



# PowerFlex® 70 & 700 Adjustable Frequency AC Drive Packages for Fan and Pump Applications

# **Product Description**

The Allen-Bradley PowerFlex Drive Packages for Fan and Pump applications are built upon the PowerFlex 70 and 700 drive platform. The drive packages are designed for easy installation in mechanical fan and pump systems and offer a dedicated internal communication option allowing for seamless system integration.

### **Features**

- Selectable **PWM Carrier Frequency** for system acoustical tuning.
- "S" Curve acceleration and deceleration for smooth speed transitioning of high inertia loads.
- Three Frequency Avoidance Bands with adjustable bandwidth to lock out mechanical resonance points.
- Restart Into Rotating Loads without tripping with selectable speed search sequencing.
- Adjustable Auto Restart (number of restarts and time delay between attempts are selectable).
- A process PI Function allows simple process control without the need for additional hardware.
- Indication LED's on the drive for Run/Stop/Fault and communication status.
- **S.M.A.R.T. Start** and detailed assisted start-up routines in the LCD HIM allows for easy configuring and tuning of the drive.

# Communication

- Optional internal communication modules allow connectivity to Rockwell Automation NetLinx™ open architecture based networks and other building automation networks including: Metasys N2, Siemens Building Technologies P1, Modbus RTU and LonWorks Protocols.
- DriveExplorer<sup>™</sup> and DriveTools<sup>™</sup> SP Software can be used to easily program, monitor and control the drives.

# **Human Interface Module**

- 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



### **Package Features**

- Available styles include:
  - Main Input Disconnect
  - 3 Contactor Full Feature Bypass with Disconnect
  - 3 Contactor Basic Bypass with Disconnect
- NEMA 1 wall mount enclosure.
- Complete assembly is UL508C listed.
- 35,000 to 100,000 AIC rating for connection to high capacity power line feeds.
- Bypass Control and Status Display provides quick visual indication of drive/bypass status through LED's and schematic diagram (standard on 3 Contactor Full Feature Bypass with Disconnect package)
- Dedicated Purge Input for connection to fire and life safety system (standard on 3 Contactor Full Feature Bypass with Disconnect package).
- Special options such as input line reactor are available.



Ratings	Main Input Disconnect	3 Contactor Full Feature Bypass with Disconnect	3 Contactor Basic Bypass with Disconnect
208V AC	1-15 HP	1-15 HP	Not Available
480V AC	1-200 HP	1-150 HP	1-100 HP
600V AC	3-150 HP	3-150 HP	Not Available

# **Packaging Styles**

# **Main Input Disconnect**

- 1 Door Interlocked Main Input Disconnect
- 2 Main Input Disconnect Handle



# 3 Contactor Full Feature Bypass with Disconnect

- Bypass Control and Status Display
- Bypass Control and Status Display Board
- 3 Drive Main Input Contactor
- 4 Drive Motor Output Contactor
- **5** Drive Bypass Contactor
- 6 Bypass Motor Overload Relay
- 7 115V AC Control Transformer
- **13** Field Control Wiring Terminal Block
- 9 Door Interlocked Main Input Disconnect
- 10 Main Input Disconnect Handle



# 3 Contactor Basic Bypass with Disconnect

- Drive Main Input Contactor
- 2 Drive Motor Output Contactor
- Orive Bypass Contactor
- 4 Drive Enable Relay
- 5 Door Interlocked Main Input Disconnect
- 6 Drive/Test/Off/Bypass Selector Switch
- Main Input Disconnect Handle



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