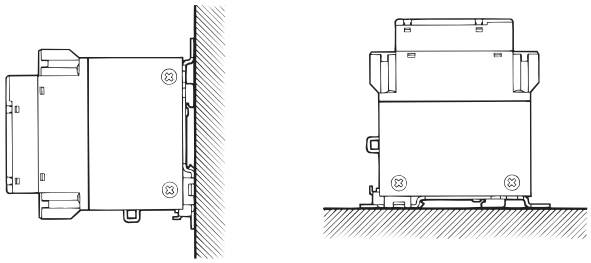
■ Safety Precautions

Refer to *Safety Precautions for All Solid State Relays*.

■ Precautions for Correct Use

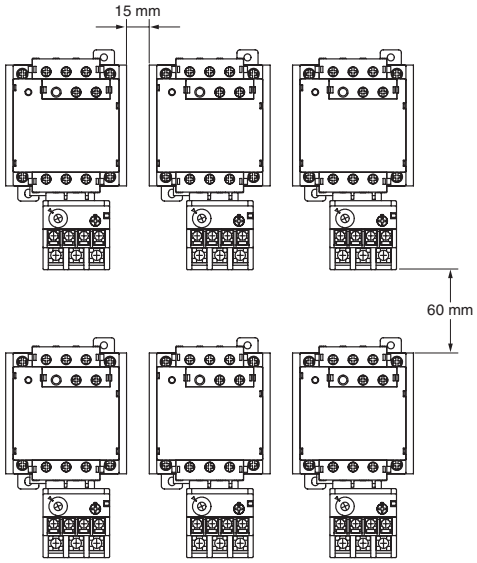
Mounting Method

Vertical **Horizontal**



Note: When the G3J is mounted horizontally, the load current must be 50% of the rated load current if the G3J is used at a temperature exceeding 40°C.

Close Mounting



Note: Minimum distances of 15 mm horizontally and 60 mm vertically are required between adjacent G3Js with thermal overload relays.

Power Supply for Soft-start Models and Soft Start/Stop Models

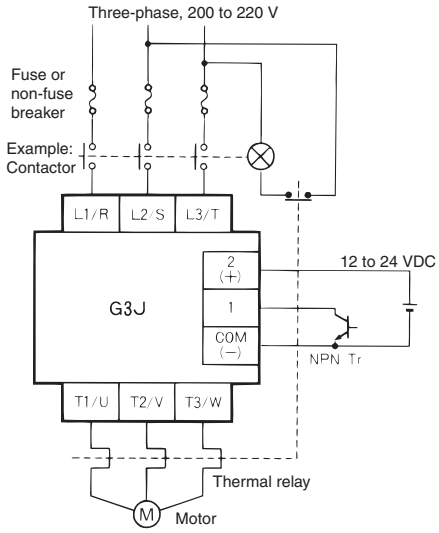
Activate the operation input to the G3J-S□ Soft-start Models or G3J-T□ Soft-start/stop Models only after the power supply has sufficiently stabilized to achieve stable soft-start operation.

Wiring

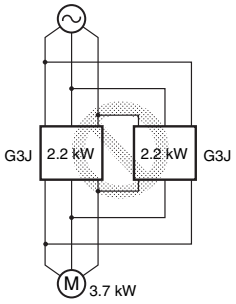
- Make sure that the lead wires are thick enough for the current.
- Output terminals T1, T2, and T3 may be charged regardless of whether the Unit is a 2- or 3-element model that is turned ON or OFF. Cut off the Unit from the power supply by installing a circuit-breaker or other device on the power supply side.
  Be sure to turn OFF the power supply before wiring the Unit.
- Terminal L2 and terminal T2 of the 2-element model are internally short-circuited to each other. Therefore, connect terminal L2 to the ground terminal of the power supply.
  If L2 is connected to a terminal other than the ground terminal, cover all the charged terminals, such as heater terminals, to prevent electric shock accidents and ground faults.
- Do not wire power lines or high-tension lines along with the lines of the G3J in the same conduit. Otherwise, the G3J may be damaged or malfunction due to induction noise.
- Be sure to use a surge absorber when connecting an inductive load to the monitor output.

System Protection

- The system will be safer if the power supply is shut off with a contactor or other device on the power supply side of the G3J as shown in the following diagram.



- Do not operate motors that exceed the allowable capacity with G3Js connected in parallel. Doing so may result in malfunctions.



Tightening Screws

Be sure to tighten the screws to the specified torques given below. Not doing so may result in malfunctions.

Tightening Torque

Output terminals (M4): 1.2 N·m
Input terminals and monitor output terminals (M3): 0.6 N·m

Operating Conditions

- Make sure no current exceeding the rated current will flow into the G3J. Otherwise, the G3J may generate excessive heat.
- Make sure that there is no excess ambient temperature rise due to the heat generation of the G3J. If the G3J is mounted inside a panel, install a fan so that the interior of the panel is sufficiently ventilated.

Limiting Resistor

A limiting resistor cannot be used with the G3J.