

Control, Flexibility and Performance



1336 PLUS II AC Drive

Power Range

The 1336 PLUS II drive is available in packages capable of delivering 0.37 to 448 kW (0.5-600 HP) in three voltage ranges: 200-240V, 380-480V and 500-600V. A smaller drive is now available for the 11-15 kW (15-20 HP) 460V and 5.5-15 kW (7.5-20 HP) 575V ratings.

Product Highlights

- Auto-tuning for **SENSORLESS VECTOR** Control
- Volts/Hertz operation available through parameter selection
- Easy-to-program parameters organized in a group and element structure
- Condensed packaging allows for easy mounting, installation and wiring
- Real-time status, fault and alarm monitoring through Human Interface Module or communication options
- Proactive current limit for high performance and application flexibility
- At temperature provides adaptive control for heatsink temperature conditions
- Flexible analog input/output options with isolation
- Auto economizer for energy savings
- On-board status LEDs (Fault, Stop, Run, Power)
- Multiple language Human Interface Module

Communications

The 1336 PLUS II drive is designed with integrated communications in mind. This drive allows for snap-in communication modules in all drive ratings and can also connect to networks via external SCANport™ communication modules. Key communication options include:

- ControlNet™
- DriveTools™ SP Software
- RS232/422/485 DF1, DH-485
- SLC 500™
- DeviceNet™
- Flex™ I/O
- Remote I/O
- Other



1336 PLUS II

The 1336 PLUS II AC drive sets the standard for general purpose, adjustable frequency AC drives. Offering a superior combination of reliability and state-of-the-art microprocessor technology, the 1336 PLUS II drive is the solution for the majority of applications that require precise control of 3 phase AC induction motors.



Application Logic

- Software & Hardware Configurable Inputs/Outputs
- S-Curve Acceleration & Deceleration
- Process PI Control
- Slip Compensation & Droop
- Speed Sensitive Electronic Overload Investigated by UL to Meet NEC Article 430
- Single Drop PLC Interface Support
- Step Logic

Operator Interface

- Programming and/or Operation
- Scalable Process Display
- 2-Line x 16-Character LCD
- Multi-Language Support

Drive Protection

- Under and Over Voltage
- Overcurrent
- Phase Loss Detection
- Output Phase-to-Phase & Phase-to-Ground Shorts
- Input Transient

Input Specifications

Three-Phase Voltage	200-240V AC/380-480V AC/500-600V AC ±10%
Frequency	47-63 Hz
Power Ride Through	15mS Minimum
Control Ride Through	2.0 Sec (Typical)

Output Specifications

Voltage	0 to 100% of rated Voltage
Frequency Range	0-400 Hz
Frequency Resolution	0.003% of Maximum Frequency
Continuous Current	To 100% of Rated Current
Intermittent Current	To 150% for 60 Seconds
Instantaneous Current Trip	At 220%-330%
Speed Regulation	0.1% with Encoder Option, 0.5% with Slip Compensation
Starting Torque	250% of Rated Torque
Peak Torque	260% of Rated Torque
Dynamic Response	12 Radians

Drive Adjustments

Accel/Decel	3600.0 Seconds in 0.01 Sec Increments, Linear or S-Curve
Line Loss Recovery	4 Programmable Options
Output Frequency	0 to 120 Hz Minimum; 40 to 400 Maximum
Stop Mode	Coast/Ramp/Brake/Ramp to Hold
Adjustable Current Limit	20 to 160%
Motor Overload	20 to 115%
Motor Control	Sensorless Vector; V/Hz
Process PI Loop	Prop. & Int. Gains, Output Limits, Preloads
Speed Regulation Mode	Open Loop, Encoder Feedback, Slip Compensation, Droop, Process PI
7 Preset Frequencies; 3 Skip Frequencies	0 to 400 Hz
Flying Start	4 Methods Plus Direction
Smooth Torque at Low Speed	120:1 Speed Range

Ambient Operating Temperatures

Without Enclosure (IP00: Open Style)	0° to 50° C
With Enclosure (IP20; NEMA Type 1), (IP54; NEMA Type 12), (IP65, NEMA Type 4)	0° to 40° C

Dimensions - mm (inches) (380-480V Frames Typ.) IP20 (NEMA Type 1)

	Height	Width	Depth
.37-3.7kW (0.5-5 HP)	290.0 (11.42)	215.9 (8.50)	207.0 (8.15)
5.5-15kW (7.5-20 HP)	350.0 (13.78)	260.0 (10.24)	212.0 (8.35)
11-22kW (15-30 HP)	476.3 (18.75)	276.4 (10.88)	219.7 (8.86)
30-45kW (40-60HP)	701.0 (27.60)	301.8 (11.88)	225.0 (8.86)
45-93kW (60-125HP)	1240.0 (48.82)	381.5 (15.02)	270.8 (10.66)
112-187kW (150-250HP)	1498.6 (59.00)	511.0 (20.12)	424.4 (16.71)
187-336kW (250-450HP)	2286.0 (90.00)	762.1 (30.00)	635.0 (25.00)
373-448kW (500-600HP)	2324.1 (91.50)	762.0 (30.00)	635.0 (25.00)

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