



Kinetix 6000 Power Rail

(Catalog Numbers 2094-PRS1, -PRS2, -PRS3, -PRS4, -PRS5, -PRS6, -PRS7, -PRS8, and 2094-PR1, -PR2, -PR4, -PR6, -PR8)

Introduction

This publication provides installation instructions for the Allen-Bradley® Bulletin 2094 Power Rail. Use these instructions for mounting your power rail to the panel. The power rail provides power and control signals from the IAM (converter section) to adjacent AM (inverters). The Integrated Axis Module (IAM), Axis Module(s) (AM), Shunt Module (SM), and Slot Filler Module(s) mount to the power rail.

For further Kinetix® 6000 installation instructions refer to the *Kinetix 6000 Multi-Axis Servo Drive Installation Manual* (publication 2094-IN001x-EN-P).

Refer to the *System Design for Control of Electrical Noise Reference Manual* (publication GMC-RM001x-EN-P) for greater detail on reducing electrical noise when mounting your power rail.

Power Rails these Instructions Apply to

These installation instructions apply to the following Bulletin 2094 Power Rails:

Description	Catalog Number
Power Rail (Slim), 230V or 460V, 1 axis	2094-PRS1
Power Rail (Slim), 230V or 460V, 2 axis	2094-PRS2
Power Rail (Slim), 230V or 460V, 3 axis	2094-PRS3
Power Rail (Slim), 230V or 460V, 4 axis	2094-PRS4
Power Rail (Slim), 230V or 460V, 5 axis	2094-PRS5
Power Rail (Slim), 230V or 460V, 6 axis	2094-PRS6
Power Rail (Slim), 230V or 460V, 7 axis	2094-PRS7
Power Rail (Slim), 230V or 460V, 8 axis	2094-PRS8
Power Rail, 230V or 460V, 1 axis	2094-PR1
Power Rail, 230V or 460V, 2 axis	2094-PR2
Power Rail, 230V or 460V, 4 axis	2094-PR4
Power Rail, 230V or 460V, 6 axis	2094-PR6
Power Rail, 230V or 460V, 8 axis	2094-PR8

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Unpacking Your Power Rail

Remove all packing material, wedges, and braces from within and around the components. After unpacking, check the item(s) name plate catalog number against the purchase order.

Each Power Rail ships with:

- One braided 100 mm (3.9 in.) ground strap
- Protective boots (one covering each of the power rail connectors)

ATTENTION



To avoid damage to power rail connector pins during installation, do not remove the protective boots until the module for each slot is ready for mounting.

Dimensions

Mounting dimensions for the Kinetix 6000 Power Rail are shown in the figures beginning below.

Figure 1
2094-PRS1 (Slim)

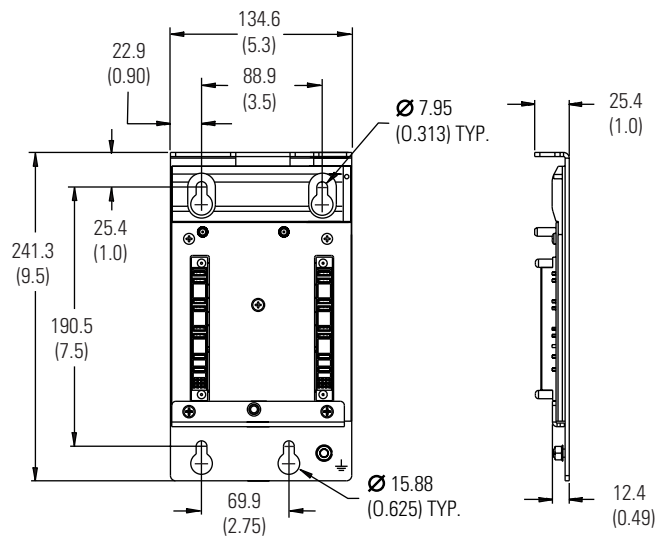
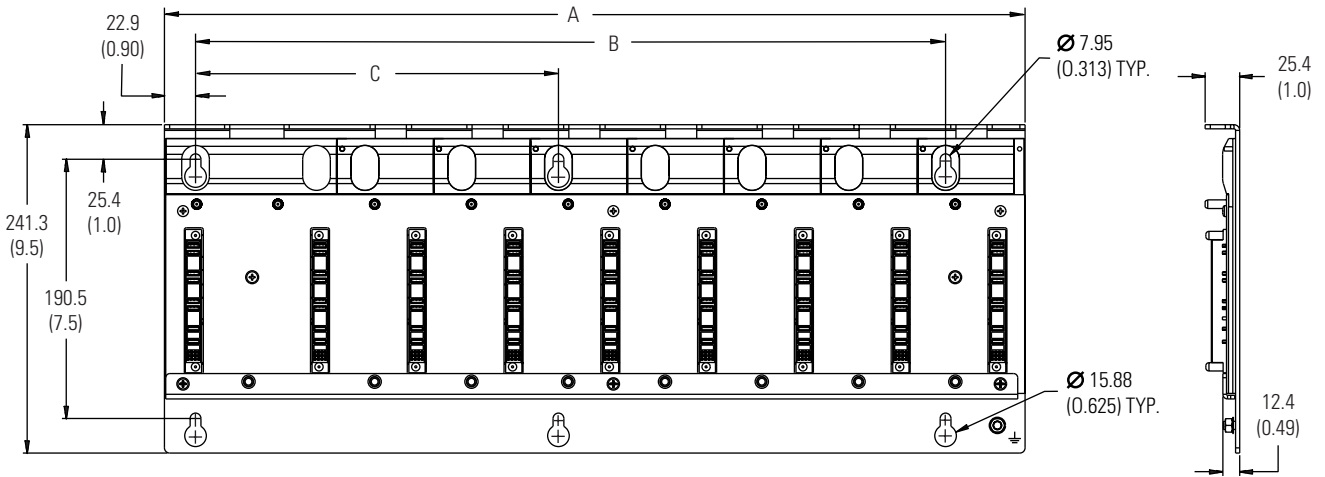


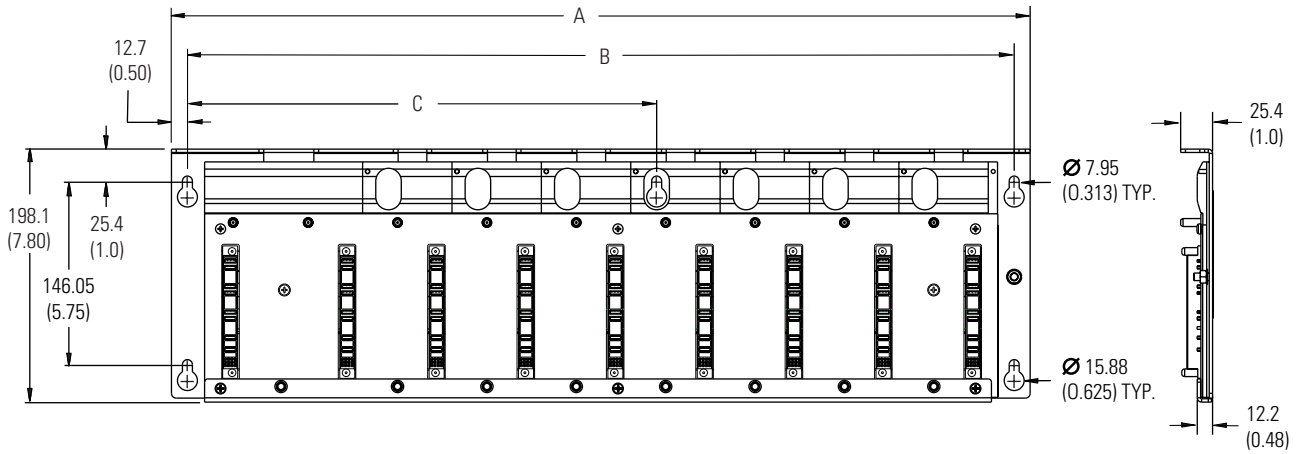
Figure 2
2094-PRS2, -PRS3, -PRS4, -PRS5, -PRS6, -PRS7, and -PRS8 (Slim)



Catalog Number	Description	Dimension A mm (in.)	Dimension B mm (in.)	Dimension C mm (in.)
2094-PRS2	2 axis power rail	205.7 (8.10)	124.5 (4.90)	N/A
2094-PRS3	3 axis power rail	276.9 (10.90)	195.6 (7.70)	N/A
2094-PRS4	4 axis power rail	348.0 (13.70)	266.7 (10.50)	N/A
2094-PRS5	5 axis power rail	419.1 (16.50)	337.8 (13.30)	195.6 (7.70)
2094-PRS6	6 axis power rail	490.2 (19.30)	408.9 (16.10)	195.6 (7.70)
2094-PRS7	7 axis power rail	561.3 (22.10)	480.1 (18.90)	266.7 (10.50)
2094-PRS8	8 axis power rail	632.5 (24.90)	551.2 (21.70)	266.7 (10.50)

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Figure 3
2094-PR1, -PR2, -PR4, -PR6, and -PR8



Catalog Number	Description	Dimension A mm (in.)	Dimension B mm (in.)	Dimension C mm (in.)
2094-PR1	1 axis power rail	185.42 (7.30)	160.02 (6.30)	N/A
2094-PR2	2 axis power rail	256.54 (10.10)	231.14 (9.10)	N/A
2094-PR4	4 axis power rail	398.78 (15.70)	373.38 (14.70)	N/A
2094-PR6	6 axis power rail	541.02 (21.30)	515.62 (20.30)	302.26 (11.90)
2094-PR8	8 axis power rail	683.26 (26.90)	657.86 (25.90)	373.38 (14.70)

Mounting Your Power Rail

These procedures assume you have prepared your panel and understand how to bond your system. For installation instructions regarding equipment and accessories not included here, refer to the instructions that came with those items.

The Kinetix 6000 power rail comes in lengths to support 1 integrated axis module and additional axis or shunt modules. The connector pins for each slot are covered by a protective boot. The boot is designed to protect the pins from damage and ensure that no foreign objects lodge between the pins during installation.

ATTENTION

To avoid damage to Power Rail connector pins during installation, do not remove the protective boots until the module for each slot is ready for mounting.

To mount your Kinetix 6000 power rail:

1. Layout the position for your power rail in the enclosure. Refer to the *Kinetix 6000 Multi-Axis Servo Drive Installation Manual* (publication 2094-IN001x-EN-P) for panel layout recommendations. Mounting hole dimensions for the power rail are shown in figures 1, 2, and 3.
2. Attach the power rail to the cabinet. The recommended mounting hardware is M6 metric (1/4x20) bolts. Refer to the *System Design for Control of Electrical Noise Reference Manual* (publication GMC-RM001x-EN-P) for HF bonding techniques.

IMPORTANT

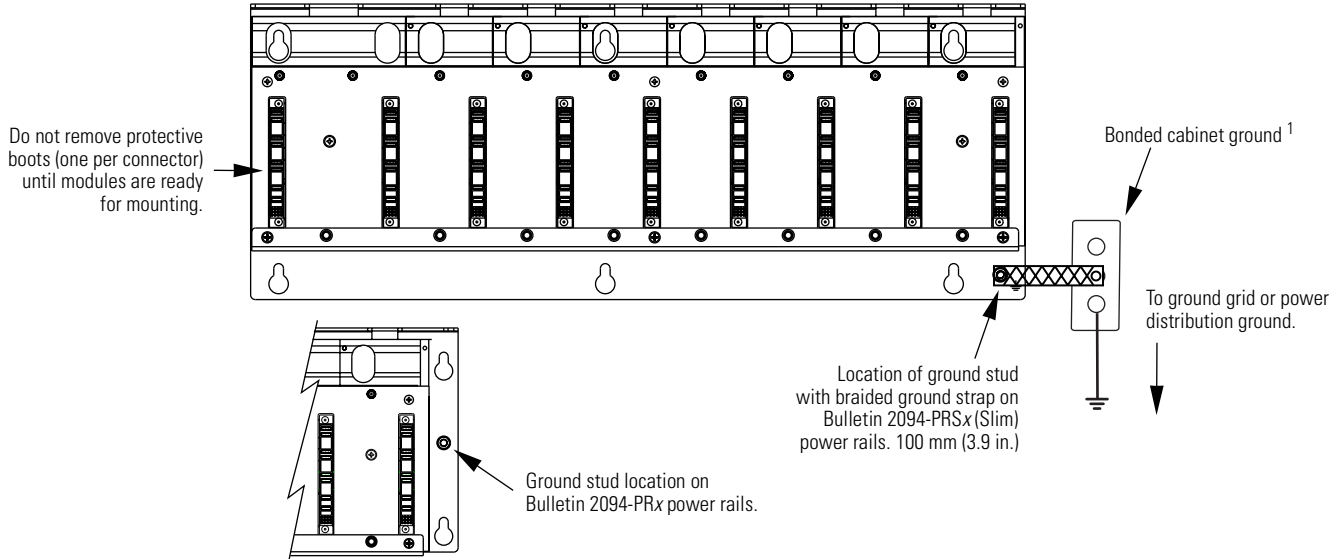
To improve the bond between the power rail and subpanel, construct your subpanel out of zinc plated (paint-free) steel.

3. Tighten all mounting fasteners.

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4. Attach braided grounding strap from right side grounding stud to bonded cabinet ground, as shown in Figure 4.

Figure 4
Attaching Braided Ground Strap



¹ For more information on bonding subpanels, refer to the *System Design for Control of Electrical Noise Reference Manual* (publication GMC-RM001x-EN-P).

Note: For removal and replacement procedures, refer to the *Kinetix 6000 Multi-Axis Servo Drive Integration Manual* (publication 2094-IN002x-EN-P).

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For more information refer to our web site: **www.ab.com/motion**

For Allen-Bradley Technical Support information refer to: www.ab.com/support or Tel: (1) 440.646.5800

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