

# High Performance AC drive for the Fibers Industry



## 1336 SPIDER AC Drive

### Output Ratings

The 1336 SPIDER AC drive is rated in terms of peak output amps for use on synchronous reluctance and permanent magnet synchronous motors, and is available in peak (synchronizing) current ratings from 21.6A to 60.0A at 200-240V, and from 9.9A to 33.0A at 380V-480V.

### Product Highlights

- Bookshelf-style design for high density panel mounting
- Two configurations available – Stand-alone (full I/O) or PLC control (limited I/O)
- Shared bus and common bus configuration is standard
- 500ms low voltage ride-through allows continuous operation down to 50% of nominal AC line voltage
- Built-in dynamic braking IGBT – just add external resistors
- Infinite DC braking time
- Advanced Fibers and Textiles features for easy integration into automated processes and machinery

### Communications Options

The 1336 SPIDER is designed with integrated communications in mind.

Key communication options for internal mounting include:

- DeviceNet™
- Remote I/O
- RS232/422/485 DF1, DH-485
- Other

External communication options include:

- ControlNet™
- SLC 500™
- Flex™ I/O
- Other



## 1336 SPIDER



*The 1336 SPIDER AC drive combines an optimal package design with internal communication options and advanced features for the Fibers Industry.*



**Application Logic  
for Fibers Applications**

- Programmable inertia ride-through after line-loss detection
- Built-in traverse function
- Synchronized speed change functionality
- Synchronous motor “sync loss” detection and recovery
- Phase-locked loop function allows speed command to lock onto a pulse train input

**Operator Interface**

- Hand-held HIM available for programming and diagnostics
- Multi-language support

**Drive Protection**

- Overvoltage and Programmable Undervoltage
- Hardware Current Limit and Heatsink Overtemperature
- Output Phase-to-Phase and Phase-to-Ground Short Circuit
- AC line Input Transient Suppression

**Drive Adjustments**

- |                               |  |
|-------------------------------|--|
| Accel/Decel                   | 0-600 Seconds in 0.01 Second Increments, Linear or S-Curve |
| Line Loss Recovery            | 4 Programmable Options                                     |
| Stop Mode                     | Coast/Ramp/Brake/Ramp to Hold                              |
| Motor Control                 | Sensorless Vector; V/Hz                                    |
| Speed Regulation Mode         | Open Loop, Process PI                                      |
| Traverse                      | Traverse Inc., Traverse Dec., Max. Traverse, P Jump        |
| Synchronous Speed Change      | Sync Time  |
| Synchronous Motor “Sync Loss” | Sync Loss Gain, Sync Loss Time, Sync Loss Comp             |

**Ambient Operating  
Temperatures**

- |                       |             |
|-----------------------|-------------|
| IP 20; NEMA Open Type | 0° to 50° C |
|-----------------------|-------------|

**Input Specifications**

- |                         |  |
|-------------------------|--|
| Three-Phase Voltage     | +10% of maximum, -50% of nominal (at reduced output power) |
| Frequency               | 47 to 63 Hz  |
| Power Loss Ride Through | 30ms at full load  |
| Control Ride Through    | 2.5 seconds minimum (not running)                          |

**Output Specifications  
and Dimensions**

- |                      |  |
|----------------------|--|
| Voltage              | 0 to rated voltage   |
| Frequency Range      | 0 to 400 Hz  |
| Frequency Accuracy   | ± 0.01% of set output frequency from digital setpoint                      |
| Speed Regulation     | 0.01% (synchronous motor)<br>0.5% with slip compensation (induction motor) |
| Dynamic Response     | 12 Radians   |
| Time at Peak Current | 20 Seconds Maximum every 10 Minutes  |
| Current              | Varies by catalog number – see table below                                 |

| Drive Catalog Number – 1336Z- | Peak Output Amps | Continuous Output Amps | Height mm (inches) | Width mm (inches) | Depth mm (inches) |
|-------------------------------|------------------|------------------------|--------------------|-------------------|-------------------|
| <b>200-240V AC</b>            |                  |                        |                    |                   |                   |
| x A022                        | 21.6             | 9.0                    | 442.0 (17.4)       | 95.0 (3.74)       | 200.0 (7.87)      |
| x A036                        | 36.0             | 15.0                   | 442.0 (17.4)       | 95.0 (3.74)       | 200.0 (7.87)      |
| x A060                        | 60.0             | 30.0                   | 453.0 (17.83)      | 195.0 (7.68)      | 200.0 (7.87)      |
| <b>380-480V AC</b>            |                  |                        |                    |                   |                   |
| x B010                        | 9.9              | 8.5                    | 442.0 (17.4)       | 95.0 (3.74)       | 200.0 (7.87)      |
| x B017                        | 16.5             | 10.0                   | 442.0 (17.4)       | 95.0 (3.74)       | 200.0 (7.87)      |
| x B033                        | 33.0             | 17.0                   | 453.0 (17.83)      | 195.0 (7.68)      | 200.0 (7.87)      |

Note: Current Ratings in 50°C ambient with 2kHz carrier

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