

**Work environment**

- Please use 220V AC in  $\pm 10\%$  ranges.
- To avoid the false operate, please keep the product away from the high electromagnetic interference.
- Please operate in the area which temperature is  $5^{\circ}\text{C} \sim 45^{\circ}\text{C}$ .
- Please operate in the area which humidity is 80% or less.
- Please keep the product away from the flammability and exploder.
- To avoid the static interference and current leakage, all grounding must be done.

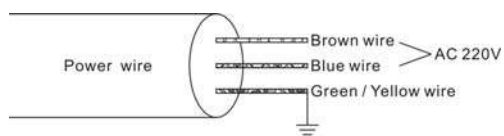
**Notice of safety**

- Turn off the power before maintenance and repairs or raising the machine arms, or changing needle, or threading needle.
- Please don't open the cover of the controller except the professional.
- When turn on the machine in the first time, use low speed to operate and check the correct rotation direction.
- During machine operation, don't touch any moving parts.
- All moving parts must use the protective device to avoid the body contact and objects insertion.
- When there is water or other liquid, or caustic material on controller or motor, you must stop operation and turn off the power.
- All connector shouldn't be plug and unplug when power on.

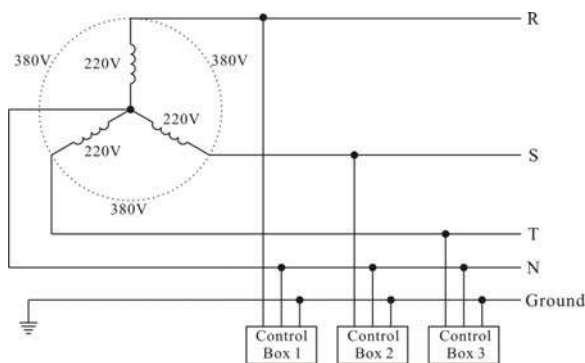
**Power Connection**

Ground wire (green & yellow) must be grounding.

Single phase 220V power connection



Three phase 380V power connection



**Display**

The LED in the front panel indicates the status of the machine. When the machine is powered on, the LED should be lighting all the time. If the LED is dead, check the power supply or the controller is damaged. If the LED is twinkling, it indicates an error or warning. The error mode is the LED twinkles several times and then it is dead for a short time. For example, the LED twinkles 3 times and then it is dead for a short time, it means error 3<sup>rd</sup>.

The warning mode is the LED is lighting for a short time and then dead for a short time. The errors and warning are listed in the table below.

Error and warning	Meaning and solution
Error 1 <sup>st</sup>	Power supply is overvoltage. Check the power supply.
Error 2 <sup>nd</sup>	Power supply is undervoltage. Check the power supply.
Error 3 <sup>rd</sup>	Motor is overcurrent. Check the machine if it is overload or blocked.
Error 4 <sup>th</sup>	Pedal is not connected. Check the connectors.
Error 5 <sup>th</sup>	The machine is blocked. Check the machine.
Error 6 <sup>th</sup>	Bus voltage is too high. Check the power supply.
Error 7 <sup>th</sup>	Signal of the motor sensor is wrong. Check the motor sensor.
warning	Warning. Check if the pedal is at the stop position and the machine is put down.

**Speed adjusting**

The minimum speed is 150rad/min. The maximum speed is 4000rad/min for GC6710MD and 3000rad/min for GC6710HD. There is a scroll wheel in the front panel. Rolling up to increase the top speed and rolling down to decrease the top speed.

**Needle position**

The machine will stop anywhere after sewing, and it will stop at the nearest needle up position or needle down position by pressing the correct button or trampling the pedal back.