Product Overview

Flexible Packaging and Mounting

IP20, NEMA Type 1 – For conventional mounting inside or outside a control cabinet. Conduit plate is vertically removable for easy installation and replacement without disturbing conduit.

IP66, NEMA Type 4X/12 (Indoor Use) – For mounting directly in the production environment. Listed by UL to resist dust, dirt, etc. and to survive high pressure water spray. Also certified by NSF to assure conformity with international food equipment standards.

Flange Type – For mounting heatsink through back of an enclosure, thus removing a large portion of the heat inside a cabinet. The backside is rated IP66 and UL (NEMA) Type 4X/12 for both indoor and outdoor use.

Space Saving Hardware Features

Zero Stacking™ - Drives can be mounted directly next to one another with no reduction of ambient temperature rating (50° C).

Integral EMC Filtering provides a compact, all-in-one package solution for meeting EMC requirements, including CE in Europe.

Integral Dynamic Brake Transistor delivers a cost-effective means of switching regenerative energy without costly external chopper circuits.

Internal Dynamic Brake Resistor requires no extra panel space, and supplies a large amount of braking torque for short periods.

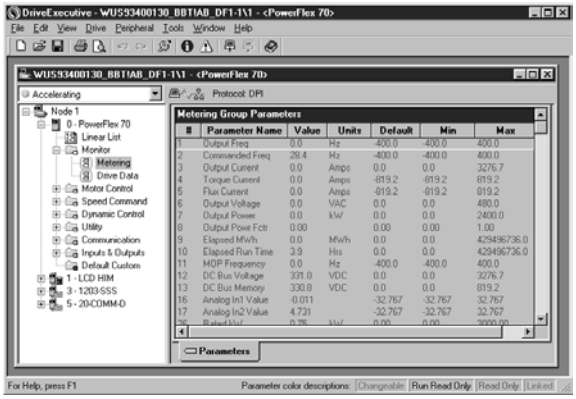
Easy to Use Human Interface Tools

PowerFlex 7-Class LCD Human Interface Modules provide:

- Large and easy to read 7 line backlit display
- Variety of languages (English, French, German, Italian, Spanish, Portuguese, Dutch)
- Alternate function keys for shortcuts to common tasks
- “Calculator-like” number pad for fast and easy data entry (Full Numeric version only)
- Control keys for local start, stop, speed, and direction
- Remote versions for panel mount applications

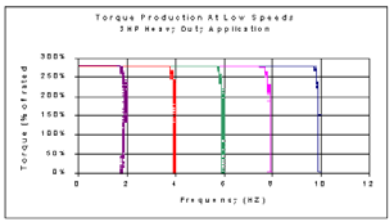
Family of PC based configuration tools:

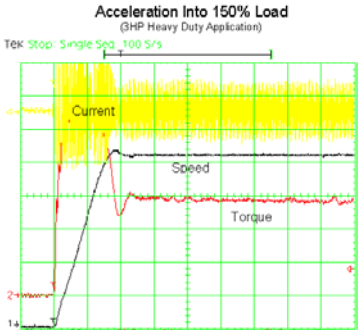
- **DriveExplorer and DriveExplorer Lite**: A simple and flexible “On-line” tool for monitoring and configuration while connected to a drive.
- **DriveTools™ SP**: A suite of software tools which provide an intuitive means for programming, troubleshooting and maintaining Allen-Bradley AC and DC drives.



Control and Performance Features

Standard Control





Sensorless Vector Control develops high torque over a wide speed range, and adapts to individual motor characteristics.

Fast acting **Current Limit** and **Bus Voltage Regulation** result in maximum acceleration and deceleration without tripping.

Flying Start delivers smooth connection into rotating loads, regardless of commanded direction, without the need for any speed feedback device.

PI Control can eliminate the need for a separate process loop controller.

Inertia Ride-Through offers tripless operation during a prolonged power outage by using the rotating energy stored in high inertia, low friction loads.

User Sets, allowing up to three complete sets of parameter data, can be individually loaded for different batch processes.

Slip compensation delivers minimum of 0.5% open loop speed regulation across a wide speed range, eliminating the need for speed feedback devices in some applications.

Enhanced Control

All the features of Standard Control, plus:

Available Now:

Safe Off Option, the first offering available within the DriveGuard™ series of safety solutions, prevents a drive from delivering rotational energy to motors by integrating a safety circuit with the drive's power switching signals. This solution meets EN 954-1, Category 3.

Dedicated Enable Input is provided by jumper removal for systems requiring absolute drive disable regardless of pacemotor changes.

4-20mA Output instead of 0-10V can be selected for the analog outputs.

PTC Analog Input provides accurate motor thermal protection when using a motor temperature feedback device.

Plus More (see user manual for complete list of additional features)

Coming Fall 2004:

Encoder Option provides closed loop speed regulation.

Droop Control for load sharing applications.

Sleep/Wake Control for analog control of start and stop.

Torque Input for applications requiring direct control of torque rather than speed.

Plus More (contact factory for complete list of features planned for this release)