Drive Application Software

Center Winder / Unwind Application Module

For center driven variable diameter process line applications requiring Loadcell, Dancer, or Open Loop web tension control, the Center Winder/Unwind application module provides easy to use, cost effective and flexible control. When combined with the PowerFlex™ 700S AC drive and DriveLogix™, this performance package will help solve your production needs.

Application

Center Winder & Unwind applications are some of the most challenging in process line applications. Drive Application Software incorporates the complex features and functions required for proper web tension control from core to full roll and from full roll to core. The application is designed with RSLogix 5000™ and operates in the Logix™ environment. This provides the user with a familiar and open programming environment in which they can add machine specific programming if necessary. All Application Modules operate exclusively in the DriveLogix environment.

General Features

- RSLogix 5000 programming environment
- Programmed with Ladder Logic and Function Block languages
- Factory tested, supported, & documented
- Programming tool includes flexible serial interface and standard RS232 connectivity

Requirements

- PowerFlex 700S AC drive with DriveLogix
- Working knowledge of center winder applications
- RSLogix 5000 software tool
- Working knowledge of RSLogix 5000
- OEM or Systems Integrator - Drive Application Software license
Standard Features

- Standard 32bit process line command word
- Includes all command functions
- Includes all control selections
- Diameter Calculation
  - Up to 20:1 build up/down ratio
  - Variable update rate
  - 3 diameter presets
  - Manual increase & decrease option
  - Analog diameter preset option
  - Diameter hold option
  - Power loss diameter memory
  - Core speed match adjust
- Tension Control (Loadcell, Dancer, Torque)
  - Closed Loop tension control, speed or torque trim
  - Closed Loop dancer control, speed or torque trim
  - Open Loop torque control
  - Tension/Torque setpoint from analog input or communications
  - Dancer loading output
  - Automatic dancer centering
  - Stall tension
  - Linear taper tension
  - Dynamic switching between closed loop and open loop tension control
- Inertia and Loss Compensation
  - Frictional and Windage loss adjustment
  - Inertia compensation
  - Dynamic inertia scaling for diameter changes
- Roll Change Support
  - Core speed match adjust
  - Torque memory – Boost and Knife cut boost

Optional Features

- Communications
  - ControlNet™
  - EtherNet/IP
  - DeviceNet™
  - Remote I/O
- I/O Expansions
  - DriveLogix supports
    - 1 rail of Flex™ I/O
  - SynchLink™ - included in all PowerFlex 700S drives
  - Fiber Optic drive to drive communications

Technical Support

Drive Application Software support is available through Drives Technical Support

- Tel: (1) 262.512.8176, Fax: (1) 262.512.2222
- Email: support@drives.ra.rockwell.com
- Online: www.ab.com/support/abdrives

Drive Engineering Services

For advanced application expertise and support, contact Local Drives Solutions or Drive Systems

- Support Plus
- Software Modifications & Integration
- Start-Up and Commissioning
- Packaged Hardware & Software Solutions
- Complete “Turn Key” Systems
- Field Modernization & Upgrades