#### **Inverter Model Numbers**



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- 1, 2, 3...1. After turning off the main circuit power supply, do not touch circuit components until the "CHARGE" indicator is extinguished. The capacitors are still charged and can be quite dangerous.
  - 2. Do not change the wiring while power is applied to the circuit.
  - 3. Do not check signals during operation.
  - 4. Be sure to ground 3G3XV using the ground terminal G (E).
  - 5. Never connect main circuit output terminals, T1 (U), T2 (V), T3 (W), to AC main circuit supply.

#### **Caution**

- *1, 2, 3...* 1. All the constants of 3G3XV have been adjusted at the factory. Do not change their settings unnecessarily.
  - Do not perform withstand voltage test on any part of the 3G3XV Unit. This electronic equipment uses semi-conductors and is vulnerable to high voltage.

## 1-3 Installation

#### 1-3-1 Location

Location of the equipment is important to achieve proper performance and normal operating life.

The 3G3XV Units should be installed in areas where the following conditions exist.

- Ambient temperature:
  - $-10^{\circ}$  to  $40^{\circ}$ C,  $14^{\circ}$  to  $104^{\circ}$ F (with top cover on)
  - $-10^{\circ}$  to  $45^{\circ}$ C,  $14^{\circ}$  to  $113^{\circ}$ F (with top cover off)
- Protected from rain or moisture.

- Protected from direct sunlight.
- Protected from corrosive gases or liquids.
- Free from airborne dust or metallic particles.
- Free from vibration.
- Free from magnetic noise.
- **Caution** To house multiple SYSDRIVE 3G3XVs in a switchgear, install a cooling fan or some other means to cool the air entering the Inverter below 113°F (45°C).

### 1-3-2 Mounting Space

Install the 3G3XV vertically and allow sufficient space for effective cooling as shown in below.



## 1-3-3 Dimensions in Inches (mm)

The Unit dimensions vary from model to model, as shown in the following diagram and table.





Voltage	Phase	Max. Applicable Motor Output HP (kW)	W	W1	Н	H1	D	d
200 V	3-phase	0.13 to 0.5 (0.1 to 0.4)	4.13 (105)	3.66 (93)	5.91 (150)	5.43 (138)	3.94 (100)	0.20 (5)
		1/2 (0.75/1.5)	5.51 (140)	5.04 (128)	5.91 (150)	5.43 (138)	5.43 (138)	0.20 (5)
		3/5 (2.2/3.7)	5.51 (140)	4.96 (126)	7.87 (200)	7.32 (186)	6.69 (170)	0.22 (5.5)
	Single-phase	0.13 to 0.5 (0.1 to 0.4)	5.51 (140)	5.04 (128)	5.91 (150)	5.43 (138)	5.43 (138)	0.20 (5)
		1/2 (0.75/1.5)	5.51 (140)	4.96 (126)	7.87 (200)	7.32 (186)	6.69 (170)	0.22 (5.5)
		3/5 (2.2/3.7)	7.48 (190)	6.89 (175)	7.87 (200)	7.28 (185)	7.48 (190)	0.23 (5.8)
400 V	3-phase	0.25/0.5 (0.2/0.4)	5.51 (140)	4.96 (126)	7.87 (200)	7.32 (186)	4.72 (120)	0.22 (5.5)
		1/2 (0.75/1.5)	5.51 (140)	4.96 (126)	7.87 (200)	7.32 (186)	6.69 (170)	0.22 (5.5)
		3/5 (2.2/3.7)	7.48 (190)	6.89 (175)	7.87 (200)	7.28 (185)	7.48 (190)	0.23 (5.8)

# 1-4 Wiring

Connect the main circuit and control circuit wiring securely, as described below.

**Note** Use closed-loop connectors sized for the gauge of wire being used. Attach the connectors using a crimping tool recommended by the connector manufacturer.

## 1-4-1 Terminal Blocks

The main circuit and control circuit terminal blocks are at the bottom of the Inverter under a terminal cover.

### **Removing/Attaching the Terminal Cover**

To remove the terminal cover, squeeze the sides of the cover (1), and lift up (2) at the same time, as shown in the following diagram. Reverse these steps to attach the cover.