

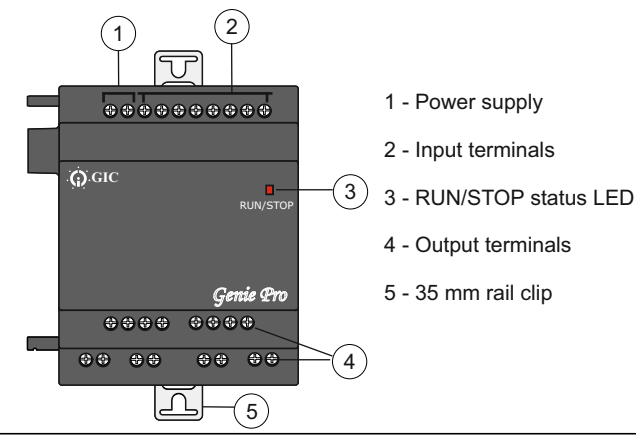
(1) 1 A quick blowing fuse, circuit-breaker or circuit protector.

**⚠ 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.

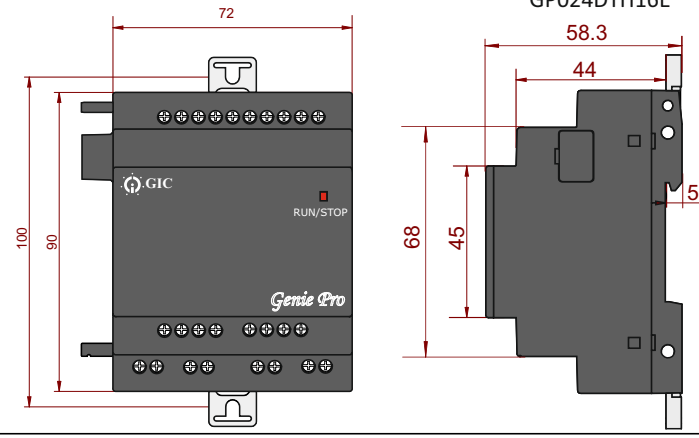
**⚠ Cautions:**  
1. Ensure that control wires or communication cables are not bundled together with the main circuit or power lines. Maintain a minimum distance of 100 mm (4 inches) between them. Failure to do so may lead to noise interference affecting communication signals.  
2. Always use shielded 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. 4M digital extension module**

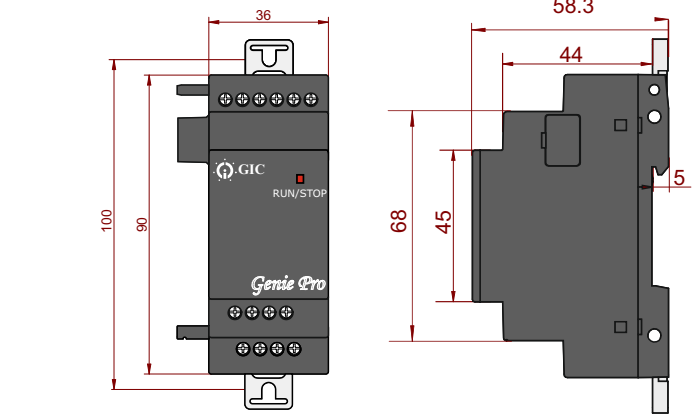
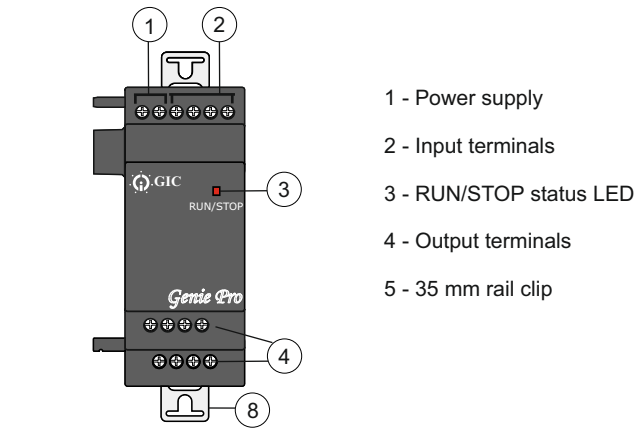


**Mounting Dimensions (in mm)**



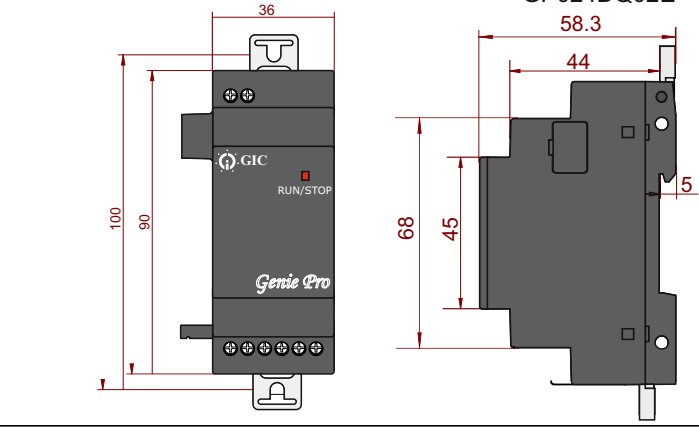
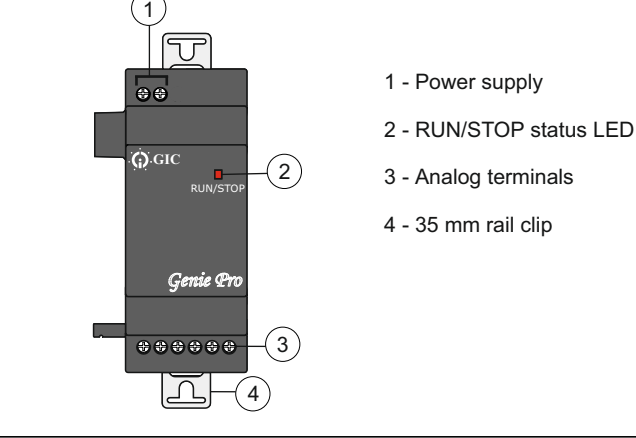
**CAT-ID's**  
GP230UR16E  
GP024UR16E  
GP124DR16E  
GP024DTL16E  
GP024DTH16E

**2. 2M digital extension module**



**CAT-ID's**  
GP230UR08E  
GP024UR08E  
GP124DR08E  
GP024DTL08E  
GP024DTH08E

**3. Analog module**



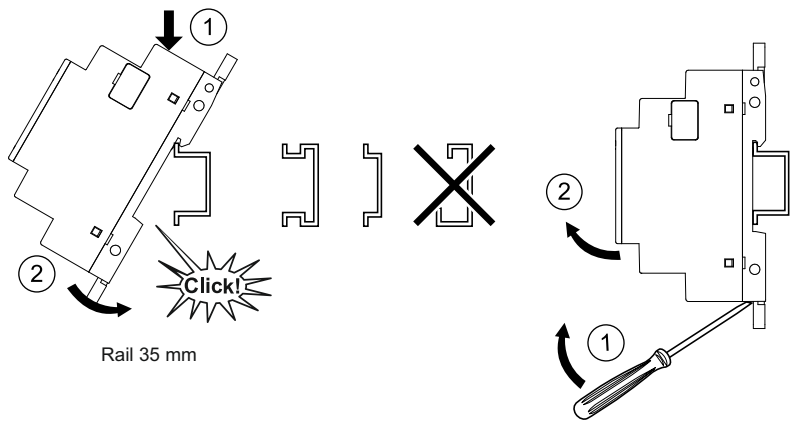
**CAT-ID's**  
GP124DM20E  
GP124DH20E  
GP024DQ02E

**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



### LED indication

		Diagnostics
RUN/STOP	RED	Product switched ON, module is in STOP mode
	GREEN	Product switchtd ON, module is in RUN mode

### Terminal and Torque details

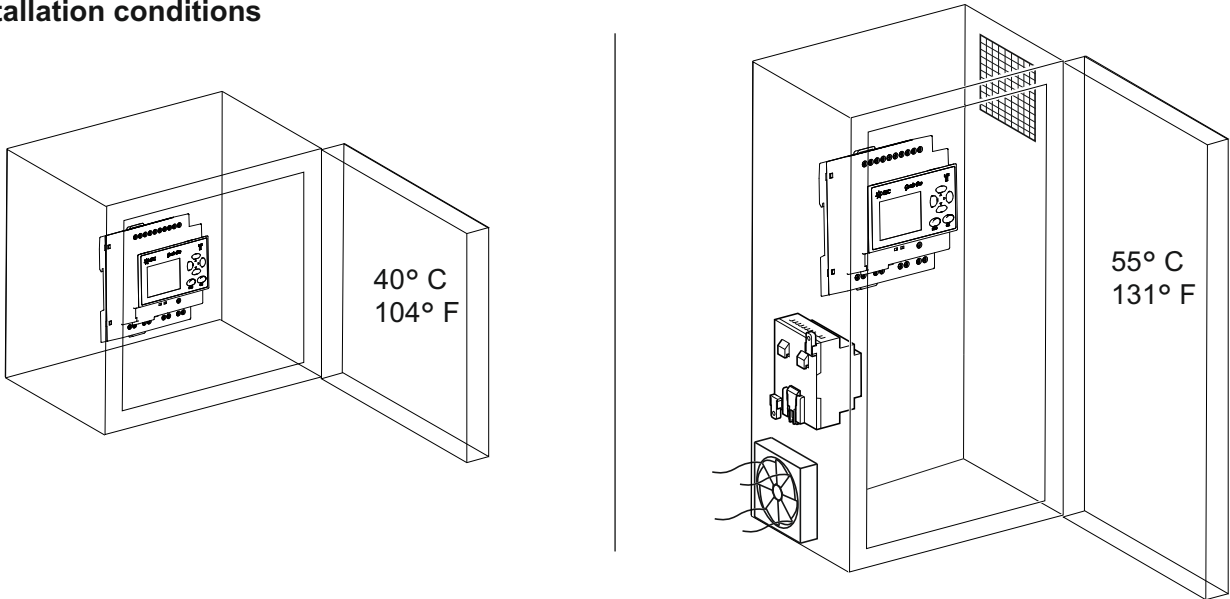
Type	Wire gauge (AWG)	Stripped length	Torque
Solid	24 - 12	7 - 8 mm	0.4-0.5 N·m (3.54-4.4 lb·in)
	26 - 12		
Stranded	24 - 12	7 - 8 mm	0.4-0.5 N·m (3.54-4.4 lb·in)
	26 - 12		



≐ 12 V
≐ 24 V
≐ 110-240 V

5 A
5 A
5 A

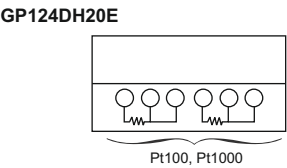
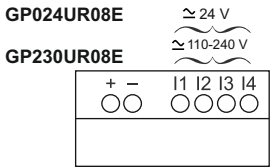
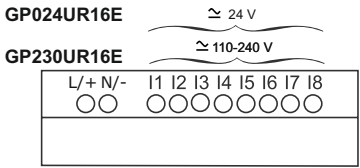
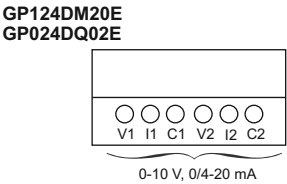
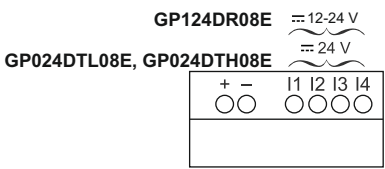
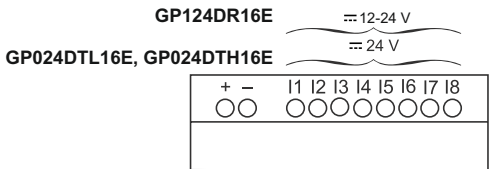
### Installation conditions



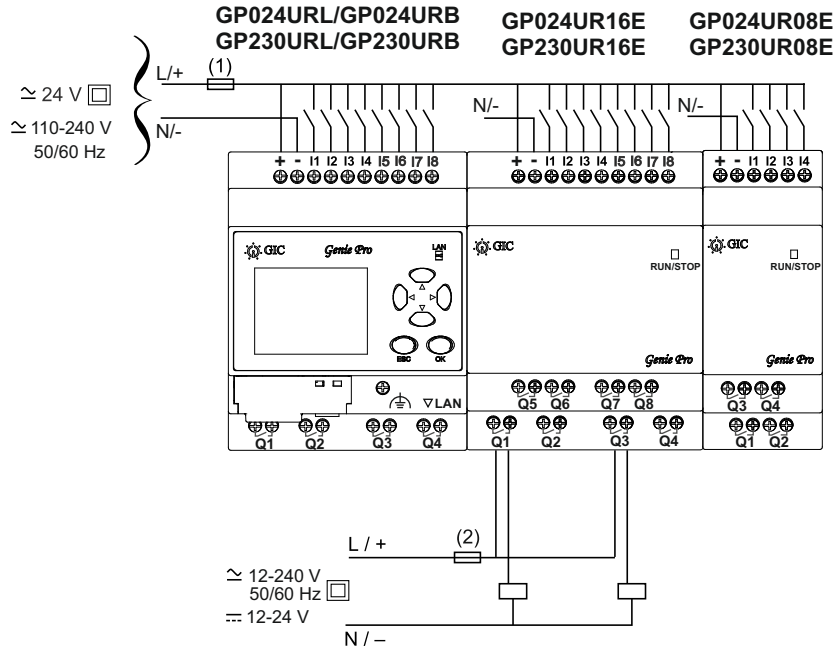
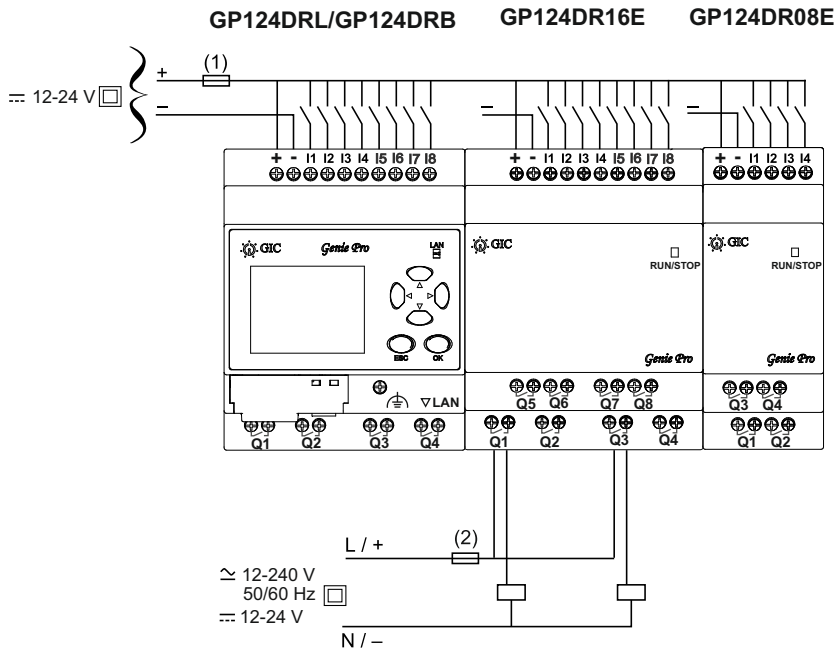
### Service conditions

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

### Input details



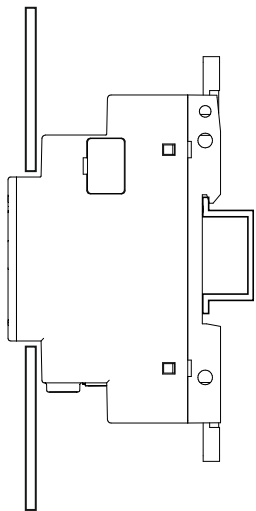
### Input and Output wiring connection



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

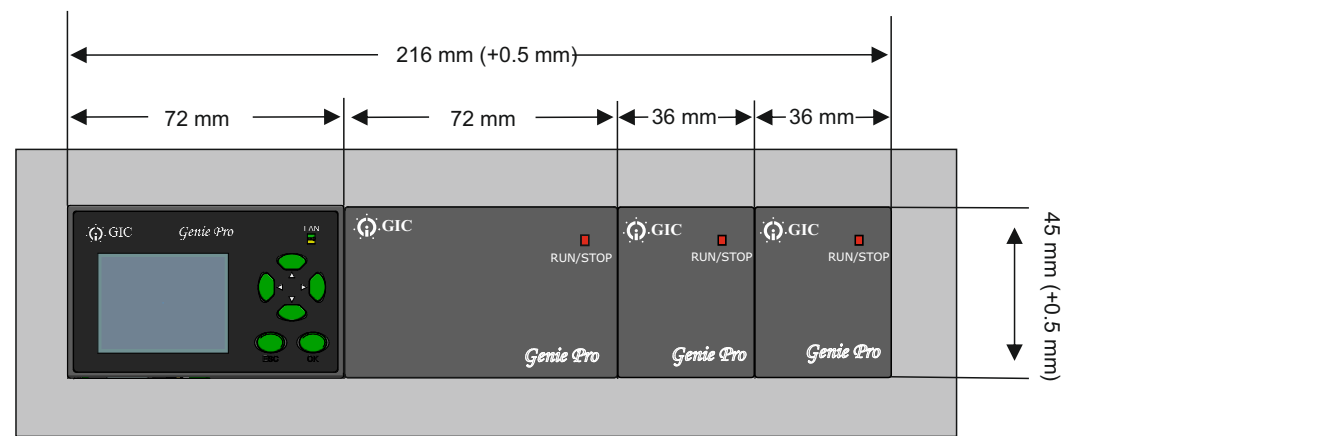
(2) Fuse, circuit breaker or current protector as per relay rating. For 8A relay use 8A circuit breaker or current protector. For 5A relay use 5A circuit breaker or current protector.

Enclosed type mounting

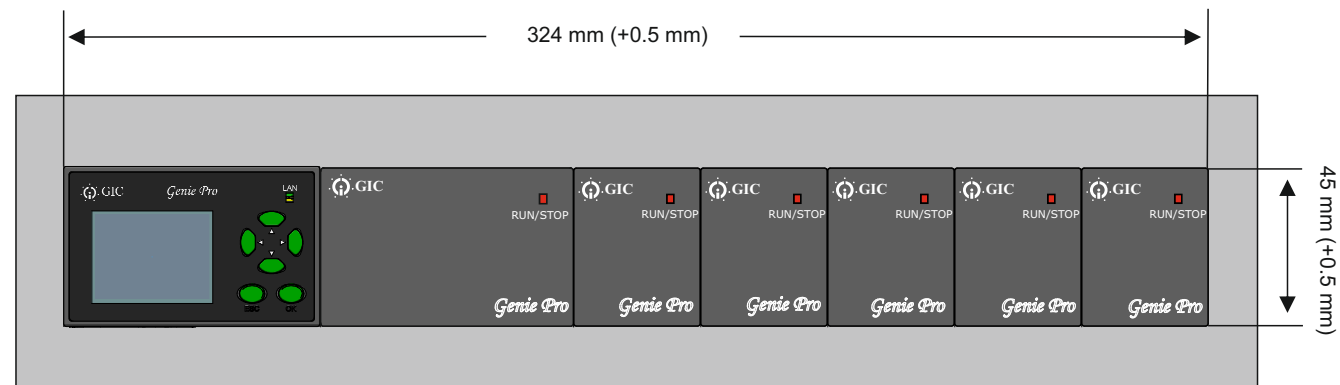


Mounting dimension

1. Base with digital expansion (Max IO's).



2. Base with digital & analog expansion (Max IO's).



**\* Note:**  
The above mounting dimension is for reference, the size may change as per the system is configured.