

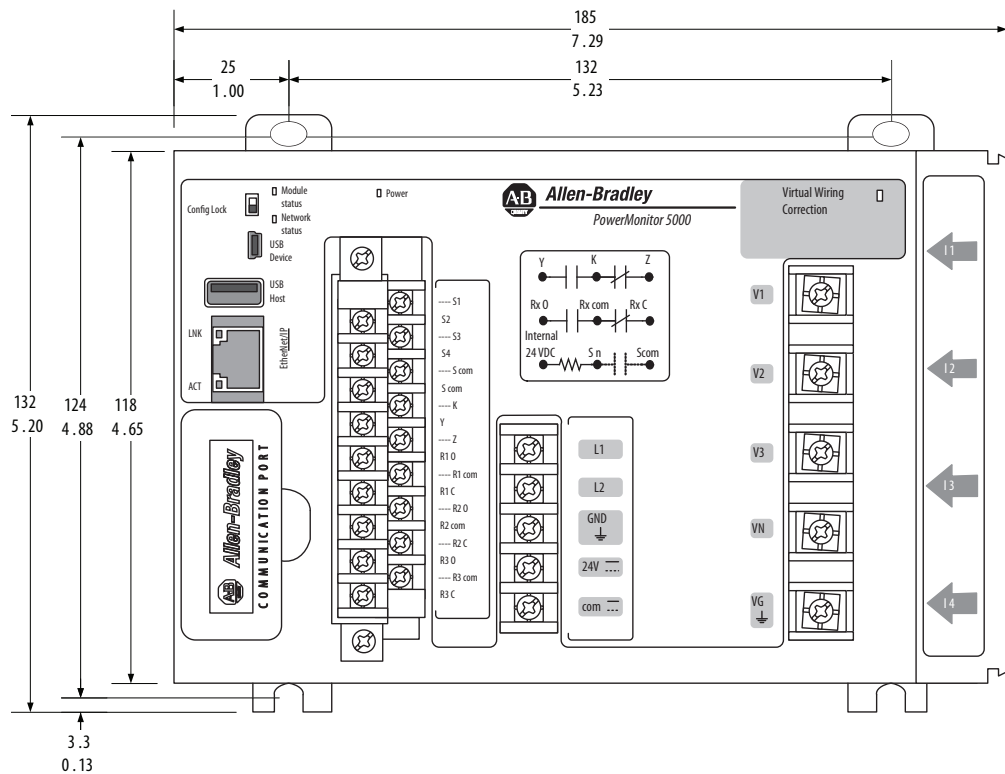
IMPORTANT

Use caution not to block the ventilation slots of the power monitor. All wiring, wire ways, enclosure components, and other obstructions must be a minimum of 50 mm (2.0 in.) from the top and bottom of the unit to provide ventilation and electrical isolation. Units can be mounted side-by-side.

Note that access to the USB device port is required for initial configuration of the power monitor and can be required for eventual administration and maintenance. Consider safe and convenient access to the power monitor front panel when planning the installation location.

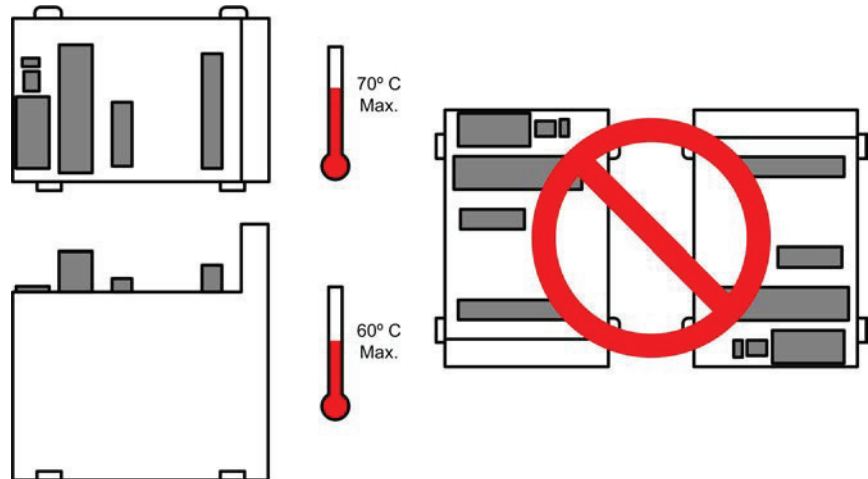
PowerMonitor 5000 Unit Dimensions

Mounting Hole Tolerance:
±0.4 mm (0.016 in.)
Dimensions are in mm/in.
Depth: 178/7.0



Mounting Orientation Options

We recommend that you mount the power monitor to a vertical panel with the ventilation slots at the top and bottom. You can also mount the unit on a horizontal surface, however, the maximum ambient operating temperature in this orientation is 60 °C (140 °F). Do not mount the unit with the ventilation slots at the side. Refer to the figure below.



Panel Mounting

Follow these steps for panel mounting a PowerMonitor 5000 unit.

1. Use the power monitor as a template and mark pilot holes on your panel.
2. Drill pilot holes for M4 or #8 screws.



ATTENTION: During mounting of all devices, make sure that all debris (such as metal chips or wire strands) is kept from falling into the power monitor. Debris that falls into the module could cause damage when the device is energized.

3. Use M4 or #8 screws to mount the power monitor to your panel and tighten to 1.16 N•m (10 lb•in).
4. Ground the power monitor on a ground bus with a low-impedance earth ground connection.
5. Connect the ground bus to a functional earth ground on the panel.

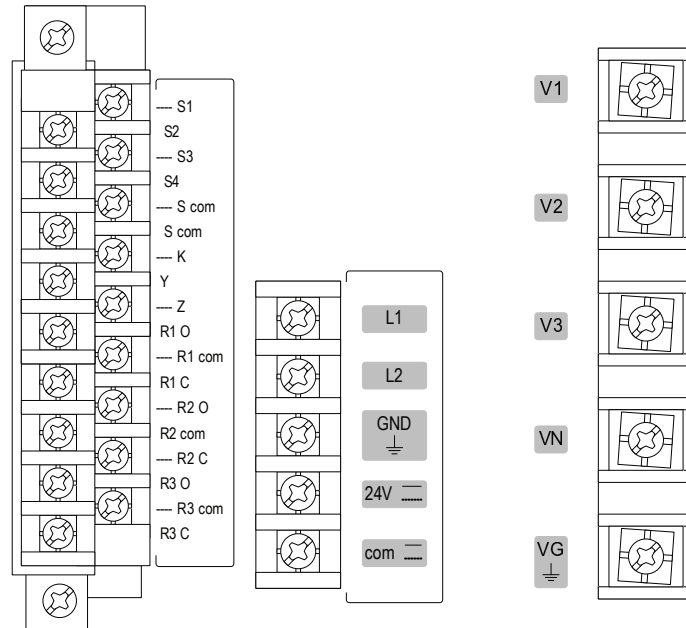
IMPORTANT The upper mounting slots are equipped with protective conductor terminals, that must make metal-to-metal contact with the grounded mounting panel.

Wire the PowerMonitor 5000 Unit

The PowerMonitor 5000 unit is equipped with screw terminals with pressure plates and finger protection for the control power, I/O wiring, and voltage connections. The I/O wiring block is removable.

Current sensing conductors are routed through openings in the power monitor housing.

Figure 2 - Terminal Block Layout



Wire Requirements

Wiring Category	Wire Type	Wire Size Range	Wires per Terminal	Recommended Torque
Control Power	Cu - 75 °C (167 °F)	0.25...2.5 mm ² (22...14 AWG)	2 max	1.27 N•m (11.24 lb•in)
Input/Output (I/O)		0.5...0.8 mm ² (20...18 AWG)		0.68 N•m (6 lb•in)
Voltage Sensing		0.75...2.5 mm ² (18...14 AWG)	1 max	1.50 N•m (13.3 lb•in)
Current Sensing		4 mm ² max (12 AWG max)		N/A

Grounding

This product is intended to be mounted to a well-grounded mounting surface, such as a metal panel. The upper mounting slots are equipped with protective conductor terminals, which must make metal-to-metal contact with the mounting panel. In solid-state systems, grounding helps limit the effects of noise due to electromagnetic interference (EMI).

Connect a 2.5 mm² (14 AWG) wire from the GND terminal of the PowerMonitor 5000 unit to the ground bus or other low-impedance earth ground prior to connecting the control power or any other connections.