

Handling RS-485 and Micro SD Card Interfaces

To ensure safe and reliable operation, observe the following guidelines when handling the RS-485 and Micro SD card interfaces:

Power Isolation Requirement:

The RS-485 and Micro SD card interfaces must not be inserted or removed while the device is powered on.

Recommended Procedure:

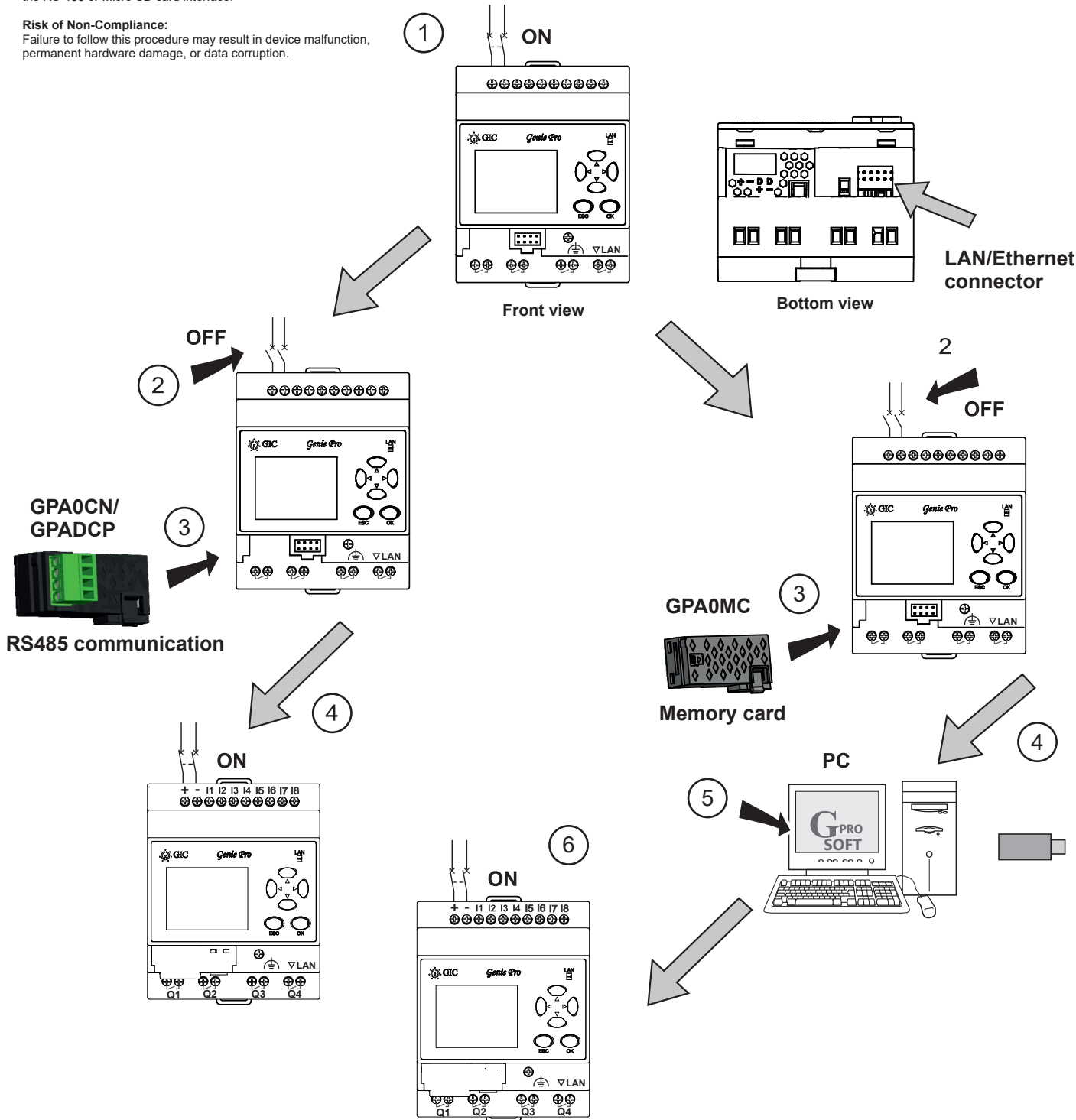
Always shut down the input supply voltage before inserting or removing the RS-485 or Micro SD card interface.

Risk of Non-Compliance:

Failure to follow this procedure may result in device malfunction, permanent hardware damage, or data corruption.

LED indication

| | | Diagnostics |
|----------|----------|---|
| RUN/STOP | RED | Product switched ON, module is in STOP mode |
| | GREEN | Product switched ON, module is in RUN mode |
| LAN | BLINKING | Ethernet/LAN connected |



⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH.

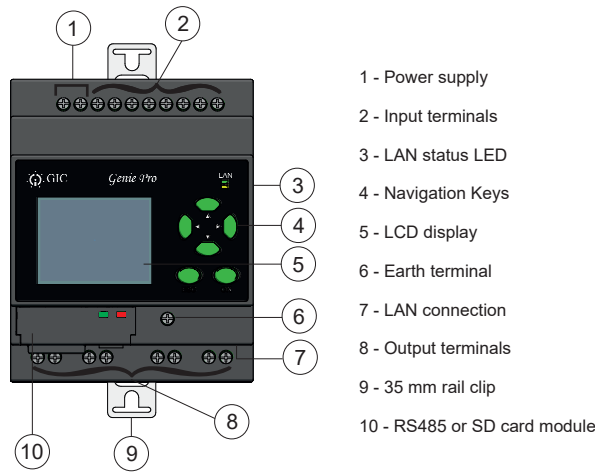
1. Ensure to deactivate the power prior to installation, removal, wiring, or maintenance tasks.
2. Install an external safety circuit separate from the Genie-Pro to maintain system integrity during power supply or module failures, preventing potential mishaps due to erroneous outputs.
3. Implement mechanical safeguards outside the Genie-Pro to protect against damage, e.g. Emergency Stop, protective circuits, and limit switches, ensuring safe operation and preventing accidents during forward/reverse operations.
4. Due to the risk of permanent ON or OFF states in the Genie-Pro's output relays, incorporate additional protective external circuits or mechanisms to ensure major safety considerations and prevent serious accidents.
5. Avoid contact with the conductive parts of the Genie-Pro while powered on to prevent electric shocks or device malfunctioning.

⚠ Cautions:

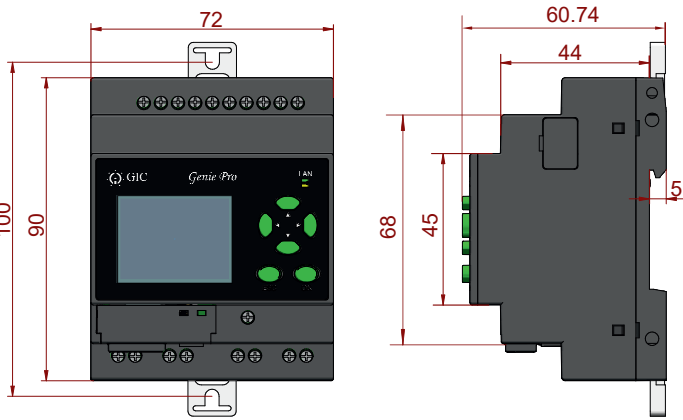
1. Ensure that control wires or communication cables are not bundled together with the main circuit or power lines. Maintain a minimum distance of 100 mm (4 inches) between them. Failure to do so may lead to noise interference affecting communication signals.
2. Always use shielded twisted pair cables for communication purposes.
3. Ensure that fluctuations or deviations in the main supply voltage remain within the tolerance limits specified in the technical specifications. Exceeding these limits could result in operational malfunctions.
4. Do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous.
5. Before installation, ensure that specifications agree with intended application.
6. Only qualified persons are authorized to install the product.

Product Overview

1. Base module with LCD



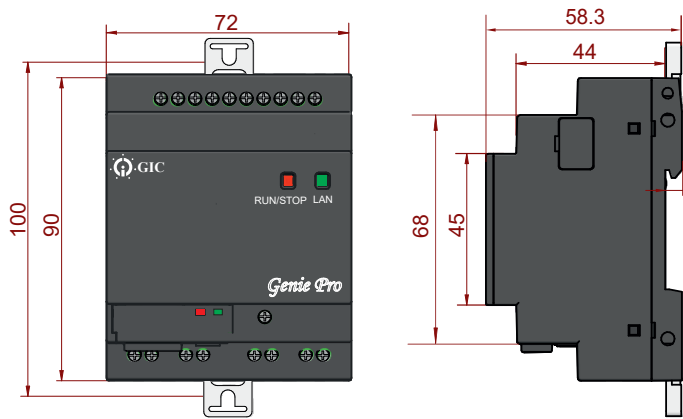
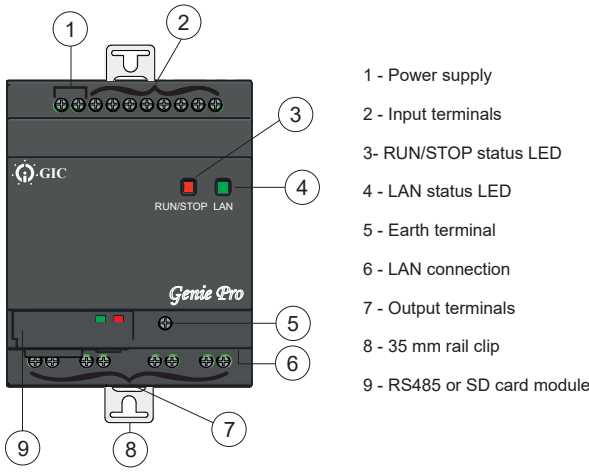
Mounting Dimensions (in mm)



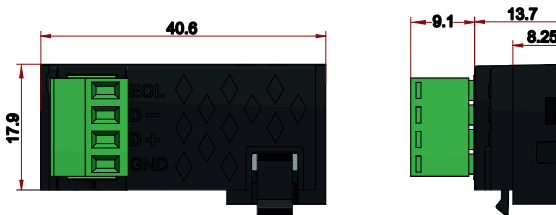
CAT-ID's

GP230URL/GP230URB/
GP024URL/GP024URB/
GP124DRL/GP124DRB/
GP024DTLL/GP024DTLB
GP024DTHL/GP024DTHB

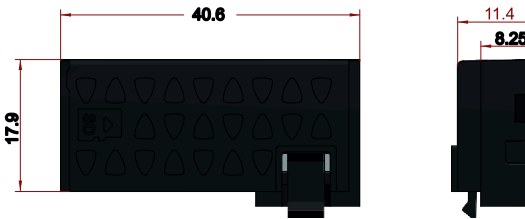
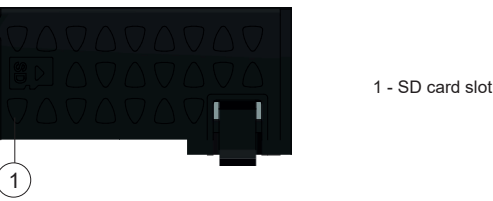
2. Base module without LCD



3. RS 485 module



4. SD card module

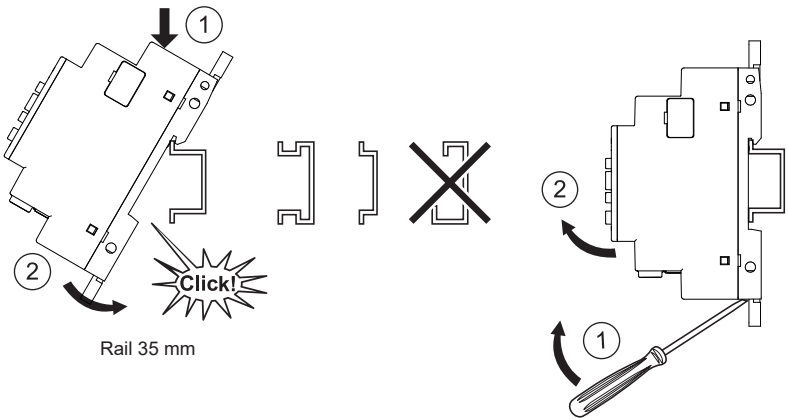


General Precautions during wiring :

1. In cases of high noise levels on the power lines, it is recommended to use an isolation transformer with the Genie-Pro power supply, despite the built-in precautions within the Genie-Pro.
2. When utilizing the DC-powered Genie-Pro, ensure that the 24 VDC input line is routed separately from the 100 V AC and 240 V AC lines.
3. Keep the input lines and output lines separated from each other.
4. If the output lines are close to power supply lines or input lines, use shielded cables for both the input and output lines and ensure proper grounding.

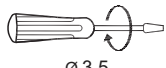
IMPORTANT : This document provides installation instructions only. Refer to User's Manual/Help file for complete Genie Pro set up, operation and software instructions. Those responsible for the application, implementation or use of this product must ensure that the necessary design considerations have been incorporated into each application, completely adhering to applicable laws, performance and safety requirements, regulations, codes and standards. The customer is responsible for all consequences of the application.

Installation on Rail



Terminal and Torque details

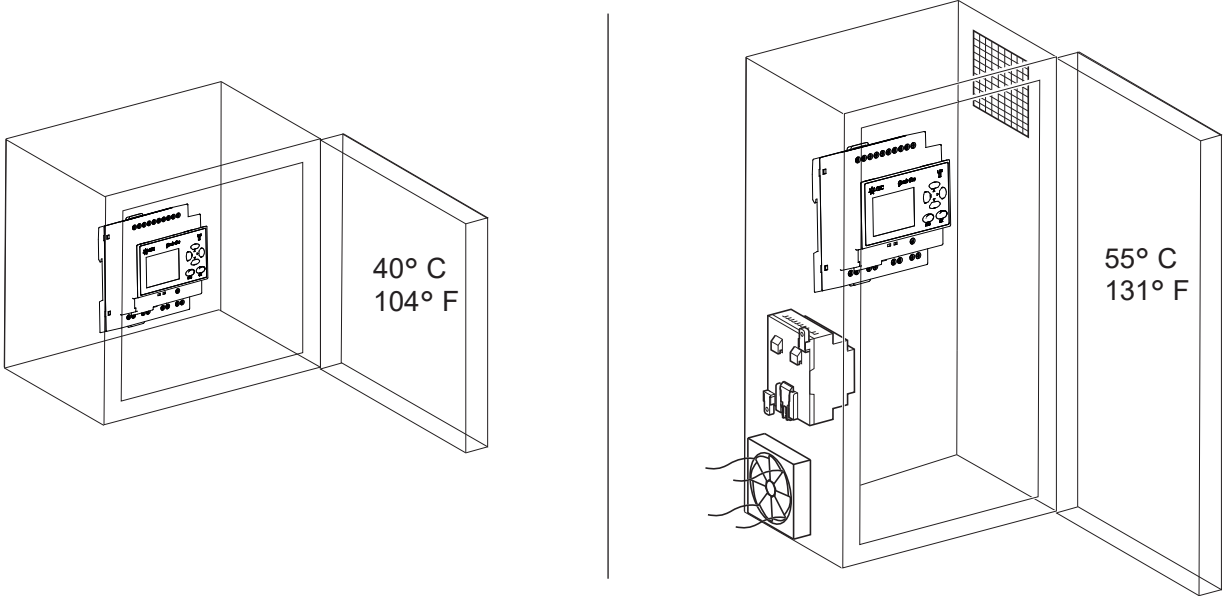
| Type | Wire gauge (AWG) | Stripped length | Torque |
|----------|--------------------|-----------------|------------------------------|
| Solid | 24 - 12 | 7 - 8 mm | 0.4-0.5 N·m (3.54-4.4 lb·in) |
| | 26 - 12 | | |
| Stranded | 24 - 12 26 - 12 | 7 - 8 mm | 0.4-0.5 N·m (3.54-4.4 lb·in) |



| |
|-----------|
| 12 V |
| 24 V |
| 110-240 V |

| |
|-----|
| 8 A |
| 8 A |
| 8 A |

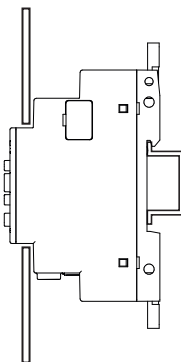
Installation conditions



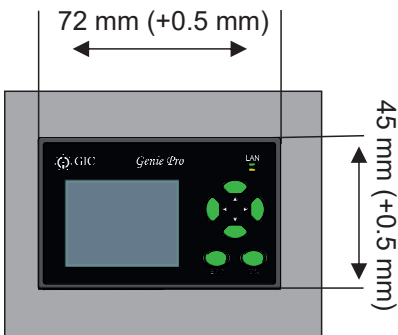
Service conditions

| | |
|--|---|
| Operating temperature | (-20 °C to +55 °C) (-4 °F to +131 °F) |
| Storage temperature | (-25 °C to +70 °C) (-13 °F to +158 °F) |
| Relative Humidity | 10-95%, non-condensing |
| Pollution degree | 2 (IEC/EN 61131-02) |
| Degree of Protection | IP 40 Front Panel, IP 20 Terminal |
| Altitude | Operations: 0 - 2000 m (0 - 6562 ft) Transport: 0 - 3000 m (0 - 9843 ft) |
| Vibration resistance (IEC 60068-2-6) | 5 Hz ≤ f < 8.4 Hz, amplitude: 3.5 mm |
| Shock resistance (IEC 60068-2-27) | 8.4 Hz ≤ f ≤ 150 Hz, acceleration: 1 g |
| Enclosure material | self-extinguishable |
| Standard applicable/ operating conditions | 61131-02 |

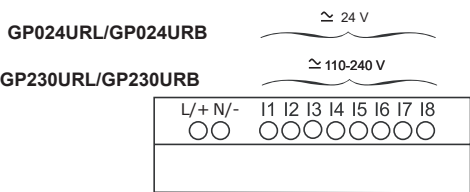
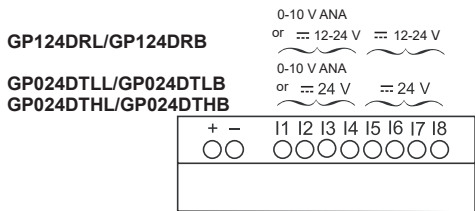
Enclosed type mounting



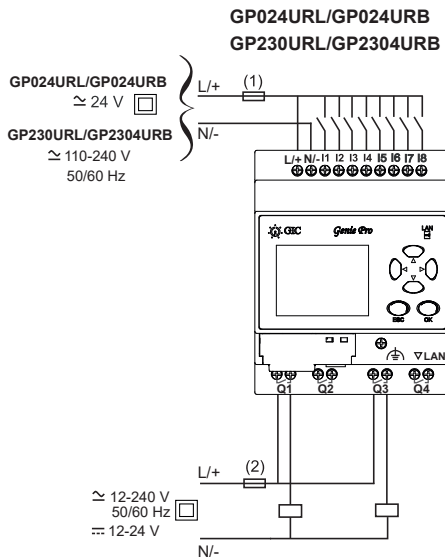
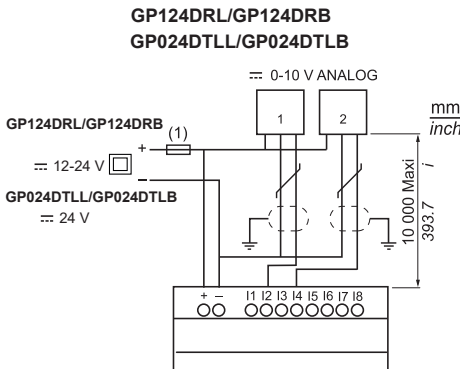
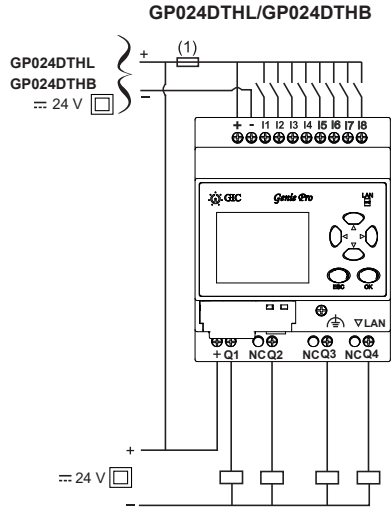
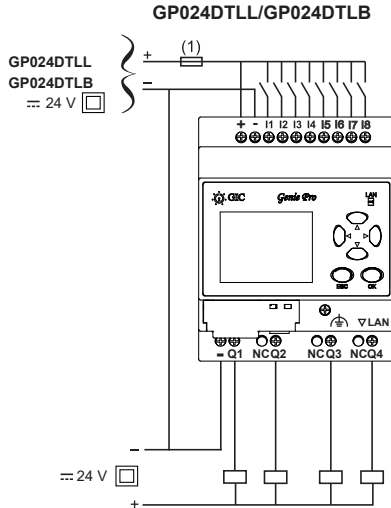
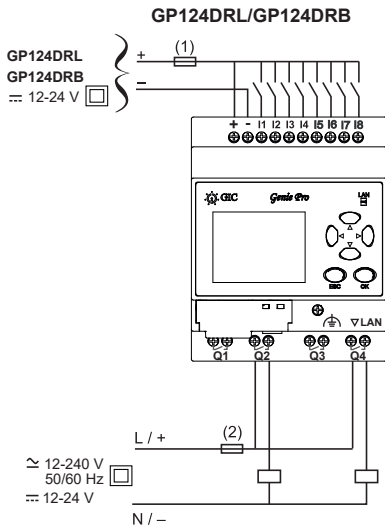
Mounting dimension



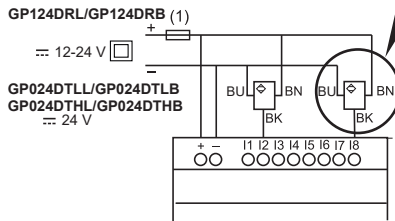
Input details



Input and Output wiring connection



GP124DRL/GP124DRB
GP024DTLL/GP024DTLB
GP024DTHL/GP024DTHB



(1) 1 A quick blowing fuse, circuit-breaker or current protector.

(2) Fuse, circuit breaker or current protector as per relay rating.
For 8A relay use 8A circuit breaker or current protector.
For 5A relay use 5A circuit breaker or current protector.