

Adjustable Frequency Drives

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Product Description

Cutler-Hammer® NFX9000 adjustable frequency AC Drives from Eaton’s electrical business are designed to provide adjustable speed control of three-phase motors. These micro-processor-based drives have standard features that can be programmed to tailor the drive’s performance to suit a wide variety of application requirements.

The NFX9000 volts-per-hertz product line utilizes a 32-bit microprocessor and insulated gate bipolar transistors (IGBTs) which provide quiet motor operation, high motor efficiency and smooth low speed performance. The size and simplicity of the NFX9000 make it ideal for hassle free installation where size is a primary concern.

Models rated at 240 volts, single- or three-phase, 50/60 Hz are available in sizes ranging from 1/4 to 2 hp. Models rated at 115 volts, single-phase, 50/60 Hz are available in the 1/4 to 1/2 hp size range.

The standard drive includes a digital display, operating and programming keys on the keypad.

The display provides drive monitoring as well as adjustment and diagnostic information. The keys are utilized for digital adjustment and programming of the drive as well as for operator control. Separate terminal blocks for control and power wiring are provided for customer connections. The drives feature RS-485 serial communications.

Features and Benefits

Table 40-1. Features and Benefits

| Feature | Customer Benefit |
|--|---|
| V/Hz Control. | Provides 150% starting torque and advanced low speed control. |
| Clearly laid out and easy to understand keypad with 4-character LED display, 4 status indicating LEDs, speed potentiometer, and 5 function keys. | Most informative operator’s interface in this class of VFD, provided as standard. All parameters, diagnostic information and metering values are displayed with a bright 4-character LED display. |
| 1 analog input 4 programmable, intelligent digital inputs 1 programmable relay | Provide enhanced application flexibility. |
| Serial communication port (RS-485). | Direct connection to serial communications networks. |
| Single-phase or three-phase input capability on 115/240V AC rated units. | Operate three-phase motor with single-phase supply. |

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Model NFX9000