

Allen-Bradley 22C-D012N103 Manual

Brand	Allen-Bradley
Product Series	22 Powerflex
Product Type	Frame: C

Description

The Allen-Bradley 22C-D012N103 PowerFlex 400 adjustable frequency AC drive for Fan and Pump applications. This drive features an input voltage range of 380-480VAC, 3-phase and delivers output voltage of 0-460VAC, 3-Phase, output current of 12.0 A and output Power of 5.5 kW (7.5 HP). This drive is capable of sinusoidal Pulse Width Modulation (PWM) and Volts / Hertz control methods. It Technical specifications for 22C-D012N103

Manufacturer Rockwell Automation

Input Voltage 380-480VAC

Part Number/Catalog No. 22C-D012N103

Brand Allen-Bradley

Product Family: PowerFlex 400 for Fan and Pump applications

Input Phase: 3-Phase

Input Current: 14.2 A

Output Voltage: 0-460VAC

Output Current: 12.0 A

Output Power: 5.5 kW (7.5 HP)

I/O: Discrete Inputs: Seven (7) Sink / Source Discrete Outputs: One (1) Open Output; Two (2) Form C Contacts Analog Input: Two (2)

Analog Input 0-10VDC; 0- 20mA Analog Output: Two (2) Analog Input 0-10VDC; 0- 20mA

Installation: Panel Mount

Enclosure Rating: IP20 / NEMA UL Open Type

Frame: C

Control Method: Sinusoidal PWM; Volts / Hertz

Built-in communication port: RS485

Optional communication protocols: BacNet; LonWorks; ProfiBus; Ethernet; DeviceNet; ControlNet

Product Line Powerflex 400

Drive Type Fan & Pump

Horsepower 7.5

Phase Three-Phase

Enclosure Panel Mount - IP20, NEMA/UL Type Open

Amperage 12 Amps Description

The Allen-Bradley 22C-D012N103 is a PowerFlex 400 Adjustable Frequency AC drive. This drive model is specifically suited for Fan and Pump applications. Typical applications where this drive model is compatible for installation are Water and Waste water applications, Heating, Ventilation and Airconditioning (HVAC) application and other similar industrial applications. This device is composed majority of electronic devices, enclosed within an enclosure rated IP20, NEMA/UL Open Type.

The 22C-D012N103 and the entire Adjustable Frequency AC Drive product family is generally termed as Variable Frequency Drive (VFD), Variable Speed Drive (VSD) or Adjustable Speed Drive. All these terms refer to the same device that performs AC motor speed control. The 22C-D012N103 is not limited to speed control as it is equally capable of implementing motor starting, stopping and idle protective actions. It also has a programmable ramping, acceleration, deceleration parameters that not only protect the motor but increases operation efficiency and significantly lower energy consumption.

The is operated by supplying 380-480VAC, 3-phase to the input voltage terminals. It delivers output parameters such as 0-460VAC, 3-Phase, output current of 12.0 A and output Power of 5.5 kW (7.5 HP). This drive is a Frame C that supports direct Panel Mounting. It has embedded motor protection settings of 810V DC bus voltage (equivalent to 575V AC incoming line) as Bus Overvoltage Trip; 390V DC bus voltage (equivalent to 275V AC incoming line) for Bus undervoltage trip. The drive has a class 10 motor overload protection according to NEC article 430 and motor over-temperature protection according to NEC article 430.126 (A) (2). UL 508C File 29572. It is also capable of detecting Overcurrent, Ground fault trip, and Short circuit trip.

Meanwhile, the minimum enclosure volume should be 5098 cubic inches. The power dissipation is 200 IP20 open watts. For packaging and protection, the Allen-Bradley AC drive uses the NEMA/UL open type enclosure which allows for easy IP20 panel mounting. The dimensions add to the space-saving design of the gadget. The drive dimensions measure 260 x 130 x 180 mm. You can use this 12-A Allen-Bradley drive for the safe operation and speed control of the fans, pumps, and other applications with a horsepower rating of 7.5 HP, equivalent to 5.5 kW. The 22C-D012N103, like other members of the Allen-Bradley PowerFlex 400 AC Drive series, comes with a multitude of high-end specifications which allow for seamless system integration and functioning. The cost-effectiveness, flexibility, and ease of use make it an ideal choice for applications involving variable torque.

Technical Specifications

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