

Item # CIMR-ZU4A0014FAA, Z1000 Drives

The Z1000 variable speed drive is designed for building automation applications such as fans, pumps, and cooling towers through 500HP. The Z1000 features an easy-to-read LCD keypad that provides Hand-Off-Auto interface and a real time clock.



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Specifications

Type	HVAC Drives
Input Voltage	480 V
Power Rating	10 hp 7.46 kW
Ambient Operating Temperature	-10 to 40 °C 14 to 104 °F
Output Frequency	0.01 to 240 Hz
Digital Input	Multi-Function Programmable Digital Inputs (24Vdc): 7
Analog Input	Multi-Function Programmable Analog Inputs (0-10VDC or 4-20mA): 2
Relay Output	Fault Relay Output (Form C - 2 Amps at 250Vac max): 1, Multi-Function Programmable Relay Output (Form A - 2 Amps at 250Vac max): 3
Analog Output	Multi-Function Programmable Analog Outputs (0-10Vdc or 4-20mA): 2
Network Communications	Built-in BACnet, RS485/422 - Programmable up to 76.8 kbps Optional: LonWorks, Metasys / APOGEE FLN

Motor Construction	Squirrel Cage Induction, Interior Permanent Magnet
Drive Center to Top	8.82 in
Overload Capacity	110% for 60 seconds, 175% instantaneous
Control Methods	V/Hz Control Open Loop Vector Control for Permanent Magnet motors
Enclosures	NEMA Type 1 / IP20 : 3 - 100 HP 208V and 3 - 250 HP 480V Open Type / IP00 : 125 - 150 HP 208V and 300 - 500 HP 480V
Standard I/O	24 Vdc, 150 mA Transducer or Transmitter Power Supply for customer use: 1
Global Certification	UL, CSA, CE, RoHS
Weight	16.1 lb

Dimensions

Total Length	9.17 in
Total Width	4.88 in
Total Height	17.60 in

Feature Highlights

Harmonic Mitigation

- Built-in 5% line impedance for input harmonic reduction.

Noise Filter

- On board EMI/RFI filter complies with IEC 61800-3 restricted distribution for first environment.

Serial Communications

- Embedded BACnet communications (BTL Certified), along with Modbus/Memobus, Metasys and Apogee FLN.

Ratings

- Plenum Rated (UL 1995). Seismic Rated (IBC 2006 - Certification 12/2011). Made with RoHS compliant materials.

Internal Real-Time Clock

- Time and date stamping for events, along with timer controls for starting stopping and speed changes without the need for external controls.

PI Feature

- Maintains a set point for closed loop control of fans and pumps for pressure, flow or temperature regulation and eliminates the need for a closed loop output signal from a BAS. Independent PI to control an external device in the system.

LCD Operator

- 5-Line 16 character alpha-numeric, easy to read and understand display, with Hand-Off-Auto functions.

Carrier Frequency

- 5 kHz carrier frequency with dynamic noise control for quiet motor operation.

Application Macros

- Choose from pre-configured set up macros to match the application for quick and easy set up.

Sealed Heatsink

- Allows for drive to be mounted in a NEMA 12 enclosure with heatsink external.