

AC Contactor



The contactor is a crucial electrical device, widely utilized in control systems to automatically or manually open and close electrical circuits. To ensure safe and effective use of a contactor, follow the guide below:

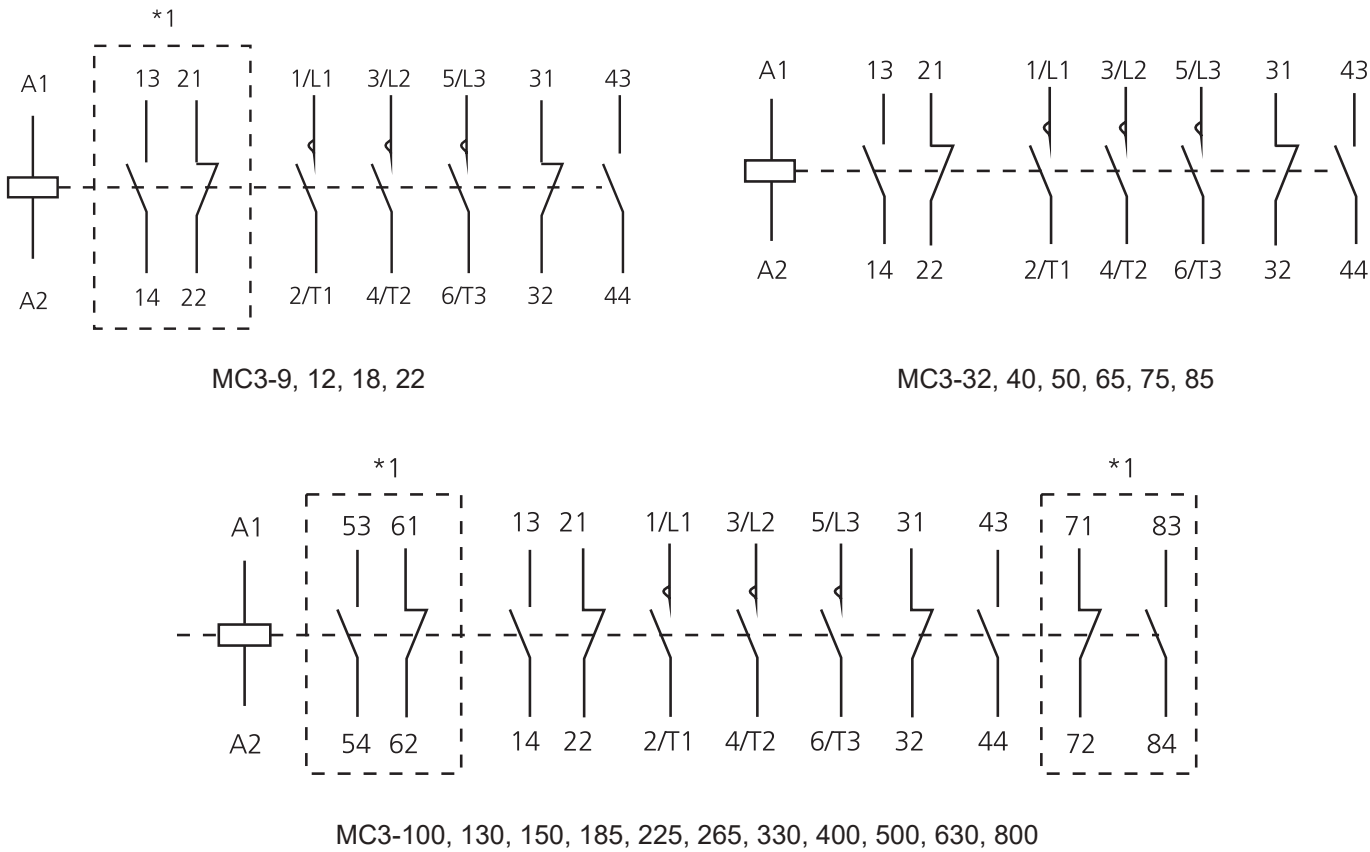


Disconnect power from the source before carrying out any installation, modification, or maintenance

OPERATING PARAMETERS

- Carefully review the technical specifications on the contactor's nameplate, including voltage, rated current, coil voltage, and other details, before selecting and installing it.
- Install the contactor in an environment free from high temperatures, humidity, dust, conductive powders, corrosive gases, and vibrations, ensuring it meets the following conditions:
 - Ambient Temperature: -5~55°C
 - Relative Humidity: ≤95%
 - Altitude: less than 2000m
- Check the load characteristics and equip additional protective devices, such as overload relays or current-limiting devices (e.g., thermal relays, AC-6b), to ensure protection against overload and to limit inrush current.

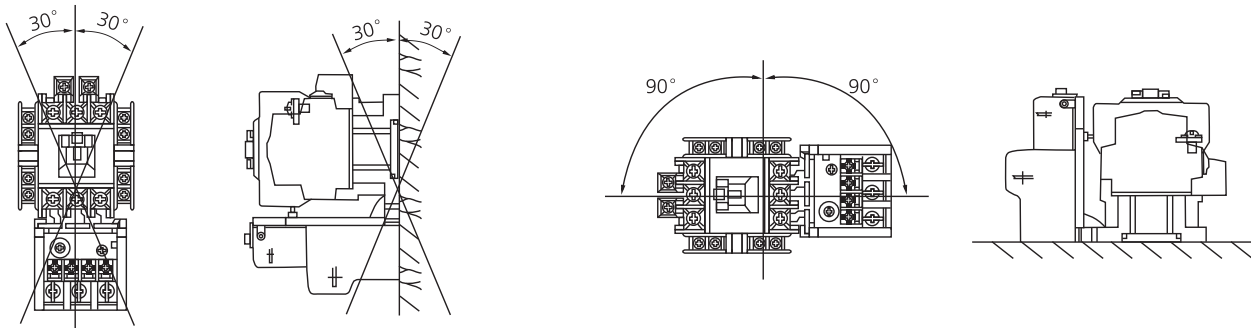
CONTACT CONFIGURATION



“*1”: Possibility of further expansion

CAUTION

- Before installation, carefully read the user manual to ensure proper operation.
- The installation, maintenance, and testing of the contactor must be carried out by qualified engineers with specialized expertise.
- Operate the contactor within the rated voltage and current specified on the nameplate to avoid malfunctions.
- Contactors can be mounted on DIN rails or screwed in place. Mounting can be either vertical or horizontal, but the deviation should not exceed 30 degrees in either direction.



- For wiring, select wire sizes appropriate for the applied voltage and current. Tighten the wires using the torque specified in the instruction manual, and ensure the torque is maintained:

- a) M4: 1.0 ~ 10 mm2 / 23 kgf.cm
- b) M5: 2.5 ~ 16 mm2 / 41 kgf.cm
- c) M8: 6.0 ~ 95 mm2 / 52 ~ 93 kgf.cm
- d) M10: 50 ~ 150 mm2 / 150 kgf.cm
- e) M12: 95 ~ 240 mm2 / 230 kgf.cm
- f) M16: 2 x (185 ~ 240) mm2 / 576 kgf.cm

6. Terminal screws must be properly tightened and checked regularly. Annually, inspect the condition of the contacts for any signs of burning or wear, and clean any dust on the contactor.

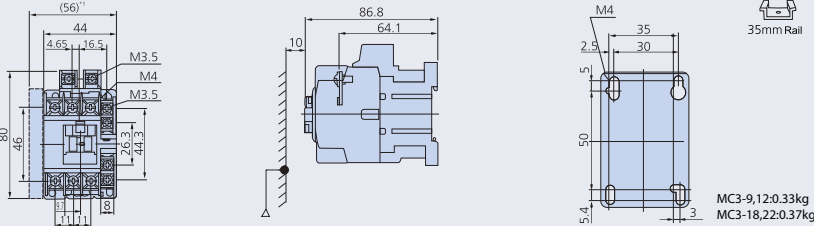
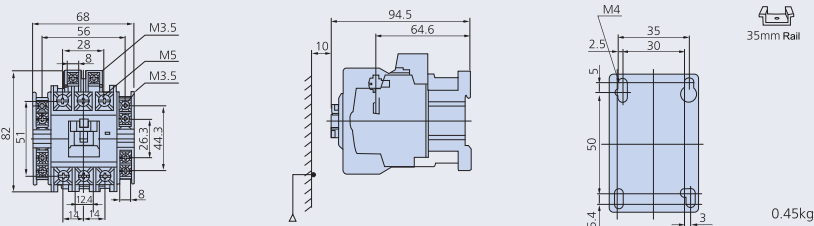
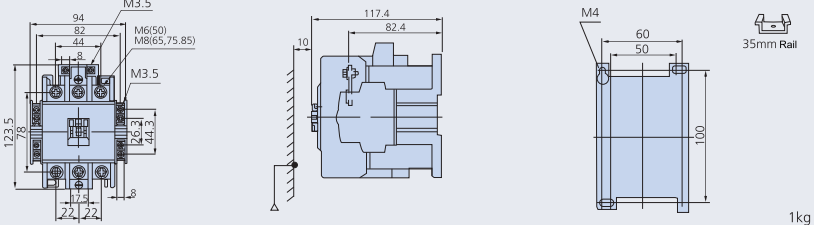
7. The coil is designed with copper windings for currents up to 85A. For contactors handling higher currents, the coil includes electronic components to reduce power loss. Ensure the correct voltage range for each coil, which should be between 85% and 110% of its rated voltage.

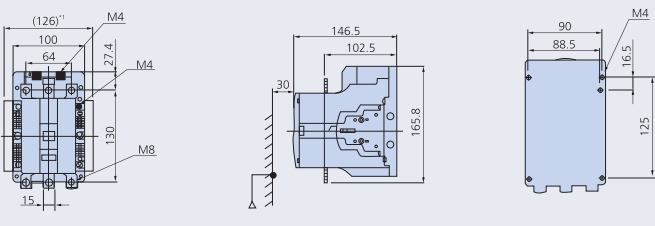
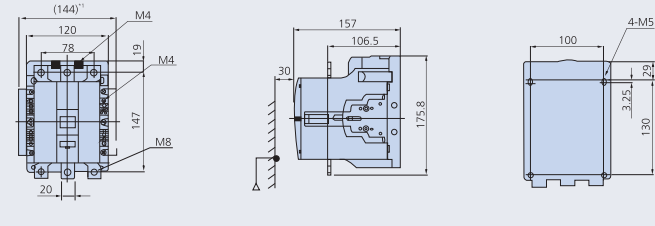
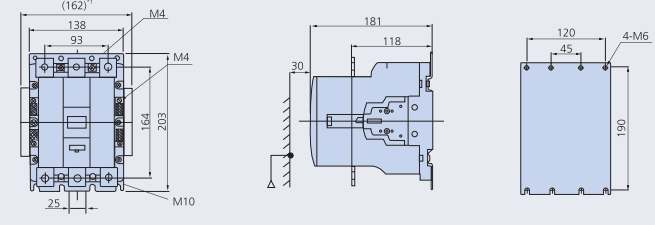
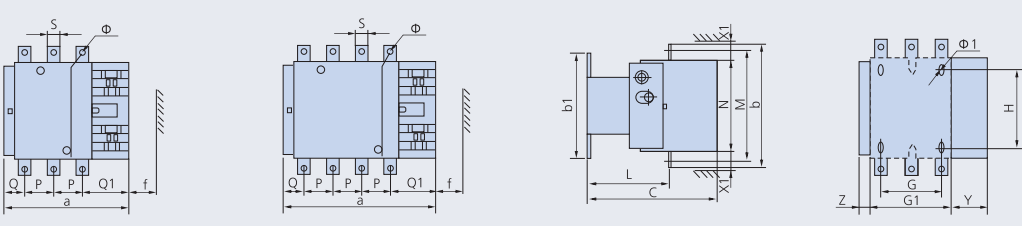
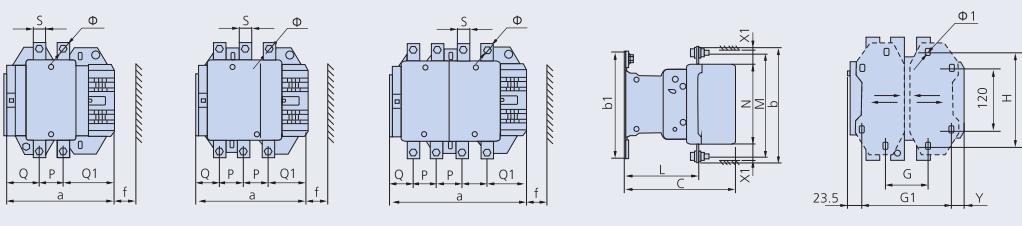
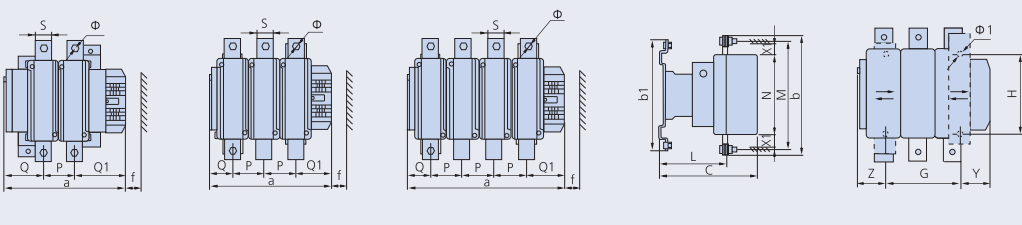
8. When the device is no longer useful, it should be disposed of as industrial waste.

TROUBLESHOOTING

1. Contactor does not switch on:
- Check the power supply to the coil.
 - Inspect the controller or control signal.
2. Unusual noise:
- Inspect the coil and magnetic core.

DIMENSIONS

MC3-9 MC3-12 MC3-18 MC3-22	
MC3-32 MC3-40	
MC3-50 MC3-65 MC3-75 MC3-85	

MC3-100 MC3-130	
MC3-150	
MC3-185 MC3-225	
MC3-265 MC3-330	
MC3-400 MC3-500	
MC3-630 MC3-800	

*Note: MC3-265~800 Refer to the Catalog for Detailed Dimensions

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