

380V Generation II Driver

Basic Installation Instructions v1.2

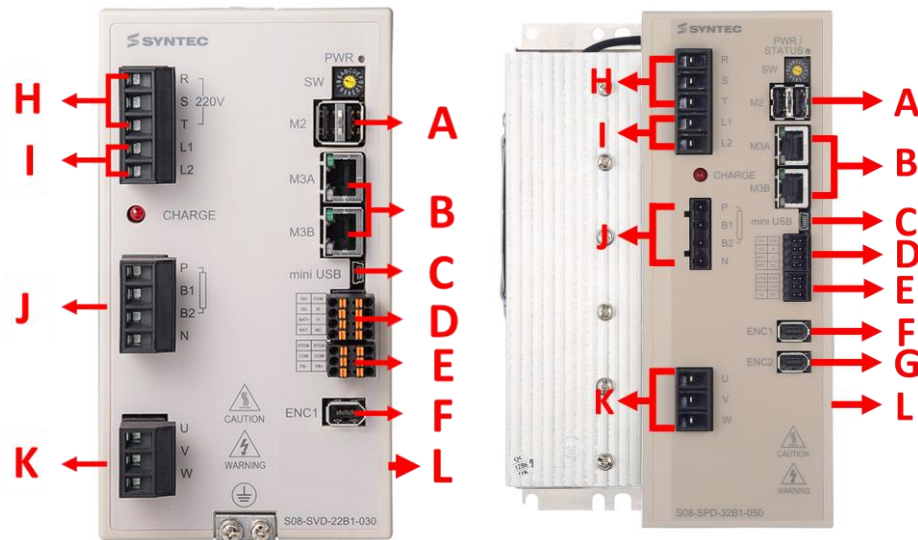
1. Applicable Types as follows:

Type	Product Name
1	S08-SVD32B1-020 2KW Generation II-Uniaxial SIZE B
2	S08-SPD32D1-050 5KW Generation II-Uniaxial SIZE C
3	S08-SPD32B1-075 7.5KW Generation II-Uniaxial SIZE C
4	S08-SPD32B1-110 11KW Generation II-Uniaxial SIZE D
5	S08-SPD32B1-185 18.5KW Generation II-Uniaxial SIZE D

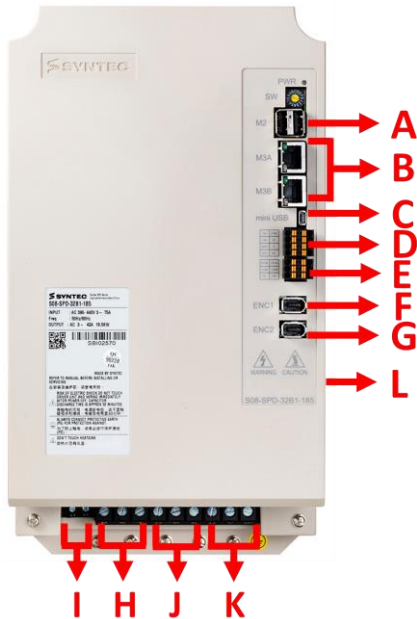
2. Driver Interface Notifications

SIZE B Top View

SIZE C Top View



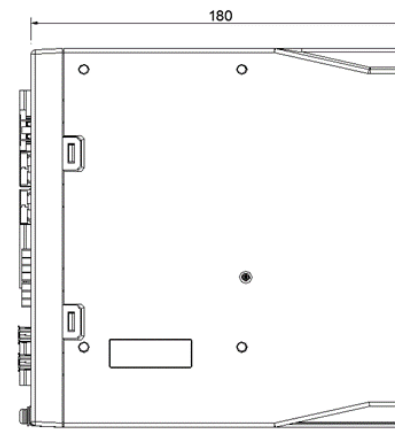
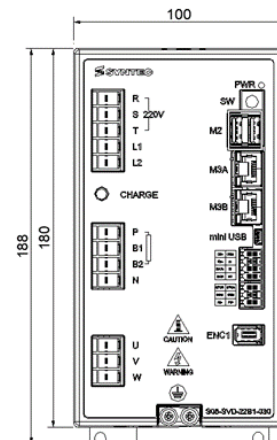
SIZE D Top View



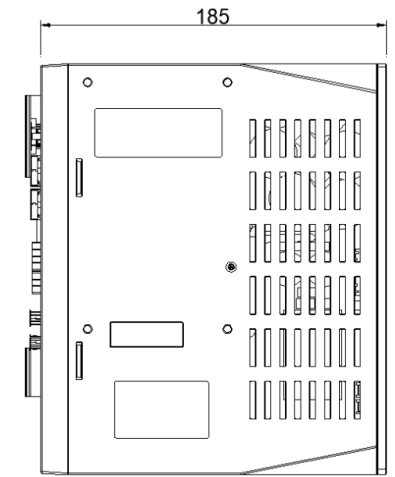
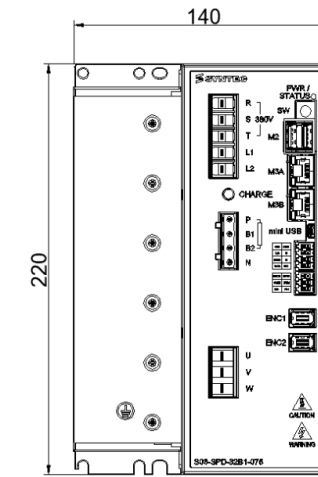
A	M2 Host Control Serial Communication Port	Connect to host controller Serial Communication Port 10Mbps (Either M2 or M3)
B	M3 Host Control Serial Communication Port	Connect to host controller Serial Communication 100Mbps (Either M2 or M3)
C	Mini USB Port	Connect to personal computer
D	I/O Signal Port	Connect to I/O equipment (Emergency stop, indicator lights, etc.)
E	External Battery Connection Port	Connect to output battery of absolute encoder.
F	Encoder feedback 1 (ENC1)	Connect to motor encoder
G	Encoder feedback 2 (ENC2)	Connect to load encoder
H	External power Supply (RST)	Connect to 3-phase AC 380V
I	Controller Board Power Supply (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.
J	Regenerative Resistor	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 C: external regenerate resistor connects to P and B2 SIZE D: external regenerate resistor connects to P and B
K	Motor Power Source (UVW)	Connect to the motor and supply power.
L	Expansion Module connector	The driver can connect to expansion module, i.e., ABZ encoder connector expansion module, ADDA expansion module etc. If there are any needs, please contact Syntec sales staff.

3. Controller Specifications (Unit: mm)

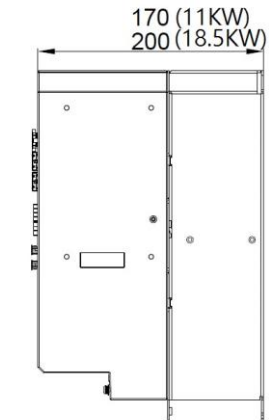
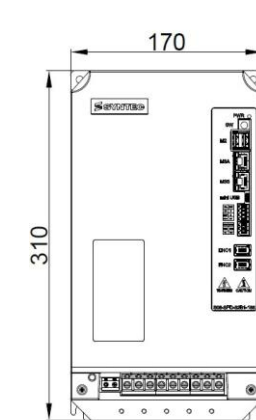
● SIZE B



● SIZE C

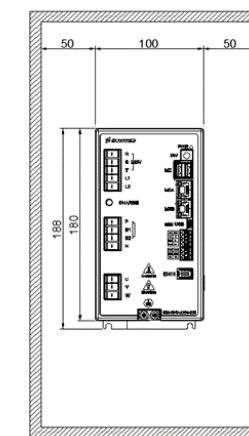


● SIZE D

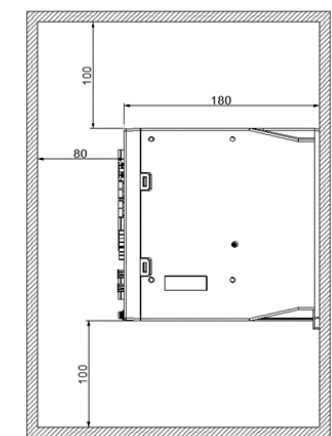


4. Installation Specifications (Unit: mm)

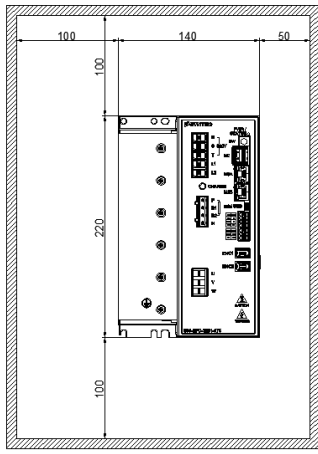
● SIZE B Front View



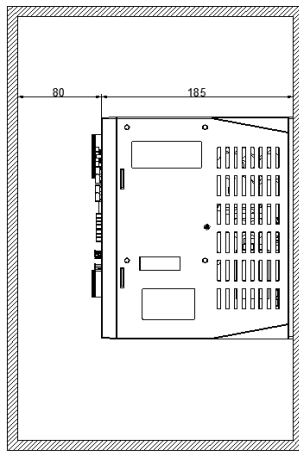
● SIZE B Side View



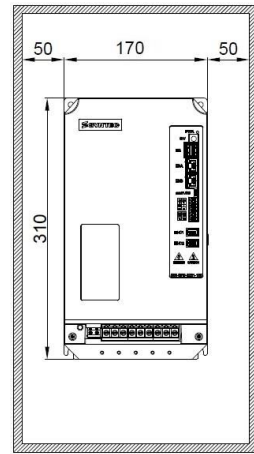
● SIZE C Front View



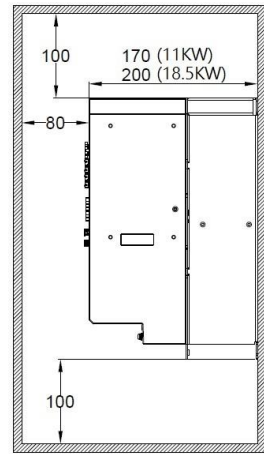
● SIZE C Side View



● SIZE D Front View

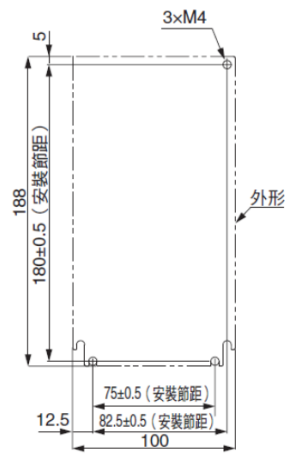


● SIZE D Side View

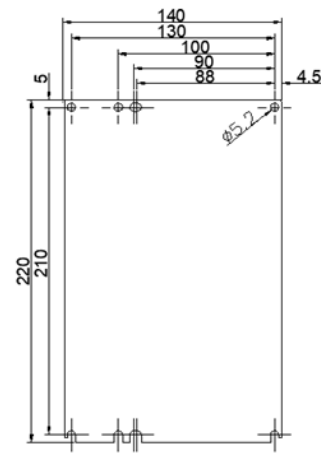


5. Mounting Hole Specifications (Unit: mm)

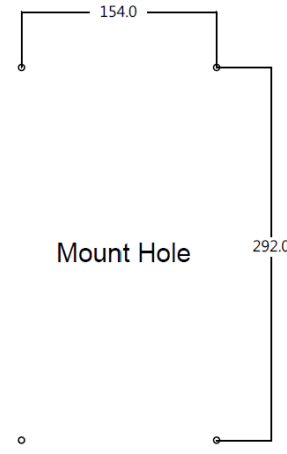
● SIZE B (Please install with M4 screws.)



● SIZE C (Please install with M5 screws.)



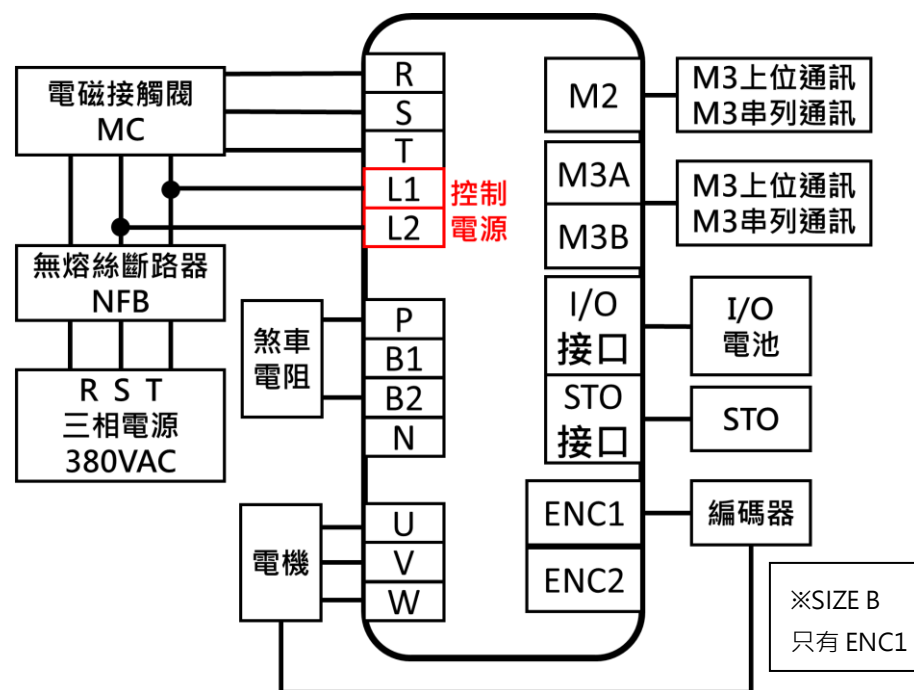
● SIZE D (Please install with M5 screws.)



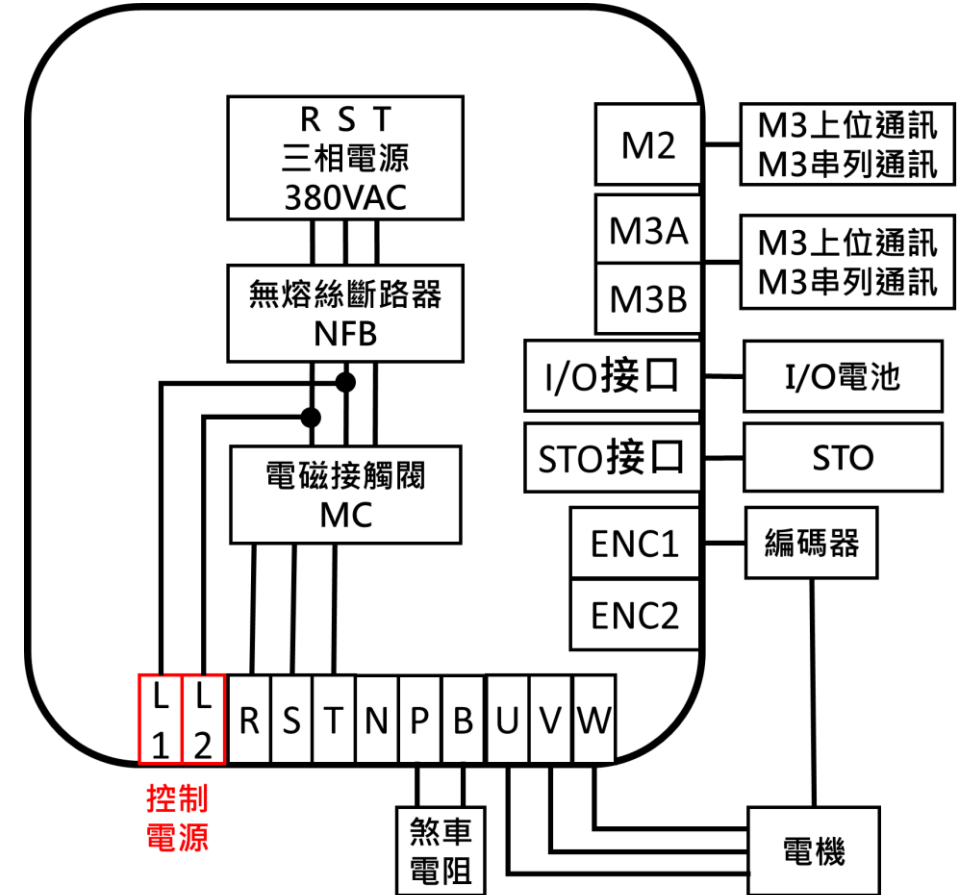
6. Basic Wiring Diagram

- 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 B & SIZE C



● SIZE D



※RST Recommended Wiring
Diameter: 4AWG or 22mm²

※ Recommended Encoder Wiring
Diagram: 22AWG×2C+24AWG×2P,
Over 90% coverage.

7. Interface Configurations

Please notice the value and polarities of voltages.

● M2 Serial Communication Port

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

● STO Signal Port

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

● Setting 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 Arrangement

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.