

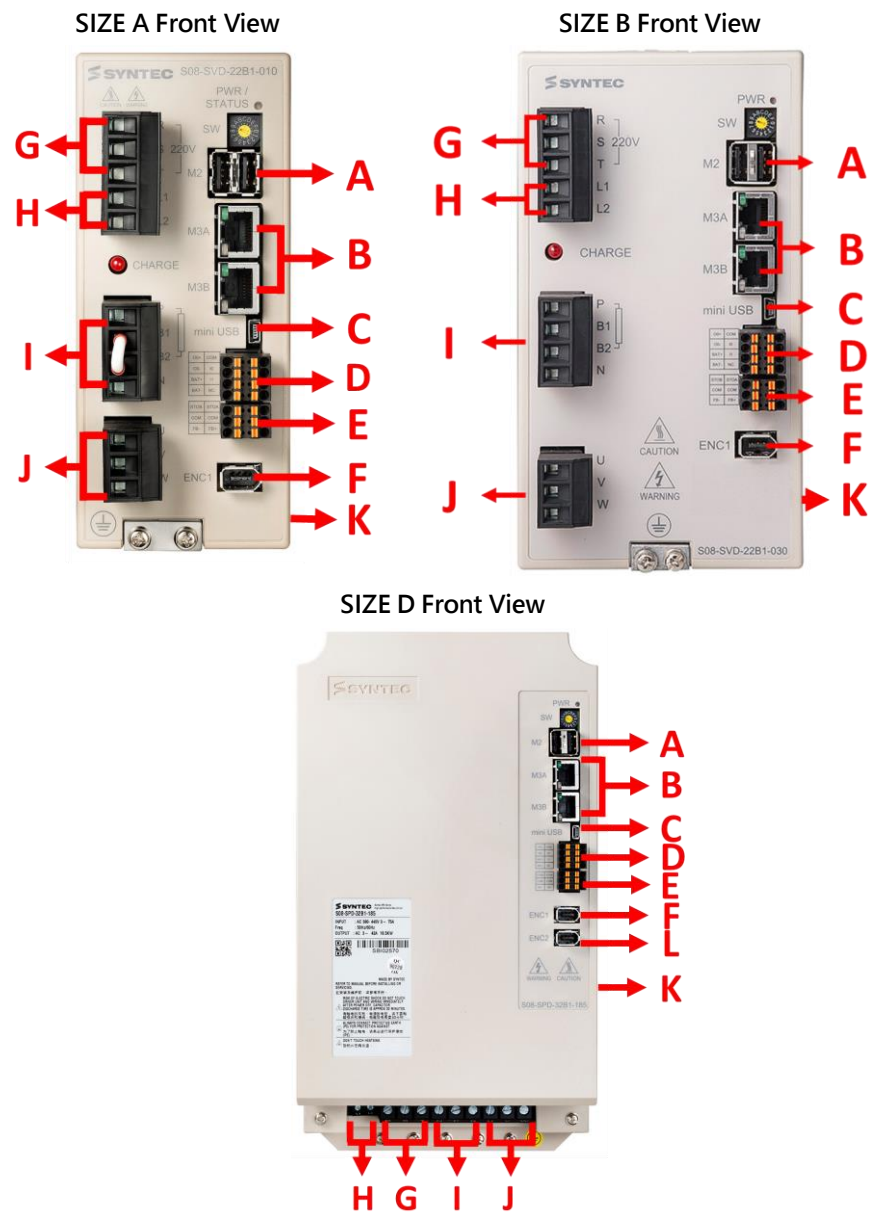
220V Generation II Driver

Basic Installation Instructions v1.3

1. Applicable Type:

Type	Product Name
1 S08-SVD22B1-010	1KW Generation II Driver – Uniaxial SIZE A
2 S08-SVD22B1-030	3KW Generation II Driver – Uniaxial SIZE B
3 S08-SPD22B1-110	11KW Generation II Driver – Uniaxial SIZE D

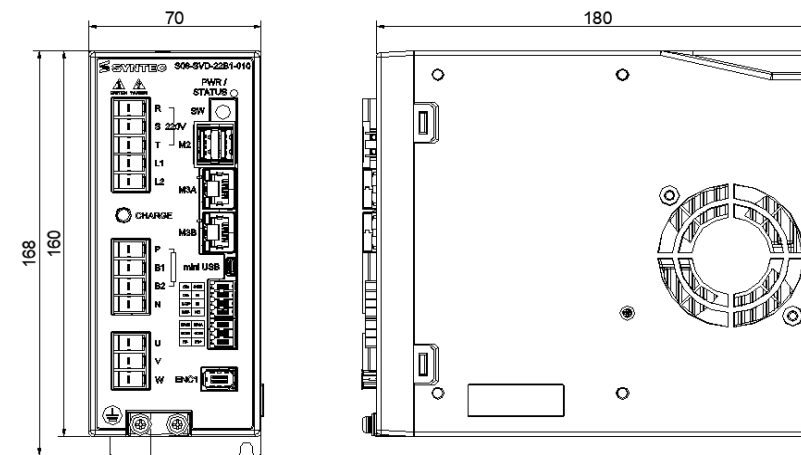
2. Interface Specifications:



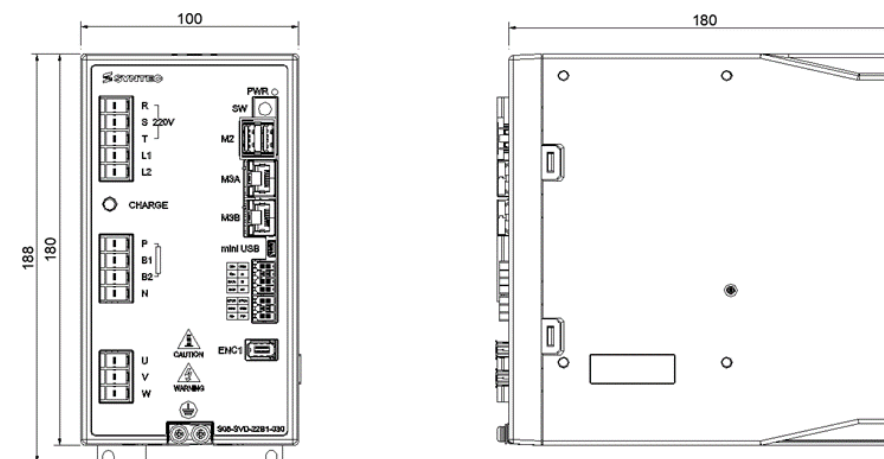
A	M2 Host Control Communication Port	Connect to host controller Serial Communication Port 10Mbps (Either M2 or M3)
B	M3 Host Control Serial Communication Port	Connect to host controller Serial Communication 100Mbps (Either M2 or M3)
C	Mini USB Port	Connect to personal computer
D	I/O Signal Port External Battery Port	Connect to I/O equipment (emergency stop, indicator lights, etc.) Co
E	STO Signal Port	STO interface, 2 sets of safety inputs, 1 set of safety feedback
F	Encoder Feedback 1 (ENC1)	Connect to motor encoder
G	External Power Supply	Connect to 3-phase electrical power 220V(RST)
H	Control Power (L1 L2)	If there are safety requirements, the controlled source can be independently supplied from L1 & L2 and connect to single-phase AC. The input voltage must be the same as RST.
I	Regenerate Resistor (P B1 B2 N)	Two connection methods of SIZEA, SIZEB, optional: a) Connect the external regenerative resistor to P & B2. b) The built-in brake is to short circuit B1 and B2 SIZE D: external regenerative resistor connects to P and B
J	Motor Power Source	Connect to motor and supply power. (UVW)
K	Expansion Module Connector	The driver can connect to expansion module, i.e., Encoder ABZ connector expansion module, ADDA expansion module, etc. If there are any needs, please contact Syntec sales staff.
L	Encoder Feedback 2 (ENC2)	Connect to load encoder

3. Controller Specifications (Unit: mm)

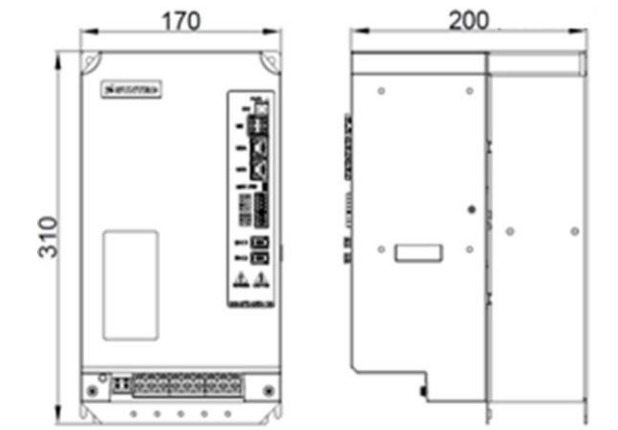
● SIZE A



● SIZE B

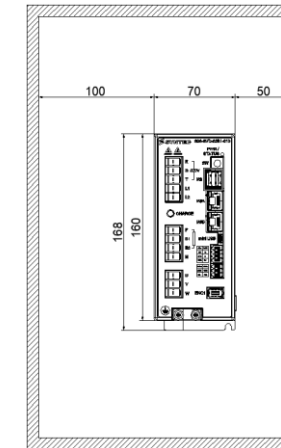


● SIZE D

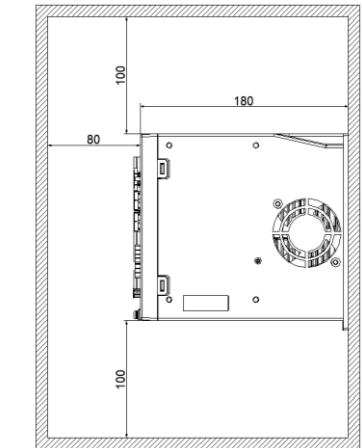


4. Installation Specifications (Unit: mm)

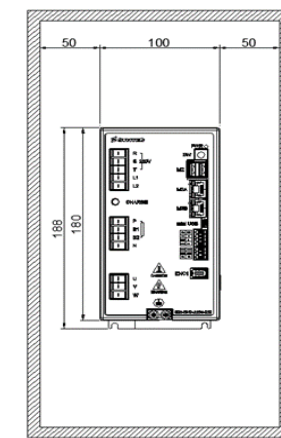
● SIZE A Front View



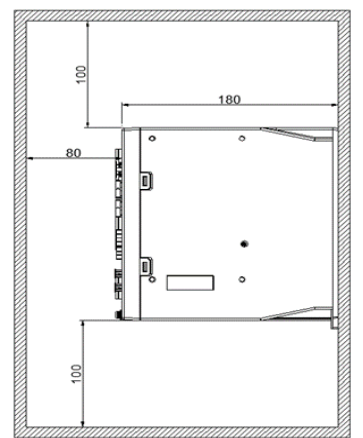
● SIZE A Front View



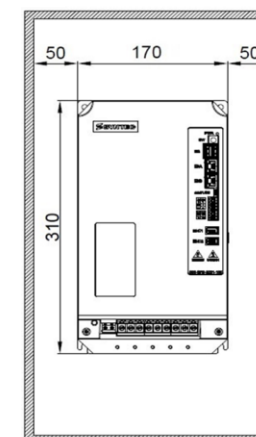
● SIZE B Front View



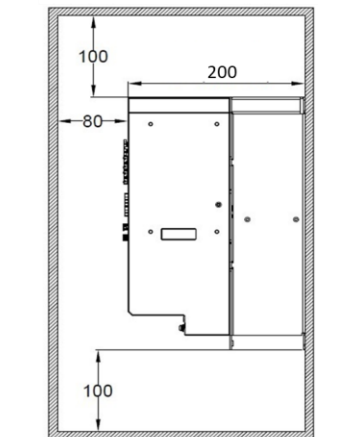
● SIZE B Side View



● SIZE D Front View



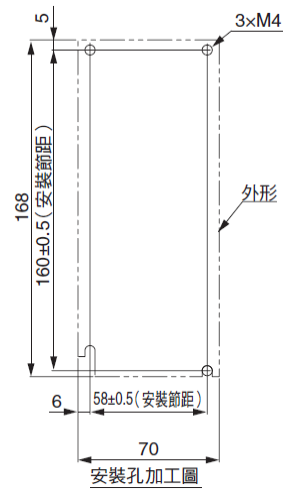
● SIZE D Side View



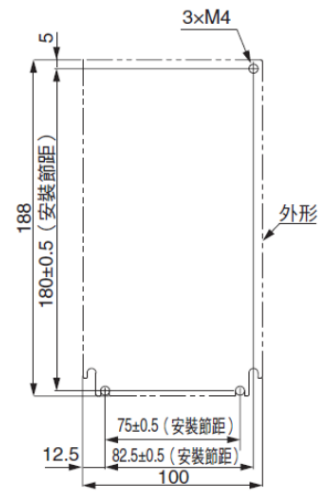
5. Mounting Hole Specifications (Unit: mm)

Please install with M4 screws.

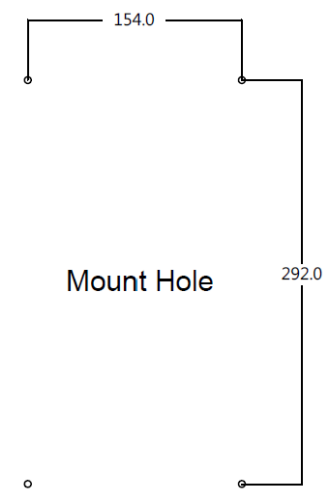
● SIZE A



● SIZE B



● SIZE D (Please install with M5 screws.)

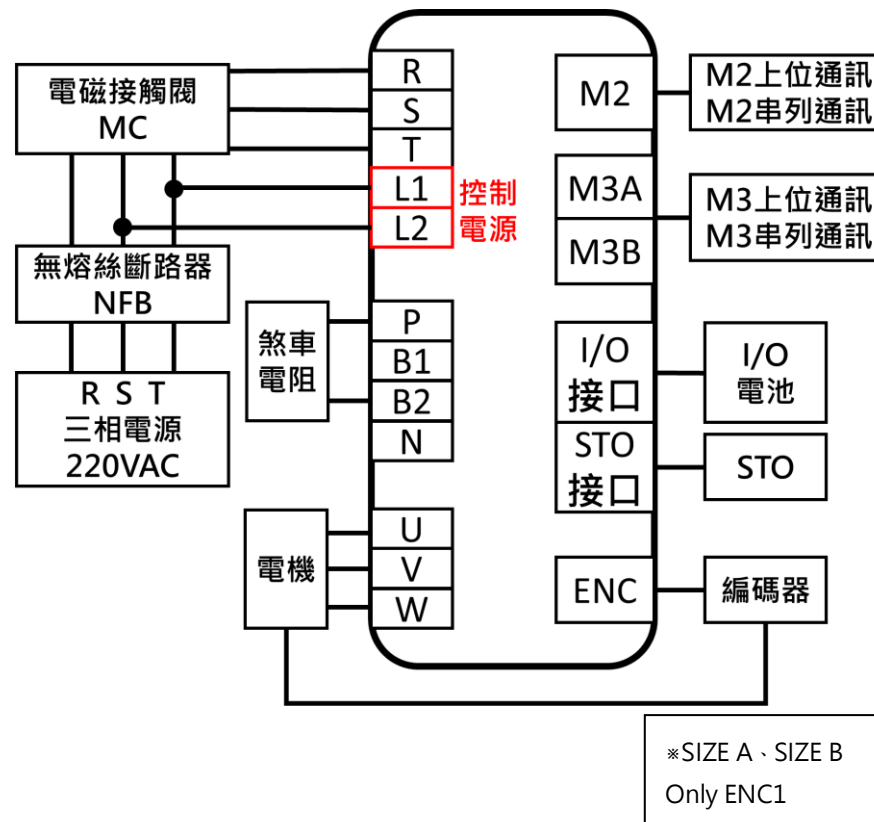


6. Basic Wiring Diagram

- Please Confirm whether the wiring of the U, V, W terminals output to the motor is correct, otherwise it may cause reversal or abnormality, and the encoder must be adjusted again.
- In case the use of independent controlled source, please connect the sources (L1, L2) of the control plate to either of the three RST terminals before the magnetic contactor (MC).

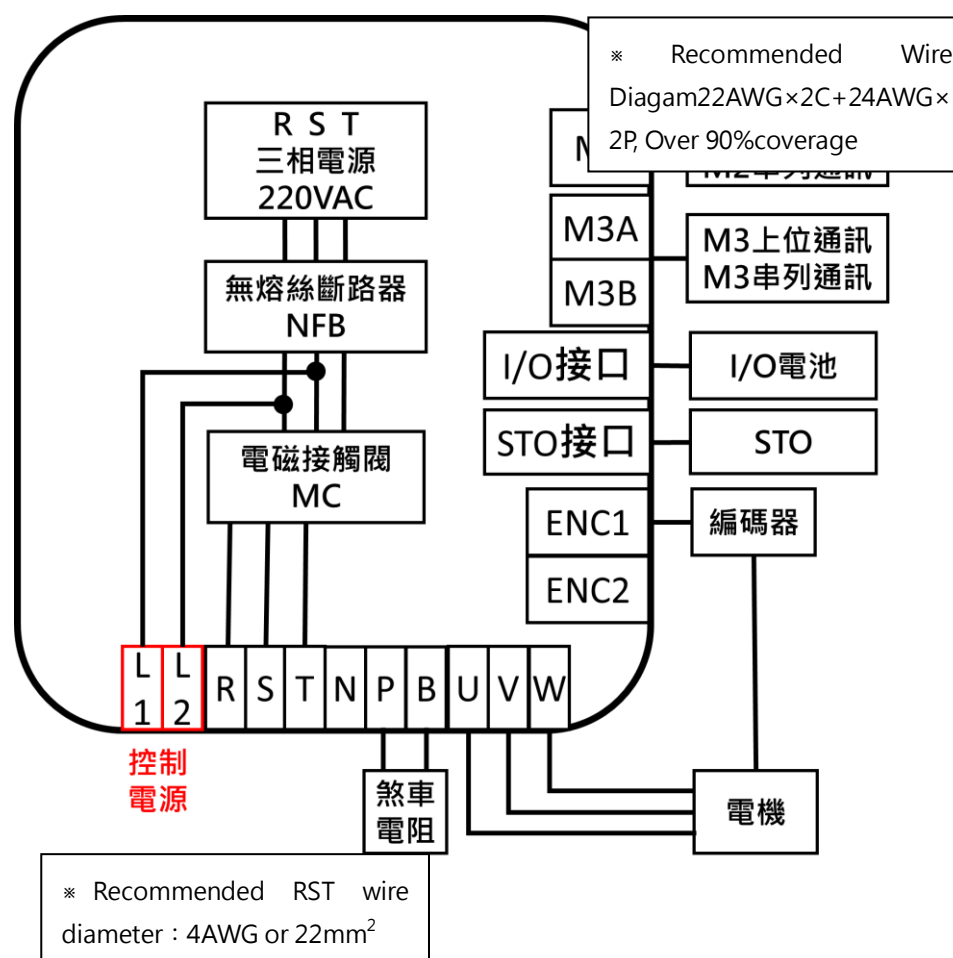
- The default settings of B1 and B2 are short circuit with built-in braking resistors. If the processing requires a high load factor, it is recommended removing the short circuit wiring and apply an external high wattage braking resistor between P and B2.
- When wiring the host controller, either M2 Serial Communication Port or M3 Serial Communication Port can be installed.

● SIZE A & SIZE B



※SIZE A · SIZE B
Only ENC1

● SIZE D



※ Recommended RST wire diameter : 4AWG or 22mm²

7. Interface Configurations

Please notice the value and polarities of voltages.

● M2Serial Communication Port Arrangement

M2	PIN	SIGNAL
1	1	--
2	2	D-
3	3	D+
4	4	--

● STO Signal Port Arrangement

STO	PIN	SIGNAL	PIN	SIGNAL
1	1	STO-B	2	STO-A
3	3	STO-COM	4	STO-COM
5	5	STO-FB-	6	STO-FB+

● Encoder Feedback Arrangement

編碼器回授	PIN	SIGNAL
1	1	5V
2	2	GND
3	3	BAT+
4	4	BAT-
5	5	D+
6	6	D-

● M3 Serial communication Port

M3	PIN	SIGNAL
1	1	TX+
2	2	TX-
3	3	RX+
4	4	NC
5	5	NC
6	6	RX-
7	7	NC
8	8	NC

● Mini USB Port Arrangement

Mini USB	PIN	SIGNAL
1	1	5V
2	2	DM
3	3	DP
4	4	GND
5	5	GND

● Station Number Settings

站號設定	PIN	SIGNAL	PIN	SIGNAL
0	N/A	8	站號 8	
1	站號 1	9	站號 9	
2	站號 2	A	站號 10	
3	站號 3	B	站號 11	
4	站號 4	C	站號 12	
5	站號 5	D	站號 13	
6	站號 6	E	站號 14	
7	站號 7	F	站號 15	

● I/O Signal Port

I/O 通訊埠訊號	PIN	SIGNAL	PIN	SIGNAL
1	1	O0+	2	COM
3	3	O0-	4	I0
5	5	BAT+	6	I1
7	7	BAT-	8	NC

Notice : Contact capacity of output is DC30V, 200mA. Do not use in overload condition.