com port signal pin with output Y
CN4	- FG - D- - D+	- FG: shield wire - D-: Data - input signal - D+: Data + input signal

CN2	- DAV - GND - DAI - GND	- DAV: DAV signal pin with voltage output - DAI: DAI signal pin with current output - GND: Ground pin
CN1	- 24V - 0V - FG	POWER SIGNAL PIN

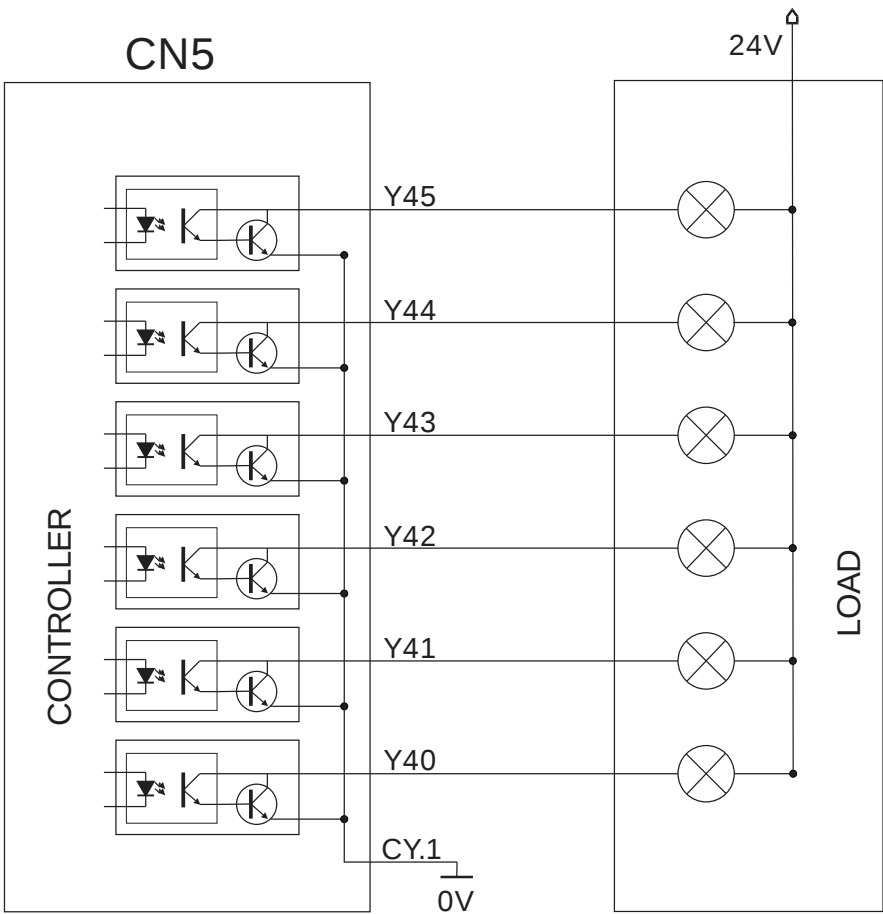
2.2 LOW INPUT CONNECTION DIAGRAM



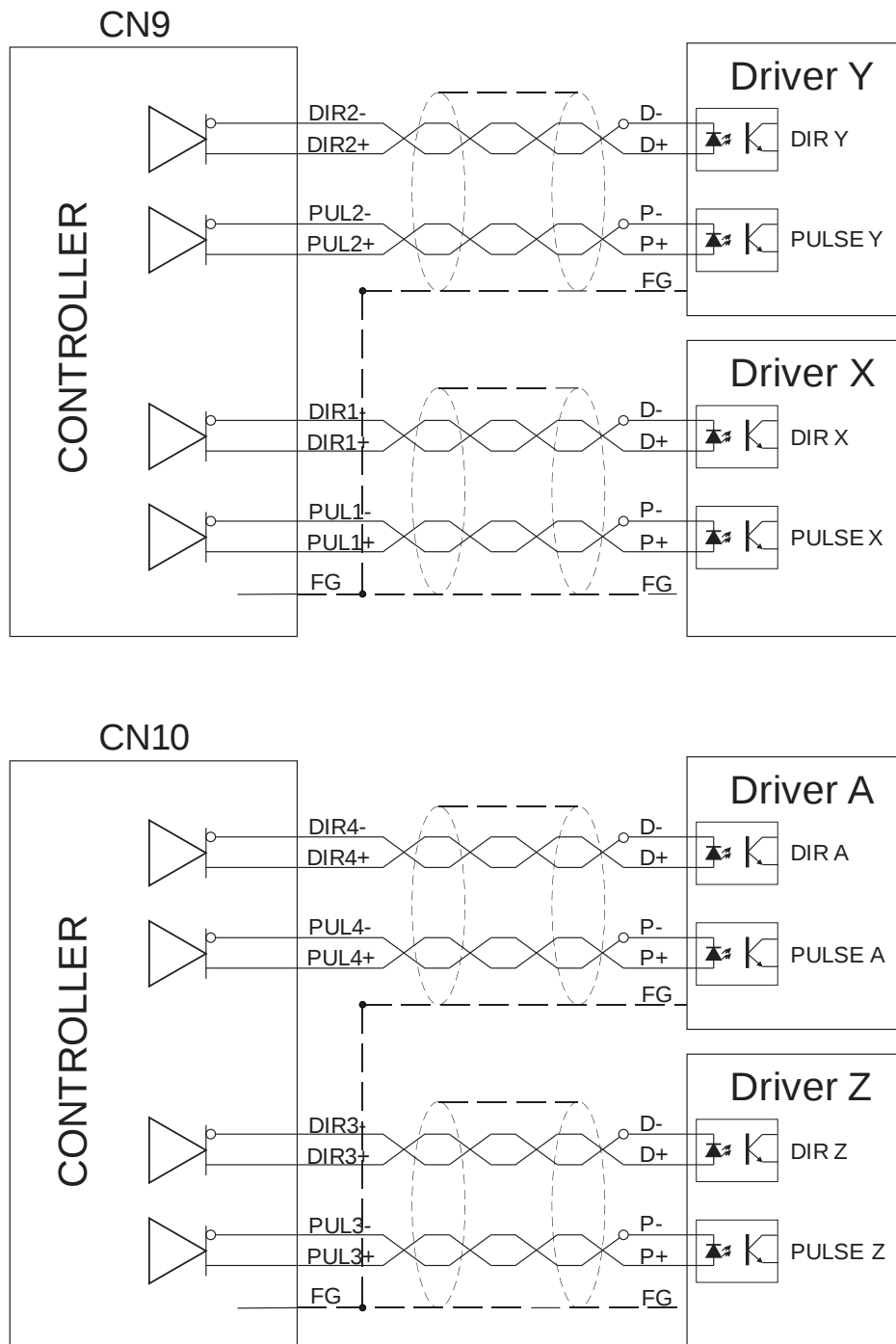
2.3 HIGH INPUT CONNECTION DIAGRAM



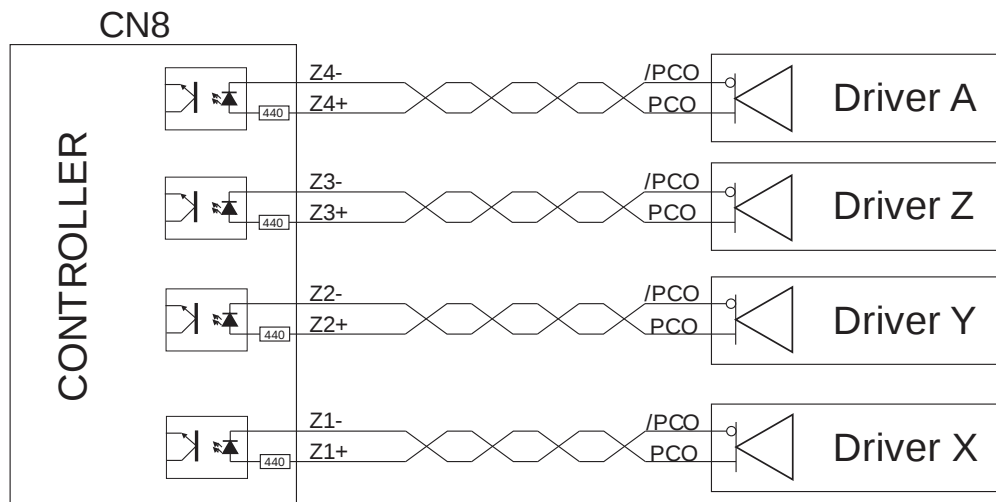
2.4 LOW OUTPUT CONNECTION DIAGRAM



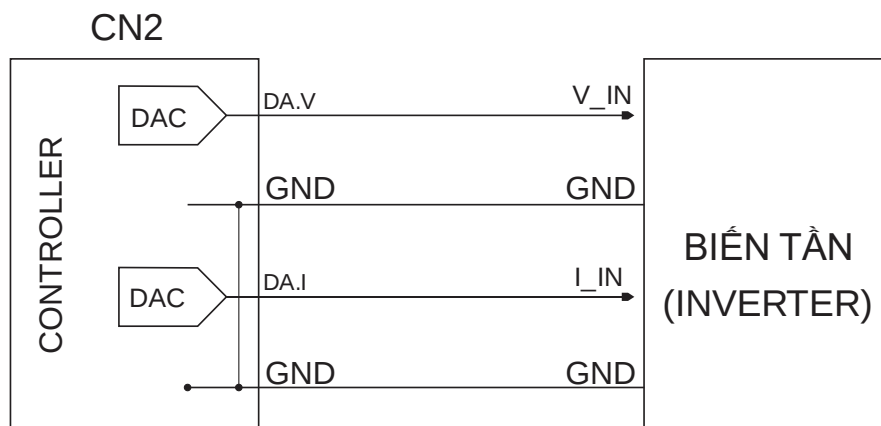
2.5 PULSE, SERVO MOTOR DIRECTIONAL CONTROL



2.6 ENCODER FEEDBACK FROM SERVO DIAGRAM

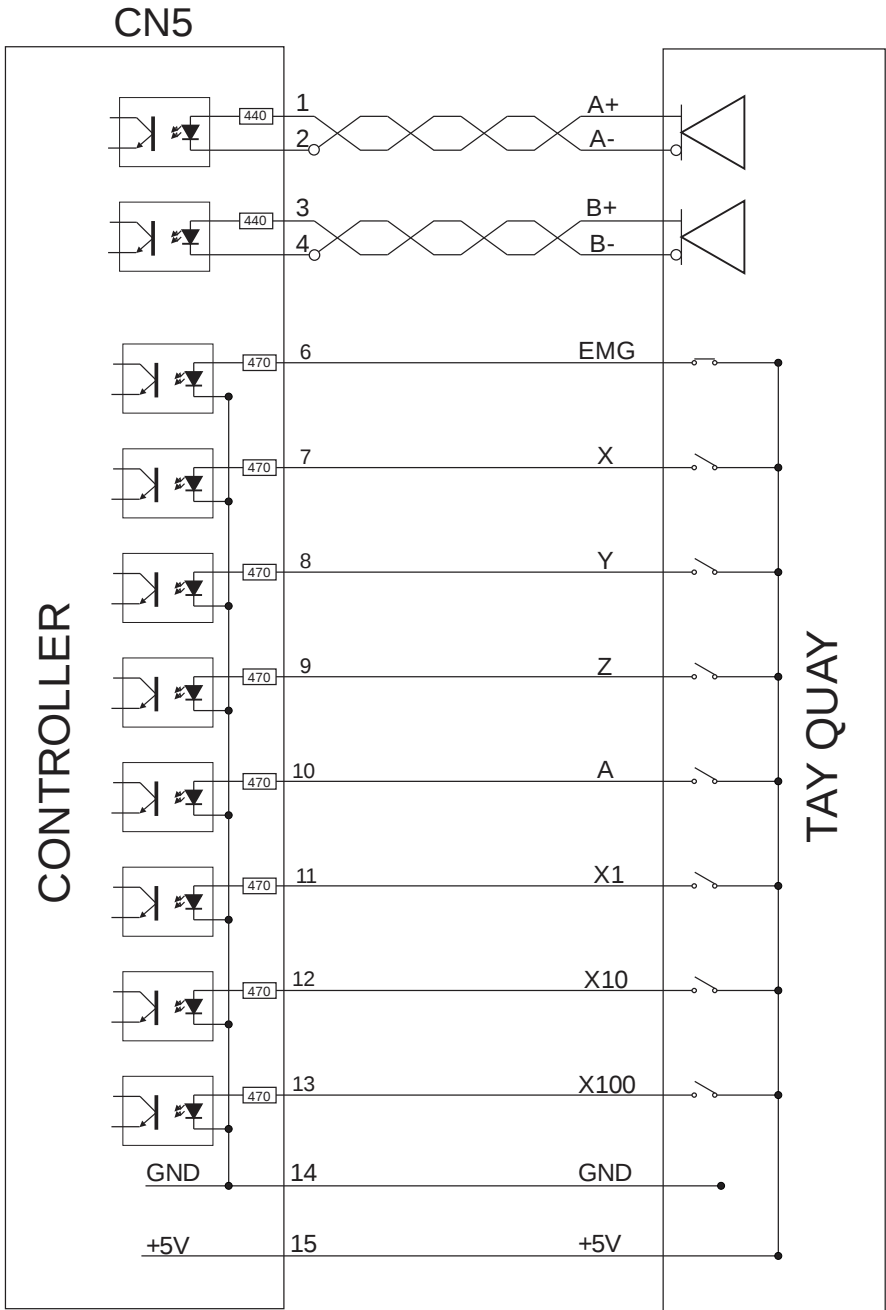


2.7 INVERTER CONNECTION DIAGRAM BY ANALOG INPUT

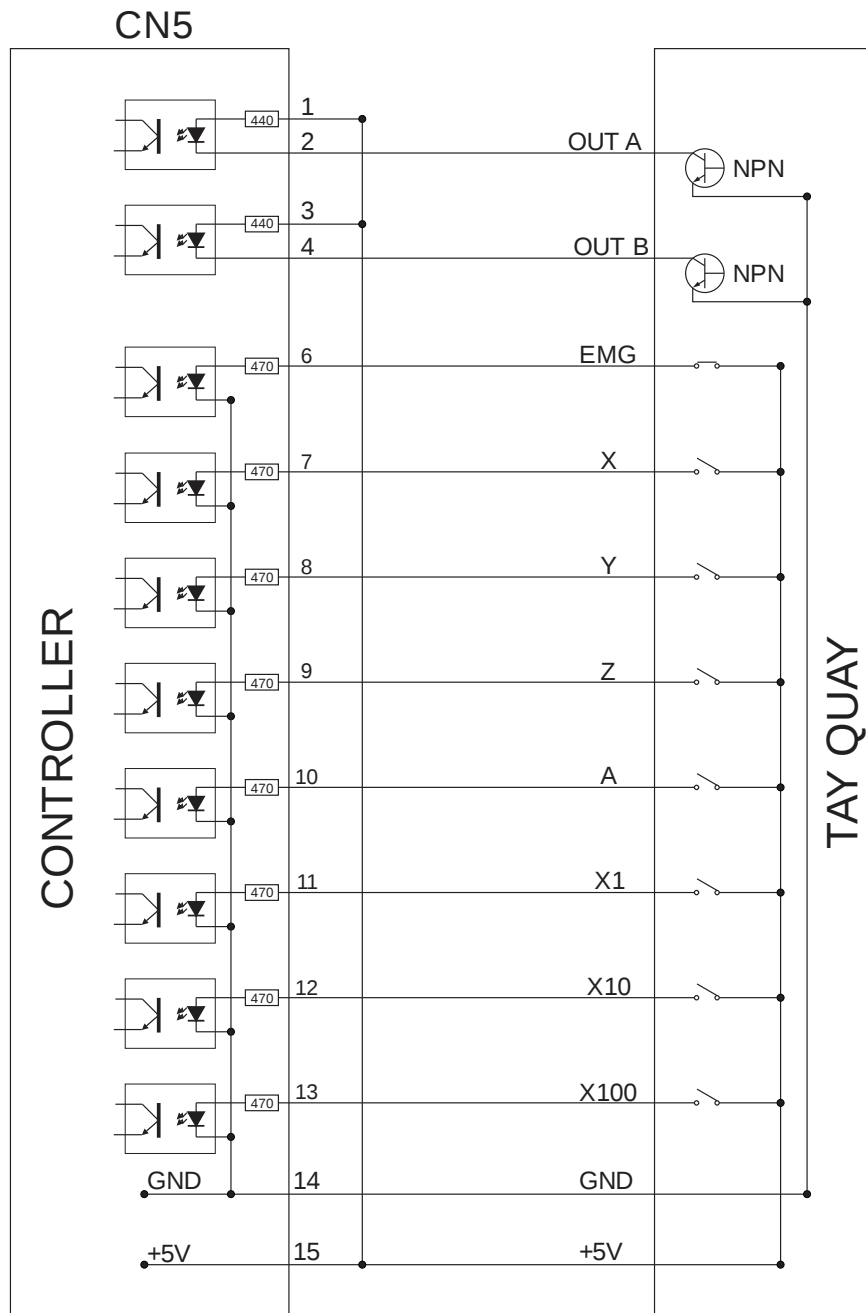


2.8 HANDWHEEL CONNECTION DIAGRAM

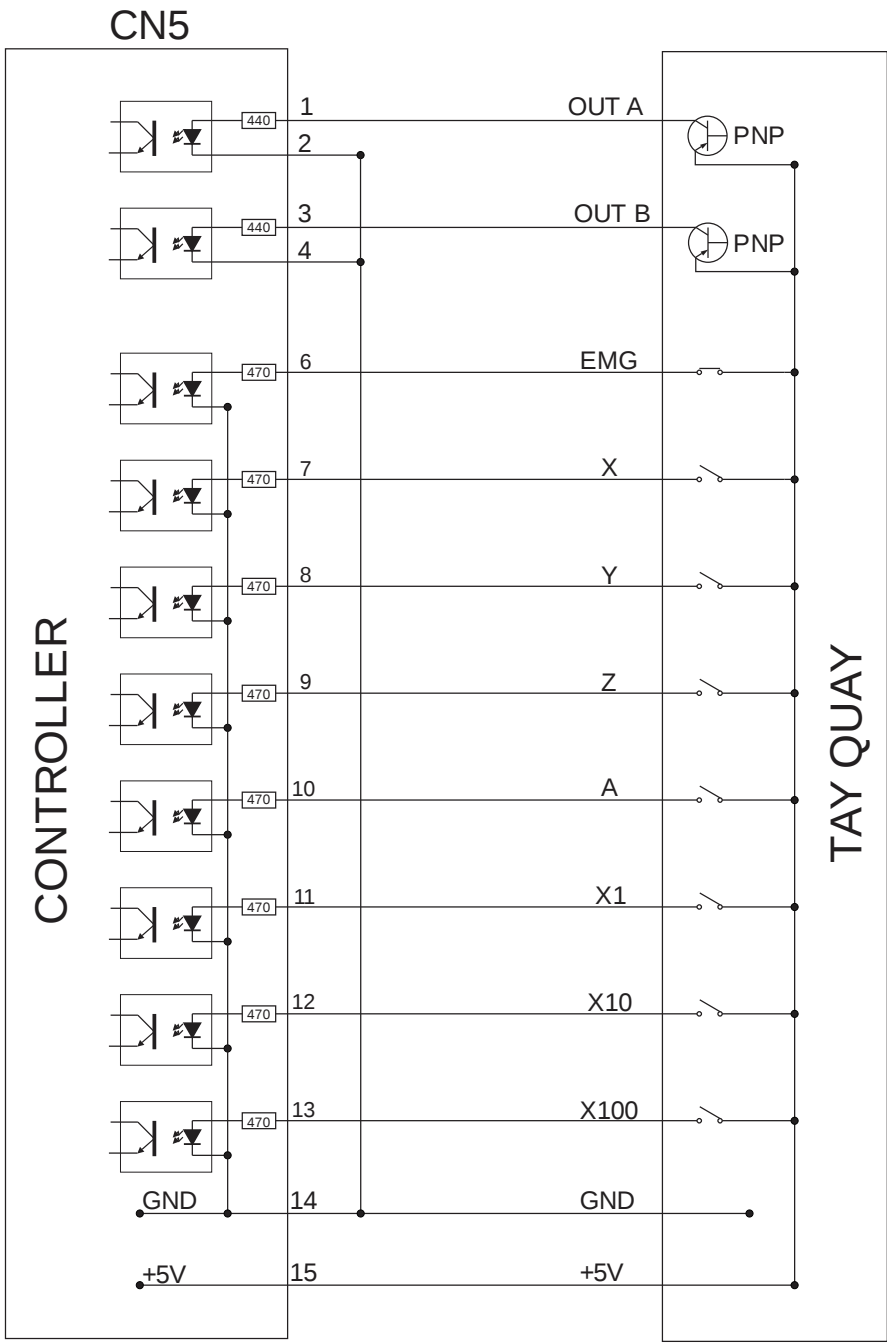
2.8.1 DIFFERENTIAL OUTPUT HANDWHEEL



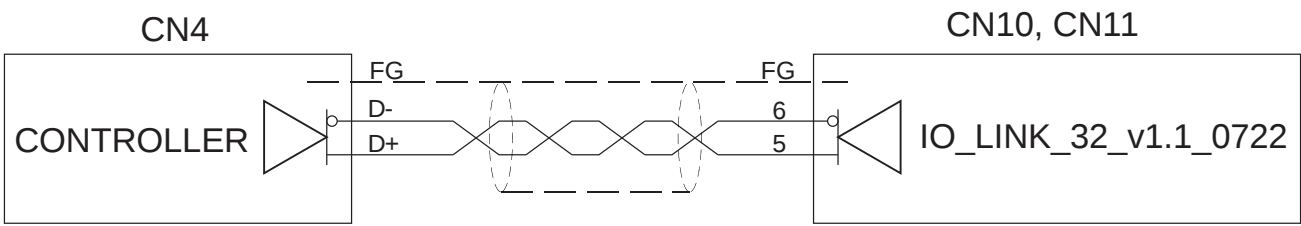
2.8.2 NPN OUTPUT HANDWHEEL



2.8.3 PNP OUTPUT HANDWHEEL



2.9 RS485, I/O-LINK CONNECTION



2.10 POWER CONNECTION

