

Allen-Bradley 2094-BC04-M03-S Manual

Brand	Allen-Bradley
Product Series	2097
Product Type	IAM 400 Volt Class

Description

Allen-Bradley 2094-BC04-M03-S Kinetix 6000 Integrated Axis Module, 400/460V AC (400V Class) Input Power, 28kW Converter, 28A Inverter, Safety Equipped (Safe Torque Off functionality)

The Allen-Bradley 2094-BC04-M03-S is a n Integrated Axis Power Modul. This module has input power range of 360-480V, with converter rating of 28 kW and 30 A inverter rating. This module has an output power rating of 50-135 Watts

Technical specifications for 2094-BC04-M03-S

Part Number/Catalog No. 2094-BC04-M03-S

Brand Allen-Bradley

Manufacturer Rockwell Automation

Product Description Integrated Axis Module

Operating Temperature 32-122 F (0-50 C)

Power Dissipation 94-255 Watts

Converter Section Output 28 kW

Inverter Section Output Current 30 A

Input Voltage Range 400/460VAC

Bandwidth Velocity Loop: 500 Hz Current Loop: 1300 Hz

PWM Frequency 4 kHz

Internal Shunt Continuous Power 200W

Internal Shunt Peak Power 22.5 kW

Module Location Leftmost of the Power Rail

Module Type IAM 400 Volt Class

AC Input Voltage 324-528 Volts rms 3 Phase (360-480 Volts nom)

AC Input Frequency 47-63 Hertz

AC Input Current (nom rms) 44.0 Amperes

AC Input Current (Max Inrush 0-peak) 31.1 Amperes

DC Input Voltage (Common Bus Follower) 458-747 Volts

DC Input Current (Common Bus Follower) 41.5 Amperes

Internal Shunt (Continuous Power) 200 Watts

Internal Shunt (Peak Power) 22.5 Kilowatts

Internal Shunt Resistor 28.75 Ohms

Efficiency 97%

Weight 21.1 lbs (9.60 kg)

The 2094-BC04-M03-S is a Kinetix 6000 Drive system module. This component is manufactured by Allen-Bradley that is designed to function as an Integrated Axis Module for inverter. This module has an output power rating of 53 Watts at 20% loading, 72 Watts at 40% loading, 93 Watts at 60% loading, 116 Watts at 80% loading and 142 Watts at 100% loading.

This module has a converter and inverter section. The converter section has an output rating of 28kW and 30 Ampere for inverter. This module is also referred to as an AM power module. It ships with a wiring plug connector set for motor power (MP) and motor/resistive brake power (BC). Connector kits Input and Output interfaces, safety, and auxiliary feedback signals with catalog

numbers 2090-K6CK-D44M and 2090-K6CK-D44S0 and motor feedback with catalog number 2090-K6CK-D15M are not provided with this module.

Ground jumper settings is not always required when using this module. However, ungrounded or high impedance power configurations require ground jumper settings. To set ground jumper settings, the Integrated Access Module (IAM) is removed from the power rail, opening the power module and modifying the jumper position to the appropriate location. By default, the module is set to grounded position wherein P16 and P17 are shorted while the ungrounded configuration has P18 and P19 terminals shorted.

When mounting the 2094-BC04-M03-S, The integrated axis module is mounted first, then the IPIM, Axis module, Shunt Module and Slot filler module. The IAM must be installed at the leftmost side of the power rail. Other modules are positioned to the right of the IAM. This module is designed to provide a Kinetix Integrated Motion solution for your drive, motor, and actuator applications. The 2094-BC04-M03-S has a safe torque-off feature with 200V or 400V-class AC input power. It contains an inverter and a converter section. The peak enhancement feature is available on 400V-class (Series B and C) 2094-BC04-M03-S IAM modules. The 2094-BC04-M03-S drive can connect to a ground jumper. The 2094-BC04-M03-S' power dissipation (measured in Watts) varies depending on the percentage of its power output at a given time. For example, the 2094-BC04-M03-S' power dissipation is 94 W at 20% of its rated power output, and the dissipation is 255 W at 100% of the drive's rated power output. The 2094-BC04-M03-S comes in 3 series (A, B, and C), and these series have different peak current ratings. The Series A 2094-BC04-M03-S drive has a 150% peak current rating, while the Series B and C 2094-BC04-M03-S drive's have 250% peak current ratings.

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