PowerFlex Low Voltage Drives Selection Guide

Allen-Bradley

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Rockwell Automation

PowerFlex Low Voltage Drives

Selection Guide

PowerFlex Drives

PowerFlex Drives Focus on the Benefits that Make a Difference for Your Bottom Line

The Allen-Bradley® PowerFlex family of AC and DC drives has been developed to provide the benefits that matter most to you. Our focus on delivering a flexible portfolio designed to keep you connected to your operations and ultimately help improve productivity, helps you achieve the positive impact you need to be successful.

Flexibility allows PowerFlex drives to meet a wide variety of application requirements. By offering a broad range of motor control and power solutions, PowerFlex drives are able to handle the simplest to the most demanding applications. The family also features a wide selection of hardware, software, safety and packaging options to help fit your needs.

- Reduce total cost of ownership by selecting a drive built for application requirements, with as many or as few options as the application requires
- Boost productivity with specific application control such as TorqProve™ for lifting applications and Pump-Off for oil wells
- Application conditions and environments vary, so PowerFlex drives are available with a choice of packaging options that range from highly flexible IP00 open styles to extra protection for harsh environments
- Select the safety features and method of implementation that works best for your application

Connectivity is a key to monitoring your application and taking the appropriate actions to maintain smooth operations. The seamless flow of real-time information within your application can help to enhance the agility and productivity of your machine. PowerFlex drives offer features that can help you easily manage data throughout your operations.

- Visibility to operating conditions
- Powerful diagnostics provide access to real time data and allow you to take proactive measures before unplanned shutdown
- Monitor, configure and control from anywhere
- Seamless visibility and communications between the plant floor and control room
- Communication choices include drives with built-in EtherNet/IP along with options that support a variety of industrial networks

Productivity is a word that gets used a lot. You know it's important but does selecting the right drive really make a difference? It does when you select a PowerFlex drive that offers:

- Safety features that help protect personnel and assets while enabling reduced downtime
- Premier Integration into the Logix environment for streamlined configuration and programming
- Faster time to market with reduced development and commissioning time
- Protection against unplanned downtime with advanced diagnostics and notification of irregular operating parameters
- Access to real time data, allowing information-enabled decisions which help reduce downtime and keep production running smoothly

Drive Efficient Operations

Improved motor control performance and motor efficiency means greater overall production efficiency. PowerFlex drives are capable of providing both an immediate and measurable impact on energy use and operational productivity.

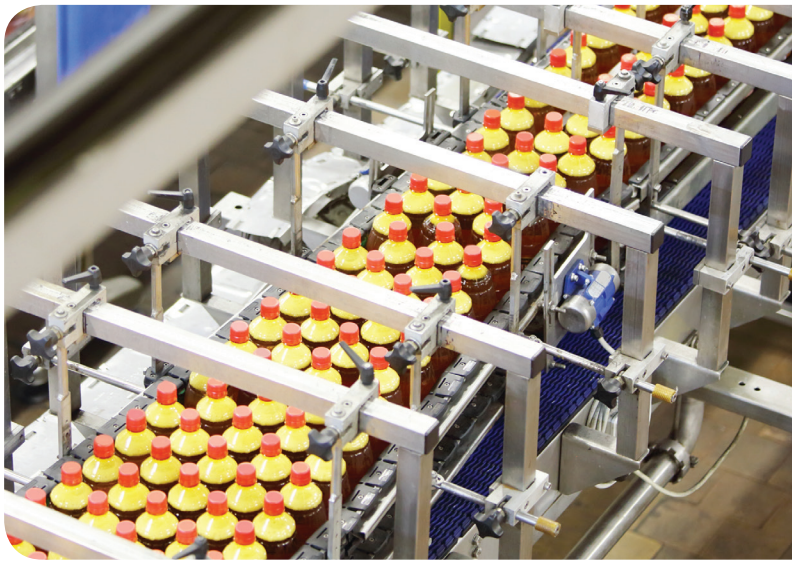
- Help reduce and track energy consumption by applying a PowerFlex drive to your application
- Variable speed drives help reduce energy consumption by running motors at the speed required by the application
- Efficiency translates to savings – motors typically consume as much as 60% of the energy in an industrial facility

Motor Control Optimization

For optimized motor control solutions for any application, the PowerFlex family leverages a wide range of control technologies to give you the ability to meet virtually any application requirement from open loop speed regulation to precise torque and speed control. Support for a wide range of motors – including induction motors, surface-mounted permanent magnet motors and interior permanent magnet motors – provides flexibility.

In addition to industry standard motor control, the PowerFlex family offers unique control technologies that can provide you with even greater application flexibility.

FORCE™ Technology is the Allen-Bradley patented Field Oriented Control, which is a version of Flux Vector Control. This provides excellent low speed/zero speed performance and delivers accurate torque and speed regulation.



World Class Offering

With a complete portfolio covering global voltages and a wide range of power ratings and features, the PowerFlex family of drives offers a motor control solution to meet your application demands.

PowerFlex® Architecture-class AC drives provide a broad set of features and application-specific parameters and are ideal for high performance applications. This class of drives is designed for advanced application flexibility and control system integration.

PowerFlex® Compact AC drives deliver a simple and cost-effective solution for standalone machine level control applications or simple system integration. Designed for ease of use, this general-purpose class of drives provides a compact package to optimize panel space and application versatility.

PowerFlex® DC drives are designed for the most demanding standalone and coordinated drive control and drive system applications. This drive combines powerful performance with flexible control to produce a highly functional, cost-effective drive and control solution.

DeviceLogix™ is an embedded control technology in PowerFlex 750-Series Drives that can control outputs and manage status information onboard a device. A drive with DeviceLogix technology can help improve system performance and productivity by controlling outputs and managing status and information within the drive. Help speed reaction time by processing logic in the drive, which reduces dependency on network throughput and provides an option for decision making if communication is lost with the main controller.

Specific Application Control

Select PowerFlex drives have specialized drive parameters configured to support a particular application. Application Sets are a configuration of the standard drive parameters designed to simplify a user's implementation of a standard drive application without the need for custom programming.

Positioning – The PowerFlex 525 and 750-Series drives are optimized for single-axis applications. With features ranging from simple position and velocity profiling and point-to-point planners to more complex electronic gearing, registration, homing and safety capabilities, these drives are ideal for speed and position control applications.

TorqProve™ – This feature helps confirm control of the load in any lifting or hoisting application. TorqProve helps remove concerns with brake timing and environmental changes and can significantly reduce wear and tear on the mechanical brake with smooth operation and reduced machine stress. This standard feature is available in PowerFlex 755 AC drives, PowerFlex DC drives and as a control option for PowerFlex 7000 medium voltage drives.

Pump Off – This unique feature specific for oil well applications is a patented pump-off function that measures the torque and currents on a motor to determine flow from a well. This alternative to traditional mechanical flow meters allows pump operators to optimize production based on the flow of the well and can also help reduce downtime by protecting the rod and motor assets. This feature is available in the PowerFlex 753 and 755 drives.

Communications for Data Management

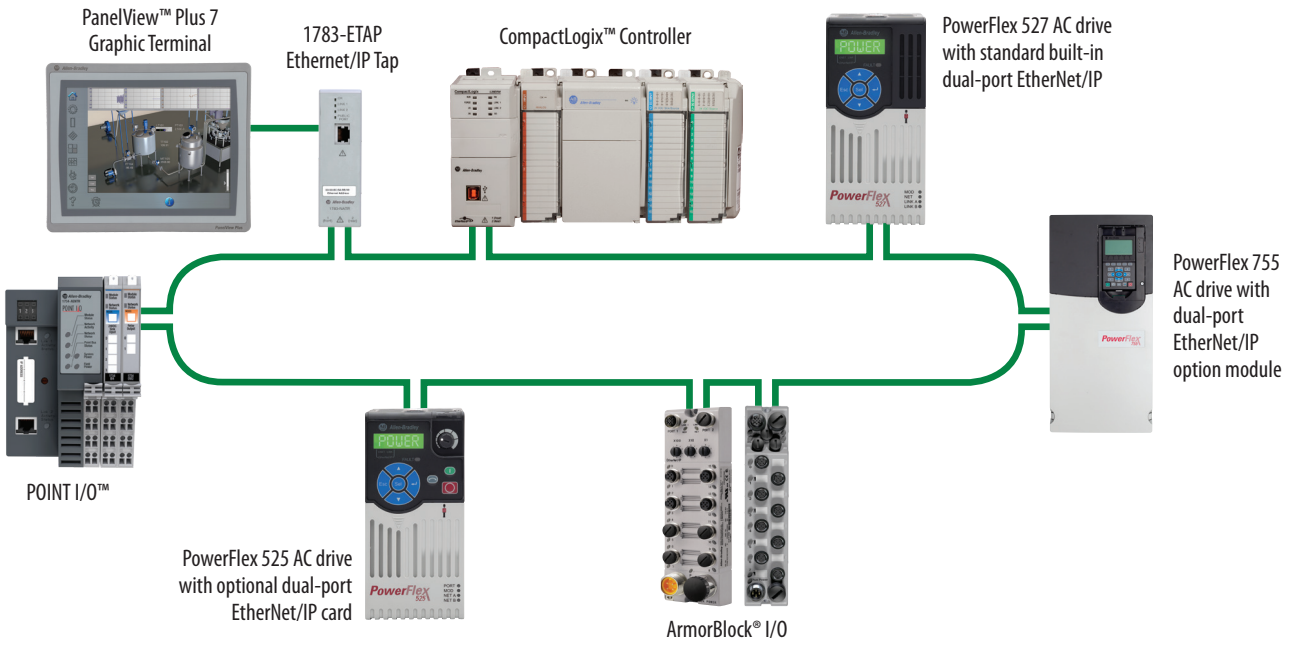
Getting valuable real-time information about your application can help to enhance the agility and productivity of your business. PowerFlex drives have been designed to offer features that can help you easily manage data throughout your operations for time savings and increased efficiency.

As part of the Rockwell Automation® Integrated Architecture®, PowerFlex drives can do much more than just respond to interlocking commands. They provide valuable diagnostic information and can be configured as a natural extension of the system.

For networked applications, EtherNet/IP connectivity supports seamless integration into the Logix environment. PowerFlex drives help you apply this open, widely adopted network by making connections simple through either built-in EtherNet/IP ™ ports or optional EtherNet/IP communication cards.

The latest additions to the PowerFlex drive family offer the benefits of dual-port EtherNet/IP connectivity which allow the drives to support topology flexibility and Device Level Ring (DLR) functionality. Implementing DLR functionality helps you achieve higher network resiliency. If one device on the EtherNet/IP network fails, the other devices are able to continue operation. DLR technology, which is an ODVA™ standard, helps reduce configuration time and costs by minimizing the number of managed switches and reducing cabling needs while allowing you to create a single network ring that connects all components at the device level.

In addition to EtherNet/IP, PowerFlex drives are capable of supporting industrial protocols found throughout the world. See the drive options for more details.



EtherNet/IP is an established, broadly adopted network that helps simplify and enhance machine design and operation. Dual-port EtherNet/IP connectivity supports linear and ring topologies as well as DLR functionality.

Safety Solutions Help Improve Productivity

Safety is a crucial concern for every type of automation. Protecting personnel and assets is always a high priority, with far-reaching benefits. However, in the past, implementing safety solutions often meant sacrificing productivity. PowerFlex AC drives can assist you in solving that dilemma by helping to provide protection for your people and equipment while also reducing unplanned downtime.

PowerFlex AC drives offer safety options designed to help you best meet the needs of your application. PowerFlex 70 and 750-Series AC drives are available with optional Safe Torque-off functionality offering Safe-off control. Safe Torque-off is a standard embedded feature on the PowerFlex 525 AC drive. And the PowerFlex 527 drive provides a choice for Safe Torque-off implementation. It offers hardwired, built-in Safe Torque-off as well as the option of Integrated Safety, a controller-based safety function that is configured in the Studio 5000 Logix Designer environment and delivered via EtherNet/IP.

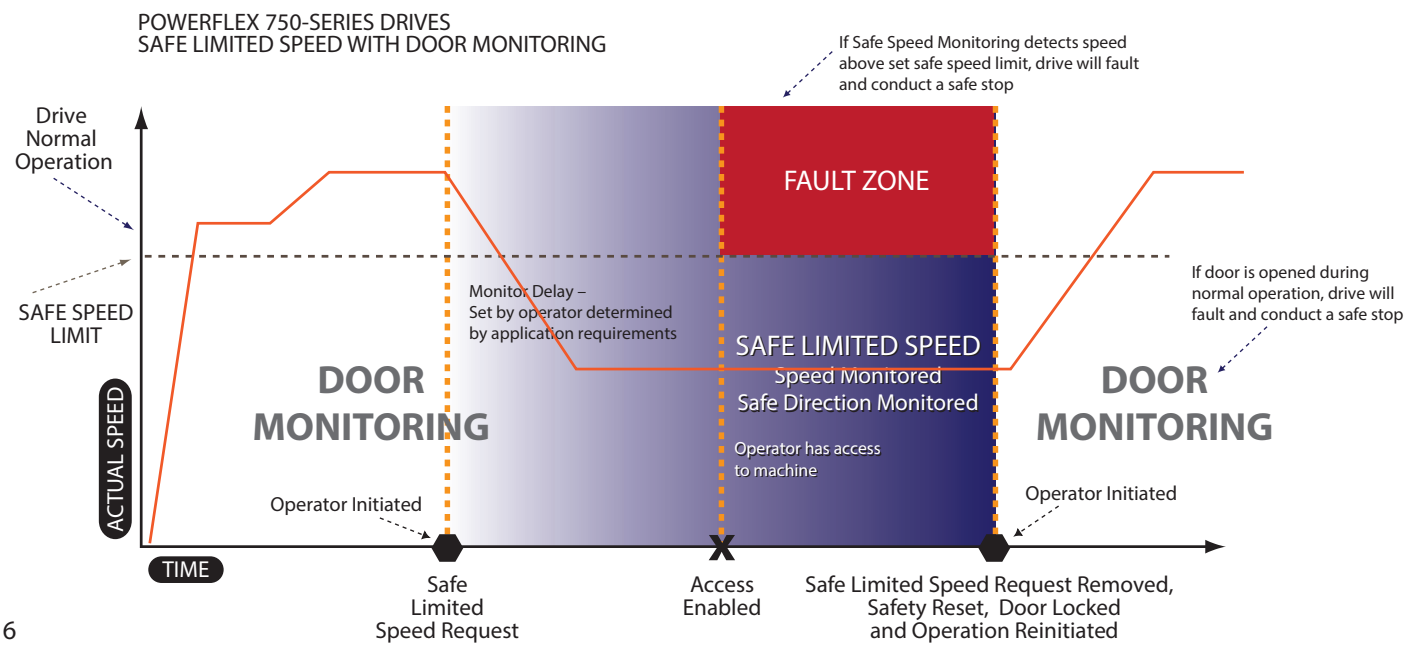
Safe Torque-off is ideal for safety related applications requiring removal of rotational power to the motor without removing power from the drive. Safe Torque-off functionality offers the benefit of quick start-up after a demand on the safety system and helps reduce wear from repetitive start-up. It provides safety ratings up to and including PLe/SIL3 and CAT 3.

The Safe Speed Monitor provides a solution for applications using PowerFlex 750-Series AC drives that can benefit from access to a safety zone while there is limited motion. In addition, the Safe Speed Monitor has an integrated monitoring relay to save additional panel space and installation labor. This option carries a safety rating up to and including PLe/SIL3 and Cat 4. The Safe Speed Monitor option helps you safely monitor and control the speed of your application which allows operators to perform process or maintenance work without stopping the machine.

Drives without a safety option can be configured with the MSR57P Safety Relay to achieve the same safe limited speed capability and safety ratings.

Safe Speed Monitor option provides the following functionality:

- Safe Torque-Off
- Stop Categories 0 and 1
- Safe Stop
- Safe Limited Speed
- Safe Maximum Speed
- Safe Direction
- Safe Maximum Acceleration
- Zero Speed Monitoring
- Door Control and Monitoring
- Enabling switch input

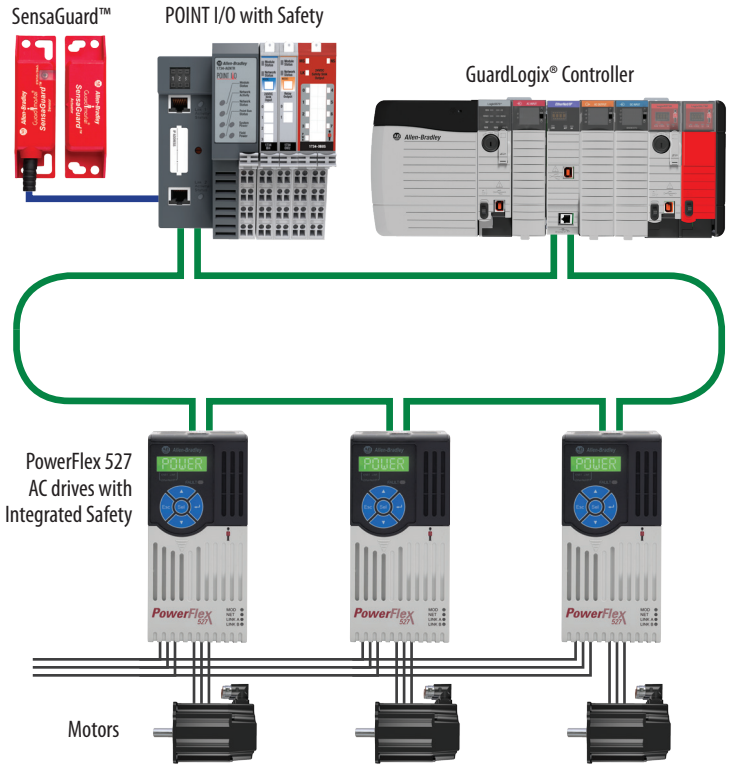


Networked Safety Helps Streamline Machine Design

The ability to integrate the safety functions of a control system with non-safety functions provides machine builders with a variety of benefits, including the opportunity to minimize equipment redundancies and improve productivity. The PowerFlex 527 is the first Allen-Bradley AC drive to offer Integrated Safety - controller-based and delivered via EtherNet/IP.

- Use of an Allen-Bradley GuardLogix Safety Controller removes the need for a separate safety controller
- Use of a single programming software package helps eliminate the need to write and coordinate multiple programs on different controllers, which in turn, helps to simplify application programming and reduce training and support costs
- Use of a single development environment helps reduce expensive redevelopment. If a machine needs to be scaled – from one line to three, for example – it can be as easy as porting the necessary application from one to the next
- With a single software program managing both safety and standard functions, engineers no longer need to manually manage the separation of standard and safety memory or work on partitioning logic to isolate safety
- Fewer components mean smaller panel enclosures, saving money on control cabinets and floor space
- The integration of the safety and standard control systems provides operators and maintenance personnel with visibility to all machine events – including safety events. This enables a quick response that allows the machine to return to full production
- Safety and non-safety functions share the same EtherNet/IP network
- Helps reduce the need to install expensive and difficult-to-maintain gateways between each network
- More safety tags are seen in controller
  - Safe off condition
  - Safety fault condition
  - Connection status
  - Reset Requirement
- The PowerFlex 527 drive is the only Allen-Bradley AC drive that offers Integrated Safety

PowerFlex 527 Integrated Safety Solution



Zone Control

In the past, a safety event in one section of a machine could result in the entire machine shutting down because the standard system had limited knowledge of the safety event. But Integrated Safety allows the control and safety systems to coexist on the same network and to share data between the safety and standard applications. This allows "zone control" where one zone of the machine is brought to a safe state while other zones continue to operate.

- Using an Integrated Safety solution, drives and their respective motors are grouped together into zones. All zoning is done completely in the controller – compared with a hardwired solution in which drives have safety inputs daisy chained together
- Modifications to your application are simplified which helps to save you both time and money

Simplified Drive Configuration and Programming

PowerFlex drives help make configuration and programming fast and uncomplicated with a choice of easy-to-use software packages and tools. Each tool has been designed to be powerful and intuitive to help enhance your user experience and reduce your development time so you can deliver faster and more efficiently.

Human Interface Module (HIM)

The Human Interface Module (HIM) provides convenient configuration.

- Features a high definition LCD
- Supports multiple languages
- Provides meaningful explanations of parameters and events so you don't have to search through a manual for details
- Available with most PowerFlex drives. Refer to specific drive details

Connected Components Workbench Software

Connected Components Workbench™ programming and configuration software leverages proven Rockwell Automation and Microsoft® Visual Studio® technologies for fast and easy drive configuration, controller programming, and integration with the HMI editor.

- Free software helps you get your drives up and running with an intuitive interface and startup wizards
- Localized language support
- Online and offline configuration
- Context-sensitive "Help"
- Supports PowerFlex drives as well as Micro800® programmable controllers and PanelView component graphic terminals

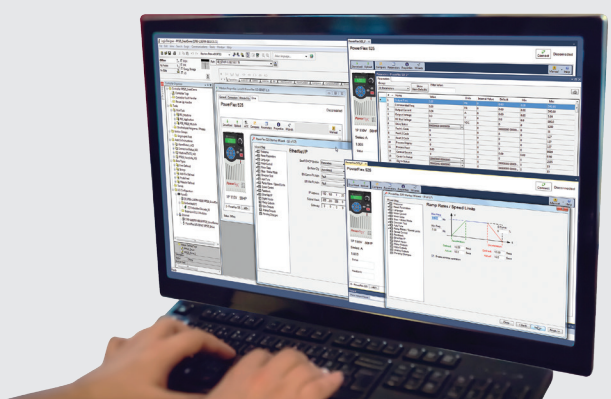
Configuration and Programming with Studio 5000 Logix Designer

PowerFlex drives are able to achieve an exceptional level of integration with Logix Programmable Automation Controllers (PACs) by using Add-on Profiles within the Studio 5000® environment.

- Data associated with the drive is automatically generated to ease configuration and minimize the need to manually program the required parameters and tags
  - Increase productivity with easy access to system and machine level data as well as diagnostic information

The PowerFlex 527 and 755 AC drives can be programmed using motion instructions in the Studio 5000 environment. These motion instructions are shared with Kinetix® servo drives, providing a common configuration, programming and control experience for both types of drives.

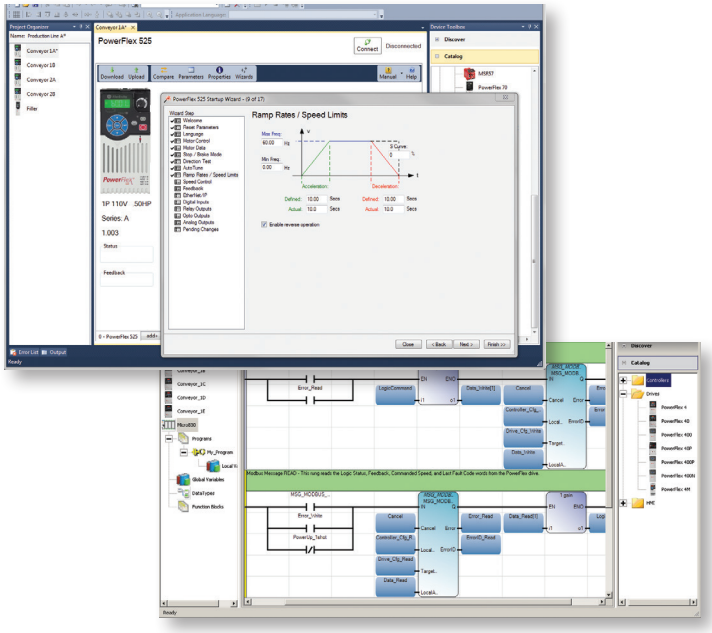
- Consistent configuration of AC and servo drives simplifies machine development and use
- The use of motion instructions allows code reuse which helps make machine design more efficient
- Synchronization of drives and other EtherNet/IP compliant devices helps enhance performance for applications that require high accuracy

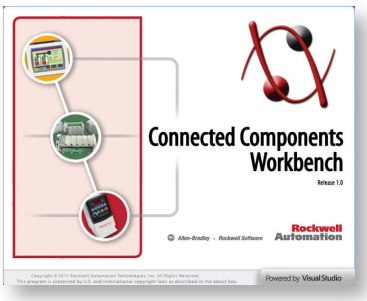


Configuring PowerFlex drives with the Studio 5000 Logix Designer application lets you consolidate controller programming and drive system configuration, operation, and maintenance into a single software environment

Connected Components Workbench

Connected Components Workbench™ programming and configuration software supports PowerFlex AC drives, Micro800™ controllers, PanelView™ Component graphic terminals, and other select Allen-Bradley devices. This software leverages proven Rockwell Automation and Microsoft® Visual Studio® technologies for fast and easy drive configuration, controller programming, and integration with the HMI editor.





Drive features include:

- Online and offline configuration
- Linear List Parameter Editor
- Easy access to embedded device user manuals
- Context-sensitive “Help”
- Localized language support
- Connection path is saved with device, reducing time for each subsequent connection
- View and clear fault queue, clear faults
- View and clear event queue, clear events
- View diagnostic items
- Reset drive/peripheral

General features:

- Free software is easy to acquire and install
- Convenient, single development environment (controller, HMI, drives)
- Add a device via simple drag and drop from a catalog of available components or go online to add devices to your project
- IEC1131 programming using ladder, function block, and structured text
- User-defined function blocks optimize control of your machine

Faster Configuration with AppView™ & CustomView™

Leverage a new convenient feature to speed up your PowerFlex 523 and 525 drive configuration in Connected Components Workbench with the AppView tool. This feature highlights parameter groups for several of the most common applications, including conveyors, mixers, compressors, pumps and blowers.

With the settings to run these applications already in place, you can get your machine up and running faster, increasing your productivity. You can customize your machine and reduce your design and development time by quickly creating custom groups of parameters using the CustomView™ configuration tool.

This programming option, available through the HIM or Connected Components Workbench, allows you to customize your configuration by adding or removing parameters from an AppView group or save your own custom group of parameters.

Download Connected Components Workbench software at:
http://www.ab.com/go/ccws

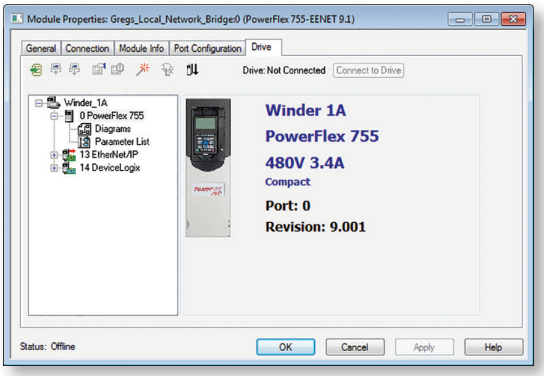
Drive Integration with Studio 5000 Logix Designer

The Rockwell Automation Integrated Architecture system provides a convergence of control and information to help you achieve plantwide optimization. At the heart of an Integrated Architecture system, the Studio 5000 environment serves as a single programming tool for the design and configuration of your application. You need only one software package for discrete, process, batch, motion, safety and drive-based applications. PowerFlex drives are also backwards compatible with most versions of RSLogix 5000.

Save Development Time with Premier Integration

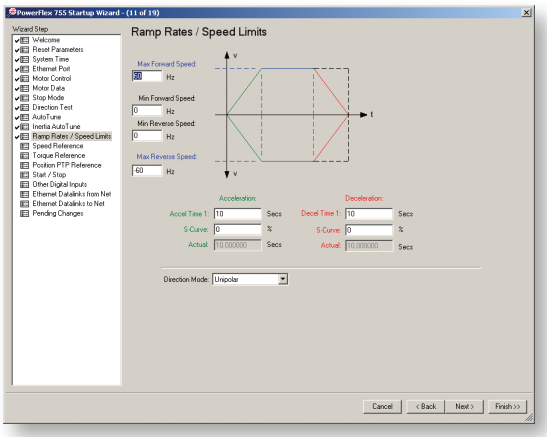
Premier Integration is the exclusive experience of integrating Allen-Bradley motor control devices into the Allen-Bradley Logix control platform. Use just one software tool to help reduce your programming time, ease startup and commissioning, and streamline diagnostics.

- A single development environment to configure and program your entire Logix/drive system
- Drive configuration is saved as part of the Studio 5000 Logix Designer project file and also stored in the Logix controller, so there's no need to store and maintain multiple files. You only need one file for both the controller and all drive configurations
- Diagnostic, fault, alarm and event information are integral to the Studio 5000 environment
- Add-on Profiles and motion instructions allow you to benefit from simplified machine development, use and maintenance



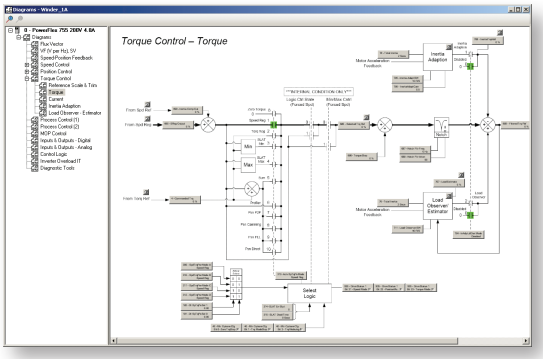
Studio 5000 software can help reduce programming time by automatically populating drive parameters in the controller memory as controller tags.

- Descriptive tag names are automatically generated
- Address mismatch errors can be eliminated
- Copy and paste function makes duplicating drives fast and easy
- Advanced graphical wizards walk you through drive configuration



When functioning as part of the Rockwell Automation Integrated Architecture, PowerFlex drives can do much more than just respond to interlocking commands.

- Predict mechanical problems and help improve performance with diagnostics and real-time data
- Monitor performance either locally or remotely to make informed decisions about your assets



Find the latest firmware at:
www.rockwellautomation.com/global/support/pcdc.page

Premier Integration

Simplify Development, Use and Maintenance

The integration of Allen-Bradley motor control devices into the Logix control platform helps reduce your programming time, ease startup and commissioning, and streamline diagnostics. By providing consolidated controller programming and device system configuration, operation and maintenance in a single software environment – Studio 5000 Logix Designer – Premier Integration helps reduce complication and errors.

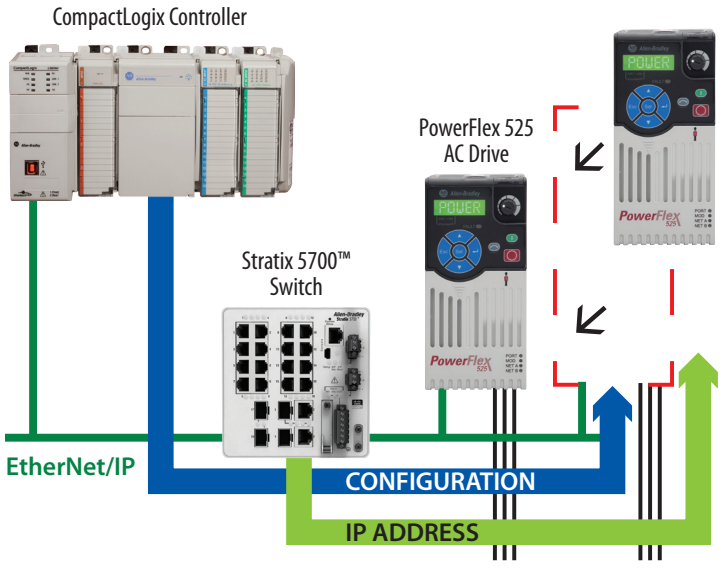
- A single software solution using intuitive programming provides a common user experience
- Software interface streamlines device set up
- Easy access to system and machine level data as well as diagnostic information
- Configuration is centralized in Studio 5000 software for both the controllers and the drives
- Helps simplify configuration of multiple drives
- PowerFlex drives use Premier Integration to help reduce development time and simplify system operation and diagnostics. The PowerFlex 527 drive enhances the user experience by exclusively using the motion instruction set in the Studio 5000 Logix Designer application and working with a Logix PAC

Automatic Device Configuration

Automatic Device Configuration (ADC) allows Logix controllers to detect a replaced PowerFlex drive and download all configuration parameters automatically, minimizing the need for manual reconfiguration. This feature helps to enhance productivity by facilitating reduced downtime.

ADC is available with PowerFlex 520-Series and 750-Series drives.*

- PowerFlex 525 and 755 drives feature a built-in EtherNet/IP port to achieve ADC
- With the PowerFlex 527 drive, the Logix controller maintains every aspect of the drive's parameters, and resets them each time it connects to the drive. This creates inherent automatic device replacement to help minimize machine downtime
- Stratix 5700, 6000 and 8000 switches provide automatic IP address assignment



** PowerFlex 523 and 753 drives require a dual-port EtherNet/IP communication card for ADC.*

What's New

PowerFlex 527 AC Drives

A New Spin on Motor Control

The PowerFlex 527 AC drive is the newest addition to the PowerFlex 520-Series of AC drives and it offers a new spin on motor control. It's a variable frequency drive that is configured and programmed like an Allen-Bradley Kinetix servo drive. As a result, machine builders can reduce complexity and save valuable engineering time by using a single software package with common motion instructions for both AC and servo drives. And because the PowerFlex 527 AC drive was designed to work exclusively with Studio 5000 software and Logix Programmable Automation Controllers (PACs), the drive is able to leverage the benefits of our Logix controller capabilities and perform as a natural extension of the controller. The result is a solution that helps you achieve enhanced machine synchronization and motor coordination.

- Power Range: 0.4 - 22 kW/0.5 – 30 HP in global voltages from 100 – 600V
- Designed for machine applications – such as pumps, fans, and in-feed and out-feed conveyors – that need speed control for induction motors
- Shares common configuration and programming with Allen-Bradley Kinetix servo drives
- Configure, program and reuse application code to help reduce engineering time and effort.
- Built-in dual-port EtherNet/IP supports multiple network topologies and Device Level Ring functionality
- Safety Implementation
  - Built-in hardwired Safe Torque-off. SIL 3 / PLe Cat 3
  - Integrated Safety - controller-based safety delivered via EtherNet/IP. SIL 3 / PLe Cat 3
- Removable terminal blocks help simplify installation

HIM
Multi-lingual LCD display with QuickView scrolling text

Safety
Safe Torque-off is a standard feature that can be applied through either hardwired safety or Integrated Safety via an EtherNet/IP network

Terminal Blocks
Removable terminal blocks ease installation

Communications
Built-in dual-port EtherNet/IP

Drive Programming with Studio 5000 Logix Designer Motion Instructions

Simplify Machine Development and Use

When we introduced the PowerFlex 755 AC drive with the option for configuration and programming using motion instructions in the Studio 5000 environment, we knew it was a great concept. A variable frequency drive that is configured and programmed like a servo drive. The benefits seem obvious. You can reduce complexity and save valuable engineering time by using a single software package with common instructions for both types of drives.

Our customers also recognized the great concept. That's why the new PowerFlex 527 AC drive exclusively uses Studio 5000 software and Logix Programmable Automation Controllers. This is is the first AC drive completely integrated with Logix controllers and the Studio 5000 environment. Using one software tool, this combination of products allows you to drive out cost, reduce engineering and delivery times, and engineer a more competitive machine.

By leveraging the benefits of our Logix controller capabilities and performing as a natural extension of the controller, the PowerFlex 527 drive helps you achieve enhanced motor coordination – along with many other advantages.

This level of integration provides exclusive application resources that offer additional time-saving features and performance enhancements.

- PowerFlex 527* AC drives are configured and programmed the same way as Kinetix servo drives, streamlining machine design
- The use of motion instructions allows code reuse which helps make machine design more efficient
- Powerful diagnostics, including time stamped events, provide precise drive information to help you quickly identify and resolve problems
- Safety application is programmed in the safety task within the Studio 5000 Logix Designer environment. Safety connections are made on the EtherNet/IP network, and no additional wiring is required
- Synchronization – from very simple electronic gearing to electronic camming – can be accomplished using just a few instructions. Synchronization can be done over the network without the need for any additional hardware devices
- Inherent automatic device replacement is a time-saving benefit of the PowerFlex 527 drive. The Logix controller maintains the drive's parameters, and in the event of a drive replacement, the controller will automatically download the parameters, helping minimize machine downtime

For applications that require both simple speed control as well as precise motor functionality, a combination of AC and servo drives is the logical solution. The new PowerFlex 527 AC drive can manage the simple speed control while a Kinetix servo drive handles the more precise motor control operations involving speed, torque and position control.

** The PowerFlex 755 drives are also able to use motion instructions in the Studio 5000 Logix Designer application.*

POWERFLEX AC DRIVES

	PowerFlex 4M AC Drive	PowerFlex 400 AC Drive
		
Motor Control	• Volts per Hertz	• Volts per Hertz
Application	• Open Loop Speed Regulation	• Open Loop Speed Regulation
Ratings 100-115V 1 Phase In/3 Phase 230V Out	• 0.2...1.1 kW • 0.25...1.5 Hp • 1.6...6 A	• N/A
Ratings 200-240V	• 0.2...7.5 kW • 0.25...10 Hp • 1.6...33 A	• 2.2...37 kW • 3.0...50 Hp • 12...145 A
Ratings 400-480V	• 0.4...11 kW • 0.5...15 Hp • 1.5... 24 A	• 2.2...250 kW • 3.0...350 Hp • 6...460 A
Ratings 500-600V	• N/A	• N/A
Ratings 690V	• N/A	• N/A
Ambient Temperature * Limit for Enclosure Types	• IP20: -10 to 50 ˚C (14 to 122 ˚F) • IP20 zero stacking: -10 to 40 ˚C (14 to 104 ˚F)	• IP20, NEMA/UL Type Open, Frame C: -10 to 50 ˚C (14 to 122 ˚F) • IP20, NEMA/UL Type Open, Frame D and up: -10 to 45 ˚C (14 to 113 ˚F) • IP30, NEMA/UL Type Open, all frames: -10 to 45 ˚C (14 to 113 ˚F)
EMC Filters	• Internal (1 phase 240V and 3 phase 480V) • External (1 & 3 phase)	• External
Standards and Certifications	• c-UL, UL, CE, RCM, RoHS	• c-UL, UL, CE, IEC (Designed to Meet), RCM, RoHS, UL508C Plenum Rating
Overload Capability	• 150% for 60 secs • 200% for 3 secs	• 110% for 60 secs
Output Frequency Range	• 0...400 Hz	• 0...320 Hz
User Interface	• Local Keypad • Remote Keypad • Studio 5000 • Connected Components Workbench (CCW)	• Local Keypad • Remote Keypad • Studio 5000 • Connected Components Workbench (CCW)
Communications Options	• Integral RS485 (Modbus RTU) • Optional: *DeviceNet, *EtherNet/IP, *PROFIBUS DP, *ControlNet, *LonWorks®, *Bluetooth® *Optional network for use only with DSI External Communications Kit	• Integral RS485 (Modbus RTU, Metasys N2, P1-FLN) • Optional: DeviceNet, EtherNet/IP, PROFIBUS DP, ControlNet, LonWorks, BACnet, Bluetooth
Analog Inputs	• Qty. 1 (unipolar voltage)	• Qty. 2 (1 bipolar voltage or current, 1 unipolar voltage or current)
Analog Outputs	• None	• Qty. 2 (unipolar voltage or current)
PTC Inputs	• Qty. 1 (uses an Analog Input)	• Qty. 1 (uses an Analog Input)
Digital Inputs	• Qty. 5 (24V DC, 2 programmable)	• Qty. 7 (24V DC, 4 programmable)
Relay Outputs	• Qty. 1 (form C)	• Qty. 2 (form C)
Transistor Outputs	• None	• Qty. 1
Dynamic Braking	• Internal IGBT except catalog numbers ending in "3"	• No
Safety	• No	• No
	Found on page 18	*Found on page 21*

* Environmental considerations may apply

PowerFlex 523 AC Drive	PowerFlex 525 AC Drive	PowerFlex 527 AC Drive
		
• Volts per Hertz • Sensorless Vector Control	• Volts per Hertz • Sensorless Vector Control • Closed Loop Velocity Vector Control • Permanent Magnet Motor Control**	• Volts per Hertz • Sensorless Vector Control • Closed Loop Velocity Vector Control
• Open Loop Speed Regulation	• Open Loop Speed Regulation • Closed Loop Speed Regulation	• Open Loop Speed Regulation • Closed Loop Speed Regulation
• 0.2...1.1 kW • 0.25...1.5 Hp • 1.6...6 A	• 0.4...1.1 kW • 0.5...1.5 Hp • 2.5...6 A	• 0.4...1.1 kW • 0.5...1.5 Hp • 2.5...6 A
• 0.2. . .15 kW • 0.25. . .20 Hp • 1.6. . .62.1 A	• 0.4...15 kW • 0.5...20 Hp • 2.5...62.1 A	• 0.4...15 kW • 0.5...20 Hp • 2.5...62.1 A
• 0.4. . .22 kW • 0.5. . .30 Hp • 1.4. . .43 A	• 0.4...22 kW • 0.5...30 Hp • 1.4...43 A	• 0.4...22 kW • 0.5...30 Hp • 1.4...43 A
• 0.4. . .22 kW • 0.5. . .30 Hp • 0.9. . .32 A	• 0.4...22 kW • 0.5...30 Hp • 0.9...32 A	• 0.4...22 kW • 0.5...30 Hp • 0.9...32 A
• N/A	• N/A	• N/A
• IP20: -20 to 50 °C (-4 to 122 °F) • IP20 Zero Stacking: -20* to 45 °C (-4 to 113 °F) • IP20: -20 to 60 °C (140 °F), with current derating • IP20: -20 to 70 °C: (158 °F) with current derating and optional control module fan kit	• IP20: -20 to 50 °C (-4 to 122 °F) • IP20 Zero Stacking: -20* to 45 °C (-4 to 113 °F) • IP20: -20 to 60 °C (140 °F), with current derating • IP20: -20 to 70 °C: (158 °F) with current derating and optional control module fan kit	• IP20: -20 to 50 °C (-4 to 122 °F) • IP20 Zero Stacking: -20* to 45 °C (-4 to 113 °F) • IP20: -20 to 70 °C: (158 °F) with current derating and optional control module fan kit
• Internal (1 phase 240V and 3 phase 480V) • External (1 & 3 phase)	• Internal (1 phase 240V and 3 phase 480V) • External (1 & 3 phase)	• Internal (1 phase 240V and 3 phase 480V) • External (1 & 3 phase)
• ACS 156, c-UL, UL, CE, EAC, KCC, RCM, REACH, RoHS, SEMI F47	• ACS 156, ATEX, c-UL, UL, CE, EAC, EPRI/SEMI F47, KCC, Lloyd's Register, RCM, RoHS, TÜV FS ISO/EN13849-1	• ACS 156, ATEX, c-UL, UL, CE, EAC, EPRI/SEMI F47, KCC, Lloyd's Register, RCM, RoHS, TÜV FS ISO/EN13849-1
• Normal Duty Application: 110% - 60 secs, 150% - 3 secs (For 20 Hp & above) • Heavy Duty Application: 150% - 60 secs, 180% - 3 secs (200% - 3 secs programmable)	• Normal Duty Application: 110% - 60 secs, 150% - 3 secs (For 20 Hp & above) • Heavy Duty Application: 150% - 60 secs, 180% - 3 secs (200% - 3 secs programmable)	• Normal Duty Application: 110% - 60 secs, 150% - 3 secs (For 20 Hp & above) • Heavy Duty Application: 150% - 60 secs, 180% - 3 secs (200% - 3 secs programmable)
• 0. . . 500 Hz	• 0. . . 500 Hz	• 0. . . 590 Hz
• 5 Digits, 16 segments QuickView™ LCD display with multiple languages and local keypad • Remote Keypad • MainsFree™ Programming via USB • Application specific parameter group AppView™ and CustomView™ • Studio 5000 • Connected Components Workbench (CCW)	• 5 Digits, 16 segments QuickView™ LCD display with multiple languages and local keypad • Remote Keypad • MainsFree™ Programming via USB • Application specific parameter group AppView™ and CustomView™ • Studio 5000 • Connected Components Workbench (CCW)	• Studio 5000 Logix Designer
• Integral RS485 (Modbus RTU) • Optional: Dual-port EtherNet/IP, DeviceNet, PROFIBUS DP	• Embedded EtherNet/IP Port • Integral RS485 (Modbus RTU) • Optional: Dual-port EtherNet/IP, DeviceNet, PROFIBUS DP	• Embedded Dual-port EtherNet/IP
• Qty. 1 (unipolar voltage or current)	• Qty. 2 (1 bipolar voltage, 1 current)	• Qty. 2 (1 bipolar voltage, 1 current)
• None	• Qty: 1 (unipolar voltage or current)	• Qty: 1 (unipolar voltage or current)
• Qty. 1 (uses an Analog Input)	• Qty. 1 (uses an Analog Input)	• Qty. 1 (uses an Analog Input)
• Qty: 5 (24V DC, 4 programmable)	• Qty: 7 (24V DC, 6 programmable)	• Qty: 4 (24V DC, 3 programmable)
• Qty. 1 (form C)	• Qty: 2 (1 form A Relay, 1 form B Relay)	• Qty: 2 (1 form A Relay, 1 form B Relay)
• None	• Qty. 2	• Qty. 2
• Internal IGBT	• Internal IGBT	• Internal IGBT
• No	• Built-in Safe Torque-Off, SIL2, PLd, Cat 3	• Built-in Safe Torque-Off, SIL 3 / PLe Cat 3 • Built-in Integrated Safety SIL 3 / PLe Cat 3
Found on page 31	*Found on page 34*	*Found on page 37*

**Permanent magnet motor control is scheduled for a future firmware release

POWERFLEX AC DRIVES

	PowerFlex 70 AC Drive	PowerFlex 753 AC Drive
		
Motor Control	• Vector Control w/FORCE Technology with and without an encoder • Sensorless Vector Control • Volts per Hertz	• Vector Control w/FORCE Technology with or without an encoder • Sensorless Vector Control • Volts per Hertz • Permanent Magnet Motor Control (Interior)
Application	• Open Loop Speed Regulation • Closed Loop Speed Regulation • Precise Torque & Speed Regulation	• Open Loop Speed Regulation • Closed Loop Speed Regulation • Precise Torque and Speed Regulation • Indexer Positioning
Single-phase Input w/Derate	• Yes	• Yes
Ratings 200-240V	• 0.37...18.5 kW • 0.5...25 Hp • 2.2...70 A	• N/A
Ratings 400-480V	• 0.37...37 kW • 0.5...50 Hp • 1.1...72 A	• 0.75...270 kW • 1...400 Hp • 2.1...477 A
Ratings 500-600V	• 0.37...37 kW • 0.5...50 Hp • 0.9...52 A	• 1...300 Hp • 1.7... 289 A
Ratings 690V	• N/A	• 7.5...250 kW • 12...263 A
Ambient Temperature Limit for Enclosure Types	• IP20, NEMA/UL Type 1: 0 to 50 ˚C (32 to 122 ˚F) • Flange Mount: 0 to 50 ˚C (32 to 122 ˚F) • IP66, NEMA/UL Type 4X/12 indoor: 0 to 40 ˚C (32 to 104 ˚F)	• IP00/IP20, NEMA/UL Open Type = 0-50 ˚C (32-122 ˚F)** • NEMA/UL Type 1 Kit = 0-40 ˚C (32-104 ˚F) • Flange Mount Front: IP00/IP20, NEMA/UL Open Type = 0-50 ˚C (32-122 ˚F)** • Flange Mount Back: IP66, NEMA/UL Type 4X = 0-40 ˚C (32-104 ˚F) • IP54, NEMA/UL Type 12 = 0-40 ˚C (32-104 ˚F)
EMC Filters	• Internal	• Internally mounted option
Standards and Certifications	• ABS, c-UL-us, CE*, EAC,IEC (Designed to Meet), KKC, Lloyd's Register, NSF Certified (IP66, NEMA/UL Type 4X/12 only), RCM (excluding 600V), RoHS, SEMI F47, Trentec, TÜV FS ISO/EN13849-1 with Safe Torque-off option	• ABS, ATEX***, c-UL-us, CE, EAC, EPRI/SEMI F47, • TÜVV FS ISO/EN13849-1 for Safe Torque-Off and Safe Speed Monitor options, Lloyd's Register, KCC, RCM, RINA, RoHS compliant materials
Overload Capability	• Normal Duty Application • 110% - 60 s, 150% - 3 s • Heavy Duty Application • 150% - 60 s, 200% - 3 s	• Normal Duty Application • 110% - 60 s, 150% - 3 s • Heavy Duty Application • 150% - 60s, 180% - 3s
Output Frequency Range	• 0 - 500 Hz	• 0...325 Hz @ 2 kHz PWM • 0...590 Hz @ 4 kHz PWM****
User Interface	• Local PowerFlex HIMs • Remote PowerFlex HIMs • Studio 5000 • Connected Components Workbench (CCW)	• Local PowerFlex HIMs • Remote PowerFlex HIMs • Studio 5000 • Connected Components Workbench (CCW)
Communications Options	• Internal DPI • DeviceNet • ControlNet (Coax or Fiber) • EtherNet/IP • Remote I/O • RS485 DF1 • BACnet • RS485 HVAC (Modbus RTU, Metasys N2, Siemens P1) • PROFIBUS DP • Interbus • Bluetooth • External SCANport • Modbus/TCP • CANopen • LonWorks	• Single or Dual-port Ethernet/IP options • ControlNet (Coax or Fiber) • DeviceNet • Remote I/O • RS485 DFI • PROFIBUS DP • BACnet/IP • Modbus/TCP • HVAC (Modbus RTU, FLN P1, Metasys N2) • ProfiNet IO • LonWorks • CANopen
Conformal Coating	• Standard	• Standard
Analog Inputs	• Qty. 2 (1 bipolar voltage or current, 1 unipolar voltage or current)	• Up to 7 total (bipolar voltage or current)
Analog Outputs	• Qty. 1 (unipolar voltage or current)	• Up to 7 total (bipolar voltage or current)
PTC Inputs	• Qty. 1 (uses an Analog Input)	• Up to 3 total
Digital Inputs	• Qty. 6 (24V DC or 115V AC, option card required for 115V)	• Up to 21 total (Qty. 21 - 24V DC or Qty. 19 - 115V AC)
Relay Outputs	• Qty. 2 (form C)	• Up to 7 total
Transistor Outputs	• None	• Up to 7 total
Internal Brake Transistor	• Standard	• Standard (frames 1-5) Optional (frame 6-7)
AC Input Choke	• No	• No
DC Link Choke	• FR C-E Yes	• Yes
Common Mode Choke	• External option	• External option
Safety	• Safe Torque-Off SIL2, PLd, Cat 3 - option	• Safe Torque-Off SIL3, PLe, Cat 3 with option card • Safe Speed Monitor SIL3, PLe, Cat 4 with option card
	Found on page 46	*Found on page 55*

* CE certification testing has not been performed on 600V drives

** Frame 7, 477A Output, All Enclosures = 0-40 ˚C (32-104 ˚F)

*** Requires 11-Series I/O and ATEX daughter card options

**** Derating @4 kHz; see tech specs

PowerFlex 755 Wall Mount AC Drive	PowerFlex 755 Floor Mount AC Drive	POWERFLEX DC DRIVE	PowerFlex DC Drive
			
• Vector Control w/FORCE Technology with and without an encoder • Sensorless Vector Control • Volts per Hertz • Surface Mount and Interior Permanent Magnet Motor Control (with and without encoder) Frames 2 - 7	• Vector Control w/FORCE Technology with and without an encoder • Sensorless Vector Control • Volts per Hertz • Surface Mount and Interior Permanent Magnet Motor Control (with encoder)		
• Open Loop Speed Regulation • Closed Loop Speed Regulation • Precise Torque and Speed Regulation • Accurate Positioning with PCAM, Indexer and Gearing	• Open Loop Speed Regulation • Closed Loop Speed Regulation • Precise Torque and Speed Regulation • Accurate Positioning with PCAM, Indexer and Gearing	**Motor Control**	• Regenerative and Non-regenerative • Field Weakening and Economize
• Yes (frames 1-7)	• No	**Application Performance**	• Open Loop Speed Regulation • Closed Loop Speed Regulation • Precise Torque Regulation
• N/A	• N/A	**Single-phase Input w/Derate**	• N/A
• 0.75...270 kW • 1...400 Hp • 2.1...477 A	• 200. . .1400 kW • 300 . . .2000 Hp • 370...2330 A	**Ratings 200-240V**	• 1.2...224 kW • 1.5...300 Hp • 7...1050 A
• 1...300 Hp • 1.7...289 A	• 250...1500 Hp • 272. . . 1630 A	**Ratings 400-480V**	• 1.5...671 kW • 2...900 Hp • 4.1...1494 A
• 7.5...250 kW • 12...263 A	• 200...1500 Hp • 215...1485 A	**Ratings 500-600V**	• 37. . .932 kW / 50. . .1250 Hp / 67.5. . .1688 A
		Ratings 690V	• 298. . .1044 kW / 400. . .1400 Hp / 452. . .1582 A
• IP00/IP20, NEMA/UL Open Type = 0-50 °C (32-122 °F)** • NEMA/UL Type 1 Kit = 0-40 °C (32-104 °F) • Flange Mount Front: IP00/IP20, NEMA/UL Open Type = 0-50 °C (32-122 °F)** • Flange Mount Back: IP66, NEMA/UL Type 4X = 0-40 °C (32-104 °F) • IP54, NEMA/UL Type 12 = 0-40 °C (32-104 °F)	• IP00/IP20, NEMA/UL Open Type = 0-50 °C (32-122 °F) • IP54, NEMA/UL Type 12 = 0-40 °C (32-104 °F) • Frames 8-10: 50°C w/derating	**Ambient Temperature Limit for Enclosure Types**	• IP 20 / Open = 50 °C (104 °F) • 55 °C (131 °F) with derating
• Internally mounted option	• Internally mounted option	**EMC Filters**	• External
• ABS, ATEX***, c-UL-us, CE, EAC, EPRI/SEMI F47, TÜV FS ISO/EN13849-1 for Safe Torque-Off and Safe Speed Monitor options, Lloyd's Register, KCC, RCM, RINA, RoHS compliant materials	• ABS, ATEX***, c-UL-us, CE, EAC, EPRI/SEMI F47, TÜV FS ISO/EN13849-1 for Safe Torque-Off and Safe Speed Monitor options, Lloyd's Register, KCC, RCM, RINA, RoHS compliant materials	**Standards and Certifications**	• c-UL-us, CE, EAC, IEC (Designed to Meet), KCC, RCM, UL • RoHS compliant materials
• Normal Duty Application • 110% - 60s, 150% - 3s • Heavy Duty Application • 150% - 60s, 180% - 3s	• Normal Duty Application • 110% - 60s, 150% - 3s • Heavy Duty Application • 150% - 60s, 180% - 3s • Light Duty Application (frames 8-10) • 110% - 60s	**Overload Capability**	• Heavy Duty Application 150% - 60s, 200% - 3s
• 0...325 Hz @ 2 kHz PWM • 0...590 Hz @ 4 kHz PWM****	• 0...325 Hz @ 2 kHz PWM • 0...590 Hz @ 4 kHz PWM****	**Output Speed Range**	1000:1 DC Tach 100:1 Armature feedback 1000:1 Digital Incremental Encoder/Resolver
• Local PowerFlex HIMs • Remote PowerFlex HIMs • Studio 5000 • Connected Components Workbench (CCW)	• Local PowerFlex HIMs • Remote PowerFlex HIMs • Studio 5000 • Connected Components Workbench (CCW)	**User Interface**	• Local PowerFlex HIMs • Remote PowerFlex HIMs • Studio 5000 • Connected Components Workbench (CCW)
• Built-In EtherNet/IP port or Dual-port EtherNet/IP option module • ControlNet (Coax or Fiber) • DeviceNet • Remote I/O • BACnet/IP • RS485 DFI • PROFIBUS DP • Modbus/TCP • HVAC (Modbus RTU, FLN P1, Metasys N2) • ProfiNet IO • LonWorks • CANopen	• Built-in EtherNet/IP port or Dual-port EtherNet/IP option module • ControlNet (Coax or Fiber) • DeviceNet • Remote I/O • BACnet/IP • RS485 DFI • PROFIBUS DP • Modbus/TCP • HVAC (Modbus RTU, FLN P1, Metasys N2) • ProfiNet IO • LonWorks • CANopen	**Communications Options**	• Internal DPI • DeviceNet • ControlNet (Coax or Fiber) • EtherNet/IP • Remote I/O • RS485 DF1 • PROFIBUS DP
• Standard	• Standard	**Preset Speeds**	• 7
• Up to 10 total (bipolar voltage or current)	• Up to 10 total (bipolar voltage or current)	**Standard Analog Inputs**	• 3 - Configurable (13 bit + sign, each ±V or mA)
• Up to 10 total (bipolar voltage or current)	• Up to 10 total (bipolar voltage or current)	**Standard Digital Inputs**	• 8 - Configurable (24V DC)
• Up to 5 total	• Up to 5 total	**Standard Analog Outputs**	• 2 - Configurable (11-Bit + sign, each ±V)
• Up to 31 total (24V DC or 115V AC)	• Up to 31 total (24V DC or 115V AC)	**Standard Digital Outputs**	• 4 - Configurable (24V DC) • 2 - Configurable Relay (NO)
• Up to 10 total (form C)	• Up to 10 total (form C)		
• Up to 10 total	• Up to 10 total	**Dynamic Braking**	• Armature Regen or Dynamic Braking Resistor
• Standard (frames 1-5) Optional (frame 6-7)	• Standard (frames 1-5) Optional (frame 6-7); frames 8-10 require external brake module	**Safety**	• No
• No	• No		
• Yes	• Yes		
• External option	• External option		
• Safe Torque-Off SIL3, PLe, Cat 3 with option card • Safe Speed Monitor SIL3, PLe, Cat 4 with option card	• Safe Torque-Off SIL3, PLe, Cat 3 with option card • Safe Speed Monitor SIL3, PLe, Cat 4 with option card		
Found on page 62	*Found on page 62*		*Found on page 110*

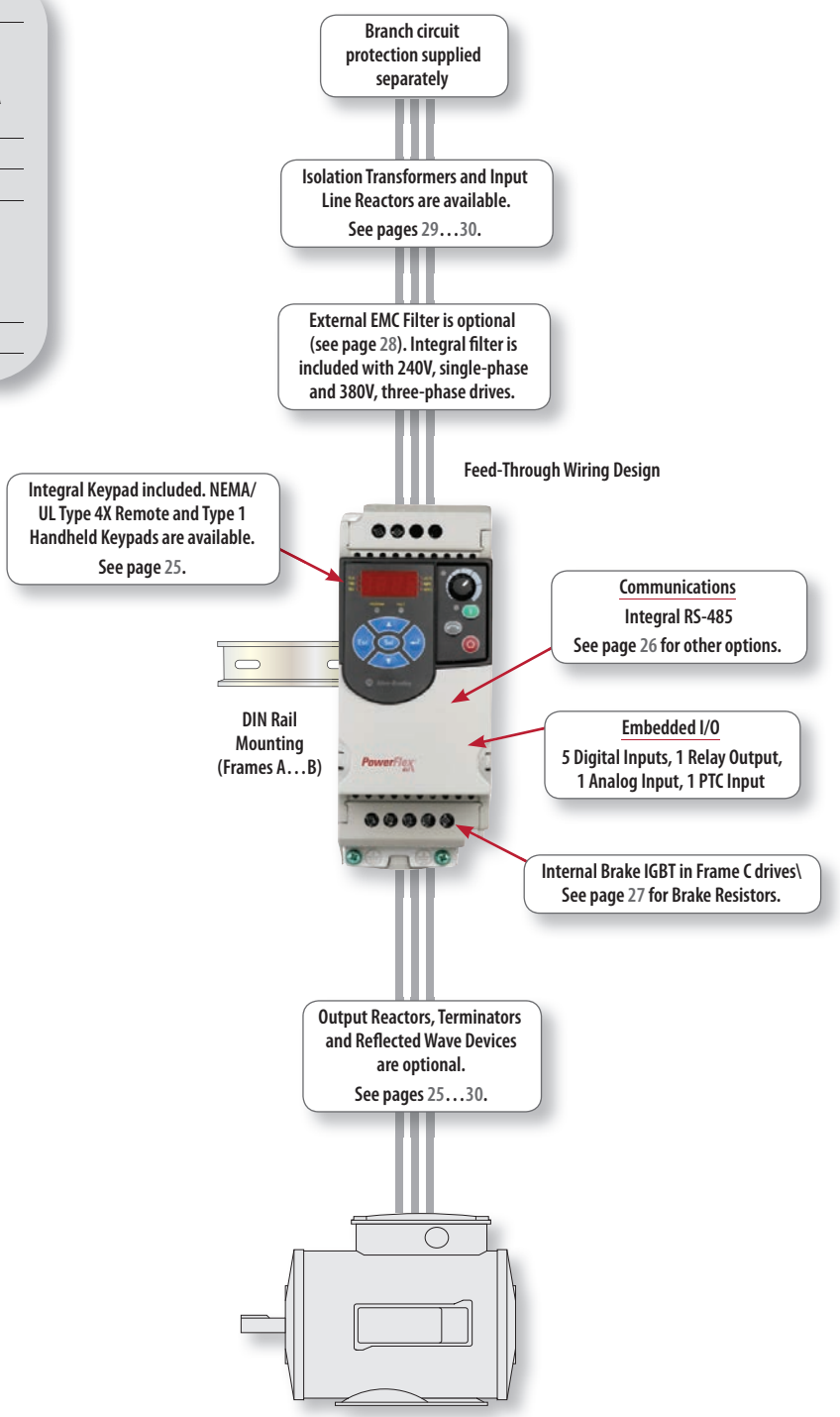
**Frame 7, 477A Output, All Enclosures = 0-40 °C (32-104 °F)
*** Requires 11-Series I/O and ATEX daughter card options
**** Derating @4 kHz; see tech specs

PowerFlex 4M AC Drive

Providing users with motor speed control in a compact, space saving design, the PowerFlex 4M AC drive is the smallest and most cost effective member of the PowerFlex family of drives.

Providing application flexibility, feed-through wiring and ease-of-programming this drive is ideal for machine level speed control, for applications requiring space savings and easy-to-use AC drives.

PowerFlex 4M at a glance	
Ratings	
100…120V:	0.2…1.1 kW / 0.25…1.5 Hp / 1.6…6 A
200…240V:	0.2…7.5 kW / 0.25…10 Hp / 1.6…33 A
380…480V:	0.4…11 kW / 0.5…15 Hp / 1.5…24 A
Motor Control	V/Hz Control
Enclosures	IP20, NEMA/UL Type Open
Certifications	• c-UL, UL • CE • RCM • RoHS
Options	See pages 25… 30



Additional Information

PowerFlex 4M Technical Data, publication 22F-TD001
PowerFlex 4M User Manual, publication 22F-UM001

Catalog Number Explanation

22F –	D	018	N	1	0	4
	Voltage Rating	Rating	Enclosure		Internal EMC Filter 0 = No 1 = Yes	

Product Selection

100…120V AC, Single-Phase Input, Three-Phase Output Drives (50/60 Hz, No Brake)

Drive Ratings				IP20, NEMA/UL Type Open	with Integral "S Type" EMC Filter
		Output Current			
kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.2	0.25	1.6	A	22F-V1P6N103	–
0.4	0.5	2.5	A	22F-V2P5N103	–
0.75	1	4.5	B	22F-V4P5N103	–
1.1	1.5	6	B	22F-V6P0N103	–

200…240V AC, Single-Phase Input, Three-Phase Output Drives (50/60 Hz, No Brake)

Drive Ratings				IP20, NEMA/UL Type Open	with Integral "S Type" EMC Filter (1)
		Output Current			
kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.2	0.25	1.6	A	22F-A1P6N103	22F-A1P6N113
0.4	0.5	2.5	A	22F-A2P5N103	22F-A2P5N113
0.75	1	4.2	A	22F-A4P2N103	22F-A4P2N113
1.5	2	8	B	22F-A8P0N103	22F-A8P0N113
2.2	3	11	B	22F-A011N103	22F-A011N113

(1) This filter is suitable for use with a cable length of up to 5 meters for class A environments and up to 1 meter for class B environments.

200…240V AC, Three-Phase Drives (50/60 Hz)

Drive Ratings				IP20, NEMA/UL Type Open	with Integral "S Type" EMC Filter
		Output Current			
kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.2	0.25	1.6	A	22F-B1P6N103	–
0.4	0.5	2.5	A	22F-B2P5N103	–
0.75	1	4.2	A	22F-B4P2N103	–
1.5	2	8	A	22F-B8P0N103	–
2.2	3	12	B	22F-B012N103	–
3.7	5	17.5	B	22F-B017N103	–
with Brake					
5.5	7.5	25	C	22F-B025N104	–
7.5	10	33	C	22F-B033N104	–

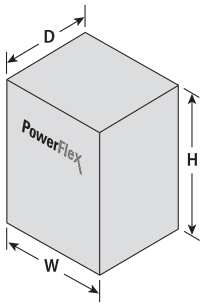
380…480V AC, Three-Phase Drives (50/60 Hz)

Drive Ratings				IP20, NEMA/UL Type Open	with Integral "S Type" EMC Filter (1)
		Output Current			
kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	1.5	A	22F-D1P5N103	22F-D1P5N113
0.75	1	2.5	A	22F-D2P5N103	22F-D2P5N113
1.5	2	4.2	A	22F-D4P2N103	22F-D4P2N113
2.2	3	6	B	22F-D6P0N103	22F-D6P0N113
3.7	5	8.7	B	22F-D8P7N103	22F-D8P7N113
with Brake					
5.5	7.5	13	C	22F-D013N104	22F-D013N114
7.5	10	18	C	22F-D018N104	22F-D018N114
11	15	24	C	22F-D024N104	22F-D024N114

(1) This filter is suitable for use with a cable length of up to 10 meters for Class A environments.

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



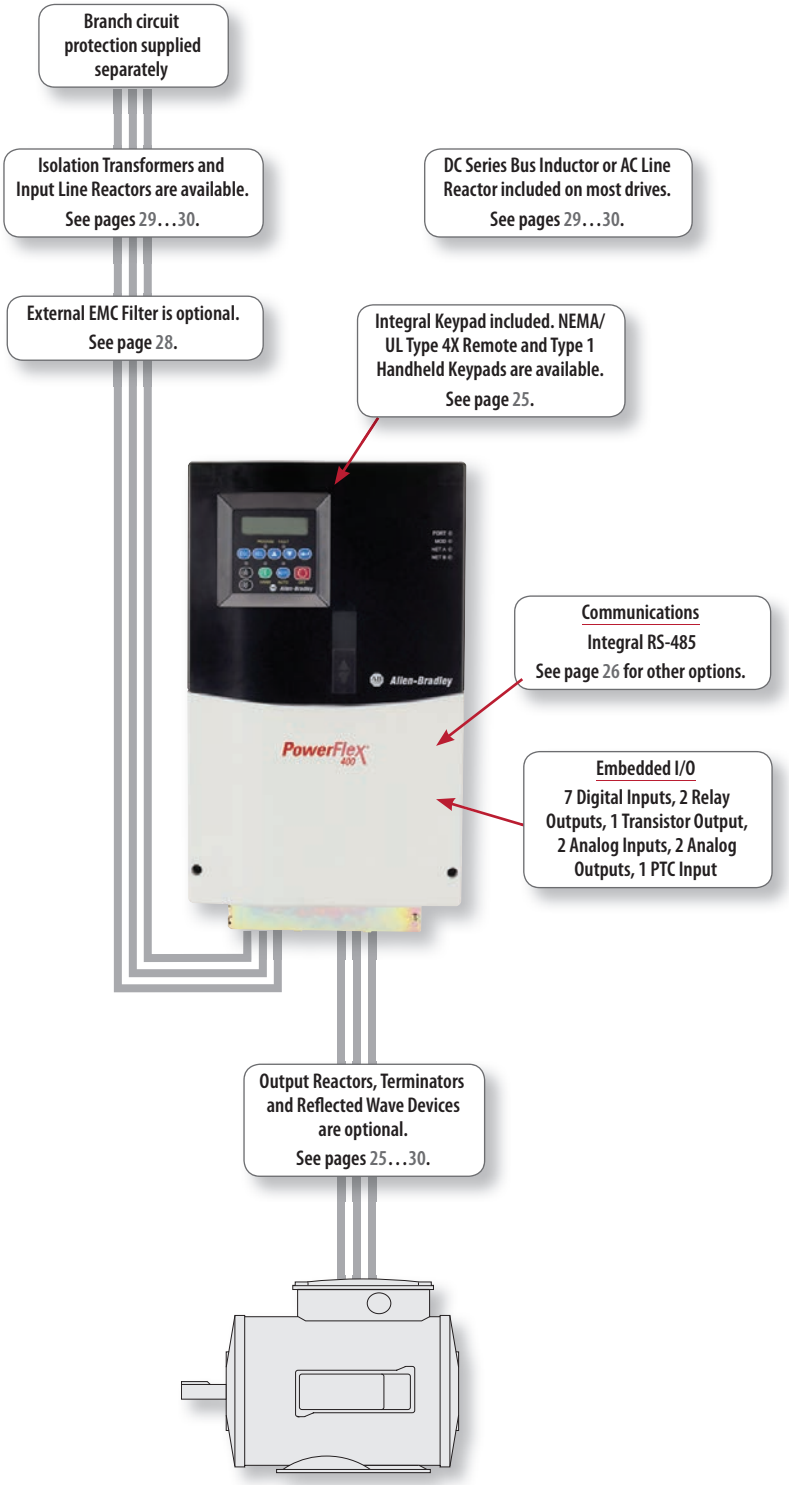
IP20, NEMA/UL Type Open

Frame	H	W	D	Weight
A	174.0 (6.85)	72.0 (2.83)	136.0 (5.35)	1.58 (3.5)
B	174.0 (6.85)	100.0 (3.94)	136.0 (5.35)	2.09 (4.6)
C	260.0 (10.24)	130.0 (5.12)	180.0 (7.09)	4.81 (10.6)

PowerFlex 400 AC Drive

Providing users with easy installation and ideal for mechanical fan and pump systems, the PowerFlex 400 AC drive offers a wide range of built-in features allowing for seamless HVAC building system integration. The PowerFlex 400 is designed to meet global OEM, contractor and end-user demands for flexibility, space savings and ease-of-use.

PowerFlex 400 AC Drive at a glance	
Ratings	
200…240V:	2.2…37 kW / 3…50 Hp / 12…145 A
380…480V:	2.2…250 kW / 3…350 Hp / 6…460 A
Motor Control	V/Hz Control
Enclosures	• IP20, NEMA/UL Type Open • Flange Mount Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X • IP30, NEMA/UL Type 1 (with optional kit)
Additional Features	PID/ PIP for fan and pump applications
Certifications	• c-UL, UL • CE • IEC (Designed to Meet) • RCM • RoHS • UL508C Plenum Rating
Options	See pages 25… 30



Additional Information

PowerFlex 400 Technical Data, publication 22C-TD001
PowerFlex 400 User Manual, publication 22C-UM001

Catalog Number Explanation

22C –	D	038	A	1	0	3
	Voltage Rating	Rating	Enclosure			

Product Selection

200...240V AC, Three-Phase Drives

Drive Ratings				Rating	Panel Mount	Flange Mount [1]
kW	Hp	Output Current [2] A	Frame Size		Cat. No.	Cat. No.
2.2	3	12	C	IP20, NEMA/UL Open Type [3]	22C-B012N103 [4]	22C-B012F103 [4]
3.7	5	17.5	C	IP20, NEMA/UL Open Type [3]	22C-B017N103 [4]	22C-B017F103 [4]
5.5	7.5	24	C	IP20, NEMA/UL Open Type [3]	22C-B024N103 [4]	22C-B024F103 [4]
7.5	10	33	C	IP20, NEMA/UL Open Type [3]	22C-B033N103 [4]	22C-B033F103 [4]
11	15	49	D	IP30, NEMA/UL Type 1	22C-B049A103	–
15	20	65	D	IP30, NEMA/UL Type 1	22C-B065A103	–
18.5	25	75	D	IP30, NEMA/UL Type 1	22C-B075A103	–
22	30	90	D	IP30, NEMA/UL Type 1	22C-B090A103	–
30	40	120	E	IP30, NEMA/UL Type 1	22C-B120A103	–
37	50	145	E	IP30, NEMA/UL Type 1	22C-B145A103	–

(1) Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.

(2) Drive terminals are sized according to UL. Depending on operating ambient and wire used, some local or national codes may require a larger wire size than what the power terminals can accept. Multiple conductors, 90 °C wire, and/or lugs may be required. Refer to the PowerFlex 400 User Manual for details on terminal block wire ranges.

(3) IP30, NEMA/UL Type 1 can be achieved for panel mount drives with top cover and optional conduit box kit installed. See page 26 for a field installed conversion kit.

(4) A DC bus inductor is not included. See page 29 for available inductors.

380...480V AC, Three-Phase Drives

Drive Ratings					Panel Mount	Flange Mount (1)
		Output Current (2)				
kW	Hp	A	Frame Size	Rating	Cat. No.	Cat. No.
2.2	3	6	C	IP20, NEMA/UL Open Type (3)	22C-D6P0N103 (4)	22C-D6P0F103 (4)
4	5	10.5	C	IP20, NEMA/UL Open Type (3)	22C-D010N103 (4)	22C-D010F103 (4)
5.5	7.5	12	C	IP20, NEMA/UL Open Type (3)	22C-D012N103 (4)	22C-D012F103 (4)
7.5	10	17	C	IP20, NEMA/UL Open Type (3)	22C-D017N103 (4)	22C-D017F103 (4)
11	15	22	C	IP20, NEMA/UL Open Type	22C-D022N103	22C-D022F103 (5)
15	20	30	C	IP20, NEMA/UL Open Type	22C-D030N103	22C-D030F103 (5)
18.5	25	38	D	IP30, NEMA/UL Type 1	22C-D038A103	–
22	30	45.5	D	IP30, NEMA/UL Type 1	22C-D045A103	–
30	40	60	D	IP30, NEMA/UL Type 1	22C-D060A103	–
37	50	72	E	IP30, NEMA/UL Type 1	22C-D072A103	–
45	60	88	E	IP30, NEMA/UL Type 1	22C-D088A103	–
55	75	105	E	IP30, NEMA/UL Type 1	22C-D105A103	–
75	100	142	E	IP30, NEMA/UL Type 1	22C-D142A103	–
90	125	170	F	IP30, NEMA/UL Type 1	22C-D170A103	–
110	150	208	F	IP30, NEMA/UL Type 1	22C-D208A103	–
132	200	260	G	IP30, NEMA/UL Type 1	22C-D260A103	–
160	250	310	G	IP30, NEMA/UL Type 1	22C-D310A103	–
200	300	370	H	IP30, NEMA/UL Type 1	22C-D370A103 (6)	–
250	350	460	H	IP30, NEMA/UL Type 1	22C-D460A103 (6)	–

(1) Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP40/54/65, NEMA/UL Type 1/12/4/4X.

(2) Drive terminals are sized according to UL. Depending on operating ambient and wire used, some local or national codes may require a larger wire size than what the power terminals can accept. Multiple conductors, 90 °C wire, and/or lugs may be required. Refer to the PowerFlex 400 User Manual for details on terminal block wire ranges.

(3) IP30, NEMA/UL Type 1 can be achieved for panel mount drives with top cover and optional conduit box kit installed. See page 27 for a field installed conversion kit.

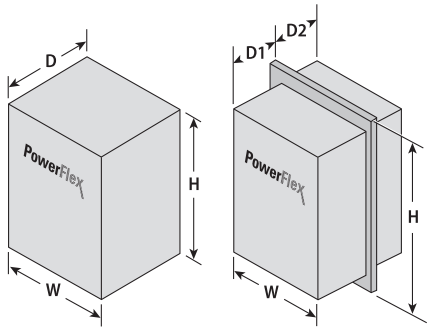
(4) A DC bus inductor is not included. See page 27 for available inductors.

(5) 11 and 15 kW (15 and 20 Hp) Frame C flange mount drives require an external DC series bus inductor.

(6) 200 and 250 kW (300 and 350 Hp) ratings include an internal AC line reactor (not a DC bus inductor).

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



Panel Mount

Frame	H	W	D	Weight (1)
C	260.0 (10.20) 320.0 (12.60) (2)	130.0 (5.10)	180.0 (7.10)	7.49 (16.5)
D	436.2 (17.17)	250.0 (9.84)	206.1 (8.11)	15.60 (34.4)
E	605.5 (23.84)	370.0 (14.57)	259.2 (10.21)	51.20 (112.9)
F	850.0 (33.46)	425.0 (16.73)	280.0 (11.02)	88.00 (194.0)
G	892.0 (35.12)	425.0 (16.73)	264.0 (10.39)	106.00 (233.7)
H	1363.8 (53.69)	529.2 (20.83)	358.6 (14.12)	177.00 (390.2)

(1) Weights are approximate. Refer to the PowerFlex 400 User Manual for detailed weight information.

(2) Drive with IP30, NEMA 1/UL Type 1 option kit installed.

Flange Mount

Frame	H	W	D1	D2	Weight (1)
C	325.0 (12.80)	300.0 (11.81)	105.8 (4.17)	138.2 (5.44)	3.85 (8.5)

(1) Weights are approximate. Refer to the PowerFlex 400 User Manual for detailed weight information.

PowerFlex 4-Class Drives

PowerFlex 4 AC Drive

Designed to meet global OEM and end-user demands for simplicity, space savings, and cost efficiency, this drive provides intuitive features such as an integral keypad with local potentiometer and control keys that are active right out of the box.

PowerFlex 4 AC Drive at a Glance				
Ratings	100…120V: 0.2…1.1 kW / 0.25…1.5 Hp / 1.5…6 A		200…240V: 0.2…3.7 kW / 0.25…5 Hp / 1.4…17.5 A	
	380…480V: 0.4…3.7 kW / 0.5…5 Hp / 1.4…8.7 A			
Motor Control	V/Hz Control			
Enclosures	IP20, NEMA/UL Type Open	Plate Drive Front = IP20, NEMA/UL Type Open	Flange Mount Front = IP20, NEMA/UL Type Open Back/Heatsink = IP40/54/65 NEMA/UL Type 1/12/4/4X	IP30, NEMA/UL Type 1 (with optional kit)

PowerFlex 40 AC Drive

The PowerFlex 40 AC drive gives OEMs, machine builders, and end users performance-enhancing motor control in an easy to-use, compact package. The PowerFlex 40 features sensorless vector control to meet low speed torque demands that help improve application performance.

With flexible packaging options and an uncomplicated programming structure, this drive can be quickly and easily installed and configured for a variety of applications.

PowerFlex 40 AC Drive at a Glance				
Ratings	100…120V: 0.4…1.1 kW / 0.5…1.5 Hp / 2.3…6 A		200…240V: 0.4…7.5 kW / 0.5…10 Hp / 2.3…33 A	
	380…480V: 0.4…11 kW / 0.5…15 Hp / 1.4…24 A		500…600V: 0.75…11 kW / 1…15 Hp / 1.7…19 A	
Motor Control	V/Hz Control	Sensorless Vector Control		
Enclosures	IP20, NEMA/UL Type Open	Plate Drive Front = IP20, NEMA/UL Type Open	Flange Mount Front = IP20, NEMA/UL Type Open Back/Heatsink = IP40/54/65 NEMA/UL Type 1/12/4/4X	IP30, NEMA/UL Type 1 (with optional kit)
	IP66, NEMA/UL Type 4X			

PowerFlex 40P AC Drive

The PowerFlex 40P AC drive addresses user needs for closed loop control with an option for Category 3 Safe Torque-off in a compact and cost effective design. Based on the popular PowerFlex 40, this drive is designed to meet global OEM and end-user demands for flexibility, space savings, and ease of use. This drive is a cost-effective alternative for speed or basic position control of applications such as diverters, smart conveyors, packaging machines, palletizers, drafting machines, ring spinning machines, and synthetic fiber spinning machines and shares common options and accessories with the PowerFlex 40.

PowerFlex 40P AC Drive at a Glance				
Ratings	200…240V: 0.4…7.5 kW / 0.5…10 Hp / 2.3…33 A		380…480V: 0.4…11 kW / 0.5…15 Hp / 1.4…24 A	
	500…600V: 0.75…11 kW / 1…15 Hp / 1.7…19 A			
Motor Control	V/Hz Control	Sensorless Vector Control		
Enclosures	IP20, NEMA/UL Type Open	Plate Drive Front = IP20, NEMA/UL Type Open	Flange Mount Front = IP20, NEMA/UL Type Open Back/Heatsink = IP40/54/65 NEMA/UL Type 1/12/4/4X	IP30, NEMA/UL Type 1 (with optional kit)

For additional product selection information, please visit www.rockwellautomation.com/go/drives.

Human Interface Modules and Accessories

Description	Cat. No.	Used with PowerFlex Drive	
		4M	400
Remote (Panel Mount) LCD Display, Digital Speed Control, CopyCat Capable. Includes 2.0 meter cable. IP66, NEMA Type 4X/12 - Indoor Use Only.	22-HIM-C2S (1)	✓	✓
Remote Handheld, LCD Display, Full Numeric Keypad, Digital Speed Control, CopyCat Capable. Includes 1.0 meter cable. IP30, NEMA Type 1. Panel mount with optional Bezel Kit.	22-HIM-A3	✓	✓
Bezel Kit. Panel Mount for LCD Display, Remote Handheld Unit. IP30, NEMA Type 1. Includes a 22-RJ45CBL-C20 cable.	22-HIM-B1	✓	✓
DSI HIM Cable (DSI HIM to RJ45 cable)			
1.0 Meter (3.3 Feet)	22-HIM-H10	✓	✓
2.9 Meter (9.5 Feet)	22-HIM-H30	✓	✓

(1) The 22-HIM-C2S is smaller than the 22-HIM-C2 and cannot be used as a direct replacement.

Other Options

Description	Cat. No.	Used with PowerFlex Drive	
		4M	400
Auxiliary Relay Board - Expands drive output capabilities - Frames D. . .H only.	AK-U9-RLB1		✓

Terminators

Description (1)	Cat. No.	Used with PowerFlex Drive	
		4M	400
for use with 3.7 kW (5 Hp) and below drives	1204-TFA1	✓	✓
for use with 1.5 kW (2 Hp) and up drives	1204-TFB2	✓	✓

(1) For selection information, refer to Appendix A of the Wiring and Grounding Guidelines for Pulse Width Modulated (PWM) AC Drives, publication Drives-IN001.

Reflected Wave Reduction Module with Common Mode Choke

Description (1)	Cat. No.	Used with PowerFlex Drive	
		4M	400
17A with Common Mode Choke	1204-RWC-17-A	✓	✓

(1) For selection information, refer to Appendix A of the Wiring and Grounding Guidelines for Pulse Width Modulated (PWM) AC Drives, publication Drives-IN001.

Reflected Wave Reduction Modules

Voltage	ND kW	ND Hp	Cat. No.	Used with PowerFlex Drive	
				4M	400
380. . . 480V AC	2.2. . .4	3. . .5	1321-RWR8-DP	✓	✓
	4	5	1321-RWR12-DP	✓	✓
	5.5	7.5	1321-RWR18-DP	✓	✓
	7.5	10	1321-RWR25-DP	✓	✓
	11	15	1321-RWR25-DP	✓	✓
	15	20	1321-RWR35-DP		✓
	18.5	25	1321-RWR45-DP		✓
	22	30	1321-RWR55-DP		✓
	30	40	1321-RWR80-DP		✓
	37	50	1321-RWR80-DP		✓
	45	60	1321-RWR100-DP		✓
	55	75	1321-RWR130-DP		✓
	75	100	1321-RWR160-DP		✓
	90	125	1321-RWR200-DP		✓
	110	150	1321-RWR250-DP		✓
	149	200	1321-RWR320-DP		✓
	187	250	1321-RWR320-DP		✓

Communication Option Kits

Description	Cat. No.	Used with PowerFlex Drive	
		4M	400
BACnet® MS/TP RS485 Communication Adapter	22-COMM-B		✓
ControlNet™ Communication Adapter	22-COMM-C	✓ (1)	✓
DeviceNet™ Communication Adapter	22-COMM-D	✓ (1)	✓
EtherNet/IP™ Communication Adapter	22-COMM-E	✓ (1)	✓
LonWorks® Communication Adapter	22-COMM-L		✓
PROFIBUS™ DP Communication Adapter	22-COMM-P	✓ (1)(2)	✓
Serial Converter Module (RS485 to RS232). Provides serial communication via DF1 protocol for use with DriveExplorer™ and DriveExecutive™ software. Includes DSI to RS232 serial converter, 1203-SFC serial cable, 22-RJ45CBL-C20 cable, and DriveExplorer Lite CD.	22-SCM-232	✓	✓
Serial Cable. 2.0 meter with a locking low profile connector. Connects the serial converter to a 9-pin sub-miniature D female computer connector.	1203-SFC	✓	✓
Serial Null Modem Adapter. Use when connecting the serial converter to DriveExplorer on a handheld PC.	1203-SNM	✓	✓
Universal Serial Bus™ (USB) Converter includes 2m USB, 20-HIM-H10 and 22-HIM-H10 Cables.	1203-USB	✓	✓
DSI Cable. 2.0 meter RJ45 to RJ45 cable, male to male connectors.	22-RJ45CBL-C20	✓	✓
Splitter Cable. RJ45 one to two port splitter cable.	AK-U0-RJ45-SC1	✓	✓
Terminal Block. RJ45 two position terminal block (6 pieces) with two 120 Ohm terminating resistors (loose).	AK-U0-RJ45-TB2P	✓	✓
Terminating Resistors. 120 Ohm resistor embedded in an RJ45 connector (2 pieces).	AK-U0-RJ45-TR1	✓	✓
DSI External Communications Kit. External mounting kit for 22-COMM Communication Adapters.	22-XCOMM-DC-BASE	✓	✓
External Communications Kit Power Supply Optional 100 . . . 240V AC Power Supply for External DSI Communications Kit.	20-XCOMM-AC-PS1	✓	✓
Compact I/O Module (3 Channel)	1769-SM2	✓	✓
Serial Flash Firmware Kit Updates drive firmware via computer.	AK-U9-FLSH1		✓
Communication Adapter Cover Houses the Communication Adapter for B and C Frame drives. Note: Cover adds 25 mm (0.98 in.) to the overall depth of the drive.			
Frame C Drive (PowerFlex 400)	22C-CCC		✓ (3)

(1) PowerFlex 4 and PowerFlex 4M drives require External DSI Communication Kits. Communication Adapters cannot be drive mounted.

(2) When a 22-COMM-P adapter is configured for multi-drive mode, a PowerFlex 400 drive must be used as a master drive on the network.

(3) If IP30, NEMA/UL Type 1 is required, a 22-JBCB (Frame B drives) or 22-JBCC (Frame C drives) must also be ordered.

IP30, NEMA/UL Type 1 Conversion Kit

Description	Frame	Cat. No.	Used with PowerFlex Drive	
			4M	400
Converts IP20 drive to IP30, NEMA/UL Type 1 enclosure. Includes conduit box, mounting screws and plastic top panel.	C	22-JBAC		✓
Converts IP20 drive to IP30, NEMA/UL Type 1 enclosure. Includes communication option conduit box, mounting screws and plastic top panel.	C	22-JBCC		✓

Dynamic Brake Resistors

Drive Rating			Minimum Resistance	Resistance [1]		Used with PowerFlex Drive	
Voltage	kW	Hp	Ohms ±10%	Ohms ±5%	Cat. No. [2]	4M	400
200…240V, 50/60 Hz, Three-Phase	5.5	7.5	13	30	AK-R2-030P1K2	✓	
	7.5	10	10	30	AK-R2-030P1K2	✓	
380…480V, 50/60 Hz, Three-Phase	5.5	7.5	55	120	AK-R2-120P1K2	✓	
	7.5	10	39	120	AK-R2-120P1K2	✓	
	11	15	24	120	AK-R2-120P1K2 [3]	✓	

(1) Verify resistor Ohms against minimum resistance for drive being used.

(2) Resistors listed are rated 5% duty cycle.

(3) Requires two resistors wired in parallel.

Spare Parts

Description		Cat. No.	Used with PowerFlex Drive	
			4M	400
Fan Replacement Kits	Fan Replacement Kit - Frame A	SK-U1-FFAN1-A1	✓	
	Fan Replacement Kit - Frame B	SK-U1-FFAN1-B1	✓	
	Fan Replacement Kit - Frame C	SK-U1-FFAN1-C1	✓	
	Fan Replacement Kit - Frame C, 1 Fan	SK-U1-FAN1-C1		✓ [1]
	Fan Replacement Kit - Frame C, 1 Fan, 15 Hp	SK-U1-FAN1-C2		✓ [2]
	Fan Replacement Kit - Frame D, 2 Fans, B049…B090 & D038…D060 Ratings	SK-U1-FAN2-D1		✓
	Fan Replacement Kit - Frame E, 2 Fans, B120…B145 & D072…D142 Ratings	SK-U1-FAN2-E2		✓
	Fan Replacement Kit - Frame F, 2 Fans, IGBT, D170 & D208 Ratings	SK-U1-FAN2-F1		✓
	Fan Replacement Kit - Frame F, 1 Fan, Rectifier, D170 & D208 Ratings	SK-U1-FAN1-F2		✓
	Fan Replacement Kit - Frame F, 1 Fan, Choke, D170 & D208 Ratings	SK-U1-FAN1-F3		✓
	Fan Replacement Kit - Frame G, 1 Fan (Side), D260 & D310 Ratings	SK-U1-FAN1-G1		✓
	Fan Replacement Kit - Frame G, 4 Fans (Bottom), D260 & D310 Ratings	SK-U1-FAN4-G3		✓
	Fan Replacement Kit - Frame H, 1 Fan (Upper Side), D370 & D460 Ratings	SK-U1-FAN1-H1		✓
	Fan Replacement Kit - Frame H, 1 Fan (Middle Side), D370 & D460 Ratings	SK-U1-FAN1-H2		✓
	Fan Replacement Kit - Frame H, 4 Fans (Bottom), D370 & D460 Ratings	SK-U1-FAN4-H3		✓
Covers	Frame A Cover	SK-U1-FCVR-A1	✓	
	Frame B Cover	SK-U1-FCVR-B1	✓	
	Frame C Cover	SK-U1-FCVR-C1	✓	
	Frame C Cover with Power Terminal Guard	SK-U1-CCVR1-C1		✓
	Frame D Cover	SK-U1-CCVR1-D1		✓
	Frame E Cover	SK-U1-CCVR1-E1		✓
	Frame F Cover	SK-U1-CCVR1-F1		✓
	Frame G Cover	SK-U1-CCVR1-G1		✓
	Frame H Cover	SK-U1-CCVR1-H1		✓

(1) 3…10 Hp at 200…240V AC and 3…10 Hp at 380…480V AC.

(2) 15…20 Hp at 380…480V AC.

EMC Filters (Required to Meet CE Certification)

Drive Ratings			PowerFlex 4M		PowerFlex 400
			S Type Filter	L Type Filter	IP00 (NEMA/UL Type Open)
Input Voltage	kW	Hp	Cat. No. (1)	Cat. No. (2)	Cat. No. (1)
100…120V, 50/60 Hz, Single-Phase	0.2	0.25	–	22F-RF010-AL	–
	0.4	0.5	–	22F-RF010-AL	–
	0.75	1	–	22F-RF025-BL	–
	1.1	1.5	–	22F-RF025-BL	–
200…240V, 50/60 Hz, Single-Phase	0.2	0.25	(3)	22F-RF010-AL	–
	0.4	0.5	(3)	22F-RF010-AL	–
	0.75	1	(3)	22F-RF010-AL	–
	1.5	2	(3)	22F-RF025-BL	–
	2.2	3	(3)	22F-RF025-BL	–
200…240V, 50/60 Hz, Three-Phase	0.2	0.25	22F-RF9P5-AS	22F-RF9P5-AL	–
	0.4	0.5	22F-RF9P5-AS	22F-RF9P5-AL	–
	0.75	1	22F-RF9P5-AS	22F-RF9P5-AL	–
	1.5	2	22F-RF9P5-AS	22F-RF9P5-AL	–
	2.2	3	22F-RF021-BS	22F-RF021-BL	22-RF034-CS
	3.7	5	22F-RF021-BS	22F-RF021-BL	22-RF034-CS
	5.5	7.5	22F-RF039-CS	22F-RF039-CL	22-RF034-CS
	7.5	10	22F-RF039-CS	22F-RF039-CL	22-RF034-CS
	11	15	–	–	22-RFD070
	15	20	–	–	22-RFD100
	18.5	25	–	–	22-RFD100
	22	30	–	–	22-RFD150
	30	40	–	–	22-RFD150
	37	50	–	–	22-RFD180
380…480V, 50/60 Hz, Three-Phase	0.4	0.5	22F-RF6P0-AS	22F-RF6P0-AL	–
	0.75	1	22F-RF6P0-AS	22F-RF6P0-AL	–
	1.5	2	22F-RF6P0-AS	22F-RF6P0-AL	–
	2.2	3	22F-RF012-BS	22F-RF012-BL	22-RF018-CS
	3.7	5	22F-RF012-BS	22F-RF012-BL	22-RF018-CS
	5.5	7.5	22F-RF026-CS	22F-RF026-CL	22-RF018-CS
	7.5	10	22F-RF026-CS	22F-RF026-CL	22-RF018-CS
	11	15	22F-RF026-CS	22F-RF026-CL	22-RF026-CS
	15	20	–	–	22-RFD036
	18.5	25	–	–	22-RFD050
	22	30	–	–	22-RFD050
	30	40	–	–	22-RFD070
	37	50	–	–	22-RFD100
	45	60	–	–	22-RFD100
	55	75	–	–	22-RFD150
	75	100	–	–	22-RFD180
	90	125	–	–	22-RFD208
	110	150	–	–	22-RFD208
	132	200	–	–	22-RFD323
	160	250	–	–	22-RFD480
	200	300	–	–	22-RFD480
	250	350	–	–	22-RFD480

(1) This filter is suitable for use with a cable length of up to 10 meters for Class A and 1 meter for Class B environments.

(2) This filter is suitable for use with a cable length of up to 100 meters for Class A and 5 meters for Class B environments.

(3) Drives are available in these ratings with internal "S Type" filters.

DC Series Bus Inductors

Drive Rating				Inductance		Used with PowerFlex Drive	
Voltage	kW	Hp	Amps	mH	Cat. No.	4M	400
200…240V, 50/60 Hz, Three-Phase	2.2	3	12	1.00	1321-DC12-1		✓
	3.7	5	17.5	0.65	1321-DC18-1		✓
	5.5	7.5	32	0.85	1321-DC32-1		✓
	7.5	10	40	0.75	1321-DC40-2		✓
400…480V, 50/60 Hz, Three-Phase	2.2	3	6	2	1321-DC9-2		✓
	4.0	5	10.5	2.1	1321-DC12-2		✓
	5.5	7.5	18	3.75	1321-DC18-4		✓
	7.5	10	25	1.28	1321-DC25-4		✓
	11	15	32	2.68	1321-DC32-3		✓
	15	20	30	2.5	1321-DC40-4		✓

Isolation Transformers for PowerFlex 400 - IP32, NEMA/UL Type 3R Standalone, 4…6% Nominal Impedance

Rating		Wiring Diagram (see page 100)	208V Primary	230V Primary	460V Primary		575V Primary	
			208V, 60 Hz, Three-Phase Secondary	230V, 60 Hz, Three-Phase Secondary	230V, 60 Hz, Three-Phase Secondary	460V, 60 Hz, Three-Phase Secondary	230V, 60 Hz, Three-Phase Secondary	460V, 60 Hz, Three-Phase Secondary
kW	Hp		Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.
2.2	3.0	1	1321-3TW005-XX	1321-3TW005-AA	1321-3TW005-BA	1321-3TW005-BB	1321-3TW005-CA	1321-3TW005-CB
22	30	2	–	1321-3TW040-AA	1321-3TW040-BA	1321-3TW040-BB	1321-3TW040-CA	1321-3TW040-CB
30	40	2	–	1321-3TW051-AA	1321-3TW051-BA	1321-3TW051-BB	1321-3TW051-CA	1321-3TW051-CB
37	50	2	–	1321-3TH063-AA	1321-3TH063-BA	1321-3TH063-BB	–	–
45	60	2	–	–	–	1321-3TH075-BB	–	–
55	75	2	–	–	–	1321-3TH093-BB	–	–
75	100	2	–	–	–	1321-3TH118-BB	–	–
90	125	2	–	–	–	1321-3TH145-BB	–	–
110	150	2	–	–	–	1321-3TH175-BB	–	–
132	200	2	–	–	–	1321-3TH220-BB	–	–
160	250	2	–	–	–	1321-3TH275-BB	–	–
200	300	2	–	–	–	1321-3TH330-BB	–	–
250	350	2	–	–	–	1321-3TH440-BB	–	–

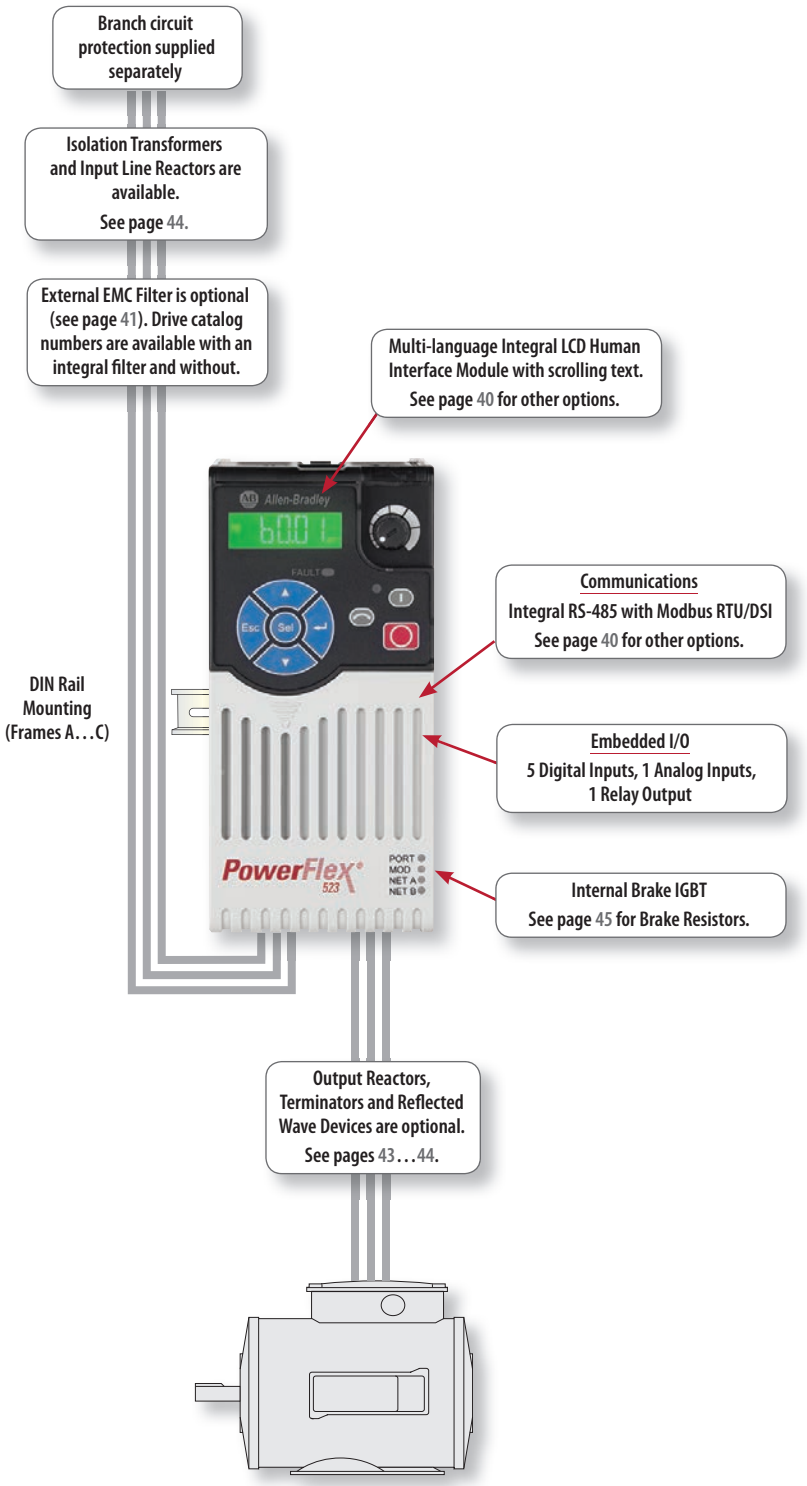
Line Reactors - 3% Impedance

Drive Ratings				IP00 [1] (NEMA/UL Open Type)	IP11 [1] (NEMA/UL Type 1)	Used with PowerFlex Drive	
Voltage	kW	Hp	Amps	Cat. No.	Cat. No.	4M	400
200…240V, 60 Hz, Three-Phase	0.2	0.25	2.0	1321-3R2-A	–	✓	
	0.4	0.5	4.0	1321-3R4-B	–	✓	
	0.75	1	8.0	1321-3R8-B	–	✓	
	1.5	2	8.0	1321-3R8-A	–	✓	
	2.2	3	12	1321-3R12-A	1321-3RA12-A	✓	✓
	3.7	5	17.5	1321-3R18-A	1321-3RA18-A	✓	✓
	5.5	7.5	24	1321-3R25-A	1321-3RA25-A	✓	✓
	7.5	10	33	1321-3R35-A	1321-3RA35-A	✓	✓
	11	15	49	1321-3R45-A	1321-3RA45-A		✓
	15	20	65	1321-3R55-A	1321-3RA55-A		✓
	18.5	25	75	1321-3R80-A	1321-3RA80-A		✓
	22	30	90	1321-3R80-A	1321-3RA80-A		✓
	30	40	120	1321-3R100-A	1321-3RA100-A		✓
	37	50	145	1321-3R130-A	1321-3RA130-A		✓
380…480V, 60 Hz, Three-Phase	0.4	0.5	2.0	1321-3R2-B	–	✓	
	0.75	1	4.0	1321-3R4-C	–	✓	
	1.5	2	4.0	1321-3R4-B	–	✓	
	2.2	3	6.0	1321-3R8-C	1321-3RA8-C	✓	✓
	4.0	5	10.5	1321-3R8-B	1321-3RA8-B	✓	✓
	5.5	7.5	12	1321-3R12-B	1321-3RA12-B	✓	✓
	7.5	10	17	1321-3R18-B	1321-3RA18-B	✓	✓
	11	15	22	1321-3R25-B	1321-3RA25-B	✓	✓
	15	20	30	1321-3R35-B	1321-3RA35-B		✓
	18.5	25	38	1321-3R35-B	1321-3RA35-B		✓
	22	30	45.5	1321-3R45-B	1321-3RA45-B		✓
	30	40	60	1321-3R55-B	1321-3RA55-B		✓
	37	50	72	1321-3R80-B	1321-3RA80-B		✓
	45	60	88	1321-3R80-B	1321-3RA80-B		✓
	55	75	105	1321-3R100-B	1321-3RA100-B		✓
	75	100	142	1321-3R130-B	1321-3RA130-B		✓
	90	125	170	1321-3R160-B	1321-3RA160-B		✓
	110	150	208	1321-3R200-B	1321-3RA200-B		✓

(1) Catalog numbers listed are for 3% impedance. 5% impedance reactor types are also available. Refer to 1321 Power Conditioning Products Technical Data, publication 1321-TD001.

PowerFlex 523 AC Drive

PowerFlex 523 AC drives are designed to help reduce installation and configuration time with an innovative modular design while providing just enough control for your application. These drives offer convenient programming features with the fast upload and download of configuration files over a standard USB connection, as well as installation flexibility with Zero Stacking and a high ambient operating temperature. PowerFlex 523 AC drives also provide a variety of motor control options, making these drives ideal for simple applications.



PowerFlex 523 AC Drive at a glance

Ratings	
100…120V:	0.2…1.1 kW / 0.25…1.5 Hp / 1.6…6 A
200…240V:	0.2…15 kW / 0.25…20 Hp / 1.6…62.1 A
380…480V:	0.4…22 kW / 0.5…30 Hp / 1.4…43 A
525…600V:	0.4…22 kW / 0.5…30 Hp / 0.9…32 A
Motor Control	• V/Hz Control • Sensorless Vector Control
Enclosures	• IP20, NEMA/UL Type Open • IP30, NEMA/UL Type 1 (with optional kit)
Additional Features	• Modular design eases installation • Operating temperatures from -20 °C (-4 °F) up to 50 °C (122 °F). Up to 70 °C (158 °F) with current derating and optional control module fan kit • LCD QuickView™ HIM with multi-language support • MainsFree™ Programming via USB • Configure using Connected Components Workbench Software • Configure using Studio 5000 Logix Designer™ Software • Automatic Device Configuration (1) • Economizer motor control for energy savings • Application specific parameter group AppView™ and CustomView™ • Option for dual port EtherNet/IP adapter. DeviceNet and PROFIBUS DP adapters also available. • Conformal coating to IEC 60721 3C2 standards
Certifications	• ACS 156 • c-UL, UL • CE • EAC • KCC • RCM • REACH • RoHS • SEMI F47
Options	See pages 40… 45

(1) Requires Dual-port EtherNet/IP Option Module (Cat. No. 25-COMM-E2P).

Additional Information

PowerFlex 520-Series Technical Data, publication 520-TD001
PowerFlex 520-Series User Manual, publication 520-UM001

Catalog Number Explanation

25A –	D	6P0	N	1	1	4
	Voltage Rating	Rating	Enclosure		Internal EMC Filter 0 = No 1 = Yes	

Product Selection

100…120V AC, Single-Phase Input, Three-Phase Output Drives, 50/60 Hz

Drive Ratings					Frame Size	No Filter	with Integral EMC Filter
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A		Cat. No.	Cat. No.
0.2	0.25	0.2	0.25	1.6	A	25A-V1P6N104	–
0.4	0.5	0.4	0.5	2.5	A	25A-V2P5N104	–
0.75	1	0.75	1	4.8	B	25A-V4P8N104	–
1.1	1.5	1.1	1.5	6	B	25A-V6P0N104	–

200…240V AC, Single-Phase Input, Three-Phase Output Drives, 50/60 Hz

Drive Ratings					Frame Size	No Filter	with Integral EMC Filter [1]
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A		Cat. No.	Cat. No.
0.2	0.25	0.2	0.25	1.6	A	25A-A1P6N104	25A-A1P6N114
0.4	0.5	0.4	0.5	2.5	A	25A-A2P5N104	25A-A2P5N114
0.75	1	0.75	1	4.8	A	25A-A4P8N104	25A-A4P8N114
1.5	2	1.5	2	8	B	25A-A8P0N104	25A-A8P0N114
2.2	3	2.2	3	11	B	25A-A011N104	25A-A011N114

(1) This filter is suitable for use with cable lengths up to 10 meters (32.8 feet) for C2 spec and 20 meters (65.6 feet) for C3 spec.

200…240V AC, Three-Phase, 50/60 Hz

Drive Ratings					Frame Size	No Filter	with Integral EMC Filter
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A		Cat. No.	Cat. No.
0.2	0.25	0.2	0.25	1.6	A	25A-B1P6N104	–
0.4	0.5	0.4	0.5	2.5	A	25A-B2P5N104	–
0.75	1	0.75	1	5	A	25A-B5P0N104	–
1.5	2	1.5	2	8	A	25A-B8P0N104	–
2.2	3	2.2	3	11	A	25A-B011N104	–
4	5	4	5	17.5	B	25A-B017N104	–
5.5	7.5	5.5	7.5	24	C	25A-B024N104	–
7.5	10	7.5	10	32.2	D	25A-B032N104	–
11	15	11	15	48.3	E	25A-B048N104	–
15	20	11	15	62.1	E	25A-B062N104	–

380…480V AC, Three-Phase, 50/60 Hz

Drive Ratings					Frame Size	No Filter	with Integral EMC Filter (1)
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A		Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	1.4	A	25A-D1P4N104	25A-D1P4N114
0.75	1	0.75	1	2.3	A	25A-D2P3N104	25A-D2P3N114
1.5	2	1.5	2	4	A	25A-D4P0N104	25A-D4P0N114
2.2	3	2.2	3	6	A	25A-D6P0N104	25A-D6P0N114
4	5	4	5	10.5	B	25A-D010N104	25A-D010N114
5.5	7.5	5.5	7.5	13	C	25A-D013N104	25A-D013N114
7.5	10	7.5	10	17	C	25A-D017N104	25A-D017N114
11	15	11	15	24	D	25A-D024N104	25A-D024N114
15	20	11	15	30	D	25A-D030N104	25A-D030N114
18.5	25	15	20	37	E	25A-D037N114 (2)	25A-D037N114
22	30	18.5	25	43	E	25A-D043N114 (2)	25A-D043N114

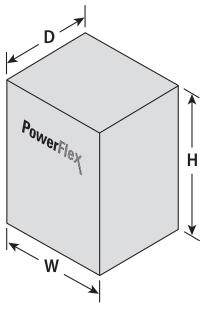
(1) This filter is suitable for use with cable lengths up to 10 meters (32.8 feet) for C2 spec and 20 meters (65.6 feet) for C3 spec.
(2) With EMC filter.

525…600V AC, Three-Phase, 50/60 Hz

Drive Ratings					Frame Size	No Filter	with Integral EMC Filter
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A		Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	0.9	A	25A-E0P9N104	–
0.75	1	0.75	1	1.7	A	25A-E1P7N104	–
1.5	2	1.5	2	3	A	25A-E3P0N104	–
2.2	3	2.2	3	4.2	A	25A-E4P2N104	–
4	5	4	5	6.6	B	25A-E6P6N104	–
5.5	7.5	5.5	7.5	9.9	C	25A-E9P9N104	–
7.5	10	7.5	10	12	C	25A-E012N104	–
11	15	11	15	19	D	25A-E019N104	–
15	20	11	15	22	D	25A-E022N104	–
18.5	25	15	20	27	E	25A-E027N104	–
22	30	18.5	25	32	E	25A-E032N104	–

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP20, NEMA/UL Type Open

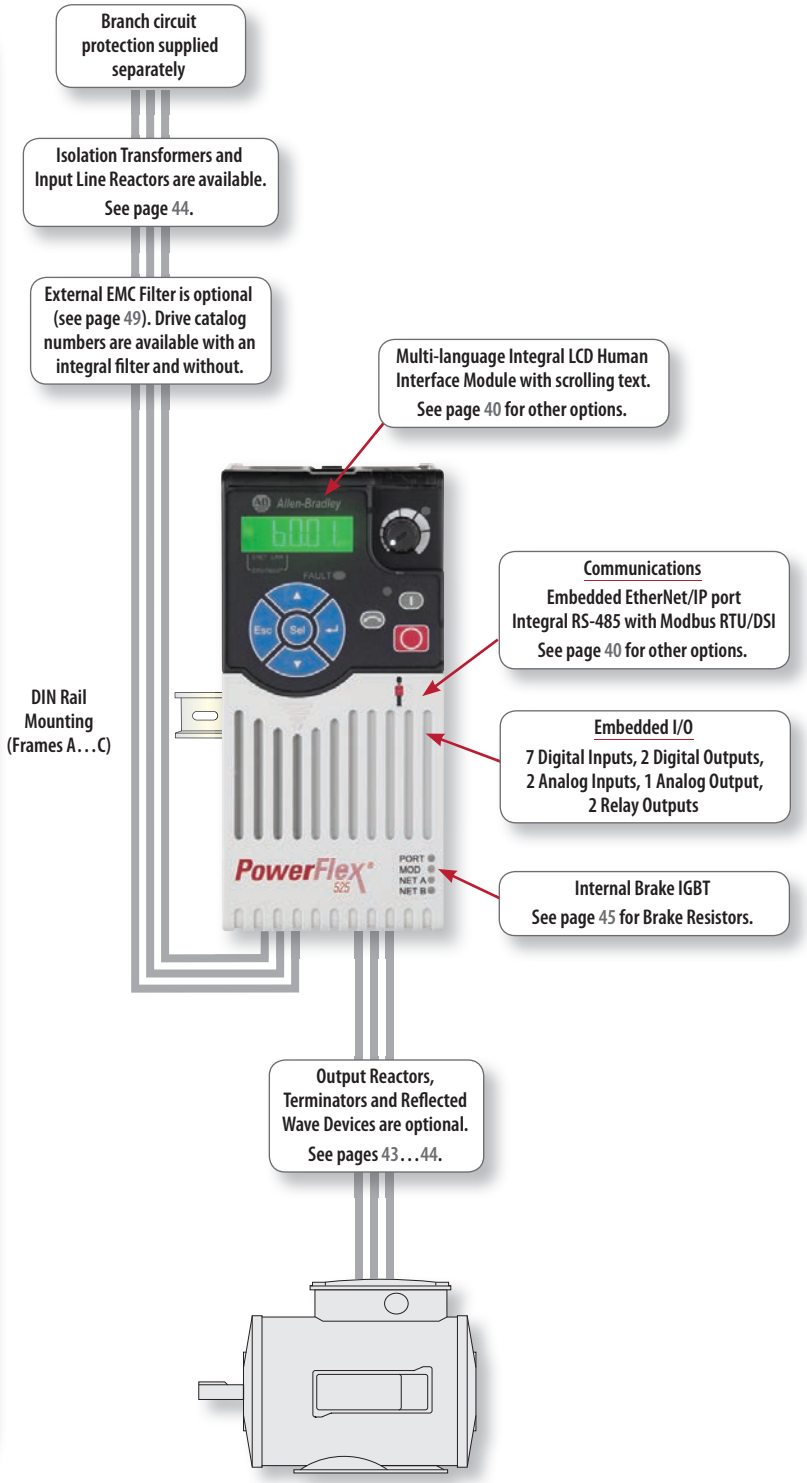
Frame	H	W	D	Weight
A	152.0 (5.98)	72.0 (2.83)	172.0 (6.77)	1.10 (2.4)
B	180.0 (7.08)	87.0 (3.42)	172.0 (6.77)	1.60 (3.5)
C	220.0 (8.66)	109.0 (4.29)	184.0 (7.24)	2.30 (5.1)
D	260.0 (10.23)	130.0 (5.11)	212.0 (8.34)	3.20 (7.1)
E	300.0 (11.81)	185.0 (7.28)	279.0 (10.98)	12.90 (28.4)

PowerFlex 525 AC Drive

PowerFlex 525 AC drives feature an innovative, modular design offering fast and easy installation and configuration. These cost-effective compact drives come with embedded EtherNet/IP™ communications, safety, USB configuration and a high ambient operating temperature capability. PowerFlex 525 AC drives also provide a variety of motor control algorithms including volts per hertz, sensorless vector control and closed loop velocity vector control, making these drives ideal for a vast array of applications.

PowerFlex 525 AC Drive at a glance	
Ratings	
100…120V:	0.4…1.1 kW / 0.5…1.5 Hp / 2.5…6 A
200…240V:	0.4…15 kW / 0.5…20 Hp / 2.5…62.1 A
380…480V:	0.4…22 kW / 0.5…30 Hp / 1.4…43 A
525…600V::	0.4…22 kW / 0.5…30 Hp / 0.9…32 A
Motor Control	• V/Hz Control • Sensorless Vector Control • Closed Loop Velocity Vector Control • Permanent Magnet Motor Control (1)
Enclosures	• IP20, NEMA/UL Type Open • IP30, NEMA/UL Type 1 (with optional kit)
Safety	• Safe Torque-Off PLd/SIL2 Cat 3 (meets ISO 13849-1)
Additional Features	• Modular design eases installation • Operating temperatures from -20 °C (-4 °F) up to 50 °C (122 °F). Up to 70 °C (158 °F) with current derating and optional control module fan kit • Built-in EtherNet/IP port • Option for dual port EtherNet/IP adapter. • LCD QuickView™ HIM with multi-language support • MainsFree™ Programming via USB • Configure using Connected Components Workbench Software • Configure using Studio 5000 Logix Designer™ Software • Automatic Device Configuration • Economizer motor control for energy savings • Application specific parameter group AppView™ and CustomView™ • Simple positioning control with optional encoder card • Conformal coating to IEC 60721 3C2 standards • DeviceNet and PROFIBUS DP adapters available
Certifications	• ACS 156 • ATEX • c-UL, UL • CE • EAC • EPRI/SEMI F47 • KCC • Lloyd's Register • RCM • RoHS • TÜV FS ISO/EN13849-1 (EN954-1)
Options	See pages 40…45

(1) Permanent magnet motor control is scheduled for a future firmware release.



Additional Information

PowerFlex 520-Series Technical Data, publication 520-TD001
PowerFlex 520-Series User Manual, publication 520-UM001

Catalog Number Explanation

25B –	D	6P0	N	1	1	4
	Voltage Rating	Rating	Enclosure		Internal EMC Filter 0 = No 1 = Yes	

Product Selection

100…120V AC, Single-Phase Input, Three-Phase Output Drives, 50/60 Hz

Drive Ratings						No Filter	with Integral EMC Filter
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	2.5	A	25B-V2P5N104	–
0.75	1	0.75	1	4.8	B	25B-V4P8N104	–
1.1	1.5	1.1	1.5	6	B	25B-V6P0N104	–

200…240V AC, Single-Phase Input, Three-Phase Output Drives, 50/60 Hz

Drive Ratings						No Filter	with Integral EMC Filter (1)
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	2.5	A	25B-A2P5N104	25B-A2P5N114
0.75	1	0.75	1	4.8	A	25B-A4P8N104	25B-A4P8N114
1.5	2	1.5	2	8	B	25B-A8P0N104	25B-A8P0N114
2.2	3	2.2	3	11	B	25B-A011N104	25B-A011N114

(1) This filter is suitable for use with cable lengths up to 10 meters (32.8 feet) for C2 spec and 20 meters (65.6 feet) for C3 spec.

200…240V AC, Three-Phase, 50/60 Hz

Drive Ratings						No Filter	with Integral EMC Filter
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	2.5	A	25B-B2P5N104	–
0.75	1	0.75	1	5	A	25B-B5P0N104	–
1.5	2	1.5	2	8	A	25B-B8P0N104	–
2.2	3	2.2	3	11	A	25B-B011N104	–
4	5	4	5	17.5	B	25B-B017N104	–
5.5	7.5	5.5	7.5	24	C	25B-B024N104	–
7.5	10	7.5	10	32.2	D	25B-B032N104	–
11	15	11	15	48.3	E	25B-B048N104	–
15	20	11	15	62.1	E	25B-B062N104	–

380…480V AC, Three-Phase, 50/60 Hz

Drive Ratings						No Filter	with Integral EMC Filter (1)
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	1.4	A	25B-D1P4N104	25B-D1P4N114
0.75	1	0.75	1	2.3	A	25B-D2P3N104	25B-D2P3N114
1.5	2	1.5	2	4	A	25B-D4P0N104	25B-D4P0N114
2.2	3	2.2	3	6	A	25B-D6P0N104	25B-D6P0N114
4	5	4	5	10.5	B	25B-D010N104	25B-D010N114
5.5	7.5	5.5	7.5	13	C	25B-D013N104	25B-D013N114
7.5	10	7.5	10	17	C	25B-D017N104	25B-D017N114
11	15	11	15	24	D	25B-D024N104	25B-D024N114
15	20	11	15	30	D	25B-D030N104	25B-D030N114
18.5	25	15	20	37	E	25B-D037N114 (2)	25B-D037N114
22	30	18.5	25	43	E	25B-D043N114 (2)	25B-D043N114

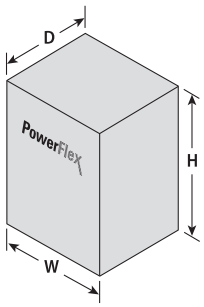
(1) This filter is suitable for use with cable lengths up to 10 meters (32.8 feet) for C2 spec and 20 meters (65.6 feet) for C3 spec.
(2) With EMC filter.

525…600V AC, Three-Phase, 50/60 Hz

Drive Ratings						No Filter	with Integral EMC Filter
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	0.9	A	25B-E0P9N104	–
0.75	1	0.75	1	1.7	A	25B-E1P7N104	–
1.5	2	1.5	2	3	A	25B-E3P0N104	–
2.2	3	2.2	3	4.2	A	25B-E4P2N104	–
4	5	4	5	6.6	B	25B-E6P6N104	–
5.5	7.5	5.5	7.5	9.9	C	25B-E9P9N104	–
7.5	10	7.5	10	12	C	25B-E012N104	–
11	15	11	15	19	D	25B-E019N104	–
15	20	11	15	22	D	25B-E022N104	–
18.5	25	15	20	27	E	25B-E027N104	–
22	30	18.5	25	32	E	25B-E032N104	–

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)

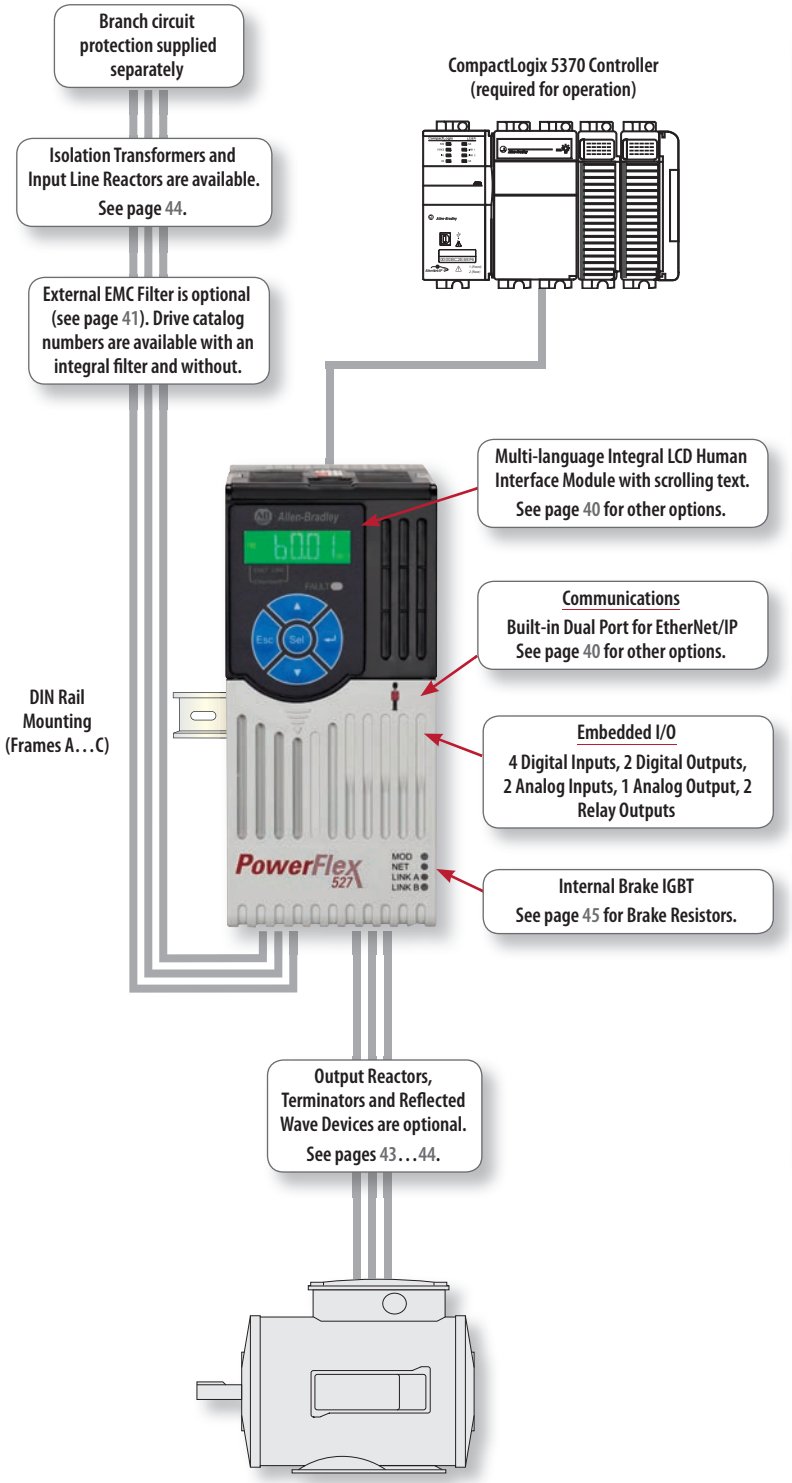


IP20, NEMA/UL Type Open

Frame	H	W	D	Weight
A	152.0 (5.98)	72.0 (2.83)	172.0 (6.77)	1.10 (2.4)
B	180.0 (7.08)	87.0 (3.42)	172.0 (6.77)	1.60 (3.5)
C	220.0 (8.66)	109.0 (4.29)	184.0 (7.24)	2.30 (5.1)
D	260.0 (10.23)	130.0 (5.11)	212.0 (8.34)	3.20 (7.1)
E	300.0 (11.81)	185.0 (7.28)	279.0 (10.98)	12.90 (28.4)

PowerFlex 527 AC Drive

PowerFlex 527 AC drives is the first compact PowerFlex drive designed to exclusively work with a Logix controller and programmed with Studio 5000 integrated motion instructions. The PowerFlex 527 drive is an ideal AC drive to complement machines already using Kinetix servo drives. It features a built-in dual port for EtherNet/IP hardwired or networked safety. Using Studio 5000 software, the configuration and programming experience saves start up time, and delivers a coordinated and synchronized machine.



PowerFlex 527 AC Drive at a glance

Ratings	
100…120V:	0.4…1.1 kW / 0.5…1.5 Hp / 2.5…6 A
200…240V:	0.4…15 kW / 0.5…20 Hp / 2.5…62.1 A
380…480V:	0.4…22 kW / 0.5…30 Hp / 1.4…43 A
525…600V:	0.4…22 kW / 0.5…30 Hp / 0.9…32 A
Motor Control	• V/Hz Control • Sensorless Vector Control • Closed Loop Velocity Vector Control
Enclosures	• IP20, NEMA/UL Type Open • IP30, NEMA/UL Type 1 (with optional kit)
Safety	• Built-in Hardwire Safe Torque-Off, SIL3, PLe, Cat 3 • Integrated Safety SIL3, PLe, Cat 4
Additional Features	• Works exlusively with Logix controllers • Program with motion instructions in Studio 5000 Logix Designer™ Software • Built-in dual port for EtherNet/IP • Choice for hardwired or network safety • Integrated Safety via EtherNet/IP adapter • Removeable I/O blocks • Operating temperatures from -20 °C (-4 °F) up to 50 °C (122 °F). Up to 70 °C (158 °F) with current derating and optional control module fan kit • Optional encoder card • Conformal coating to IEC 60721 3C2 standards
Certifications	• ACS 156 • ATEX • c-UL, UL • CE • EAC • EPRI/SEMI F47 • KCC • Lloyd's Register • RCM • RoHS • TÜV FS ISO/EN13849-1 (EN954-1)
Options	See pages 40…45

Additional Information

PowerFlex 520-Series Technical Data, publication 520-TD001
PowerFlex 527 Adjustable Frequency AC Drive User Manual, publication 520-UM002

Catalog Number Explanation

25C –	D	6P0	N	1	1	4
	Voltage Rating	Rating	Enclosure		Internal EMC Filter 0 = No 1 = Yes	

Product Selection

100…120V AC, Single-Phase Input, Three-Phase Output Drives, 50/60 Hz

Drive Ratings						No Filter	with Integral EMC Filter
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	2.5	A	25C-V2P5N104	–
0.75	1	0.75	1	4.8	B	25C-V4P8N104	–
1.1	1.5	1.1	1.5	6	B	25C-V6P0N104	–

200…240V AC, Single-Phase Input, Three-Phase Output Drives, 50/60 Hz

Drive Ratings						No Filter	with Integral EMC Filter (1)
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	2.5	A	25C-A2P5N104	25C-A2P5N114
0.75	1	0.75	1	4.8	A	25C-A4P8N104	25C-A4P8N114
1.5	2	1.5	2	8	B	25C-A8P0N104	25C-A8P0N114
2.2	3	2.2	3	11	B	25C-A011N104	25C-A011N114

(1) This filter is suitable for use with cable lengths up to 10 meters (32.8 feet) for C2 spec and 20 meters (65.6 feet) for C3 spec.

200…240V AC, Three-Phase, 50/60 Hz

Drive Ratings						No Filter	with Integral EMC Filter
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	2.5	A	25C-B2P5N104	–
0.75	1	0.75	1	5	A	25C-B5P0N104	–
1.5	2	1.5	2	8	A	25C-B8P0N104	–
2.2	3	2.2	3	11	A	25C-B011N104	–
4	5	4	5	17.5	B	25C-B017N104	–
5.5	7.5	5.5	7.5	24	C	25C-B024N104	–
7.5	10	7.5	10	32.2	D	25C-B032N104	–
11	15	11	15	48.3	E	25C-B048N104	–
15	20	11	15	62.1	E	25C-B062N104	–

380…480V AC, Three-Phase, 50/60 Hz

Drive Ratings						No Filter	with Integral EMC Filter [1]
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	1.4	A	25C-D1P4N104	25C-D1P4N114
0.75	1	0.75	1	2.3	A	25C-D2P3N104	25C-D2P3N114
1.5	2	1.5	2	4	A	25C-D4P0N104	25C-D4P0N114
2.2	3	2.2	3	6	A	25C-D6P0N104	25C-D6P0N114
4	5	4	5	10.5	B	25C-D010N104	25C-D010N114
5.5	7.5	5.5	7.5	13	C	25C-D013N104	25C-D013N114
7.5	10	7.5	10	17	C	25C-D017N104	25C-D017N114
11	15	11	15	24	D	25C-D024N104	25C-D024N114
15	20	11	15	30	D	25C-D030N104	25C-D030N114
18.5	25	15	20	37	E	25C-D037N114 [2]	25C-D037N114
22	30	18.5	25	43	E	25C-D043N114 [2]	25C-D043N114

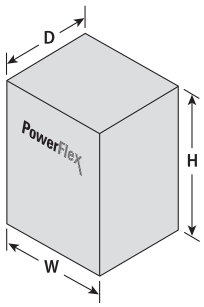
(1) This filter is suitable for use with cable lengths up to 10 meters (32.8 feet) for C2 spec and 20 meters (65.6 feet) for C3 spec.
(2) With EMC filter.

525…600V AC, Three-Phase, 50/60 Hz

Drive Ratings						No Filter	with Integral EMC Filter
Normal Duty		Heavy Duty		Output Current			
kW	Hp	kW	Hp	A	Frame Size	Cat. No.	Cat. No.
0.4	0.5	0.4	0.5	0.9	A	25C-E0P9N104	–
0.75	1	0.75	1	1.7	A	25C-E1P7N104	–
1.5	2	1.5	2	3	A	25C-E3P0N104	–
2.2	3	2.2	3	4.2	A	25C-E4P2N104	–
4	5	4	5	6.6	B	25C-E6P6N104	–
5.5	7.5	5.5	7.5	9.9	C	25C-E9P9N104	–
7.5	10	7.5	10	12	C	25C-E012N104	–
11	15	11	15	19	D	25C-E019N104	–
15	20	11	15	22	D	25C-E022N104	–
18.5	25	15	20	27	E	25C-E027N104	–
22	30	18.5	25	32	E	25C-E032N104	–

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP20, NEMA/UL Type Open

Frame	H	W	D	Weight
A	152.0 (5.98)	72.0 (2.83)	172.0 (6.77)	1.10 (2.4)
B	180.0 (7.08)	87.0 (3.42)	172.0 (6.77)	1.60 (3.5)
C	220.0 (8.66)	109.0 (4.29)	184.0 (7.24)	2.30 (5.1)
D	260.0 (10.23)	130.0 (5.11)	212.0 (8.34)	3.20 (7.1)
E	300.0 (11.81)	185.0 (7.28)	279.0 (10.98)	12.90 (28.4)

PowerFlex 520-Series Options

Human Interface Modules and Accessories

Description	Cat. No.	Used with PowerFlex Drive		
		PF523	PF525	PF527
Remote (Panel Mount) LCD Display, Digital Speed Control, CopyCat Capable. Includes 2.0 meter cable. IP66, NEMA Type 4X/12 - Indoor Use Only.	22-HIM-C2S (1)	✓	✓	
Remote Handheld, LCD Display, Full Numeric Keypad, Digital Speed Control, CopyCat Capable. Includes 1.0 meter cable. IP30, NEMA Type 1. Panel mount with optional Bezel Kit.	22-HIM-A3	✓	✓	
Bezel Kit. Panel Mount for LCD Display, Remote Handheld Unit. IP30, NEMA Type 1. Includes a 22-RJ45CBL-C20 cable.	22-HIM-B1	✓	✓	
DSI HIM Cable (DSI HIM to RJ45 cable)				
1.0 Meter (3.3 Feet)	22-HIM-H10	✓	✓	
2.9 Meter (9.5 Feet)	22-HIM-H30	✓	✓	

(1) The 22-HIM-C2S is smaller than the 22-HIM-C2 and cannot be used as a direct replacement.

Communication Option Kits

Description	Cat. No.	Used with PowerFlex Drive		
		PF523	PF525	PF527
DeviceNet™ Communication Adapter	25-COMM-D	✓	✓	
EtherNet/IP™ Communication Adapter - Dual Port	25-COMM-E2P	✓	✓	
PROFIBUS™ DP Communication Adapter	25-COMM-P	✓	✓	
Serial Converter Module (RS485 to RS232). Provides serial communication via DF1 protocol for use with DriveExplorer™ and DriveExecutive™ software. Includes DSI to RS232 serial converter, 1203-SFC serial cable, 22-RJ45CBL-C20 cable, and DriveExplorer Lite CD.	22-SCM-232	✓	✓	
Serial Cable. 2.0 meter with a locking low profile connector. Connects the serial converter to a 9-pin sub-miniature D female computer connector.	1203-SFC	✓	✓	
Serial Null Modem Adapter. Use when connecting the serial converter to DriveExplorer on a handheld PC.	1203-SNM	✓	✓	
Universal Serial Bus™ (USB) Converter includes 2m USB, 20-HIM-H10 and 22-HIM-H10 Cables.	1203-USB	✓	✓	
DSI Cable. 2.0 meter RJ45 to RJ45 cable, male to male connectors.	22-RJ45CBL-C20	✓	✓	
Splitter Cable. RJ45 one to two port splitter cable.	AK-U0-RJ45-SC1	✓	✓	
Terminal Block. RJ45 two position terminal block (6 pieces) with two 120 Ohm terminating resistors (loose).	AK-U0-RJ45-TB2P	✓	✓	
Terminating Resistors. 120 Ohm resistor embedded in an RJ45 connector (2 pieces).	AK-U0-RJ45-TR1	✓	✓	
DSI External Communications Kit. External mounting kit for 22-COMM Communication Adapters.	22-XCOMM-DC-BASE	✓	✓	
External Communications Kit Power Supply Optional 100…240V AC Power Supply for External DSI Communications Kit.	20-XCOMM-AC-PS1	✓	✓	
Compact I/O Module (3 Channel)	1769-SM2	✓	✓	

Other Options

Description	Frame	Cat. No.	Used with PowerFlex Drive		
			PF523	PF525	PF527 (1)
EMC Grounding Plate	A	25-EMC1-FA	✓	✓	✓
	B	25-EMC1-FB	✓	✓	✓
	C	25-EMC1-FC	✓	✓	✓
	D	25-EMC1-FD	✓	✓	✓
	E	25-EMC1-FE	✓	✓	✓
Mounting Adapter Plate for Bulletin 160 AC Drive to PowerFlex 520-Series	A	25-MAP-FA	✓	✓	✓
	B	25-MAP-FB	✓	✓	✓
PowerFlex 525 Incremental Encoder	All	25-ENC-1		✓	
PowerFlex 527 Incremental Encoder	All	25-ENC-2			✓
Control Module Fan Kit for 70 °C operation and/or horizontal drive mounting. (2)	A…D	25-FAN1-70C	✓	✓	✓
	E	25-FAN2-70C	✓	✓	✓

(1) PowerFlex 527 AC drives require Logix controller for operation.

(2) Refer to the PowerFlex 527 Adjustable Frequency AC Drive User Manual, publication 520-UM002, for detailed guidelines on when to use the control module fan kit.

IP30, NEMA/UL Type 1 Conversion Kit

Description	Frame	Cat. No.	Used with PowerFlex Drive		
			PF523	PF525	PF527
Converts IP20 drive to IP30, NEMA/UL Type 1 enclosure	A	25-JBAA	✓	✓	✓
	B	25-JBAB	✓	✓	✓
	C	25-JBAC	✓	✓	✓
	D	25-JBAD	✓	✓	✓
	E	25-JBAE	✓	✓	✓

EMC Filters (Required to Meet CE Certification)

Drive Ratings							Used with PowerFlex Drive		
Input Voltage	Normal Duty		Heavy Duty		Frame	Cat. No.	PF523	PF525	PF527
100 . . . 120V, Single-Phase, 50/60 Hz	0.2	0.25	0.2	0.25	A	25-RF011-AL	✓		
	0.4	0.5	0.4	0.5	A		✓	✓	✓
	0.75	1	0.75	1	B	25-RF023-BL	✓	✓	✓
	1	1.5	1	1.5	B		✓	✓	✓
200 . . . 240V, Single-Phase, 50/60 Hz	0.2	0.25	0.2	0.25	A	25-RF011-AL	✓		
	0.4	0.5	0.4	0.5	A		✓	✓	✓
	0.75	1	0.75	1	A		✓	✓	✓
	1.5	2	1.5	2	B	25-RF023-BL	✓	✓	✓
	2.2	3	2.2	3	B		✓	✓	✓
200 . . . 240V, Three-Phase 50/60 Hz,	0.2	0.25	0.2	0.25	A	25-RF014-AL	✓		
	0.4	0.5	0.4	0.5	A		✓	✓	✓
	0.75	1	0.75	1	A		✓	✓	✓
	1.5	2	1.5	2	A		✓	✓	✓
	2.2	3	2.2	3	A		✓	✓	✓
	3.7	5	3.7	5	B	25-RF021-BL	✓	✓	✓
	5.5	7.5	5.5	7.5	C	25-RF027-CL	✓	✓	✓
	7.5	10	7.5	10	D	25-RF035-DL	✓	✓	✓
	11	15	11	15	E	25-RF056-EL	✓	✓	✓
	15	20	11	15	E		✓	✓	✓
380 . . . 480V, Three-Phase 50/60 Hz	0.4	0.5	0.4	0.5	A	25-RF7P5-AL	✓	✓	✓
	0.75	1	0.75	1	A		✓	✓	✓
	1.5	2	1.5	2	A		✓	✓	✓
	2.2	3	2.2	3	A		✓	✓	✓
	3.7	5	3.7	5	B	25-RF014-BL	✓	✓	✓
	5.5	7.5	5.5	7.5	C	25-RF018-CL	✓	✓	✓
	7.5	10	7.5	10	C		✓	✓	✓
	11	15	11	15	D	25-RF033-DL	✓	✓	✓
	15	18.5	11	15	D		✓	✓	✓
	18.5	22	15	20	E	25-RF039-EL	✓	✓	✓
	22	30	18.5	25	E		✓	✓	✓
525 . . . 600V, Three-Phase, 50/60 Hz	0.4	0.5	0.4	0.5	A	25-RF8P0-BL	✓	✓	✓
	0.75	1	0.75	1	A		✓	✓	✓
	1.5	2	1.5	2	A		✓	✓	✓
	2.2	3	2.2	3	A		✓	✓	✓
	3.7	5	3.7	5	B		✓	✓	✓
	5.5	7.5	5.5	7.5	C	25-RF014-CL	✓	✓	✓
	7.5	10	7.5	10	C		✓	✓	✓
	11	15	11	15	D	25-RF027-DL	✓	✓	✓
	15	18.5	11	15	D		✓	✓	✓
	18.5	22	15	20	E	25-RF029-EL	✓	✓	✓
	22	30	18.5	25	E		✓	✓	✓

Power Modules [1]

Drive Ratings	Normal Duty		Heavy Duty			No Filter	Used with PowerFlex Drive			with Integral EMC Filter	Used with PowerFlex Drive		
Input Voltage	kW	Hp	kW	Hp	Frame	Cat No.	PF523	PF525	PF527	Cat No.	PF523	PF525	PF527
100…120V AC, Single-Phase, 50/60 Hz	0.2	0.25	0.2	0.25	A	25-PM1-V1P6	✓			–	✓		
	0.4	0.5	0.4	0.5	A	25-PM1-V2P5	✓	✓	✓	–	✓	✓	✓
	0.75	1	0.75	1	B	25-PM1-V4P8	✓	✓	✓	–	✓	✓	✓
	1	1.5	1	1.5	B	25-PM1-V6P0	✓	✓	✓	–	✓	✓	✓
200…240V AC, Single-Phase, 50/60 Hz	0.2	0.25	0.2	0.25	A	25-PM1-A1P6	✓			25-PM2-A1P6	✓		
	0.4	0.5	0.4	0.5	A	25-PM1-A2P5	✓	✓	✓	25-PM2-A2P5	✓	✓	✓
	0.75	1	0.75	1	A	25-PM1-A4P8	✓	✓	✓	25-PM2-A4P8	✓	✓	✓
	1.5	2	1.5	2	B	25-PM1-A8P0	✓	✓	✓	25-PM2-A8P0	✓	✓	✓
	2.2	3	2.2	3	B	25-PM1-A011	✓	✓	✓	25-PM2-A011	✓	✓	✓
200…240V AC, Three-Phase, 50/60 Hz	0.2	0.25	0.2	0.25	A	25-PM1-B1P6	✓			–	✓		
	0.4	0.5	0.4	0.5	A	25-PM1-B2P5	✓	✓	✓	–	✓	✓	✓
	0.75	1	0.75	1	A	25-PM1-B5P0	✓	✓	✓	–	✓	✓	✓
	1.5	2	1.5	2	A	25-PM1-B8P0	✓	✓	✓	–	✓	✓	✓
	2.2	3	2.2	3	A	25-PM1-B011	✓	✓	✓	–	✓	✓	✓
	3.7	5	3.7	5	B	25-PM1-B017	✓	✓	✓	–	✓	✓	✓
	5.5	7.5	5.5	7.5	C	25-PM1-B024	✓	✓	✓	–	✓	✓	✓
	7.5	10	7.5	10	D	25-PM1-B032	✓	✓	✓	–	✓	✓	✓
	11	15	11	15	E	25-PM1-B048	✓	✓	✓	–	✓	✓	✓
	15	20	11	15	E	25-PM1-B062	✓	✓	✓	–	✓	✓	✓
380…480V AC, Three-Phase, 50/60 Hz	0.4	0.5	0.4	0.5	A	25-PM1-D1P4	✓	✓	✓	25-PM2-D1P4	✓	✓	✓
	0.75	1	0.75	1	A	25-PM1-D2P3	✓	✓	✓	25-PM2-D2P3	✓	✓	✓
	1.5	2	1.5	2	A	25-PM1-D4P0	✓	✓	✓	25-PM2-D4P0	✓	✓	✓
	2.2	3	2.2	3	A	25-PM1-D6P0	✓	✓	✓	25-PM2-D6P0	✓	✓	✓
	3.7	5	3.7	5	B	25-PM1-D010	✓	✓	✓	25-PM2-D010	✓	✓	✓
	5.5	7.5	5.5	7.5	C	25-PM1-D013	✓	✓	✓	25-PM2-D013	✓	✓	✓
	7.5	10	7.5	10	C	25-PM1-D017	✓	✓	✓	25-PM2-D017	✓	✓	✓
	11	15	11	15	D	25-PM1-D024	✓	✓	✓	25-PM2-D024	✓	✓	✓
	15	18.5	11	15	D	25-PM1-D030	✓	✓	✓	25-PM2-D030	✓	✓	✓
	18.5	22	15	20	E	–	✓	✓	✓	25-PM2-D037	✓	✓	✓
	22	30	18.5	25	E	–	✓	✓	✓	25-PM2-D043	✓	✓	✓
525…600V AC, Three-Phase, 50/60 Hz	0.4	0.5	0.4	0.5	A	25-PM1-E0P9	✓	✓	✓	–	✓	✓	✓
	0.75	1	0.75	1	A	25-PM1-E1P7	✓	✓	✓	–	✓	✓	✓
	1.5	2	1.5	2	A	25-PM1-E3P0	✓	✓	✓	–	✓	✓	✓
	2.2	3	2.2	3	A	25-PM1-E4P2	✓	✓	✓	–	✓	✓	✓
	3.7	5	3.7	5	B	25-PM1-E6P6	✓	✓	✓	–	✓	✓	✓
	5.5	7.5	5.5	7.5	C	25-PM1-E9P9	✓	✓	✓	–	✓	✓	✓
	7.5	10	7.5	10	C	25-PM1-E012	✓	✓	✓	–	✓	✓	✓
	11	15	11	15	D	25-PM1-E019	✓	✓	✓	–	✓	✓	✓
	15	18.5	11	15	D	25-PM1-E022	✓	✓	✓	–	✓	✓	✓
	18.5	22	15	20	E	25-PM1-E027	✓	✓	✓	–	✓	✓	✓
	22	30	18.5	25	E	25-PM1-E032	✓	✓	✓	–	✓	✓	✓

(1) Includes power module front cover (Frames B…E only).

Control Module

Description	Frame	Cat. No.	Used with PowerFlex Drive		
			PF523	PF525	PF527
PowerFlex 523 Control Module (includes control module front cover)	All	25A-CTM1	✓		
PowerFlex 525 Control Module (includes control module front cover)	All	25B-CTM1		✓	
PowerFlex 527 Control Module (includes control module front cover)	All	25C-CTM1			✓

Accessories

Description	Frame	Cat. No.	Used with PowerFlex Drive		
			PF523	PF525	PF527
Power Module Front Cover	B	25-PMFC-FB	✓	✓	✓
	C	25-PMFC-FC	✓	✓	✓
	D	25-PMFC-FD	✓	✓	✓
	E	25-PMFC-FE	✓	✓	✓
PowerFlex 523 Control Module Front Cover	All	25A-CTMFC1	✓		
PowerFlex 525 Control Module Front Cover	All	25B-CTMFC1		✓	
PowerFlex 527 Control Module Front Cover	All	25C-CTMFC1			✓
Heatsink Fan Kit	A	25-FAN1-FA	✓	✓	✓
	B	25-FAN1-FB	✓	✓	✓
	C	25-FAN1-FC	✓	✓	✓
	D	25-FAN1-FD	✓	✓	✓
	E	25-FAN1-FE	✓	✓	✓
Power Terminal Guard	A	25-PTG1-FA	✓	✓	✓
	B	25-PTG1-FB	✓	✓	✓
	C	25-PTG1-FC	✓	✓	✓
	D	25-PTG1-FD	✓	✓	✓
	E	25-PTG1-FE	✓	✓	✓
EMC Ferrite Core for Drive with Internal Filter	A	25-CORE-A	✓	✓	✓
	B	25-CORE-B	✓	✓	✓
	C	25-CORE-C	✓	✓	✓
	D	25-CORE-D	✓	✓	✓
	E	25-CORE-E	✓	✓	✓
EMC Ferrite Core for Drive with External Filter	A	25-CORE-RF-A	✓	✓	✓
	B	25-CORE-RF-B	✓	✓	✓
	C	25-CORE-RF-C	✓	✓	✓
	D	25-CORE-RF-D	✓	✓	✓
	E	25-CORE-RF-E	✓	✓	✓

Terminators

Description (1)	Cat. No.	Used with PowerFlex Drive		
		PF523	PF525	PF527
for use with 3.7 kW (5 Hp) and below drives	1204-TFA1	✓	✓	✓
for use with 1.5 kW (2 Hp) and up drives	1204-TFB2	✓	✓	✓

(1) For selection information, refer to Appendix A of the Wiring and Grounding Guidelines for Pulse Width Modulated (PWM) AC Drives, publication Drives-IN001.

Reflected Wave Reduction Module with Common Mode Choke

Description (1)	Cat. No.	Used with PowerFlex Drive		
		PF523	PF525	PF527
17A with Common Mode Choke	1204-RWC-17-A	✓	✓	✓

(1) For selection information, refer to Appendix A of the Wiring and Grounding Guidelines for Pulse Width Modulated (PWM) AC Drives, publication Drives-IN001.

Reflected Wave Reduction Modules

Drive Ratings	Normal Duty		Heavy Duty		No Filter	Used with PowerFlex Drive		
Input Voltage	kW	Hp	kW	Hp	Cat. No.	PF523	PF525	PF527
380...480V, Three-Phase 50/60 Hz	2.2	3	2.2	3	1321-RWR8-DP	✓	✓	✓
	3.7	5	3.7	5	1321-RWR12-DP	✓	✓	✓
	5.5	7.5	5.5	7.5	1321-RWR18-DP	✓	✓	✓
	7.5	10	7.5	10	1321-RWR25-DP	✓	✓	✓
	11	15	11	15	1321-RWR25-DP	✓	✓	✓
	15	18.5	11	15	1321-RWR35-DP	✓	✓	✓
	18.5	22	15	20	1321-RWR45-DP	✓	✓	✓
	22	30	18.5	25	1321-RWR55-DP	✓	✓	✓
525...600V, Three-Phase, 50/60 Hz	3.7	5	3.7	5	1321-RWR8-EP	✓	✓	✓
	5.5	7.5	5.5	7.5	1321-RWR12-EP	✓	✓	✓
	7.5	10	7.5	10	1321-RWR18-EP	✓	✓	✓
	11	15	11	15	1321-RWR25-EP	✓	✓	✓

Line Reactors - 3% Impedance

Drive Ratings				IP00 (1) (NEMA/UL Open Type)	IP11 (1) (NEMA/UL Type 1)
Voltage	kW	Hp	Amps	Cat. No.	Cat. No.
200...240V, 60 Hz, Three-Phase	0.4	0.5	4.0	1321-3R4-B	1321-3RA4-B
	0.75	1	8.0	1321-3R8-B	1321-3RA8-B
	1.5	2	8.0	1321-3R8-A	1321-3RA8-A
	2.2	3	12	1321-3R12-A	1321-3RA12-A
	3.7	5	17.5	1321-3R18-A	1321-3RA18-A
	5.5	7.5	24	1321-3R25-A	1321-3RA25-A
	7.5	10	33	1321-3R35-A	1321-3RA35-A
	11	15	49	1321-3R45-A	1321-3RA45-A
	15	20	65	1321-3R55-A	1321-3RA55-A
380...480V, 60 Hz, Three-Phase	0.4	0.5	2.0	1321-3R2-B	1321-3RA2-B
	0.75	1	4.0	1321-3R4-C	1321-3RA4-C
	1.5	2	4.0	1321-3R4-B	1321-3RA4-B
	2.2	3	6.0	1321-3R8-C	1321-3RA8-C
	4.0	5	10.5	1321-3R8-B	1321-3RA8-B
	5.5	7.5	12	1321-3R12-B	1321-3RA12-B
	7.5	10	17	1321-3R18-B	1321-3RA18-B
	11	15	22	1321-3R25-B	1321-3RA25-B
	15	20	30	1321-3R35-B	1321-3RA35-B
	18.5	25	38	1321-3R35-B	1321-3RA35-B
	22	30	45.5	1321-3R45-B	1321-3RA45-B
500...600V, 60 Hz, Three-Phase	0.75	1	2.0	1321-3R2-B	1321-3RA2-B
	1.5	2	4.0	1321-3R4-C	1321-3RA4-C
	2.2	3	4.0	1321-3R4-B	1321-3RA4-B
	4.0	5	8.0	1321-3R8-C	1321-3RA8-C
	5.5	7.5	12	1321-3R12-B	1321-3RA12-B
	7.5	10	12	1321-3R12-B	1321-3RA12-B
	11	15	18	1321-3R18-B	1321-3RA18-B
	15	20	25	1321-3R25-B	1321-3RA25-B
	18.5	25	35	1321-3R35-C	1321-3RA35-C
	22	30	35	1321-3R35-B	1321-3RA35-B

(1) Catalog numbers listed are for 3% impedance. 5% impedance reactor types are also available. Refer to 1321 Power Conditioning Products Technical Data, publication 1321-TD001.

Dynamic Brake Resistors

Drive Rating			Minimum Resistance	Resistance	
Voltage	kW	Hp	Ohms, ±10%	Ohms, ±5%	Cat. No. (1) (2)
100…120V, 50/60 Hz, Single-Phase	0.4	0.5	60	91	AK-R2-091P500
	0.75	1	60	91	AK-R2-091P500
	1.1	1.5	48	91	AK-R2-091P500
200…240V, 50/60 Hz, Single-Phase	0.4	0.5	60	91	AK-R2-091P500
	0.75	1	60	91	AK-R2-091P500
	1.5	2	48	91	AK-R2-091P500
	2.2	3	32	47	AK-R2-047P500
200…240V, 50/60 Hz, Three-Phase	0.4	0.5	60	91	AK-R2-091P500
	0.75	1	60	91	AK-R2-091P500
	1.5	2	60	91	AK-R2-091P500
	2.2	3	32	47	AK-R2-047P500
	3.7	5	19	47	AK-R2-047P500
	5.5	7.5	19	30	AK-R2-030P1K2
	7.5	10	15	30	AK-R2-030P1K2
	11	15	15	15	AK-R2-030P1K2 (3)
	15	20	11	15	AK-R2-030P1K2 (3)
380…480V, 50/60 Hz, Three-Phase	0.4	0.5	97	360	AK-R2-360P500
	0.75	1	97	360	AK-R2-360P500
	1.5	2	97	360	AK-R2-360P500
	2.2	3	97	120	AK-R2-120P1K2
	4.0	5	77	120	AK-R2-120P1K2
	5.5	7.5	55	120	AK-R2-120P1K2
	7.5	10	55	120	AK-R2-120P1K2
	11	15	50	60	AK-R2-120P1K2 (3)
	15	20	50	60	AK-R2-120P1K2 (3)
	18.5	25	30	40	AK-R2-120P1K2 (4)
	22	30	30	40	AK-R2-120P1K2 (4)
500…600V, 50/60 Hz, Three-Phase	0.4	0.5	120	360	AK-R2-360P500
	0.75	1	120	360	AK-R2-360P500
	1.5	2	120	360	AK-R2-360P500
	2.2	3	120	120	AK-R2-120P1K2
	3.7	5	82	120	AK-R2-120P1K2
	5.5	7.5	65	120	AK-R2-120P1K2
	7.5	10	65	120	AK-R2-120P1K2
	11	15	65	60	AK-R2-120P1K2 (3)
	15	20	65	60	AK-R2-120P1K2 (3)
	18.5	25	60	60	AK-R2-120P1K2 (3)
	22	30	38	40	AK-R2-120P1K2 (4)

(1) Resistors listed are rated 5% duty cycle.

(2) Use of Rockwell Automation resistors is recommended. The resistors listed have been carefully selected for optimizing performance in a variety of applications. Alternative resistors may be used, however, care must be taken when making a selection. Refer to the PowerFlex Dynamic Braking Resistor Calculator, publication PFLEX-AT001.

(3) Requires two resistors wired in parallel.

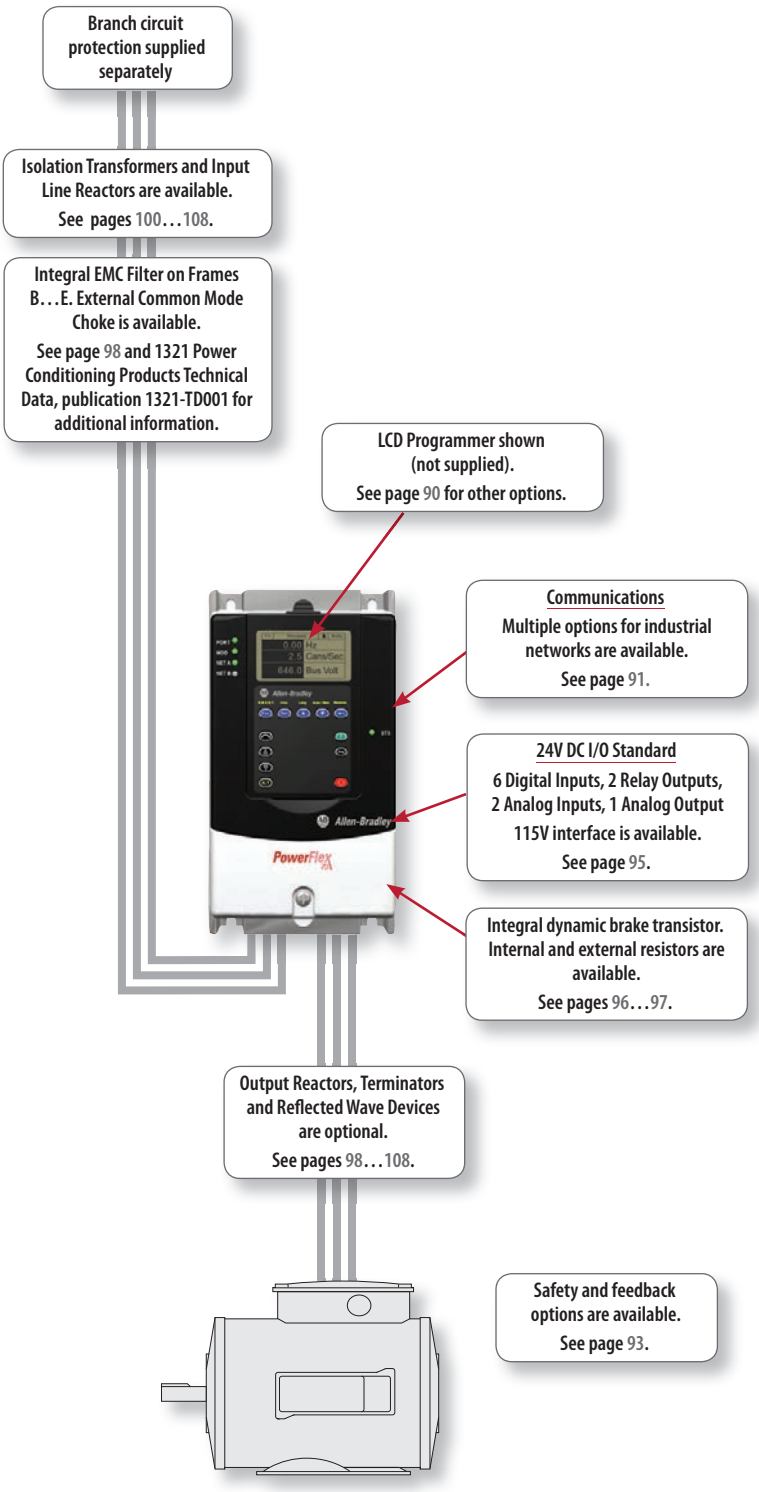
(4) Requires three resistors wired in parallel.

PowerFlex 70 AC Drive

The PowerFlex 70 offers a compact package of power, control and operator interface, designed to meet the demands for space, simplicity and reliability. This drive provides a broad spectrum of features, allowing you to easily integrate it into your architecture and configure it for most application needs.

PowerFlex 70 at a glance	
Ratings	
200…240V:	0.37…18.5 kW / 0.5…25 Hp / 2.2…70 A
380…480V:	0.37…37 kW / 0.5…50 Hp / 1.1…72 A
500…600V:	0.5…50 Hp / 0.9…52 A
Motor Control	• V/Hz Control • Sensorless Vector Control • Vector Control with FORCE Technology (with and without encoder)
Enclosures	• IP20, NEMA/UL Type 1 • Flange Mount • IP54, NEMA/UL Type 12 • IP66, NEMA/UL Type 4X/12 for indoor use
Safety	• DriveGuard Safe Torque-Off / EN13849-1 Cat. 3
Additional Features	• Speed and torque control with and without encoder feedback • Pjump and Traverse for Fibers application
Certifications	• ABS • c-UL-us • CE (1) • EAC • IEC (Designed to Meet) • KCC • Lloyd's Register • NSF Certified (IP66, NEMA/UL Type 4X/12 only) • RCM (excluding 600V) • RoHS • SEMI F47 • Trentec • TÜV FS ISO/EN13849-1 with Safe Torque-Off option
Options	See pages 91…109

(1) CE certification testing has not been performed on 600V drives



Additional Information

PowerFlex 70 Technical Data, publication 20A-TD001
PowerFlex 70 User Manual, publication 20A-UM001
PowerFlex 70 Installation Instructions, publication 20A-IN009

Catalog Number Explanation

20A	B	2P2	A	0	A	Y	N	A	N	C	0
	Voltage Rating	Rating	Enclosure					Filter Option			

Product Selection

Panel Mount - IP20, NEMA/UL Type 1, No HIM

200...240V AC, Three-Phase Drives

240V AC Input						208V AC Input [1]							
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	with Filter	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.					
2.2	2.4	3.3	0.5	0.33	20AB2P2A0AYNNNC0	2.5	2.7	3.7	0.37	0.25	20AB2P2A0AYNNNC0	N	A
2.2	2.4	3.3	0.5	0.33	20AB2P2A0AYNANC0	2.5	2.7	3.7	0.37	0.25	20AB2P2A0AYNANC0	Y	B
4.2	4.8	6.4	1	0.75	20AB4P2A0AYNNNC0	4.8	5.5	7.4	0.75	0.55	20AB4P2A0AYNNNC0	N	A
4.2	4.8	6.4	1	0.75	20AB4P2A0AYNANC0	4.8	5.5	7.4	0.75	0.55	20AB4P2A0AYNANC0	Y	B
6.8	9	12	2	1.5	20AB6P8A0AYNNNC0	7.8	10.3	13.8	1.5	1.1	20AB6P8A0AYNNNC0	N	B
6.8	9	12	2	1.5	20AB6P8A0AYNANC0	7.8	10.3	13.8	1.5	1.1	20AB6P8A0AYNANC0	Y	B
9.6	10.6	14.4	3	2	20AB9P6A0AYNNNC0	11	12.1	16.5	2.2	1.5	20AB9P6A0AYNNNC0	N	B
9.6	10.6	14.4	3	2	20AB9P6A0AYNANC0	11	12.1	16.5	2.2	1.5	20AB9P6A0AYNANC0	Y	B
15.3	17.4	23.2	5	3	20AB015A0AYNANC0	17.5	19.2	26.2	4	3	20AB015A0AYNANC0	Y	C
22	24.2	33	7.5	5	20AB022A0AYNANC0	25.3	27.8	37.9	5.5	4	20AB022A0AYNANC0	Y	D
28	33	44	10	7.5	20AB028A0AYNANC0	32.2	37.9	50.6	7.5	5.5	20AB028A0AYNANC0	Y	D
42	46.2	63	15	10	20AB042A0AYNANC0	43	55.5	74	11	7.5	20AB042A0AYNANC0	Y	D
54	63	84	20	15	20AB054A0AYNANC0	62.1	72.4	96.6	15	11	20AB054A0AYNANC0	Y	E
70	81	108	25	20	20AB070A0AYNANC0	78.2	93.1	124	18.5	15	20AB070A0AYNANC0	Y	E

(1) Drive must be programmed to lower voltage to obtain the currents shown.

Panel Mount - IP20, NEMA/UL Type 1, No HIM (continued)

380...480V AC, Three-Phase Drives

480V AC Input						400V AC Input							
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	with Filter	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.					
1.1	1.2	1.6	0.5	0.33	20AD1P1A0AYNNNC0	1.3	1.4	1.9	0.37	0.25	20AC1P3A0AYNNNC0	N	A
1.1	1.2	1.6	0.5	0.33	20AD1P1A0AYNANC0	1.3	1.4	1.9	0.37	0.25	20AC1P3A0AYNANC0	Y	B
2.1	2.4	3.2	1	0.75	20AD2P1A0AYNNNC0	2.1	2.4	3.2	0.75	0.55	20AC2P1A0AYNNNC0	N	A
2.1	2.4	3.2	1	0.75	20AD2P1A0AYNANC0	2.1	2.4	3.2	0.75	0.55	20AC2P1A0AYNANC0	Y	B
3.4	4.5	6	2	1.5	20AD3P4A0AYNNNC0	3.5	4.5	6	1.5	1.1	20AC3P5A0AYNNNC0	N	A
3.4	4.5	6	2	1.5	20AD3P4A0AYNANC0	3.5	4.5	6	1.5	1.1	20AC3P5A0AYNANC0	Y	B
5	5.5	7.5	3	2	20AD5P0A0AYNNNC0	5	5.5	7.5	2.2	1.5	20AC5P0A0AYNNNC0	N	B
5	5.5	7.5	3	2	20AD5P0A0AYNANC0	5	5.5	7.5	2.2	1.5	20AC5P0A0AYNANC0	Y	B
8	8.8	12	5	3	20AD8P0A0AYNNNC0	8.7	9.9	13.2	4	3	20AC8P7A0AYNNNC0	N	B
8	8.8	12	5	3	20AD8P0A0AYNANC0	8.7	9.9	13.2	4	3	20AC8P7A0AYNANC0	Y	B
11	12.1	16.5	7.5	5	20AD011A0AYNANC0	11.5	13	17.4	5.5	4	20AC011A0AYNANC0	Y	C
14	16.5	22	10	7.5	20AD014A0AYNANC0	15	17.2	23.1	7.5	5.5	20AC015A0AYNANC0	Y	C
22	24.2	33	15	10	20AD022A0AYNANC0	22	24.2	33	11	7.5	20AC022A0AYNANC0	Y	D
27	33	44	20	15	20AD027A0AYNANC0	30	33	45	15	11	20AC030A0AYNANC0	Y	D
34	40.5	54	25	20	20AD034A0AYNANC0	37	45	60	18.5	15	20AC037A0AYNANC0	Y	D
40	51	68	30	25	20AD040A0AYNANC0	43	56	74	22	18.5	20AC043A0AYNANC0	Y	D
52	60	80	40	30	20AD052A0AYNANC0	60	66	90	30	22	20AC060A0AYNANC0	Y	E
65	78	104	50	40	20AD065A0AYNANC0	72	90	120	37	30	20AC072A0AYNANC0	Y	E

500...600V AC, Three-Phase Drives

600V AC Input							
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	with Filter	Frame Size
Cont.	1 Min.	3 Sec.					
0.9	1	1.4	0.5	0.33	20AE0P9A0AYNNNC0	N	A
1.7	1.9	2.6	1	0.75	20AE1P7A0AYNNNC0	N	A
2.7	3.6	4.8	2	1	20AE2P7A0AYNNNC0	N	A
3.9	4.3	5.8	3	1.5	20AE3P9A0AYNNNC0	N	B
6.1	6.7	9.1	5	3	20AE6P1A0AYNNNC0	N	B
9	9.9	13.5	7.5	5	20AE9P0A0AYNNNC0	N	C
11	13.5	18	10	7.5	20AE011A0AYNNNC0	N	C
17	18.7	25.5	15	10	20AE017A0AYNNNC0	N	D
22	25.5	34	20	15	20AE022A0AYNNNC0	N	D
27	33	44	25	20	20AE027A0AYNNNC0	N	D
32	40.5	54	30	25	20AE032A0AYNNNC0	N	D
41	48	64	40	30	20AE041A0AYNANC0	N	E
52	61.5	82	50	40	20AE052A0AYNANC0	N	E

Wall/Machine Mount - IP66, NEMA/UL Type 4X/12 for Indoor Use with HIM

200...240V AC, Three-Phase Drives

240V AC Input						208V AC Input [1]							
Output Amps			Normal	Heavy		Output Amps			Normal	Heavy		with	Frame
Cont.	1 Min.	3 Sec.	Duty Hp	Duty Hp	Cat. No.	Cont.	1 Min.	3 Sec.	Duty kW	Duty kW	Cat. No.	Filter	Size
2.2	2.4	3.3	0.5	0.33	20AB2P2C3AYNNNC0	2.5	2.7	3.7	0.37	0.25	20AB2P2C3AYNNNC0	N	B
2.2	2.4	3.3	0.5	0.33	20AB2P2C3AYNANC0	2.5	2.7	3.7	0.37	0.25	20AB2P2C3AYNANC0	Y	B
4.2	4.8	6.4	1	0.75	20AB4P2C3AYNNNC0	4.8	5.5	7.4	0.75	0.55	20AB4P2C3AYNNNC0	N	B
4.2	4.8	6.4	1	0.75	20AB4P2C3AYNANC0	4.8	5.5	7.4	0.75	0.55	20AB4P2C3AYNANC0	Y	B
6.8	9	12	2	1.5	20AB6P8C3AYNNNC0	7.8	10.3	13.8	1.5	1.1	20AB6P8C3AYNNNC0	N	B
6.8	9	12	2	1.5	20AB6P8C3AYNANC0	7.8	10.3	13.8	1.5	1.1	20AB6P8C3AYNANC0	Y	B
9.6	10.6	14.4	3	2	20AB9P6C3AYNNNC0	11	12.1	16.5	2.2	1.5	20AB9P6C3AYNNNC0	N	B
9.6	10.6	14.4	3	2	20AB9P6C3AYNANC0	11	12.1	16.5	2.2	1.5	20AB9P6C3AYNANC0	Y	B
15.3	17.4	23.2	5	3	20AB015C3AYNANC0	17.5	19.2	26.2	4	3	20AB015C3AYNANC0	Y	D
22	24.2	33	7.5	5	20AB022C3AYNANC0	25.3	27.8	37.9	5.5	4	20AB022C3AYNANC0	Y	D
28	33	44	10	7.5	20AB028C3AYNANC0	32.2	37.9	50.6	7.5	5.5	20AB028C3AYNANC0	Y	D
42	46.2	63	15	10	20AB042C3AYNANC0	43	55.5	74	11	7.5	20AB042C3AYNANC0	Y	D
54	63	84	20	15	20AB054C3AYNANC0	62.1	72.4	96.6	15	11	20AB054C3AYNANC0	Y	E
70	81	108	25	20	20AB070C3AYNANC0	78.2	93.1	124	18.5	15	20AB070C3AYNANC0	Y	E

(1) Drive must be programmed to lower voltage to obtain the currents shown.

380...480V AC, Three-Phase Drives

480V AC Input						400V AC Input							
Output Amps			Normal	Heavy		Output Amps			Normal	Heavy		with	Frame
Cont.	1 Min.	3 Sec.	Duty Hp	Duty Hp	Cat. No.	Cont.	1 Min.	3 Sec.	Duty kW	Duty kW	Cat. No.	Filter	Size
1.1	1.2	1.6	0.5	0.33	20AD1P1C3AYNNNC0	1.3	1.4	1.9	0.37	0.25	20AC1P3C3AYNNNC0	N	B
1.1	1.2	1.6	0.5	0.33	20AD1P1C3AYNANC0	1.3	1.4	1.9	0.37	0.25	20AC1P3C3AYNANC0	Y	B
2.1	2.4	3.2	1	0.75	20AD2P1C3AYNNNC0	2.1	2.4	3.2	0.75	0.55	20AC2P1C3AYNNNC0	N	B
2.1	2.4	3.2	1	0.75	20AD2P1C3AYNANC0	2.1	2.4	3.2	0.75	0.55	20AC2P1C3AYNANC0	Y	B
3.4	4.5	6	2	1.5	20AD3P4C3AYNNNC0	3.5	4.5	6	1.5	1.1	20AC3P5C3AYNNNC0	N	B
3.4	4.5	6	2	1.5	20AD3P4C3AYNANC0	3.5	4.5	6	1.5	1.1	20AC3P5C3AYNANC0	Y	B
5	5.5	7.5	3	2	20AD5P0C3AYNNNC0	5	5.5	7.5	2.2	1.5	20AC5P0C3AYNNNC0	N	B
5	5.5	7.5	3	2	20AD5P0C3AYNANC0	5	5.5	7.5	2.2	1.5	20AC5P0C3AYNANC0	Y	B
8	8.8	12	5	3	20AD8P0C3AYNNNC0	8.7	9.9	13.2	4	3	20AC8P7C3AYNNNC0	N	B
8	8.8	12	5	3	20AD8P0C3AYNANC0	8.7	9.9	13.2	4	3	20AC8P7C3AYNANC0	Y	B
11	12.1	16.5	7.5	5	20AD011C3AYNANC0	11.5	13	17.4	5.5	4	20AC011C3AYNANC0	Y	D
14	16.5	22	10	7.5	20AD014C3AYNANC0	15	17.2	23.1	7.5	5.5	20AC015C3AYNANC0	Y	D
22	24.2	33	15	10	20AD022C3AYNANC0	22	24.2	33	11	7.5	20AC022C3AYNANC0	Y	D
27	33	44	20	15	20AD027C3AYNANC0	30	33	45	15	11	20AC030C3AYNANC0	Y	D
34	40.5	54	25	20	20AD034C3AYNANC0	37	45	60	18.5	15	20AC037C3AYNANC0	Y	D
40	51	68	30	25	20AD040C3AYNANC0	43	56	74	22	18.5	20AC043C3AYNANC0	Y	D
52	60	80	40	30	20AD052C3AYNANC0	60	66	90	30	22	20AC060C3AYNANC0	Y	E
65	78	104	50	40	20AD065C3AYNANC0	72	90	120	37	30	20AC072C3AYNANC0	Y	E

Wall / Machine Mount - IP66, NEMA/UL Type 4X/12 for Indoor Use with HIM (continued)

500...600V AC, Three-Phase Drives

600V AC Input							
Output Amps							
Cont.	1 Min.	3 Sec.	Normal Duty Hp	Heavy Duty Hp	Cat. No.	with Filter	Frame Size
0.9	1	1.4	0.5	0.33	20AE0P9C3AYNNNC0	N	B
1.7	1.9	2.6	1	0.75	20AE1P7C3AYNNNC0	N	B
2.7	3.6	4.8	2	1	20AE2P7C3AYNNNC0	N	B
3.9	4.3	5.8	3	1.5	20AE3P9C3AYNNNC0	N	B
6.1	6.7	9.1	5	3	20AE6P1C3AYNNNC0	N	B
9	9.9	13.5	7.5	5	20AE9P0C3AYNNNC0	N	D
11	13.5	18	10	7.5	20AE011C3AYNNNC0	N	D
17	18.7	25.5	15	10	20AE017C3AYNNNC0	N	D
22	25.5	34	20	15	20AE022C3AYNNNC0	N	D
27	33	44	25	20	20AE027C3AYNNNC0	N	D
32	40.5	54	30	25	20AE032C3AYNNNC0	N	D
41	48	64	40	30	20AE041C3AYNANC0	N	E
52	61.5	82	50	40	20AE052C3AYNANC0	N	E

Wall / Machine Mount - IP54, NEMA/UL Type 12, with HIM

200...240V AC, Three-Phase Drives

240V AC Input					208V AC Input (1)							
Output Amps			Normal Duty Hp	Heavy Duty Hp	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	with Filter	Frame Size
Cont.	1 Min.	3 Sec.			Cont.	1 Min.	3 Sec.					
54	63	84	20	15	62.1	72.4	96.6	15	11	20AB054G3AYNANC0	Y	E
70	81	108	25	20	78.2	93.1	124	18.5	15	20AB070G3AYNANC0	Y	E

(1) Drive must be programmed to lower voltage to obtain the currents shown.

380...480V AC, Three-Phase Drives

480V AC Input						400V AC Input							
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.	with Filter	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.					
52	60	80	40	30	20AD052G3AYNANC0	60	66	90	30	22	20AC060G3AYNANC0	Y	E
65	78	104	50	40	20AD065G3AYNANC0	72	90	120	37	30	20AC072G3AYNANC0	Y	E

500...600V AC, Three-Phase Drives

600V AC Input							
Output Amps							
Cont.	1 Min.	3 Sec.	Normal Duty Hp	Heavy Duty Hp	Cat. No.	with Filter	Frame Size
41	48	64	40	30	20AE041G3AYNANC0	Y	E
52	61.5	82	50	40	20AE052G3AYNANC0	Y	E

Flange Mount
Front Chassis = IP20, NEMA/UL Type 1, Heatsink = IP66, NEMA/UL Type 4X/12, No HIM

200...240V AC, Three-Phase Drives

240V AC Input						208V AC Input [1]						with Filter	Frame Size
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.		
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.					
2.2	2.4	3.3	0.5	0.33	20AB2P2F0AYNNNC0	2.5	2.7	3.7	0.37	0.25	20AB2P2F0AYNNNC0	N	A
2.2	2.4	3.3	0.5	0.33	20AB2P2F0AYNANC0	2.5	2.7	3.7	0.37	0.25	20AB2P2F0AYNANC0	Y	B
4.2	4.8	6.4	1	0.75	20AB4P2F0AYNNNC0	4.8	5.5	7.4	0.75	0.55	20AB4P2F0AYNNNC0	N	A
4.2	4.8	6.4	1	0.75	20AB4P2F0AYNANC0	4.8	5.5	7.4	0.75	0.55	20AB4P2F0AYNANC0	Y	B
6.8	9	12	2	1.5	20AB6P8F0AYNNNC0	7.8	10.3	13.8	1.5	1.1	20AB6P8F0AYNNNC0	N	B
6.8	9	12	2	1.5	20AB6P8F0AYNANC0	7.8	10.3	13.8	1.5	1.1	20AB6P8F0AYNANC0	Y	B
9.6	10.6	14.4	3	2	20AB9P6F0AYNNNC0	11	12.1	16.5	2.2	1.5	20AB9P6F0AYNNNC0	N	B
9.6	10.6	14.4	3	2	20AB9P6F0AYNANC0	11	12.1	16.5	2.2	1.5	20AB9P6F0AYNANC0	Y	B
15.3	17.4	23.2	5	3	20AB015F0AYNANC0	17.5	19.2	26.2	4	3	20AB015F0AYNANC0	Y	C
22	24.2	33	7.5	5	20AB022F0AYNANC0	25.3	27.8	37.9	5.5	4	20AB022F0AYNANC0	Y	D
28	33	44	10	7.5	20AB028F0AYNANC0	32.2	37.9	50.6	7.5	5.5	20AB028F0AYNANC0	Y	D
42	46.2	63	15	10	20AB042F0AYNANC0	43	55.5	74	11	7.5	20AB042F0AYNANC0	Y	D
54	63	84	20	15	20AB054F0AYNANC0	62.1	72.4	96.6	15	11	20AB054F0AYNANC0	Y	E
70	81	108	25	20	20AB070F0AYNANC0	78.2	93.1	124	18.5	15	20AB070F0AYNANC0	Y	E

(1) Drive must be programmed to lower voltage to obtain the currents shown.

380...480V AC, Three-Phase Drives

480V AC Input						400V AC Input						with Filter	Frame Size
Output Amps			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps			Normal Duty kW	Heavy Duty kW	Cat. No.		
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.					
1.1	1.2	1.6	0.5	0.33	20AD1P1F0AYNNNC0	1.3	1.4	1.9	0.37	0.25	20AC1P3F0AYNNNC0	N	A
1.1	1.2	1.6	0.5	0.33	20AD1P1F0AYNANC0	1.3	1.4	1.9	0.37	0.25	20AC1P3F0AYNANC0	Y	B
2.1	2.4	3.2	1	0.75	20AD2P1F0AYNNNC0	2.1	2.4	3.2	0.75	0.55	20AC2P1F0AYNNNC0	N	A
2.1	2.4	3.2	1	0.75	20AD2P1F0AYNANC0	2.1	2.4	3.2	0.75	0.55	20AC2P1F0AYNANC0	Y	B
3.4	4.5	6	2	1.5	20AD3P4F0AYNNNC0	3.5	4.5	6	1.5	1.1	20AC3P5F0AYNNNC0	N	A
3.4	4.5	6	2	1.5	20AD3P4F0AYNANC0	3.5	4.5	6	1.5	1.1	20AC3P5F0AYNANC0	Y	B
5	5.5	7.5	3	2	20AD5P0F0AYNNNC0	5	5.5	7.5	2.2	1.5	20AC5P0F0AYNNNC0	N	B
5	5.5	7.5	3	2	20AD5P0F0AYNANC0	5	5.5	7.5	2.2	1.5	20AC5P0F0AYNANC0	Y	B
8	8.8	12	5	3	20AD8P0F0AYNNNC0	8.7	9.9	13.2	4	3	20AC8P7F0AYNNNC0	N	B
8	8.8	12	5	3	20AD8P0F0AYNANC0	8.7	9.9	13.2	4	3	20AC8P7F0AYNANC0	Y	B
11	12.1	16.5	7.5	5	20AD011F0AYNANC0	11.5	13	17.4	5.5	4	20AC011F0AYNANC0	Y	C
14	16.5	22	10	7.5	20AD014F0AYNANC0	15	17.2	23.1	7.5	5.5	20AC015F0AYNANC0	Y	C
22	24.2	33	15	10	20AD022F0AYNANC0	22	24.2	33	11	7.5	20AC022F0AYNANC0	Y	D
27	33	44	20	15	20AD027F0AYNANC0	30	33	45	15	11	20AC030F0AYNANC0	Y	D
34	40.5	54	25	20	20AD034F0AYNANC0	37	45	60	18.5	15	20AC037F0AYNANC0	Y	D
40	51	68	30	25	20AD040F0AYNANC0	43	56	74	22	18.5	20AC043F0AYNANC0	Y	D
52	60	80	40	30	20AD052F0AYNANC0	60	66	90	30	22	20AC060F0AYNANC0	Y	E
65	78	104	50	40	20AD065F0AYNANC0	72	90	120	37	30	20AC072F0AYNANC0	Y	E

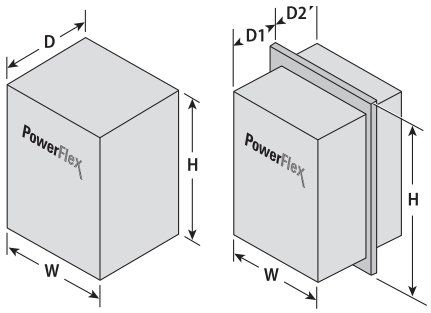
Flange Mount
Front Chassis = IP20, NEMA/UL Type 1, Heatsink = IP66, NEMA/UL Type 4X/12, No HIM (continued)

500...600V AC, Three-Phase Drives

600V AC Input							
Output Amps							
Cont.	1 Min.	3 Sec.	Normal Duty Hp	Heavy Duty Hp	Cat. No.	with Filter	Frame Size
0.9	1	1.4	0.5	0.33	20AE0P9F0AYNNNC0	N	A
1.7	1.9	2.6	1	0.75	20AE1P7F0AYNNNC0	N	A
2.7	3.6	4.8	2	1	20AE2P7F0AYNNNC0	N	A
3.9	4.3	5.8	3	1.5	20AE3P9F0AYNNNC0	N	B
6.1	6.7	9.1	5	3	20AE6P1F0AYNNNC0	N	B
9	9.9	13.5	7.5	5	20AE9P0F0AYNNNC0	N	C
11	13.5	18	10	7.5	20AE011F0AYNNNC0	N	C
17	18.7	25.5	15	10	20AE017F0AYNNNC0	N	D
22	25.5	34	20	15	20AE022F0AYNNNC0	N	D
27	33	44	25	20	20AE027F0AYNNNC0	N	D
32	40.5	54	30	25	20AE032F0AYNNNC0	N	D
41	48	64	40	30	20AE041F0AYNANC0	N	E
52	61.5	82	50	40	20AE052F0AYNANC0	N	E

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP20, NEMA/UL Type 1

Frame	H	W	D	Weight (1)
A	225.7 (8.89)	122.4 (4.82)	179.8 (7.08)	2.71 (6.0)
B	234.6 (9.24)	171.7 (6.76)	179.8 (7.08)	3.60 (7.9)
C	300.0 (11.81)	185.0 (7.28)	179.8 (7.08)	6.89 (15.2)
D	350.0 (13.78)	219.9 (8.66)	179.8 (7.08)	9.25 (20.4)
E	555.8 (21.88)	280.3 (11.04)	207.1 (8.15)	18.60 (41.0)

(1) Weights include HIM and I/O.

IP66, NEMA/UL Type 4X/12 for Indoor Use

Frame	H	W	D	Weight (1)
B	239.8 (9.44)	171.7 (6.76)	203.3 (8.00)	3.61 (8.0)
D	350.0 (13.78)	219.9 (8.66)	210.7 (8.29)	9.13 (20.1)
E	555.8 (21.88)	280.3 (11.04)	219.8 (8.65)	18.6 (41.0)

(1) Weights include HIM and I/O.

Flange Mount

Frame	H	W	D1	D2	Weight (1)
A	225.8 (8.89)	156.0 (6.14)	123.0 (4.84)	55.6 (2.19)	2.71 (6.0)
B	234.6 (9.24)	205.2 (8.08)	123.0 (4.84)	55.6 (2.19)	3.60 (7.9)
C	300.0 (11.81)	219.0 (8.62)	123.0 (4.84)	55.6 (2.19)	6.89 (15.2)
D	350.0 (13.78)	248.4 (9.78)	123.0 (4.84)	55.6 (2.19)	9.25 (20.4)
E	555.8 (21.88)	280.3 (11.04)	117.2 (4.61)	89.9 (3.54)	18.60 (41.0)

(1) Weights include HIM and I/O.

PowerFlex Architecture-Class Drives

The PowerFlex family of drives has been designed to meet a wide variety of applications.

PowerFlex 700 AC Drive

The PowerFlex 700 drive covers a wide range of horsepower ratings and is designed to control three-phase induction motors in applications with requirements ranging from the simplest speed control to the most demanding torque control.

PowerFlex 700 AC Drive at a Glance				
Ratings	200…240V: 0.37…66 kW / 0.5…100 Hp / 2.2…260 A		380…480V: 0.37…500 kW / 0.5…700 Hp / 1.1…875 A	
	500…600V: 1…150 Hp / 1.7…144 A		690V: 45…132 kW / 52…142 A	
Motor Control	V/Hz Control	Sensorless Vector Control	Vector Control with FORCE Technology (with and without encoder)	
Enclosures	IP00, NEMA / UL Type Open	IP20, NEMA / UL Type 1	IP54, NEMA 12	Flange Mount

PowerFlex 700S AC Drive

The PowerFlex 700S offers optimized integration for the most demanding stand-alone and coordinated drive control and drive system applications. The DriveLogix option combines the powerful performance and flexible control of PowerFlex AC drives with a high-performance Logix engine to produce a highly functional, cost effective drive and control solution.

PowerFlex 700S AC Drive at a Glance			
Ratings	200…240V: 0.75…66 kW / 1…100 Hp / 4.2…260 A	380…480V: 0.75…800 kW / 1…1250 Hp / 2.1…1450 A	
	500…600V: 1…1600 Hp / 1.7…1500 A	690V: 50…1500 kW / 52…1500 A	
Motor Control	V/Hz Control	Vector Control with FORCE Technology (with and without encoder)	Permanent Magnet Motor Control
Enclosures	IP20, NEMA / UL Type1	IP21, NEMA / UL Type 1	

PowerFlex 700L AC Drive

The PowerFlex 700L is available with the PowerFlex 700 or PowerFlex 700S control in a fully regenerative, liquid-cooled power structure that offers great performance and high power. This liquid-cooled drive features regenerative braking, high-response speed and position control, continuous holdback, rapid deceleration and stopping of high inertia loads.

PowerFlex 700L AC Drive at a Glance		
Ratings	380…480V: 200…860 kW / 268…1150 Hp / 360…1250 A	500…600V: 345…650 kW / 465…870 Hp / 4.25…800 A
	690V: 355…657 kW / 475…881 Hp / 380…705 A	
Motor Control	Select PowerFlex 700 or PowerFlex 700S Control	
Enclosures	IP00, NEMA / UL Type Open (Frame 2)	IP20, NEMA / UL Type 1 (Frames 3A, 3B)

For additional product selection information, please visit www.rockwellautomation.com/go/drives.

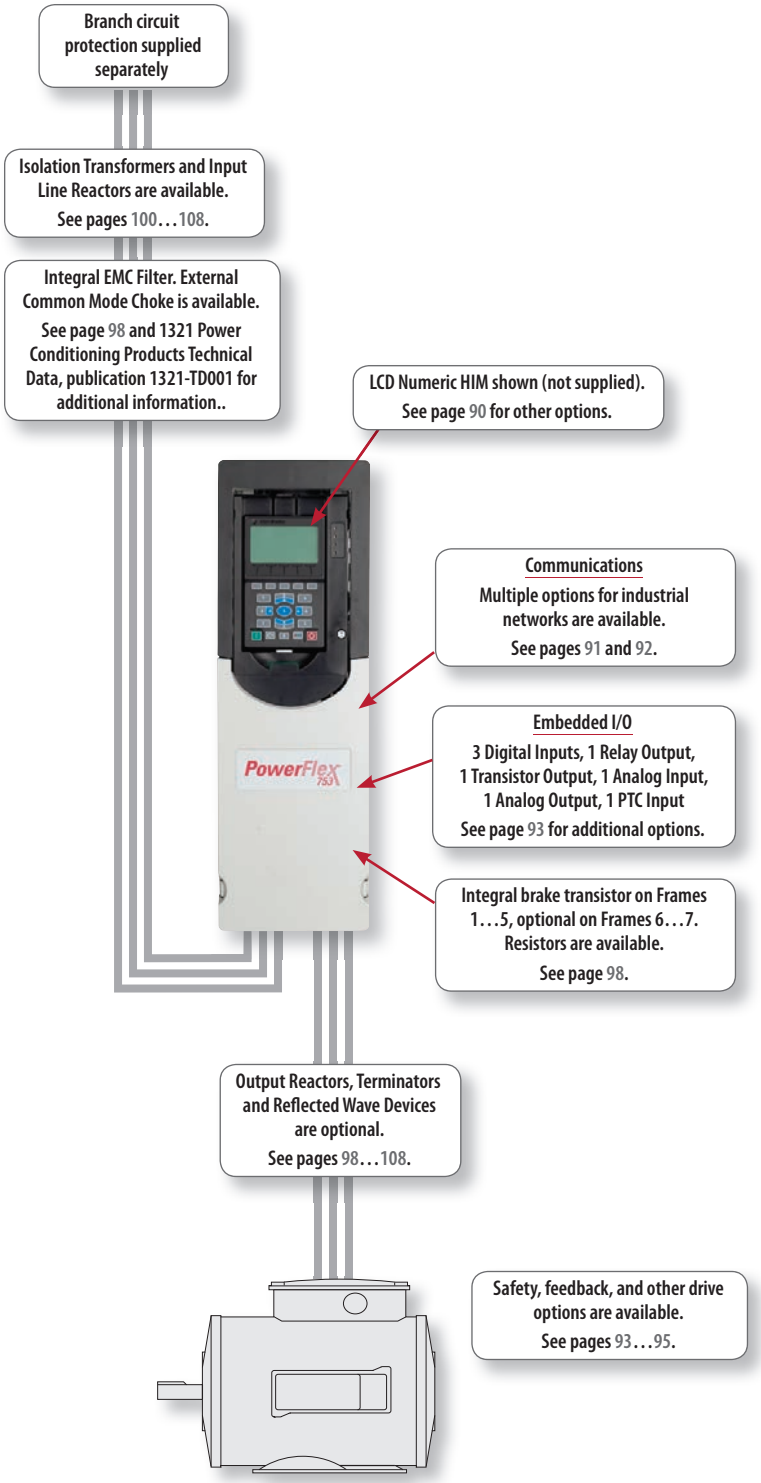
PowerFlex 700H AC Drive

Rockwell Automation announces that as of June 2016, the PowerFlex 700H AC Drives will be discontinued and no longer available for sale. Customers are encouraged to migrate from the PowerFlex 700H Drives to the PowerFlex 755 Drives.

PowerFlex 700H AC Drive at a Glance		
Ratings	380…480V: 132…1200 kW / 200…1900 Hp / 261…2150 A	500…600V: 150…2400 Hp / 170…2250 A
	690V: 160…2300 kW / 170…2250 A	
Motor Control	V/Hz Control	Sensorless Vector Control
Enclosures	IP21, NEMA Type 1	

PowerFlex 753 AC Drive

Designed for general purpose applications, the PowerFlex 753 AC drive offers multiple options and features along with the added benefit of simple integration. The PowerFlex 753 comes standard with built-in I/O making it a cost effective solution ideal for OEMs and system integrators looking to reduce engineering costs, deliver machines to market faster and meet end-user demand for more productive and safer machines.



PowerFlex 753 at a glance

Ratings	
	380…480V: 0.75…270 kW / 1.0…400 Hp / 2.1…477 A
	600V: 1.0…300 Hp / 1.7…289 A
	690V: 7.5…250 kW / 12…263 A
Motor Control	• V/Hz Control • Sensorless Vector Control • Vector Control with FORCE Technology (with and without encoder) • Interior Permanent Magnet with and without encoder
Enclosures	• IP00/IP20, NEMA/UL Type Open • Flange Mount • IP54/NEMA/UL Type 12
Safety	• Safe Torque-Off PLe/SIL3 Cat. 3 • Safe Speed Monitor PLe/SIL3 Cat. 4
Additional Features	• DeviceLogix • Predictive Diagnostics • Adjustable Voltage Control • Three option slots for I/O, feedback, safety, auxiliary control power, communications • Indexing • Pump Jack and Pump Off for oil well applications • Pjump and Traverse for Fibers application • Conformal Coating • DC Link Choke • Automatic Device Configuration (1)
Certifications	• ATEX Certified with appropriate options • c-UL-us • CE • EAC • EPRI/SEMI F47 • FS ISO/EN13849-1 with Safe Torque-Off option • KCC • Marine (ABS, Lloyd's Register, and RINA) • RCM • RoHS compliant materials • TÜV (2)
Options	See pages 90…109

(1) Requires Dual-port EtherNet/IP Option Module (Cat. No. 20-750-ENETR), firmware V7, Studio 5000 Logix Designer, and Drive Add-On Profiles Version 4.04 or higher.

(2) Certification applies to 20-750-S and 20-750-S1 Safety Options when installed in drive.

Additional Information

PowerFlex 750-Series Brochure, publication 750-BR001
PowerFlex 750-Series Technical Data, publication 750-TD001

Catalog Number Explanation

20F	1	A	N	D	248	A	A	0	N	N	N	N	N
		Input Type	Enclosure	Voltage Rating	Rating	Filtering & Common Mode Capacitor Configuration	Brake IGBT						

Product Selection

IP00/IP20, NEMA/UL Type Open [1]

380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						
Output Amps [2]			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps [2]			Normal Duty kW	Heavy Duty kW	Cat. No. [3]	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
2.1	2.3	3.2	1	0.5	20F11RD2P1AA0NNNNN	2.1	2.3	3.2	0.75	0.37	20F11RC2P1JA0NNNNN	1
3.4	3.7	5.1	2	1.5	20F11RD3P4AA0NNNNN	3.5	3.9	5.3	1.5	0.75	20F11RC3P5JA0NNNNN	1
5	5.5	7.5	3	2	20F11RD5P0AA0NNNNN	5	5.5	7.5	2.2	1.5	20F11RC5P0JA0NNNNN	1
8	8.8	12	5	3	20F11RD8P0AA0NNNNN	8.7	9.6	13.1	4	2.2	20F11RC8P7JA0NNNNN	1
11	12.1	16.5	7.5	5	20F11RD011AA0NNNNN	11.5	12.7	17.3	5.5	4	20F11RC011JA0NNNNN	1
14	15.4	21	10	7.5	20F11RD014AA0NNNNN	15.4	16.9	23.1	7.5	5.5	20F11RC015JA0NNNNN	1
2.1	3.1	3.7	1	1	20F11ND2P1AA0NNNNN	2.1	3.1	3.7	0.75	0.75	20F11NC2P1JA0NNNNN	2
3.4	5.1	6.1	2	2	20F11ND3P4AA0NNNNN	3.5	5.2	6.3	1.5	1.5	20F11NC3P5JA0NNNNN	2
5	7.5	9	3	3	20F11ND5P0AA0NNNNN	5	7.5	9.0	2.2	2.2	20F11NC5P0JA0NNNNN	2
8	12	14.4	5	5	20F11ND8P0AA0NNNNN	8.7	13	15.6	4	4	20F11NC8P7JA0NNNNN	2
11	16.5	19.8	7.5	7.5	20F11ND011AA0NNNNN	11.5	17.2	20.7	5.5	5.5	20F11NC011JA0NNNNN	2
14 (11)	15.4 (16.5)	21 (21)	10	7.5	20F11ND014AA0NNNNN	15.4 (11.5)	16.9 (17.3)	23.1 (23.1)	7.5	5.5	20F11NC015JA0NNNNN	2
22 (14)	24.2 (21)	33 (33)	15	10	20F11ND022AA0NNNNN	22 (15.4)	24.2 (23.1)	33 (33)	11	7.5	20F11NC022JA0NNNNN	2
27 (22)	29.7 (33)	40.5 (40.5)	20	15	20F11ND027AA0NNNNN	30 (22)	33 (33)	45 (45)	15	11	20F11NC030JA0NNNNN	3
34 (27)	37.4 (40.5)	51 (51)	25	20	20F11ND034AA0NNNNN	37 (30)	40.7 (45)	55.5 (55.5)	18.5	15	20F11NC037JA0NNNNN	3
40 (34)	44 (51)	60 (61.2)	30	25	20F11ND040AA0NNNNN	43 (37)	47.3 (55.5)	64.5 (66.6)	22	18.5	20F11NC043JA0NNNNN	3
52 (40)	57.2 (60)	78 (78)	40	30	20F11ND052AA0NNNNN	60 (43)	66 (66)	90 (90)	30	22	20F11NC060JA0NNNNN	4
65 (52)	71.5 (78)	97.5 (97.5)	50	40	20F11ND065AA0NNNNN	72 (60)	79.2 (90)	108 (108)	37	30	20F11NC072JA0NNNNN	4
77 (65)	84.7 (97.5)	116 (117)	60	50	20F11ND077AA0NNNNN	85 (72)	93.5 (108)	128 (130)	45	37	20F11NC085JA0NNNNN	5
96 (77)	106 (116)	144 (144)	75	60	20F11ND096AA0NNNNN	104 (85)	114 (128)	156 (156)	55	45	20F11NC104JA0NNNNN	5
125 (96)	138 (144)	188 (188)	100	75	20F1AND125AN0NNNNN	140 (104)	154 (156)	210 (210)	75	55	20F1ANC140JN0NNNNN	6 [4]
156 (125)	172 (188)	234 (234)	125	100	20F1AND156AN0NNNNN	170 (140)	187 (210)	255 (255)	90	75	20F1ANC170JN0NNNNN	6 [4]
186 (156)	205 (234)	279 (281)	150	125	20F1AND186AN0NNNNN	205 (170)	226 (255)	308 (308)	110	90	20F1ANC205JN0NNNNN	6 [4]
248 (186)	273 (279)	372 (372)	200	150	20F1AND248AN0NNNNN	260 (205)	286 (308)	390 (390)	132	110	20F1ANC260JN0NNNNN	6 [4]
302 (248)	332 (372)	453 (453)	250	200	20F1AND302AN0NNNNN	302 (260)	332 (390)	453 (468)	160	132	20F1ANC302JN0NNNNN	7 [4]
361 (302)	397 (453)	542 (544)	300	250	20F1AND361AN0NNNNN	367 (302)	404 (453)	551 (551)	200	160	20F1ANC367JN0NNNNN	7 [4]
415 (361)	457 (542)	623 (650)	350	300	20F1AND415AN0NNNNN	456 (367)	502 (551)	684 (684)	250	200	20F1ANC456JN0NNNNN	7 [4]
477 (361)	525 (542)	716 (650)	400	300	20F1AND477AN0NNNNN	477 (367)	525 (551)	716 (684)	270	200	20F1ANC477JN0NNNNN	7 [4]

(1) Frames 2…5 are IP20, Frames 6…7 are IP00.
(2) Some drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
(3) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.
(4) Also available with internal Brake IGBT (20F1xxxxxxx A xxxxxx).

IP00/IP20, NEMA/UL Type Open (continued)

Frames 3, 4 and 5 are 600V only drives. Frames 6 and 7 are dual voltage drives and can be operated at 600V or 690V AC.
Important: Frames 3, 4, and 5 must NOT be used in common DC input sharing applications with Frame 6 or larger drives. For details, contact your local Rockwell Automation sales office or Allen-Bradley Distributor.

DC Bus terminals are not supplied with AC input Frame 6 and 7 drives.

600V AC, Three-Phase Drives – IP20, NEMA/UL Type 1

Output Amps (1)						
Cont.	1 Min.	3 Sec.	Normal Duty Hp	Heavy Duty Hp	Cat. No.	Frame Size
1.7 (0.9)	1.9 (1.4)	2.6 (2.6)	1	0.5	20F11NE1P7AA0NNNNN	3
2.7 (1.7)	3.0 (2.6)	4.1 (4.6)	2	1	20F11NE2P7AA0NNNNN	3
3.9 (2.7)	4.3 (4.1)	5.9 (7.3)	3	2	20F11NE3P9AA0NNNNN	3
6.1 (3.9)	6.7 (5.9)	9.2 (10.5)	5	3	20F11NE6P1AA0NNNNN	3
9 (6.1)	9.9 (9.2)	13.5 (16.5)	7.5	5	20F11NE9P0AA0NNNNN	3
11 (9)	12.1 (13.5)	16.5 (24.3)	10	7.5	20F11NE011AA0NNNNN	3
17 (11)	18.7 (16.5)	25.5 (29.7)	15	10	20F11NE017AA0NNNNN	3
22 (17)	24 (26)	33 (46)	20	15	20F11NE022AA0NNNNN	3
27 (22)	30 (33)	41 (59)	25	20	20F11NE027AA0NNNNN	4
32 (27)	35 (41)	48 (73)	30	25	20F11NE032AA0NNNNN	4
41 (32)	45 (48)	62 (86)	40	30	20F11NE041AA0NNNNN	5

(1) These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

600…690V AC, Three-Phase Drives – IP00, NEMA/UL Type Open

600V AC Input						690V AC Input						
Output Amps (1)			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps (1)			Normal Duty kW	Heavy Duty kW	Cat. No. (2)	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
12 (9.1)	13.2 (13.7)	18 (18)	10 (3)	7.5	20F1ANE012AN0NNNNNN	12 (9)	13.2 (13.5)	18 (18)	7.5	5.5	20F1ANF012JN0NNNNNN	6 (4)
18 (11.1)	19.8 (16.7)	27 (27)	15 (3)	10	20F1ANE018AN0NNNNNN	15 (11.5)	16.5 (17.3)	22.5 (22.5)	11	7.5	20F1ANF015JN0NNNNNN	6 (4)
23 (18)	25.3 (27)	34.5 (34.5)	20 (3)	15	20F1ANE023AN0NNNNNN	20 (15)	22 (22.5)	30 (30)	15	11	20F1ANF020JN0NNNNNN	6 (4)
24 (22)	26.4 (33)	36 (39.6)	20 (3)	20	20F1ANE024AN0NNNNNN	23 (20)	25.3 (30)	34.5 (36)	18.5	15	20F1ANF023JN0NNNNNN	6 (4)
28 (23)	30.8 (34.5)	42 (42)	25 (3)	20	20F1ANE028AN0NNNNNN	30 (23)	33 (34.5)	45 (45)	22	18.5	20F1ANF030JN0NNNNNN	6 (4)
33 (28)	36.3 (42)	49.5 (50.4)	30 (3)	25	20F1ANE033AN0NNNNNN	34 (30)	37.4 (45)	51 (54)	30	22	20F1ANF034JN0NNNNNN	6 (4)
42 (33)	46.2 (49.5)	63 (63)	40 (3)	30	20F1ANE042AN0NNNNNN	46 (34)	50.6 (51)	69 (69)	37	30	20F1ANF046JN0NNNNNN	6 (4)
53 (42)	58.3 (63)	79.5 (79.5)	50 (3)	40	20F1ANE053AN0NNNNNN	50 (46)	55 (69)	75 (82.8)	45	37	20F1ANF050JN0NNNNNN	6 (4)
63 (52)	69.3 (78)	94.5 (94.5)	60	50	20F1ANE063AN0NNNNNN	61 (50)	67.1 (75)	91.5 (91.5)	55	45	20F1ANF061JN0NNNNNN	6 (4)
77 (63)	84.7 (94.5)	116 (116)	75	60	20F1ANE077AN0NNNNNN	82 (61)	90.2 (91.5)	123 (123)	75	55	20F1ANF082JN0NNNNNN	6 (4)
99 (77)	109 (116)	149 (149)	100	75	20F1ANE099AN0NNNNNN	98 (82)	108 (123)	147 (148)	90	75	20F1ANF098JN0NNNNNN	6 (4)
125 (99)	138 (149)	188 (188)	125	100	20F1ANE125AN0NNNNNN	119 (98)	131 (147)	179 (179)	110	90	20F1ANF119JN0NNNNNN	6 (4)
144 (125)	158 (188)	216 (225)	150	125	20F1ANE144AN0NNNNNN	142 (119)	156 (179)	213 (214)	132	110	20F1ANF142JN0NNNNNN	6 (4)
192 (144)	211 (216)	288 (288)	200	150	20F1ANE192AN0NNNNNN	171 (142)	188 (213)	257 (257)	160	132	20F1ANF171JN0NNNNNN	7 (4)
242 (192)	266 (288)	363 (363)	250	200	20F1ANE242AN0NNNNNN	212 (171)	233 (257)	318 (318)	200	160	20F1ANF212JN0NNNNNN	7 (4)
289 (242)	318 (318)	434 (436)	300	250	20F1ANE289AN0NNNNNN	263 (212)	289 (289)	395 (395)	250	200	20F1ANF263JN0NNNNNN	7 (4)

(1) These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
(2) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.
(3) Alternate 600V ratings when connected to drives 60 Hp and greater in common DC input applications with uncontrolled front ends.
(4) Also available with internal Brake IGBT (20F1xxxxxxx A xxxxxx).

Flange Mount
Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP66, NEMA/UL Type 4X

380...480V AC, Three-Phase Drives

480V AC Input						400V AC Input						
Output Amps [1]			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps [1]			Normal Duty kW	Heavy Duty kW	Cat. No. [2]	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
2.1	3.1	3.7	1	1	20F11FD2P1AA0NNNNN	2.1	3.1	3.7	0.75	0.75	20F11FC2P1JA0NNNNN	2
3.4	5.1	6.1	2	2	20F11FD3P4AA0NNNNN	3.5	5.2	6.3	1.5	1.5	20F11FC3P5JA0NNNNN	2
5	7.5	9	3	3	20F11FD5P0AA0NNNNN	5	7.5	9.0	2.2	2.2	20F11FC5P0JA0NNNNN	2
8	12	14.4	5	5	20F11FD8P0AA0NNNNN	8.7	13	15.6	4	4	20F11FC8P7JA0NNNNN	2
11	16.5	19.8	7.5	7.5	20F11FD011AA0NNNNN	11.5	17.2	20.7	5.5	5.5	20F11FC011JA0NNNNN	2
14 (11)	15.4 (16.5)	21 (21)	10	7.5	20F11FD014AA0NNNNN	15.4 (11.5)	16.9 (17.3)	23.1 (23.1)	7.5	5.5	20F11FC015JA0NNNNN	2
22 (14)	24.2 (21)	33 (33)	15	10	20F11FD022AA0NNNNN	22 (15.4)	24.2 (23.1)	33 (33)	11	7.5	20F11FC022JA0NNNNN	2
27 (22)	29.7 (33)	40.5 (40.5)	20	15	20F11FD027AA0NNNNN	30 (22)	33 (33)	45 (45)	15	11	20F11FC030JA0NNNNN	3
34 (27)	37.4 (40.5)	51 (51)	25	20	20F11FD034AA0NNNNN	37 (30)	40.7 (45)	55.5 (55.5)	18.5	15	20F11FC037JA0NNNNN	3
40 (34)	44 (51)	60 (61.2)	30	25	20F11FD040AA0NNNNN	43 (37)	47.3 (55.5)	64.5 (66.6)	22	18.5	20F11FC043JA0NNNNN	3
52 (40)	57.2 (60)	78 (78)	40	30	20F11FD052AA0NNNNN	60 (43)	66 (66)	90 (90)	30	22	20F11FC060JA0NNNNN	4
65 (52)	71.5 (78)	97.5 (97.5)	50	40	20F11FD065AA0NNNNN	72 (60)	79.2 (90)	108 (108)	37	30	20F11FC072JA0NNNNN	4
77 (65)	84.7 (97.5)	116 (117)	60	50	20F11FD077AA0NNNNN	85 (72)	93.5 (108)	128 (130)	45	37	20F11FC085JA0NNNNN	5
96 (77)	106 (116)	144 (144)	75	60	20F11FD096AA0NNNNN	104 (85)	114 (128)	156 (156)	55	45	20F11FC104JA0NNNNN	5

Note: Frames 6…7 require a user installed flange kit with an IP00, NEMA/UL Type Open drive.

(1) Some drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

(2) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

600V AC, Three-Phase Drives

Output Amps [1]			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Frame Size
Cont.	1 Min.	3 Sec.				
1.7 (0.9)	1.9 (1.4)	2.6 (2.6)	1	0.5	20F11FE1P7AA0NNNNN	3
2.7 (1.7)	3.0 (2.6)	4.1 (4.6)	2	1	20F11FE2P7AA0NNNNN	3
3.9 (2.7)	4.3 (4.1)	5.9 (7.3)	3	2	20F11FE3P9AA0NNNNN	3
6.1 (3.9)	6.7 (5.9)	9.2 (10.5)	5	3	20F11FE6P1AA0NNNNN	3
9 (6.1)	9.9 (9.2)	13.5 (16.5)	7.5	5	20F11FE9P0AA0NNNNN	3
11 (9)	12.1 (13.5)	16.5 (24.3)	10	7.5	20F11FE011AA0NNNNN	3
17 (11)	18.7 (16.5)	25.5 (29.7)	15	10	20F11FE017AA0NNNNN	3
22 (17)	24 (26)	33 (46)	20	15	20F11FE022AA0NNNNN	3
27 (22)	30 (33)	41 (59)	25	20	20F11FE027AA0NNNNN	4
32 (27)	35 (41)	48 (73)	30	25	20F11FE032AA0NNNNN	4
41 (32)	45 (48)	62 (86)	40	30	20F11FE041AA0NNNNN	5
52 (41)	57 (62)	78 (111)	50	40	20F11FE052AA0NNNNN	5

(1) These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

IP54, NEMA/UL Type 12

380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						
Output Amps [1]			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps [1]			Normal Duty kW	Heavy Duty kW	Cat. No. [2]	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
2.1	3.1	3.7	1	1	20F11GD2P1AA0NNNNN	2.1	3.1	3.7	0.75	0.75	20F11GC2P1JA0NNNNN	2
3.4	5.1	6.1	2	2	20F11GD3P4AA0NNNNN	3.5	5.2	6.3	1.5	1.5	20F11GC3P5JA0NNNNN	2
5	7.5	9	3	3	20F11GD5P0AA0NNNNN	5	7.5	9.0	2.2	2.2	20F11GC5P0JA0NNNNN	2
8	12	14.4	5	5	20F11GD8P0AA0NNNNN	8.7	13	15.6	4	4	20F11GC8P7JA0NNNNN	2
11	16.5	19.8	7.5	7.5	20F11GD011AA0NNNNN	11.5	17.2	20.7	5.5	5.5	20F11GC011JA0NNNNN	2
14 (11)	15.4 (16.5)	21 (21)	10	7.5	20F11GD014AA0NNNNN	15.4 (11.5)	16.9 (17.3)	23.1 (23.1)	7.5	5.5	20F11GC015JA0NNNNN	2
22 (14)	24.2 (21)	33 (33)	15	10	20F11GD022AA0NNNNN	22 (15.4)	24.2 (23.1)	33 (33)	11	7.5	20F11GC022JA0NNNNN	2
27 (22)	29.7 (33)	40.5 (40.5)	20	15	20F11GD027AA0NNNNN	30 (22)	33 (33)	45 (45)	15	11	20F11GC030JA0NNNNN	3
34 (27)	37.4 (40.5)	51 (51)	25	20	20F11GD034AA0NNNNN	37 (30)	40.7 (45)	55.5 (55.5)	18.5	15	20F11GC037JA0NNNNN	3
40 (34)	44 (51)	60 (61.2)	30	25	20F11GD040AA0NNNNN	43 (37)	47.3 (55.5)	64.5 (66.6)	22	18.5	20F11GC043JA0NNNNN	3
52 (40)	57.2 (60)	78 (78)	40	30	20F11GD052AA0NNNNN	60 (43)	66 (66)	90 (90)	30	22	20F11GC060JA0NNNNN	4
65 (52)	71.5 (78)	97.5 (97.5)	50	40	20F11GD065AA0NNNNN	72 (60)	79.2 (90)	108 (108)	37	30	20F11GC072JA0NNNNN	5
77 (65)	84.7 (97.5)	116 (117)	60	50	20F11GD077AA0NNNNN	85 (72)	93.5 (108)	128 (130)	45	37	20F11GC085JA0NNNNN	5
96 (77)	106 (116)	144 (144)	75	60	20F1AGD096AN0NNNNN	104 (85)	114 (128)	156 (156)	55	45	20F1AGC104JN0NNNNN	6 [3]
125 (96)	138 (144)	188 (188)	100	75	20F1AGD125AN0NNNNN	140 (104)	154 (156)	210 (210)	75	55	20F1AGC140JN0NNNNN	6 [3]
156 (125)	172 (188)	234 (234)	125	100	20F1AGD156AN0NNNNN	170 (140)	187 (210)	255 (255)	90	75	20F1AGC170JN0NNNNN	6 [3]
186 (156)	205 (234)	279 (281)	150	125	20F1AGD186AN0NNNNN	205 (170)	226 (255)	308 (308)	110	90	20F1AGC205JN0NNNNN	6 [3]
248 (186)	273 (279)	372 (372)	200	150	20F1AGD248AN0NNNNN	260 (205)	286 (308)	390 (390)	132	110	20F1AGC260JN0NNNNN	7 [3]
302 (248)	332 (372)	453 (453)	250	200	20F1AGD302AN0NNNNN	302 (260)	332 (390)	453 (468)	160	132	20F1AGC302JN0NNNNN	7 [3]
361 (302)	397 (453)	542 (544)	300	250	20F1AGD361AN0NNNNN	367 (302)	404 (453)	551 (551)	200	160	20F1AGC367JN0NNNNN	7 [3]
415 (361)	457 (542)	623 (650)	350	300	20F1AGD415AN0NNNNN	456 (367)	502 (551)	684 (684)	250	200	20F1AGC456JN0NNNNN	7 [3]

(1) Some drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

(2) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

(3) Also available with internal Brake IGBT (20F1xxxxxxx A xxxxxx).

IP54, NEMA/UL Type 12 (continued)

Frames 3, 4 and 5 are 600V only drives. Frames 6 and 7 are dual voltage drives and can be operated at 600V or 690V AC.
Important: Frames 3, 4, and 5 must NOT be used in common DC input sharing applications with Frame 6 or larger drives. For details, contact your local Rockwell Automation sales office or Allen-Bradley Distributor.

DC Bus terminals are not supplied with AC input Frame 6 and 7 drives.

600V AC, Three-Phase Drives

Output Amps (1)						
Cont.	1 Min.	3 Sec.	Normal Duty Hp	Heavy Duty Hp	Cat. No.	Frame Size
1.7 (0.9)	1.9 (1.4)	2.6 (2.6)	1	0.5	20F11GE1P7AA0NNNNN	3
2.7 (1.7)	3.0 (2.6)	4.1 (4.6)	2	1	20F11GE2P7AA0NNNNN	3
3.9 (2.7)	4.3 (4.1)	5.9 (7.3)	3	2	20F11GE3P9AA0NNNNN	3
6.1 (3.9)	6.7 (5.9)	9.2 (10.5)	5	3	20F11GE6P1AA0NNNNN	3
9 (6.1)	9.9 (9.2)	13.5 (16.5)	7.5	5	20F11GE9P0AA0NNNNN	3
11 (9)	12.1 (13.5)	16.5 (24.3)	10	7.5	20F11GE011AA0NNNNN	3
17 (11)	18.7 (16.5)	25.5 (29.7)	15	10	20F11GE017AA0NNNNN	3
22 (17)	24 (26)	33 (46)	20	15	20F11GE022AA0NNNNN	3
27 (22)	30 (33)	41 (59)	25	20	20F11GE027AA0NNNNN	4
32 (27)	35 (41)	48 (73)	30	25	20F11GE032AA0NNNNN	4
41 (32)	45 (48)	62 (86)	40	30	20F11GE041AA0NNNNN	5

(1) These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

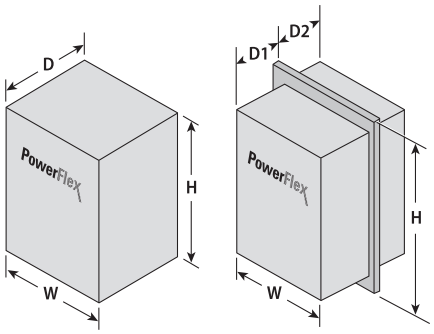
600…690V AC, Three-Phase Drives

600V AC Input						690V AC Input						Frame Size
Output Amps (1)			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps (1)			Normal Duty kW	Heavy Duty kW	Cat. No. (2)	
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
12 (9.1)	13.2 (13.7)	18 (18)	10 (3)	7.5	20F1AGE012AN0NNNNN	12 (9)	13.2 (13.5)	18 (18)	7.5	5.5	20F1AGF012JN0NNNNN	6 (4)
18 (11.1)	19.8 (16.7)	27 (27)	15 (3)	10	20F1AGE018AN0NNNNN	15 (11.5)	16.5 (17.3)	22.5 (22.5)	11	7.5	20F1AGF015JN0NNNNN	6 (4)
23 (18)	25.3 (27)	34.5 (34.5)	20 (3)	15	20F1AGE023AN0NNNNN	20 (15)	22 (22.5)	30 (30)	15	11	20F1AGF020JN0NNNNN	6 (4)
24 (22)	26.4 (33)	36 (39.6)	20 (3)	20	20F1AGE024AN0NNNNN	23 (20)	25.3 (30)	34.5 (36)	18.5	15	20F1AGF023JN0NNNNN	6 (4)
28 (23)	30.8 (34.5)	42 (42)	25 (3)	20	20F1AGE028AN0NNNNN	30 (23)	33 (34.5)	45 (45)	22	18.5	20F1AGF030JN0NNNNN	6 (4)
33 (28)	36.3 (42)	49.5 (50.4)	30 (3)	25	20F1AGE033AN0NNNNN	34 (30)	37.4 (45)	51 (54)	30	22	20F1AGF034JN0NNNNN	6 (4)
42 (33)	46.2 (49.5)	63 (63)	40 (3)	30	20F1AGE042AN0NNNNN	46 (34)	50.6 (51)	69 (69)	37	30	20F1AGF046JN0NNNNN	6 (4)
53 (42)	58.3 (63)	79.5 (79.5)	50 (3)	40	20F1AGE053AN0NNNNN	50 (46)	55 (69)	75 (82.8)	45	37	20F1AGF050JN0NNNNN	6 (4)
63 (52)	69.3 (78)	94.5 (94.5)	60	50	20F1AGE063AN0NNNNN	61 (50)	67.1 (75)	91.5 (91.5)	55	45	20F1AGF061JN0NNNNN	6 (4)
77 (63)	84.7 (94.5)	116 (116)	75	60	20F1AGE077AN0NNNNN	82 (61)	90.2 (91.5)	123 (123)	75	55	20F1AGF082JN0NNNNN	6 (4)
99 (77)	109 (116)	149 (149)	100	75	20F1AGE099AN0NNNNN	98 (82)	108 (123)	147 (148)	90	75	20F1AGF098JN0NNNNN	6 (4)
125 (99)	138 (149)	188 (188)	125	100	20F1AGE125AN0NNNNN	119 (98)	131 (147)	179 (179)	110	90	20F1AGF119JN0NNNNN	6 (4)
144 (125)	158 (188)	216 (225)	150	125	20F1AGE144AN0NNNNN	142 (119)	156 (179)	213 (214)	132	110	20F1AGF142JN0NNNNN	6 (4)
192 (144)	211 (216)	288 (288)	200	150	20F1AGE192AN0NNNNN	171 (142)	188 (213)	257 (257)	160	132	20F1AGF171JN0NNNNN	7 (4)
242 (192)	266 (288)	363 (363)	250	200	20F1AGE242AN0NNNNN	212 (171)	233 (257)	318 (318)	200	160	20F1AGF212JN0NNNNN	7 (4)
289 (242)	318 (318)	434 (436)	300	250	20F1AGE289AN0NNNNN	263 (212)	289 (289)	395 (395)	250	200	20F1AGF263JN0NNNNN	7 (4)

(1) These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
(2) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.
(3) Alternate 600V ratings when connected to drives 60 Hp and greater in common DC input applications with uncontrolled front ends.
(4) Also available with internal Brake IGBT (20F1xxxxxxx A xxxxxx).

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP00/IP20, NEMA/UL Type Open

Frame	H	W	D	Weight
1	400.5 (15.77)	110.0 (4.33)	211.0 (8.31)	6.00 (12.75)
2	424.2 (16.70)	134.5 (5.30)	212.0 (8.35)	7.80 (17.2)
3	454.0 (17.87)	190.0 (7.48)	212.0 (8.35)	11.80 (26.1)
4	474.0 (18.66)	222.0 (8.74)	212.0 (8.35)	13.60 (30.0)
5	550.0 (21.65)	270.0 (10.63)	212.0 (8.35)	20.40 (45.0)
6	665.5 (26.20)	308.0 (12.13)	346.4 (13.64)	38.60 (85.0)
7	881.5 (34.70)	430.0 (16.93)	349.6 (13.76)	72.60…108.90 (160.0…240.0)

IP54, NEMA/UL Type 12

Frame	H	W	D	Weight [1]
2	543.2 (21.39)	215.3 (8.48)	222.2 (8.75)	8.00 (17.0)
3	551.0 (21.69)	268.0 (10.55)	220.1 (8.67)	12.00 (26.0)
4	571.0 (22.48)	300.0 (11.81)	220.1 (8.67)	14.00 (30.0)
5	647.0 (25.47)	348.0 (13.70)	220.1 (8.67)	20.00 (45.0)
6	1298.3 (51.11)	609.4 (23.99)	464.7 (18.30)	91.00 (200.0)
7	1614.0 (63.54)	609.4 (23.99)	464.7 (18.30)	162.00 (357.0)

(1) Weights are approximate. Refer to the PowerFlex 750-Series Technical Data for detailed weight information.

Flange Mount

Frame	H	W	D1	D2	Weight [1]
2	481.8 (18.97)	206.2 (8.12)	148.3 (5.84)	63.7 (2.51)	8.00 (17.0)
3	515.0 (20.28)	260.0 (10.24)	127.4 (5.02)	84.6 (3.33)	12.00 (26.0)
4	535.0 (21.06)	292.0 (11.50)	127.4 (5.02)	84.6 (3.33)	14.00 (30.0)
5	611.0 (24.06)	340.0 (13.39)	127.4 (5.02)	84.6 (3.33)	20.00 (45.0)
6	665.5 (26.20)	308.0 (12.13)	208.4 (8.20)	138.0 (5.43)	38.00 (84.0)
7	875.0 (34.45)	430.0 (16.93)	208.4 (8.20)	138.0 (5.43)	96.00 (212.0)

(1) Weights are approximate. Refer to the PowerFlex 750-Series Technical Data for detailed weight information.

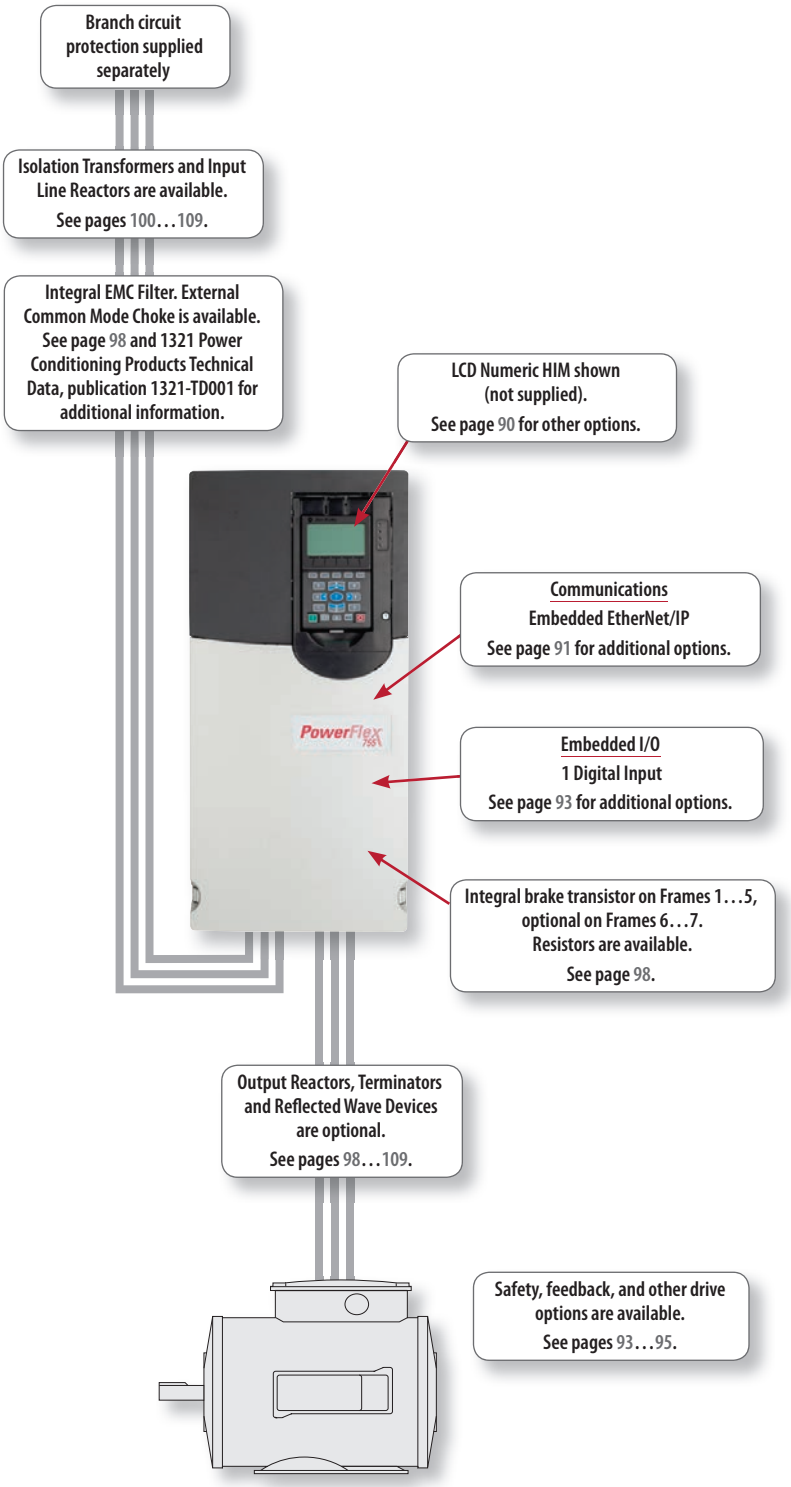
PowerFlex 755 AC Drive

Designed for ease of integration, application flexibility and performance the PowerFlex 755 AC drive provides improved functionality across many manufacturing systems. The PowerFlex 755 AC drive is designed to maximize user's investment and help improve productivity. Ideal for applications that require safety, high motor control performance, and application flexibility, the PowerFlex 755 is highly functional and cost effective solution.

PowerFlex 755 at a glance	
Ratings	
380...480V:	0.75...1400 kW / 1.0...2000 Hp / 2.1...2330 A
600V:	1.0...1500 Hp / 1.7...1530 A
690V:	7.5...1500 kW / 12...1485 A
Motor Control	• V/Hz Control • Sensorless Vector Control • Vector Control with FORCE Technology (with and without encoder) • Surface Mount Permanent Magnet: Frames 2...7 (with and without encoder) Frames 8...10 (with encoder) • Interior Permanent Magnet: Frames 2...7 (with and without encoder) Frames 8...10 (with encoder)
Enclosures	• IP00/IP20, NEMA/UL Type Open • Flange Mount • IP54/NEMA/UL Type 12 • IP20, NEMA/UL Type 1 (MCC Style Cabinet) • IP54, NEMA Type 12 (MCC Style Cabinet)
Safety	• Safe Torque-Off PLe/SIL3 Cat. 3 • Safe Speed Monitor PLe/SIL3 Cat. 4
Additional Features	• Built-in EtherNet/IP Port • Automatic Device Configuration • Program with motion instructions in Studio 5000 Logix Designer™ Software • Predictive Diagnostics • Adjustable Voltage Control • Five option slots for I/O, feedback, safety, auxiliary control power, communications • Accurate positioning with PCAM, Indexer, Electronic Gearing, and speed/position profiling • Incremental, Absolute and High Resolution feedback supported • TorqProve for lifting applications • Pump Jack and Pump Off for oil well applications • Pjump and Traverse for Fibers application • Conformal Coating • DC Link Choke • AC line fuses included with Frame 8...10 drives • Roll-out design for Frame 8...10 drives
Certifications	• ATEX Certified with appropriate options • c-UL-us • CE • EAC • EPRI/SEMI F47 • FS ISO/EN13849-1 with Safe Torque-Off option • KCC • Marine (ABS, Lloyd's Register, and RINA) • RCM • RoHS compliant materials • TÜV (1)
Options	See pages 90...108

(1) Certification applies to 20-750-S and 20-750-S1 Safety Options when installed in drive.

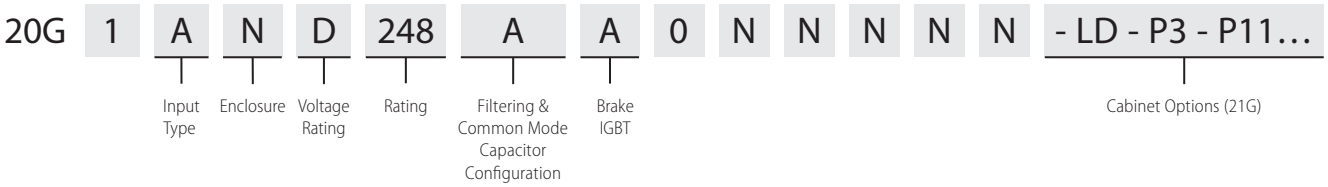
The PowerFlex 755 AC drive can be configured with drive instructions embedded in Allen-Bradley Logix Programmable Automation Controllers (PAC).



Additional Information

PowerFlex 750-Series Brochure, publication 750-BR001
PowerFlex 750-Series Technical Data, publication 750-TD001

Catalog Number Explanation



Product Selection

IP00/IP20, NEMA/UL Type Open [1]

380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						
Output Amps [2]			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps [2]			Normal Duty kW	Heavy Duty kW	Cat. No. [3]	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
2.1	2.3	3.2	1	0.5	20G11RD2P1AA0NNNNN	2.1	2.3	3.2	0.75	0.37	20G11RC2P1JA0NNNNN	1
3.4	3.7	5.1	2	1.5	20G11RD3P4AA0NNNNN	3.5	3.9	5.3	1.5	0.75	20G11RC3P5JA0NNNNN	1
5	5.5	7.5	3	2	20G11RD5P0AA0NNNNN	5	5.5	7.5	2.2	1.5	20G11RC5P0JA0NNNNN	1
8	8.8	12	5	3	20G11RD8P0AA0NNNNN	8.7	9.6	13.1	4	2.2	20G11RC8P7JA0NNNNN	1
11	12.1	16.5	7.5	5	20G11RD011AA0NNNNN	11.5	12.7	17.3	5.5	4	20G11RC011JA0NNNNN	1
14	15.4	21	10	7.5	20G11RD014AA0NNNNN	15.4	16.9	23.1	7.5	5.5	20G11RC015JA0NNNNN	1
2.1	3.1	3.7	1	1	20G11ND2P1AA0NNNNN	2.1	3.1	3.7	0.75	0.75	20G11NC2P1JA0NNNNN	2
3.4	5.1	6.1	2	2	20G11ND3P4AA0NNNNN	3.5	5.2	6.3	1.5	1.5	20G11NC3P5JA0NNNNN	2
5	7.5	9	3	3	20G11ND5P0AA0NNNNN	5	7.5	9.0	2.2	2.2	20G11NC5P0JA0NNNNN	2
8	12	14.4	5	5	20G11ND8P0AA0NNNNN	8.7	13	15.6	4	4	20G11NC8P7JA0NNNNN	2
11	16.5	19.8	7.5	7.5	20G11ND011AA0NNNNN	11.5	17.2	20.7	5.5	5.5	20G11NC011JA0NNNNN	2
14 (11)	15.4 (16.5)	21 (21)	10	7.5	20G11ND014AA0NNNNN	15.4 (11.5)	16.9 (17.3)	23.1 (23.1)	7.5	5.5	20G11NC015JA0NNNNN	2
22 (14)	24.2 (21)	33 (33)	15	10	20G11ND022AA0NNNNN	22 (15.4)	24.2 (23.1)	33 (33)	11	7.5	20G11NC022JA0NNNNN	2
27 (22)	29.7 (33)	40.5 (40.5)	20	15	20G11ND027AA0NNNNN	30 (22)	33 (33)	45 (45)	15	11	20G11NC030JA0NNNNN	3
34 (27)	37.4 (40.5)	51 (51)	25	20	20G11ND034AA0NNNNN	37 (30)	40.7 (45)	55.5 (55.5)	18.5	15	20G11NC037JA0NNNNN	3
40 (34)	44 (51)	60 (61.2)	30	25	20G11ND040AA0NNNNN	43 (37)	47.3 (55.5)	64.5 (66.6)	22	18.5	20G11NC043JA0NNNNN	3
52 (40)	57.2 (60)	78 (78)	40	30	20G11ND052AA0NNNNN	60 (43)	66 (66)	90 (90)	30	22	20G11NC060JA0NNNNN	4
65 (52)	71.5 (78)	97.5 (97.5)	50	40	20G11ND065AA0NNNNN	72 (60)	79.2 (90)	108 (108)	37	30	20G11NC072JA0NNNNN	4
77 (65)	84.7 (97.5)	116 (117)	60	50	20G11ND077AA0NNNNN	85 (72)	93.5 (108)	128 (130)	45	37	20G11NC085JA0NNNNN	5
96 (77)	106 (116)	144 (144)	75	60	20G11ND096AA0NNNNN	104 (85)	114 (128)	156 (156)	55	45	20G11NC104JA0NNNNN	5
125 (96)	138 (144)	188 (188)	100	75	20G1AND125AN0NNNNN	140 (104)	154 (156)	210 (210)	75	55	20G1ANC140JN0NNNNN	6 [4]
156 (125)	172 (188)	234 (234)	125	100	20G1AND156AN0NNNNN	170 (140)	187 (210)	255 (255)	90	75	20G1ANC170JN0NNNNN	6 [4]
186 (156)	205 (234)	279 (281)	150	125	20G1AND186AN0NNNNN	205 (170)	226 (255)	308 (308)	110	90	20G1ANC205JN0NNNNN	6 [4]
248 (186)	273 (279)	372 (372)	200	150	20G1AND248AN0NNNNN	260 (205)	286 (308)	390 (390)	132	110	20G1ANC260JN0NNNNN	6 [4]
302 (248)	332 (372)	453 (453)	250	200	20G1AND302AN0NNNNN	302 (260)	332 (390)	453 (468)	160	132	20G1ANC302JN0NNNNN	7 [4]
361 (302)	397 (453)	542 (544)	300	250	20G1AND361AN0NNNNN	367 (302)	404 (453)	551 (551)	200	160	20G1ANC367JN0NNNNN	7 [4]
415 (361)	457 (542)	623 (650)	350	300	20G1AND415AN0NNNNN	456 (367)	502 (551)	684 (684)	250	200	20G1ANC456JN0NNNNN	7 [4]
477 (361)	525 (542)	716 (650)	400	300	20G1AND477AN0NNNNN	477 (367)	525 (551)	716 (684)	270	200	20G1ANC477JN0NNNNN	7 [4]

(1) Frames 1…5 are IP20, Frames 6…7 are IP00.
(2) Some drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
(3) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.
(4) Also available with internal Brake IGBT (20G1xxxxxxx A xxxxxx).

IP00/IP20, NEMA/UL Type Open (continued)

Frames 3, 4 and 5 are 600V only drives. Frames 6 and 7 are dual voltage drives and can be operated at 600V or 690V AC.
Important: Frames 3, 4, and 5 must NOT be used in common DC input sharing applications with Frame 6 or larger drives. For details, contact your local Rockwell Automation sales office or Allen-Bradley Distributor.

DC Bus terminals are not supplied with AC input Frame 6 and 7 drives.

600V AC, Three-Phase Drives – IP20, NEMA/UL Type 1

Output Amps [1]			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Frame Size
Cont.	1 Min.	3 Sec.				
1.7 (0.9)	1.9 (1.4)	2.6 (2.6)	1	0.5	20G11NE1P7AA0NNNNN	3
2.7 (1.7)	3.0 (2.6)	4.1 (4.6)	2	1	20G11NE2P7AA0NNNNN	3
3.9 (2.7)	4.3 (4.1)	5.9 (7.3)	3	2	20G11NE3P9AA0NNNNN	3
6.1 (3.9)	6.7 (5.9)	9.2 (10.5)	5	3	20G11NE6P1AA0NNNNN	3
9 (6.1)	9.9 (9.2)	13.5 (16.5)	7.5	5	20G11NE9P0AA0NNNNN	3
11 (9)	12.1 (13.5)	16.5 (24.3)	10	7.5	20G11NE011AA0NNNNN	3
17 (11)	18.7 (16.5)	25.5 (29.7)	15	10	20G11NE017AA0NNNNN	3
22 (17)	24 (26)	33 (46)	20	15	20G11NE022AA0NNNNN	3
27 (22)	30 (33)	41 (59)	25	20	20G11NE027AA0NNNNN	4
32 (27)	35 (41)	48 (73)	30	25	20G11NE032AA0NNNNN	4
41 (32)	45 (48)	62 (86)	40	30	20G11NE041AA0NNNNN	5
52 (41)	57 (62)	78 (111)	50	40	20G11NE052AA0NNNNN	5

(1) These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

600…690V AC, Three-Phase Drives – IP00, NEMA/UL Type Open

600V AC Input						690V AC Input						Frame Size
Output Amps [1]			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps [1]			Normal Duty kW	Heavy Duty kW	Cat. No. [2]	
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
12 (9.1)	13.2 (13.7)	18 (18)	10 [3]	7.5	20G1ANE012AN0NNNNNN	12 (9)	13.2 (13.5)	18 (18)	7.5	5.5	20G1ANF012JN0NNNNN	6 [4]
18 (11.1)	19.8 (16.7)	27 (27)	15 [3]	10	20G1ANE018AN0NNNNNN	15 (11.5)	16.5 (17.3)	22.5 (22.5)	11	7.5	20G1ANF015JN0NNNNN	6 [4]
23 (18)	25.3 (27)	34.5 (34.5)	20 [3]	15	20G1ANE023AN0NNNNNN	20 (15)	22 (22.5)	30 (30)	15	11	20G1ANF020JN0NNNNN	6 [4]
24 (22)	26.4 (33)	36 (39.6)	20 [3]	20	20G1ANE024AN0NNNNNN	23 (20)	25.3 (30)	34.5 (36)	18.5	15	20G1ANF023JN0NNNNN	6 [4]
28 (23)	30.8 (34.5)	42 (42)	25 [3]	20	20G1ANE028AN0NNNNNN	30 (23)	33 (34.5)	45 (45)	22	18.5	20G1ANF030JN0NNNNN	6 [4]
33 (28)	36.3 (42)	49.5 (50.4)	30 [3]	25	20G1ANE033AN0NNNNNN	34 (30)	37.4 (45)	51 (54)	30	22	20G1ANF034JN0NNNNN	6 [4]
42 (33)	46.2 (49.5)	63 (63)	40 [3]	30	20G1ANE042AN0NNNNNN	46 (34)	50.6 (51)	69 (69)	37	30	20G1ANF046JN0NNNNN	6 [4]
53 (42)	58.3 (63)	79.5 (79.5)	50 [3]	40	20G1ANE053AN0NNNNNN	50 (46)	55 (69)	75 (82.8)	45	37	20G1ANF050JN0NNNNN	6 [4]
63 (52)	69.3 (78)	94.5 (94.5)	60	50	20G1ANE063AN0NNNNNN	61 (50)	67.1 (75)	91.5 (91.5)	55	45	20G1ANF061JN0NNNNN	6 [4]
77 (63)	84.7 (94.5)	116 (116)	75	60	20G1ANE077AN0NNNNNN	82 (61)	90.2 (91.5)	123 (123)	75	55	20G1ANF082JN0NNNNN	6 [4]
99 (77)	109 (116)	149 (149)	100	75	20G1ANE099AN0NNNNNN	98 (82)	108 (123)	147 (148)	90	75	20G1ANF098JN0NNNNN	6 [4]
125 (99)	138 (149)	188 (188)	125	100	20G1ANE125AN0NNNNNN	119 (98)	131 (147)	179 (179)	110	90	20G1ANF119JN0NNNNN	6 [4]
144 (125)	158 (188)	216 (225)	150	125	20G1ANE144AN0NNNNNN	142 (119)	156 (179)	213 (214)	132	110	20G1ANF142JN0NNNNN	6 [4]
192 (144)	211 (216)	288 (288)	200	150	20G1ANE192AN0NNNNNN	171 (142)	188 (213)	257 (257)	160	132	20G1ANF171JN0NNNNN	7 [4]
242 (192)	266 (288)	363 (363)	250	200	20G1ANE242AN0NNNNNN	212 (171)	233 (257)	318 (318)	200	160	20G1ANF212JN0NNNNN	7 [4]
289 (242)	318 (318)	434 (436)	300	250	20G1ANE289AN0NNNNNN	263 (212)	289 (289)	395 (395)	250	200	20G1ANF263JN0NNNNN	7 [4]

(1) These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
(2) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.
(3) Alternate 600V ratings when connected to drives 60 Hp and greater in common DC input applications with uncontrolled front ends.
(4) Also available with internal Brake IGBT (20G1xxxxxxx A xxxxxx).

Flange Mount
Front = IP20, NEMA/UL Type Open, Back/Heatsink = IP66, NEMA/UL Type 4X

380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						
Output Amps [1]			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps [1]			Normal Duty kW	Heavy Duty kW	Cat. No. [2]	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
2.1	3.1	3.7	1	1	20G11FD2P1AA0NNNNN	2.1	3.1	3.7	0.75	0.75	20G11FC2P1JA0NNNNN	2
3.4	5.1	6.1	2	2	20G11FD3P4AA0NNNNN	3.5	5.2	6.3	1.5	1.5	20G11FC3P5JA0NNNNN	2
5	7.5	9	3	3	20G11FD5P0AA0NNNNN	5	7.5	9.0	2.2	2.2	20G11FC5P0JA0NNNNN	2
8	12	14.4	5	5	20G11FD8P0AA0NNNNN	8.7	13	15.6	4	4	20G11FC8P7JA0NNNNN	2
11	16.5	19.8	7.5	7.5	20G11FD011AA0NNNNN	11.5	17.2	20.7	5.5	5.5	20G11FC011JA0NNNNN	2
14 (11)	15.4 (16.5)	21 (21)	10	7.5	20G11FD014AA0NNNNN	15.4 (11.5)	16.9 (17.3)	23.1 (23.1)	7.5	5.5	20G11FC015JA0NNNNN	2
22 (14)	24.2 (21)	33 (33)	15	10	20G11FD022AA0NNNNN	22 (15.4)	24.2 (23.1)	33 (33)	11	7.5	20G11FC022JA0NNNNN	2
27 (22)	29.7 (33)	40.5 (40.5)	20	15	20G11FD027AA0NNNNN	30 (22)	33 (33)	45 (45)	15	11	20G11FC030JA0NNNNN	3
34 (27)	37.4 (40.5)	51 (51)	25	20	20G11FD034AA0NNNNN	37 (30)	40.7 (45)	55.5 (55.5)	18.5	15	20G11FC037JA0NNNNN	3
40 (34)	44 (51)	60 (61.2)	30	25	20G11FD040AA0NNNNN	43 (37)	47.3 (55.5)	64.5 (66.6)	22	18.5	20G11FC043JA0NNNNN	3
52 (40)	57.2 (60)	78 (78)	40	30	20G11FD052AA0NNNNN	60 (43)	66 (66)	90 (90)	30	22	20G11FC060JA0NNNNN	4
65 (52)	71.5 (78)	97.5 (97.5)	50	40	20G11FD065AA0NNNNN	72 (60)	79.2 (90)	108 (108)	37	30	20G11FC072JA0NNNNN	4
77 (65)	84.7 (97.5)	116 (117)	60	50	20G11FD077AA0NNNNN	85 (72)	93.5 (108)	128 (130)	45	37	20G11FC085JA0NNNNN	5
96 (77)	106 (116)	144 (144)	75	60	20G11FD096AA0NNNNN	104 (85)	114 (128)	156 (156)	55	45	20G11FC104JA0NNNNN	5

Note: Frames 6…7 require an optional user installed flange kit with an IP00, NEMA/UL Type Open drive.

(1) Some drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

(2) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

600V AC, Three-Phase Drives

Output Amps [1]			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Frame Size
Cont.	1 Min.	3 Sec.				
1.7 (0.9)	1.9 (1.4)	2.6 (2.6)	1	0.5	20G11FE1P7AA0NNNNN	3
2.7 (1.7)	3.0 (2.6)	4.1 (4.6)	2	1	20G11FE2P7AA0NNNNN	3
3.9 (2.7)	4.3 (4.1)	5.9 (7.3)	3	2	20G11FE3P9AA0NNNNN	3
6.1 (3.9)	6.7 (5.9)	9.2 (10.5)	5	3	20G11FE6P1AA0NNNNN	3
9 (6.1)	9.9 (9.2)	13.5 (16.5)	7.5	5	20G11FE9P0AA0NNNNN	3
11 (9)	12.1 (13.5)	16.5 (24.3)	10	7.5	20G11FE011AA0NNNNN	3
17 (11)	18.7 (16.5)	25.5 (29.7)	15	10	20G11FE017AA0NNNNN	3
22 (17)	24 (26)	33 (46)	20	15	20G11FE022AA0NNNNN	3
27 (22)	30 (33)	41 (59)	25	20	20G11FE027AA0NNNNN	4
32 (27)	35 (41)	48 (73)	30	25	20G11FE032AA0NNNNN	4
41 (32)	45 (48)	62 (86)	40	30	20G11FE041AA0NNNNN	5
52 (41)	57 (62)	78 (111)	50	40	20G11FE052AA0NNNNN	5

(1) These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

IP54, NEMA/UL Type 12

380…480V AC, Three-Phase Drives

480V AC Input						400V AC Input						
Output Amps [1]			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps [1]			Normal Duty kW	Heavy Duty kW	Cat. No. [2]	Frame Size
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
2.1	3.1	3.7	1	1	20G11GD2P1AA0NNNNN	2.1	3.1	3.7	0.75	0.75	20G11GC2P1JA0NNNNN	2
3.4	5.1	6.1	2	2	20G11GD3P4AA0NNNNN	3.5	5.2	6.3	1.5	1.5	20G11GC3P5JA0NNNNN	2
5	7.5	9	3	3	20G11GD5P0AA0NNNNN	5	7.5	9.0	2.2	2.2	20G11GC5P0JA0NNNNN	2
8	12	14.4	5	5	20G11GD8P0AA0NNNNN	8.7	13	15.6	4	4	20G11GC8P7JA0NNNNN	2
11	16.5	19.8	7.5	7.5	20G11GD011AA0NNNNN	11.5	17.2	20.7	5.5	5.5	20G11GC011JA0NNNNN	2
14 (11)	15.4 (16.5)	21 (21)	10	7.5	20G11GD014AA0NNNNN	15.4 (11.5)	16.9 (17.3)	23.1 (23.1)	7.5	5.5	20G11GC015JA0NNNNN	2
22 (14)	24.2 (21)	33 (33)	15	10	20G11GD022AA0NNNNN	22 (15.4)	24.2 (23.1)	33 (33)	11	7.5	20G11GC022JA0NNNNN	2
27 (22)	29.7 (33)	40.5 (40.5)	20	15	20G11GD027AA0NNNNN	30 (22)	33 (33)	45 (45)	15	11	20G11GC030JA0NNNNN	3
34 (27)	37.4 (40.5)	51 (51)	25	20	20G11GD034AA0NNNNN	37 (30)	40.7 (45)	55.5 (55.5)	18.5	15	20G11GC037JA0NNNNN	3
40 (34)	44 (51)	60 (61.2)	30	25	20G11GD040AA0NNNNN	43 (37)	47.3 (55.5)	64.5 (66.6)	22	18.5	20G11GC043JA0NNNNN	3
52 (40)	57.2 (60)	78 (78)	40	30	20G11GD052AA0NNNNN	60 (43)	66 (66)	90 (90)	30	22	20G11GC060JA0NNNNN	4
65 (52)	71.5 (78)	97.5 (97.5)	50	40	20G11GD065AA0NNNNN	72 (60)	79.2 (90)	108 (108)	37	30	20G11GC072JA0NNNNN	5
77 (65)	84.7 (97.5)	116 (117)	60	50	20G11GD077AA0NNNNN	85 (72)	93.5 (108)	128 (130)	45	37	20G11GC085JA0NNNNN	5
96 (77)	106 (116)	144 (144)	75	60	20G1AGD096AN0NNNNN	104 (85)	114 (128)	156 (156)	55	45	20G1AGC104JN0NNNNN	6 [3]
125 (96)	138 (144)	188 (188)	100	75	20G1AGD125AN0NNNNN	140 (104)	154 (156)	210 (210)	75	55	20G1AGC140JN0NNNNN	6 [3]
156 (125)	172 (188)	234 (234)	125	100	20G1AGD156AN0NNNNN	170 (140)	187 (210)	255 (255)	90	75	20G1AGC170JN0NNNNN	6 [3]
186 (156)	205 (234)	279 (281)	150	125	20G1AGD186AN0NNNNN	205 (170)	226 (255)	308 (308)	110	90	20G1AGC205JN0NNNNN	6 [3]
248 (186)	273 (279)	372 (372)	200	150	20G1AGD248AN0NNNNN	260 (205)	286 (308)	390 (390)	132	110	20G1AGC260JN0NNNNN	7 [3]
302 (248)	332 (372)	453 (453)	250	200	20G1AGD302AN0NNNNN	302 (260)	332 (390)	453 (468)	160	132	20G1AGC302JN0NNNNN	7 [3]
361 (302)	397 (453)	542 (544)	300	250	20G1AGD361AN0NNNNN	367 (302)	404 (453)	551 (551)	200	160	20G1AGC367JN0NNNNN	7 [3]
415 (361)	457 (542)	623 (650)	350	300	20G1AGD415AN0NNNNN	456 (367)	502 (551)	684 (684)	250	200	20G1AGC456JN0NNNNN	7 [3]

(1) Some drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

(2) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

(3) Also available with internal Brake IGBT (20G1xxxxxxx A xxxxxx).

IP54, NEMA/UL Type 12 (continued)

Frames 3, 4 and 5 are 600V only drives. Frames 6 and 7 are dual voltage drives and can be operated at 600V or 690V AC.
Important: Frames 3, 4, and 5 must NOT be used in common DC input sharing applications with Frame 6 or larger drives. For details, contact your local Rockwell Automation sales office or Allen-Bradley Distributor.

DC Bus terminals are not supplied with AC input Frame 6 and 7 drives.

600V AC, Three-Phase Drives

Output Amps (1)						
Cont.	1 Min.	3 Sec.	Normal Duty Hp	Heavy Duty Hp	Cat. No.	Frame Size
1.7 (0.9)	1.9 (1.4)	2.6 (2.6)	1	0.5	20G11GE1P7AA0NNNNN	3
2.7 (1.7)	3.0 (2.6)	4.1 (4.6)	2	1	20G11GE2P7AA0NNNNN	3
3.9 (2.7)	4.3 (4.1)	5.9 (7.3)	3	2	20G11GE3P9AA0NNNNN	3
6.1 (3.9)	6.7 (5.9)	9.2 (10.5)	5	3	20G11GE6P1AA0NNNNN	3
9 (6.1)	9.9 (9.2)	13.5 (16.5)	7.5	5	20G11GE9P0AA0NNNNN	3
11 (9)	12.1 (13.5)	16.5 (24.3)	10	7.5	20G11GE011AA0NNNNN	3
17 (11)	18.7 (16.5)	25.5 (29.7)	15	10	20G11GE017AA0NNNNN	3
22 (17)	24 (26)	33 (46)	20	15	20G11GE022AA0NNNNN	3
27 (22)	30 (33)	41 (59)	25	20	20G11GE027AA0NNNNN	4
32 (27)	35 (41)	48 (73)	30	25	20G11GE032AA0NNNNN	4
41 (32)	45 (48)	62 (86)	40	30	20G11GE041AA0NNNNN	5

(1) These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

600…690V AC, Three-Phase Drives

600V AC Input						690V AC Input						Frame Size
Output Amps (1)			Normal Duty Hp	Heavy Duty Hp	Cat. No.	Output Amps (1)			Normal Duty kW	Heavy Duty kW	Cat. No. (2)	
Cont.	1 Min.	3 Sec.				Cont.	1 Min.	3 Sec.				
12 (9.1)	13.2 (13.7)	18 (18)	10 (3)	7.5	20G1AGE012AN0NNNNN	12 (9)	13.2 (13.5)	18 (18)	7.5	5.5	20G1AGF012JN0NNNNN	6 (4)
18 (11.1)	19.8 (16.7)	27 (27)	15 (3)	10	20G1AGE018AN0NNNNN	15 (11.5)	16.5 (17.3)	22.5 (22.5)	11	7.5	20G1AGF015JN0NNNNN	6 (4)
23 (18)	25.3 (27)	34.5 (34.5)	20 (3)	15	20G1AGE023AN0NNNNN	20 (15)	22 (22.5)	30 (30)	15	11	20G1AGF020JN0NNNNN	6 (4)
24 (22)	26.4 (33)	36 (39.6)	20 (3)	20	20G1AGE024AN0NNNNN	23 (20)	25.3 (30)	34.5 (36)	18.5	15	20G1AGF023JN0NNNNN	6 (4)
28 (23)	30.8 (34.5)	42 (42)	25 (3)	20	20G1AGE028AN0NNNNN	30 (23)	33 (34.5)	45 (45)	22	18.5	20G1AGF030JN0NNNNN	6 (4)
33 (28)	36.3 (42)	49.5 (50.4)	30 (3)	25	20G1AGE033AN0NNNNN	34 (30)	37.4 (45)	51 (54)	30	22	20G1AGF034JN0NNNNN	6 (4)
42 (33)	46.2 (49.5)	63 (63)	40 (3)	30	20G1AGE042AN0NNNNN	46 (34)	50.6 (51)	69 (69)	37	30	20G1AGF046JN0NNNNN	6 (4)
53 (42)	58.3 (63)	79.5 (79.5)	50 (3)	40	20G1AGE053AN0NNNNN	50 (46)	55 (69)	75 (82.8)	45	37	20G1AGF050JN0NNNNN	6 (4)
63 (52)	69.3 (78)	94.5 (94.5)	60	50	20G1AGE063AN0NNNNN	61 (50)	67.1 (75)	91.5 (91.5)	55	45	20G1AGF061JN0NNNNN	6 (4)
77 (63)	84.7 (94.5)	116 (116)	75	60	20G1AGE077AN0NNNNN	82 (61)	90.2 (91.5)	123 (123)	75	55	20G1AGF082JN0NNNNN	6 (4)
99 (77)	109 (116)	149 (149)	100	75	20G1AGE099AN0NNNNN	98 (82)	108 (123)	147 (148)	90	75	20G1AGF098JN0NNNNN	6 (4)
125 (99)	138 (149)	188 (188)	125	100	20G1AGE125AN0NNNNN	119 (98)	131 (147)	179 (179)	110	90	20G1AGF119JN0NNNNN	6 (4)
144 (125)	158 (188)	216 (225)	150	125	20G1AGE144AN0NNNNN	142 (119)	156 (179)	213 (214)	132	110	20G1AGF142JN0NNNNN	6 (4)
192 (144)	211 (216)	288 (288)	200	150	20G1AGE192AN0NNNNN	171 (142)	188 (213)	257 (257)	160	132	20G1AGF171JN0NNNNN	7 (4)
242 (192)	266 (288)	363 (363)	250	200	20G1AGE242AN0NNNNN	212 (171)	233 (257)	318 (318)	200	160	20G1AGF212JN0NNNNN	7 (4)
289 (242)	318 (318)	434 (436)	300	250	20G1AGE289AN0NNNNN	263 (212)	289 (289)	395 (395)	250	200	20G1AGF263JN0NNNNN	7 (4)

(1) These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.
(2) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.
(3) Alternate 600V ratings when connected to drives 60 Hp and greater in common DC input applications with uncontrolled front ends.
(4) Also available with internal Brake IGBT (20G1xxxxxxx A xxxxxx).

PowerFlex 755 Floor Mount Drives

PowerFlex 755 floor mount drives have a power range of 200 kW / 250 Hp to 1400 kW / 2000 Hp and offer multiple duty ratings to allow a drive to provide flexibility for different application requirements. One drive can provide three different motor current ratings. For example a 430 A drive can run a 400 Hp motor in light duty, a 350 Hp motor in normal duty and 300 Hp motor in heavy duty.

- Light Duty = 110% of motor rated current for 60 seconds
- Normal Duty = 110% of motor rated current for 60 seconds/150% of motor rated current for 3 seconds
- Heavy Duty = 150% of motor rated current for 60 seconds/180% of motor rated current for 3 seconds

Frame 8

Frame 9

Frame 10

IP20, NEMA/UL Type 1 Drive (2500 MCC Style Cabinet)

Includes: DC link choke, Integrated AC line fuses and Roll-out design.
Hood shown on top of cabinets is optional, refer to page 93 for ordering information.

IP54, NEMA Type 12 Drive and Options (2500 MCC Style Cabinet)
(Frame 9 shown)

Includes: DC link choke, Integrated AC line fuses, Roll-out design, Exhaust Hood, and Option bay for control/protection devices.

Roll-out Design
(Frame 8 shown)

A Roll-out Cart is required for Frame 8 . . . 10 drives and Frame 9 . . . 10 Option Bay Chassis. The cart has an adjustable Curb Height of 0 . . . 182 mm (0 . . . 7.2 in.) and Curb Offset/Reach of 0 . . . 114 mm (0 . . . 4.5 in.). See page 95 for ordering information.

2500 MCC Style Cabinets

Drives listed on the following pages utilize a CENTERLINE® 2500 MCC style cabinet. This term refers to the type of cabinet and does not imply that the MCC bus is included. To add an MCC bus, refer to pages 79…80 and choose option P20, P22 or P24.

Power Wiring Options

The following table describes the cabling options available for each Frame 8…10 drive enclosure. Refer to the PowerFlex 750-Series Technical Data, publication 750-TD001 for conduit plate dimensions.

	0	X
Adequate Spacing Available conduit plates provide adequate spacing for typical cabling.	**Possible – Evaluation is Required** Available conduit plates must be evaluated to determine if cabling will fit.	**Not Possible – Insufficient Spacing** Conduit plates are not available for the specified configuration.

Frame	Enclosure Rating	Enclosure Code	Cabinet Layout	Top Entry/ Top Exit	Top Entry/ Bottom Exit	Bottom Entry/ Top Exit	Bottom Entry/ Bottom Exit
8	IP20, NEMA/UL Type 1	B	600 mm Drive Cabinet	X		X	0
		L, P, W	800 mm Drive Cabinet	0		0	
		B	600 mm Drive with Power Option Bay			X	0
		L, P, W	800 mm Drive with Power Option Bay			0	
		B	600 mm Drive with Wiring Bay				
		L, P, W	800 mm Drive with Wiring Bay				
		B	600 mm Drive with Power Option and Wiring Bays				
		L, P, W	800 mm Drive with Power Option Bay and Wiring Bays				
	IP54, NEMA 12	J, K, Y	800 mm Drive Cabinet	X	X	X	
		J, K, Y	800 mm Drive with Power Option Bay	X		0	0
		J, K, Y	800 mm Drive with Wiring Bay				
		J, K, Y	800 mm Drive with Power Option Bay and Wiring Bays				
9	IP20, NEMA/UL Type 1	B	600 mm Drive Cabinet	0		0	0
		L, P, W	800 mm Drive Cabinet				
		B	600 mm Drive with Power Option Bay			X	
		L, P, W	800 mm Drive with Power Option Bay			0	
		B	600 mm Drive with Wiring Bay				
		L, P, W	800 mm Drive with Wiring Bay				
		B	600 mm Drive with Power Option and Wiring Bays				
		L, P, W	800 mm Drive with Power Option Bay and Wiring Bays				
	IP54, NEMA 12	J, K, Y	800 mm Drive Cabinet	X	X	X	
		J, K, Y	800 mm Drive with Power Option Bay	0		0	
		J, K, Y	800 mm Drive with Wiring Bay				
		J, K, Y	800 mm Drive with Power Option Bay and Wiring Bays				
10	IP20, NEMA/UL Type 1	B	600 mm Drive Cabinet	0		0	0
		L, P, W	800 mm Drive Cabinet			0	
		B	600 mm Drive with Power Option Bay	X		X	
		L, P, W	800 mm Drive with Power Option Bay	0		0	
		B	600 mm Drive with Wiring Bay				
		L, P, W	800 mm Drive with Wiring Bay				
		B	600 mm Drive with Power Option and Wiring Bays				
		L, P, W	800 mm Drive with Power Option Bay and Wiring Bays			X	
	IP54, NEMA 12	J, K, Y	800 mm Drive Cabinet	X	X	X	
		J, K, Y	800 mm Drive with Power Option Bay	X	0	0	
		J, K, Y	800 mm Drive with Wiring Bay	0			
		J, K, Y	800 mm Drive with Power Option Bay and Wiring Bays				

IP20, NEMA/UL Type 1 (2500 MCC Style Cabinet)

380…400V AC, Three-Phase [1]

Light Duty				Normal Duty				Heavy Duty					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cat. No. [2] [3]	Frame Size
540	594	NA	315	460	506	693	250	385	578	693	200	20G1A*C460JN0NNNNN [4]	8
585	644		315	540	594	821	315	456	684	821	250	20G1A*C540JN0NNNNN [4]	8
612	673		355	567	624	851	315	472	708	851	250	20G1A*C567JN0NNNNN [4]	8
750	825		400	650	715	975	355	540	810	975	315	20G1A*C650JN0NNNNN [4]	8
796	876		450	750	825	1125	400	585	878	1125	315	20G1A*C750JN0NNNNN [4]	8
832	915		450	770	847	1155	400	642	963	1155	355	20G1A*C770JN0NNNNN [4]	8
1040	1144		560	910	1001	1365	500	750	1125	1365	400	20G11*C910JN0NNNNN [4]	9
1090	1199		630	1040	1144	1584	560	880	1320	1584	500	20G11*C1K0JN0NNNNN [4]	9
1175	1293		710	1090	1199	1638	630	910	1365	1638	500	20G11*C1K1JN0NNNNN [4]	9
1465	1612		800	1175	1293	1872	710	1040	1560	1872	560	20G11*C1K2JN0NNNNN [4]	9
1480	1628		850	1465	1612	2198	800	1090	1635	2198	630	20G11*C1K4JN0NNNNN [4]	9
1600	1760		900	1480	1628	2220	850	1175	1763	2220	710	20G11*C1K5JN0NNNNN [4]	9
1715	1887		1000	1590	1749	2385	900	1325	1988	2385	710	20G11*C1K6JN0NNNNN [4]	10
2330	2563		1400	2150	2365	3225	1250	1800	2700	3225	1000	20G11*C2K1JN0NNNNN [4]	10

(1) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

(2) The 5th character determines Input Type. "1" = AC input with precharge and DC terminals. "A" = AC input with precharge and no DC terminals. For DC input with precharge, see page 80.

(3) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

(4) The 6th character (designated by an * in this table) determines Enclosure Type and Depth. "B" = IP20, NEMA/UL Type 1, MCC style 600 mm (23.6 in.) deep. "L" = IP20, NEMA/UL Type 1, MCC style 800 mm (31.5 in.) deep. Refer to Power Wiring Options on page 69.

480V AC, Three-Phase [1]

Light Duty				Normal Duty				Heavy Duty					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cat. No. [2]	Frame Size
485	534	NA	400	430	473	666	350	370	555	666	300	20G1A*D430AN0NNNNN [3]	8
545	600		450	485	534	745	400	414	621	745	350	20G1A*D485AN0NNNNN [3]	8
590	649		500	545	600	818	450	454	681	818	350	20G1A*D545AN0NNNNN [3]	8
710	781		600	617	679	926	500	485	728	926	400	20G1A*D617AN0NNNNN [3]	8
765	842		650	710	781	1065	600	545	818	1065	450	20G1A*D710AN0NNNNN [3]	8
800	880		700	740	817	1110	650	617	926	1110	500	20G1A*D740AN0NNNNN [3]	8
960	1056		800	800	880	1278	700	710	1065	1278	600	20G11*D800AN0NNNNN [3]	9
1045	1150		900	960	1056	1440	800	795	1193	1440	700	20G11*D960AN0NNNNN [3]	9
1135	1249		1000	1045	1150	1568	900	800	1200	1568	750	20G11*D1K0AN0NNNNN [3]	9
1365	1502		1100	1135	1249	1728	1000	960	1440	1728	800	20G11*D1K2AN0NNNNN [3]	9
1420	1562		1250	1365	1502	2048	1100	1045	1568	2048	900	20G11*D1K3AN0NNNNN [3]	9
1540	1694		1350	1420	1562	2130	1250	1135	1703	2130	1000	20G11*D1K4AN0NNNNN [3]	9
1655	1821		1500	1525	1678	2288	1350	1270	1905	2288	1100	20G11*D1K5JN0NNNNN [3]	10
2240	2464		2000	2070	2277	3105	1750	1730	2595	3105	1650	20G11*D2K0JN0NNNNN [3]	10

(1) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting, page 95.

(2) The 5th character determines Input Type. "1" = AC input with precharge and DC terminals. "A" = AC input with precharge and no DC terminals. For DC input with precharge, see page 80.

(3) The 6th character (designated by an * in this table) determines Enclosure Type and Depth. "B" = IP20, NEMA/UL Type 1, MCC style 600 mm (23.6 in.) deep. "L" = IP20, NEMA/UL Type 1, MCC style 800 mm (31.5 in.) deep. Refer to Power Wiring Options on page 69.

IP20, NEMA/UL Type 1 (continued)

600V AC, Three-Phase [1]

Light Duty				Normal Duty				Heavy Duty					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cat. No. [2]	Frame Size
355	391	NA	350	295	325	490	300	272	408	490	250	20G1A*E295AN0NNNNNN [3]	8
395	435		400	355	391	533	350	295	443	533	300	20G1A*E355AN0NNNNNN [3]	8
435	479		450	395	435	593	400	329	494	593	350	20G1A*E395AN0NNNNNN [3]	8
460	506		500	435	479	639	450	355	533	639	350	20G1A*E435AN0NNNNNN [3]	8
510	561		500	460	506	711	500	395	593	711	400	20G1A*E460AN0NNNNNN [3]	8
545	600		550	510	561	765	500	425	638	765	450	20G1A*E510AN0NNNNNN [3]	8
690	759		700	595	655	918	600	510	765	918	500	20G11*E595AN0NNNNNN [3]	9
760	836		800	630	693	1071	700	595	893	1071	600	20G11*E630AN0NNNNNN [3]	9
835	919		900	760	836	1140	800	630	945	1140	700	20G11*E760AN0NNNNNN [3]	9
900	990		950	825	908	1260	900	700	1050	1260	750	20G11*E825AN0NNNNNN [3]	9
980	1078		1000	900	990	1368	950	760	1140	1368	800	20G11*E900AN0NNNNNN [3]	9
1045	1150		1100	980	1078	1470	1000	815	1223	1470	900	20G11*E980AN0NNNNNN [3]	9
1220	1342		1200	1110	1221	1665	1100	920	1380	1665	1000	20G11*E1K1AN0NNNNNN [3]	10
1530	1683		1500	1430	1573	2145	1400	1190	1785	2145	1250	20G11*E1K4AN0NNNNNN [3]	10

(1) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

(2) The 5th character determines Input Type. "1" = AC input with precharge and DC terminals. "A" = AC input with precharge and no DC terminals. For DC input with precharge, see page 80.

(3) The 6th character (designated by an * in this table) determines Enclosure Type and Depth. "B" = IP20, NEMA/UL Type 1, MCC style 600 mm (23.6 in.) deep. "L" = IP20, NEMA/UL Type 1, MCC style 800 mm (31.5 in.) deep. Refer to Power Wiring Options on page 69.

690V AC, Three-Phase [1]

Light Duty				Normal Duty				Heavy Duty					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cat. No. [2] [3]	Frame Size
330	363	NA	315	265	292	375	250	215	323	375	200	20G1A*F265AN0NNNNNN [4]	8
370	407		355	330	363	473	315	265	398	473	250	20G1A*F330AN0NNNNNN [4]	8
410	451		400	370	407	555	355	308	462	555	300	20G1A*F370AN0NNNNNN [4]	8
460	506		450	415	457	639	400	370	555	639	355	20G1A*F415AN0NNNNNN [4]	8
500	550		500	460	506	675	450	375	563	675	375	20G1A*F460AN0NNNNNN [4]	8
530	583		530	500	550	750	500	413	620	750	400	20G1A*F500AN0NNNNNN [4]	8
650	715		630	590	649	885	560	460	690	885	450	20G11*F590AN0NNNNNN [4]	9
710	781		710	650	715	975	630	500	750	975	500	20G11*F650AN0NNNNNN [4]	9
790	869		800	710	781	1065	710	590	885	1065	560	20G11*F710AN0NNNNNN [4]	9
860	946		850	765	842	1170	750	650	975	1170	630	20G11*F765AN0NNNNNN [4]	9
960	1056		900	795	875	1350	800	750	1125	1350	710	20G11*F795AN0NNNNNN [4]	9
1020	1122		1000	960	1056	1440	900	795	1193	1440	800	20G11*F960AN0NNNNNN [4]	9
1150	1265		1100	1040	1144	1560	1000	865	1298	1560	900	20G11*F1K0AN0NNNNNN [4]	10
1485	1634		1500	1400	1540	2100	1400	1160	1740	2100	1120	20G11*F1K4AN0NNNNNN [4]	10

(1) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

(2) The 5th character determines Input Type. "1" = AC input with precharge and DC terminals. "A" = AC input with precharge and no DC terminals. For DC input with precharge, see page 80.

(3) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

(4) The 6th character (designated by an * in this table) determines Enclosure Type and Depth. "B" = IP20, NEMA/UL Type 1, MCC style 600 mm (23.6 in.) deep. "L" = IP20, NEMA/UL Type 1, MCC style 800 mm (31.5 in.) deep. Refer to Power Wiring Options on page 69.

IP54, NEMA Type 12 (2500 MCC Style Cabinet)

380…400V AC, Three-Phase [1]

Light Duty				Normal Duty				Heavy Duty					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cat. No. [2] [3]	Frame Size
540	594	NA	315	460	506	693	250	385	578	693	200	20G1AJC460AN0NNNNN	8
585	644		315	540	594	821	315	456	684	821	250	20G1AJC540AN0NNNNN	8
612	673		355	567	624	851	315	472	708	851	250	20G1AJC567AN0NNNNN	8
750	825		400	650	715	975	355	540	810	975	315	20G1AJC650AN0NNNNN	8
796	876		450	750	825	1125	400	585	878	1125	315	20G1AJC750AN0NNNNN	8
832	915		450	770	847	1155	400	642	963	1155	355	20G1AJC770AN0NNNNN	8
1040	1144		560	910	1001	1365	500	750	1125	1365	400	20G11JC910AN0NNNNN	9
1090	1199		630	1040	1144	1584	560	880	1320	1584	500	20G11JC1K0AN0NNNNN	9
1175	1293		710	1090	1199	1638	630	910	1365	1638	500	20G11JC1K1AN0NNNNN	9
1465	1612		800	1175	1293	1872	710	1040	1560	1872	560	20G11JC1K2AN0NNNNN	9
1480	1628		850	1465	1612	2198	800	1090	1635	2198	630	20G11JC1K4AN0NNNNN	9
1600	1760		900	1480	1628	2220	850	1175	1763	2220	710	20G11JC1K5AN0NNNNN	9
1715	1887		1000	1590	1749	2385	900	1325	1988	2385	710	20G11JC1K6AN0NNNNN	10
2330	2563		1400	2150	2365	3225	1250	1800	2700	3225	1000	20G11JC2K1AN0NNNNN	10

(1) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

(2) The 5th character determines Input Type. "1" = AC input with precharge and DC terminals. "A" = AC input with precharge and no DC terminals. For DC input with precharge, see page 80.

(3) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

480V AC, Three-Phase [1]

Light Duty				Normal Duty				Heavy Duty					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cat. No. [2]	Frame Size
485	534	NA	400	430	473	666	350	370	555	666	300	20G1AJD430AN0NNNNN	8
545	600		450	485	534	745	400	414	621	745	350	20G1AJD485AN0NNNNN	8
590	649		500	545	600	818	450	454	681	818	350	20G1AJD545AN0NNNNN	8
710	781		600	617	679	926	500	485	728	926	400	20G1AJD617AN0NNNNN	8
765	842		650	710	781	1065	600	545	818	1065	450	20G1AJD710AN0NNNNN	8
800	880		700	740	817	1110	650	617	926	1110	500	20G1AJD740AN0NNNNN	8
960	1056		800	800	880	1278	700	710	1065	1278	600	20G11JD800AN0NNNNN	9
1045	1150		900	960	1056	1440	800	795	1193	1440	700	20G11JD960AN0NNNNN	9
1135	1249		1000	1045	1150	1568	900	800	1200	1568	750	20G11JD1K0AN0NNNNN	9
1365	1502		1100	1135	1249	1728	1000	960	1440	1728	800	20G11JD1K2AN0NNNNN	9
1420	1562		1250	1365	1502	2048	1100	1045	1568	2048	900	20G11JD1K3AN0NNNNN	9
1540	1694		1350	1420	1562	2130	1250	1135	1703	2130	1000	20G11JD1K4AN0NNNNN	9
1655	1821		1500	1525	1678	2288	1350	1270	1905	2288	1100	20G11JD1K5AN0NNNNN	10
2240	2464		2000	2070	2277	3105	1750	1730	2595	3105	1650	20G11JD2K0AN0NNNNN	10

(1) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

(2) The 5th character determines Input Type. "1" = AC input with precharge and DC terminals. "A" = AC input with precharge and no DC terminals. For DC input with precharge, see page 80.

IP54, NEMA Type 12 (continued)

600V AC, Three-Phase [1]

Light Duty				Normal Duty				Heavy Duty					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cat. No. [2]	Frame Size
355	391	NA	350	295	325	490	300	272	408	490	250	20G1AJE295AN0NNNNN	8
395	435		400	355	391	533	350	295	443	533	300	20G1AJE355AN0NNNNN	8
435	479		450	395	435	593	400	329	494	593	350	20G1AJE395AN0NNNNN	8
460	506		500	435	479	639	450	355	533	639	350	20G1AJE435AN0NNNNN	8
510	561		500	460	506	711	500	395	593	711	400	20G1AJE460AN0NNNNN	8
545	600		550	510	561	765	500	425	638	765	450	20G1AJE510AN0NNNNN	8
690	759		700	595	655	918	600	510	765	918	500	20G11JE595AN0NNNNN	9
760	836		800	630	693	1071	700	595	893	1071	600	20G11JE630AN0NNNNN	9
835	919		900	760	836	1140	800	630	945	1140	700	20G11JE760AN0NNNNN	9
900	990		950	825	908	1260	900	700	1050	1260	750	20G11JE825AN0NNNNN	9
980	1078		1000	900	990	1368	950	760	1140	1368	800	20G11JE900AN0NNNNN	9
1045	1150		1100	980	1078	1470	1000	815	1223	1470	900	20G11JE980AN0NNNNN	9
1220	1342		1200	1110	1221	1665	1100	920	1380	1665	1000	20G11JE1K1AN0NNNNN	10
1530	1683		1500	1430	1573	2145	1400	1190	1785	2145	1250	20G11JE1K4AN0NNNNN	10

(1) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

(2) The 5th character determines Input Type. "1" = AC input with precharge and DC terminals. "A" = AC input with precharge and no DC terminals. For DC input with precharge, see page 80.

690V AC, Three-Phase [1]

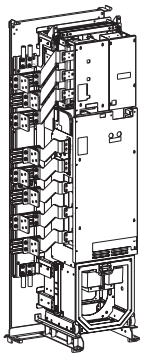
Light Duty				Normal Duty				Heavy Duty					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cat. No. [2] [3]	Frame Size
330	363	NA	315	265	292	375	250	215	323	375	200	20G1AJF265AN0NNNNN	8
370	407		355	330	363	473	315	265	398	473	250	20G1AJF330AN0NNNNN	8
410	451		400	370	407	555	355	308	462	555	300	20G1AJF370AN0NNNNN	8
460	506		450	415	457	639	400	370	555	639	355	20G1AJF415AN0NNNNN	8
500	550		500	460	506	675	450	375	563	675	375	20G1AJF460AN0NNNNN	8
530	583		530	500	550	750	500	413	620	750	400	20G1AJF500AN0NNNNN	8
650	715		630	590	649	885	560	460	690	885	450	20G11JF590AN0NNNNN	9
710	781		710	650	715	975	630	500	750	975	500	20G11JF650AN0NNNNN	9
790	869		800	710	781	1065	710	590	885	1065	560	20G11JF710AN0NNNNN	9
860	946		850	765	842	1170	750	650	975	1170	630	20G11JF765AN0NNNNN	9
960	1056		900	795	875	1350	800	750	1125	1350	710	20G11JF795AN0NNNNN	9
1020	1122		1000	960	1056	1440	900	795	1193	1440	800	20G11JF960AN0NNNNN	9
1150	1265		1100	1040	1144	1560	1000	865	1298	1560	900	20G11JF1K0AN0NNNNN	10
1485	1634		1500	1400	1540	2100	1400	1160	1740	2100	1120	20G11JF1K4AN0NNNNN	10

(1) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

(2) The 5th character determines Input Type. "1" = AC input with precharge and DC terminals. "A" = AC input with precharge and no DC terminals. For DC input with precharge, see page 80.

(3) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

IP00, NEMA Type Open



To order an IP00 drive:

1. Using the tables that follow, locate your desired drive output values.
2. Select the Base Drive Catalog Number for your desired output values.
3. Note the Quantity Required.
4. Order the specified quantity (1, 2, or 3) of the Base Drive Catalog Number.
5. Refer to the page 76 for option kits and the PowerFlex 755 IP00 NEMA/UL Open Type Drive Installation Instructions, publication 750-IN020 for installation details.

380…400V AC, Three-Phase and 540V DC Input Drives [1]

Light Duty		Normal Duty		Heavy Duty				
Output Amps Cont.	kW	Output Amps Cont.	kW	Output Amps Cont.	kW	Base Drive Cat. No. [2]	Quantity Required	Equivalent Frame Size
540	315	460	250	385	200	20G11TC460AN0NNNNN	1	8
585	315	540	315	456	250	20G11TC540AN0NNNNN	1	8
612	355	567	315	472	250	20G11TC567AN0NNNNN	1	8
750	400	650	355	540	315	20G11TC650AN0NNNNN	1	8
796	450	750	400	585	315	20G11TC750AN0NNNNN	1	8
832	450	770	400	642	355	20G11TC770AN0NNNNN	1	8
1040	560	910	500	750	400	20G11TC460AN0NNNNN	2	9
1090	630	1040	560	880	500	20G11TC540AN0NNNNN	2	9
1175	710	1090	630	910	500	20G11TC567AN0NNNNN	2	9
1465	800	1175	710	1040	560	20G11TC650AN0NNNNN	2	9
1480	850	1465	800	1090	630	20G11TC750AN0NNNNN	2	9
1600	900	1480	850	1175	710	20G11TC770AN0NNNNN	2	9
1715	1000	1590	900	1325	710	20G11TC567AN0NNNNN	3	10
2330	1400	2150	1250	1800	1000	20G11TC770AN0NNNNN	3	10

(1) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

(2) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

480V AC, Three-Phase and 650V DC Input Drives [1]

Light Duty (-LD)		Normal Duty (-ND)		Heavy Duty (-HD)				
Output Amps Cont.	Hp	Output Amps Cont.	Hp	Output Amps Cont.	Hp	Base Drive Cat. No.	Quantity Required	Equivalent Frame Size
485	400	430	350	370	300	20G11TD430AN0NNNNN	1	8
545	450	485	400	414	350	20G11TD485AN0NNNNN	1	8
590	500	545	450	454	350	20G11TD545AN0NNNNN	1	8
710	600	617	500	485	400	20G11TD617AN0NNNNN	1	8
765	650	710	600	545	450	20G11TD710AN0NNNNN	1	8
800	700	740	650	617	500	20G11TD740AN0NNNNN	1	8
960	800	800	700	710	600	20G11TD430AN0NNNNN	2	9
1045	900	960	800	795	700	20G11TD485AN0NNNNN	2	9
1135	1000	1045	900	800	750	20G11TD545AN0NNNNN	2	9
1365	1100	1135	1000	960	800	20G11TD617AN0NNNNN	2	9
1420	1250	1365	1100	1045	900	20G11TD710AN0NNNNN	2	9
1540	1350	1420	1250	1135	1000	20G11TD740AN0NNNNN	2	9
1655	1500	1525	1350	1270	1100	20G11TD545AN0NNNNN	3	10
2240	2000	2070	1750	1730	1650	20G11TD740AN0NNNNN	3	10

(1) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

IP00, NEMA Type Open (continued)

600V AC, Three-Phase and 810V DC Input Drives [1]

Light Duty (-LD)		Normal Duty (-ND)		Heavy Duty (-HD)				
Output Amps Cont.	Hp	Output Amps Cont.	Hp	Output Amps Cont.	Hp	Base Drive Cat. No.	Quantity Required	Equivalent Frame Size
355	350	295	300	272	250	20G11TE295AN0NNNNN	1	8
395	400	355	350	295	300	20G11TE355AN0NNNNN	1	8
435	450	395	400	329	350	20G11TE395AN0NNNNN	1	8
460	500	435	450	355	350	20G11TE435AN0NNNNN	1	8
510	500	460	500	395	400	20G11TE460AN0NNNNN	1	8
545	550	510	500	425	450	20G11TE510AN0NNNNN	1	8
690	700	595	600	510	500	20G11TE295AN0NNNNN	2	9
760	800	630	700	595	600	20G11TE355AN0NNNNN	2	9
835	900	760	800	630	700	20G11TE395AN0NNNNN	2	9
900	950	825	900	700	750	20G11TE435AN0NNNNN	2	9
980	1000	900	950	760	800	20G11TE460AN0NNNNN	2	9
1045	1100	980	1000	815	900	20G11TE510AN0NNNNN	2	9
1220	1200	1110	1100	920	1000	20G11TE395AN0NNNNN	3	10
1530	1500	1430	1400	1190	1250	20G11TE510AN0NNNNN	3	10

(1) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

690V AC, Three-Phase and 932V DC Input Drives [1]

Light Duty (-LD)		Normal Duty (-ND)		Heavy Duty (-HD)				
Output Amps Cont.	kW	Output Amps Cont.	kW	Output Amps Cont.	kW	Base Drive Cat. No. [2]	Quantity Required	Equivalent Frame Size
330	315	265	250	215	200	20G11TF265AN0NNNNN	1	8
370	355	330	315	265	250	20G11TF330AN0NNNNN	1	8
410	400	370	355	308	300	20G11TF370AN0NNNNN	1	8
460	450	415	400	370	355	20G11TF415AN0NNNNN	1	8
500	500	460	450	375	375	20G11TF460AN0NNNNN	1	8
530	530	500	500	413	400	20G11TF500AN0NNNNN	1	8
650	630	590	560	460	450	20G11TF265AN0NNNNN	2	9
710	710	650	630	500	500	20G11TF330AN0NNNNN	2	9
790	800	710	710	590	560	20G11TF370AN0NNNNN	2	9
860	850	765	750	650	630	20G11TF415AN0NNNNN	2	9
960	900	795	800	750	710	20G11TF460AN0NNNNN	2	9
1020	1000	960	900	795	800	20G11TF500AN0NNNNN	2	9
1150	1100	1040	1000	865	900	20G11TF370AN0NNNNN	3	10
1485	1500	1400	1400	1160	1120	20G11TF500AN0NNNNN	3	10

(1) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

(2) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

IP00, NEMA Type Open (continued)

PowerFlex 755 IP00 Option Kits

Description	Required?	Frame 8		Frame 9		Frame 10	
		Cat. No.	Qty.	Cat. No.	Qty.	Cat. No.	Qty.
Field Termination, Converter, AC Input	Recommended	20-750-BUS2-F8	1	20-750-BUS2-F9	1	20-750-BUS2-F10	1
Field Termination, Inverter, AC Output	Recommended	20-750-BUS3-F8	1	20-750-BUS3-F9	1	20-750-BUS3-F10	1
Field Termination, Inverter, DC Bus	Recommended	20-750-BUS4-F8	1	20-750-BUS4-F9	1	20-750-BUS4-F10	1
Field Termination, DC Input, Common Bus Precharge (1)(2)	Recommended	20-750-BUS5-F8	1	20-750-BUS5-F9	1	20-750-BUS5-F10	1
POD, Bucket Assembly	Required	20-750-POD1-F8	1	20-750-POD1-F8	1	20-750-POD1-F8	1
POD, Cable, 24 Volt Supply (4)	Required	20-750-PH1-F8	(3)	20-750-PH2-F9	1	20-750-PH3-F10	1
Cable, Fiber Optic, 560 mm (22 in.) (4)	Required	20-750-FCBL1-F8	1	–	–	–	–
Cable, Fiber Optic, 2.8 m (110 in.) (4)	Required	–	–	20-750-FCBL1-F10	2	20-750-FCBL1-F10	3
Transceiver, Fiber Optic	Required	–	–	SK-R1-FTR1-F8	1	SK-R1-FTR1-F8	2
POD, Remote Mounting Kit	Optional	20-750-RPD1-F8	1	20-750-RPD1-F9	1	20-750-RPD1-F10	1
Mounting Kit, Back Panel	Recommended	20-750-MNT2-F8	1	20-750-MNT2-F9	1	20-750-MNT2-F10	1
Mounting Kit, Floor	Recommended	20-750-MNT3-F8	1	20-750-MNT3-F9	1	20-750-MNT3-F10	1
Duct, Top Outlet	Recommended	20-750-DUCT2-F8	1	20-750-DUCT2-F8	2	20-750-DUCT2-F8	3
Duct, Bottom Inlet	Recommended	20-750-DUCT4-F8	1	20-750-DUCT4-F8	2	20-750-DUCT4-F8	3
Roll-Out Cart	Recommended	20-750-CART1-F8	1	20-750-CART1-F8	1	20-750-CART1-F8	1
Control Power Circuit Breaker (1)	Recommended	1489-A2D130	1	1489-A2D130	2	1489-A2D130	3
Control Power Circuit Breaker Lock (1)	Recommended	1489-AAL0A	1	1489-AAL0A	2	1489-AAL0A	3
EMC Core, Converter Input, AC Input	Optional	20-750-EMCBUS1-F8	1	20-750-EMCBUS1-F8	2	20-750-EMCBUS1-F8	3
EMC Core, Inverter Output	Optional	20-750-EMCCM1-F8	1	20-750-EMCCM1-F8	2	20-750-EMCCM1-F8	3

(1) Common DC input drives only.

(2) EMC cores are included with the 20-750-BUS5-Fx kits.

(3) 24 volt supply cable is included with each Frame 8 drive unit.

(4) 20-750-PH1-Fx and 20-750-FBCL1-Fx kits are used if the Control Pod is mounted in the drive. If the Control Pod is to be remote mounted (up to 23 m or 75 ft away), order a 20-750-RPD1-Fx kit instead.

Cabinet Options

For proper alignment and installation of a 2100 Transition Section, the MCC must be equipped with a 1.5 in. mounting channel.

PowerFlex 755 2100 Transition Section [1]

Description	Cat. No.	Frame
Left Mount Transition Section, 20 inch Depth, Cabinet, Gray with removable 1.5 in. Mounting Channel	20-750-XSEC-LH-20G	8…10
Right Mount Transition Section, 20 inch Depth, Cabinet, Gray with removable 1.5 in. Mounting Channel	20-750-XSEC-RH-20G	8…10
Left Mount, Bus Bar Splice Kit, Bumped Back, 1200 A with 1.5 in. Mounting Channel [2]	20-750-XBUS-LHBB-1200	8…10
Left Mount, Bus Bar Splice Kit, Bumped Back, 2000 A with 1.5 in. Mounting Channel [2]	20-750-XBUS-LHBB-2000	8…10
Left Mount, Bus Bar Splice Kit, Bumped Back, 3000 A with 1.5 in. Mounting Channel [2]	20-750-XBUS-LHBB-3000	8…10
Left Mount, Bus Bar Splice Kit, Non-Bumped Back, 1200 A with 1.5 in. Mounting Channel [2]	20-750-XBUS-LHNB-1200	8…10
Left Mount, Bus Bar Splice Kit, Non-Bumped Back, 2000 A with 1.5 in. Mounting Channel [2]	20-750-XBUS-LHNB-2000	8…10
Left Mount, Bus Bar Splice Kit, Non-Bumped Back, 3000 A with 1.5 in. Mounting Channel [2]	20-750-XBUS-LHNB-3000	8…10
Right Mount, Bus Bar Splice Kit, Bumped Back, 1200 A with 1.5 in. Mounting Channel [3]	20-750-XBUS-RHBB-1200	8…10
Right Mount, Bus Bar Splice Kit, Bumped Back, 2000 A with 1.5 in. Mounting Channel [3]	20-750-XBUS-RHBB-2000	8…10
Right Mount, Bus Bar Splice Kit, Bumped Back, 3000 A with 1.5 in. Mounting Channel [3]	20-750-XBUS-RHBB-3000	8…10
Right Mount, Bus Bar Splice Kit, Non-Bumped Back, 1200 A with 1.5 in. Mounting Channel [3]	20-750-XBUS-RHNB-1200	8…10
Right Mount, Bus Bar Splice Kit, Non-Bumped Back, 2000 A with 1.5 in. Mounting Channel [3]	20-750-XBUS-RHNB-2000	8…10
Right Mount, Bus Bar Splice Kit, Non-Bumped Back, 3000 A with 1.5 in. Mounting Channel [3]	20-750-XBUS-RHNB-3000	8…10
Left Mount, Bus Bar Splice Kit, Bumped Back, 1200 A without Mounting Channel [2]	20-750-XBUS-LLBB-1200	8…10
Left Mount, Bus Bar Splice Kit, Bumped Back, 2000 A without Mounting Channel [2]	20-750-XBUS-LLBB-2000	8…10
Left Mount, Bus Bar Splice Kit, Bumped Back, 3000 A without Mounting Channel [2]	20-750-XBUS-LLBB-3000	8…10
Left Mount, Bus Bar Splice Kit, Non-Bumped Back, 1200 A without Mounting Channel [2]	20-750-XBUS-LLNB-1200	8…10
Left Mount, Bus Bar Splice Kit, Non-Bumped Back, 2000 A without Mounting Channel [2]	20-750-XBUS-LLNB-2000	8…10
Left Mount, Bus Bar Splice Kit, Non-Bumped Back, 3000 A without Mounting Channel [2]	20-750-XBUS-LLNB-3000	8…10
Right Mount, Bus Bar Splice Kit, Bumped Back, 1200 A without Mounting Channel [3]	20-750-XBUS-RLBB-1200	8…10
Right Mount, Bus Bar Splice Kit, Bumped Back, 2000 A without Mounting Channel [3]	20-750-XBUS-RLBB-2000	8…10
Right Mount, Bus Bar Splice Kit, Bumped Back, 3000 A without Mounting Channel [3]	20-750-XBUS-RLBB-3000	8…10
Right Mount, Bus Bar Splice Kit, Non-Bumped Back, 1200 A without Mounting Channel [3]	20-750-XBUS-RLNB-1200	8…10
Right Mount, Bus Bar Splice Kit, Non-Bumped Back, 2000 A without Mounting Channel [3]	20-750-XBUS-RLNB-2000	8…10
Right Mount, Bus Bar Splice Kit, Non-Bumped Back, 3000 A without Mounting Channel [3]	20-750-XBUS-RLNB-3000	8…10

(1) Requires the appropriate drive option P20, P22 or P24, which is dependent on the back bus ampacity.
(2) Left side of drive to right side of 2100 MCC.
(3) Right side of drive to left side of 2100 MCC.

PowerFlex 755 2500 Splice Kits

Description	Cat No.	Frame
1200A Splice Kit to connect right side of drive to a CENTERLINE® 2500 cabinet	20-750-MBUSR1-1200	8…10
2000A Splice Kit to connect right side of drive to a CENTERLINE 2500 cabinet	20-750-MBUSR1-2000	8…10
3000A Splice Kit to connect right side of drive to a CENTERLINE 2500 cabinet	20-750-MBUSR1-3200	8…10
1200A Splice Kit to connect multiple Frame 8…10 drives or to connect left side of drive to a CENTERLINE 2500 cabinet	20-750-MBUSL1-1200	8…10
2000A Splice Kit to connect multiple Frame 8…10 drives or to connect left side of drive to a CENTERLINE 2500 cabinet	20-750-MBUSL1-2000	8…10
3000A Splice Kit to connect multiple Frame 8…10 drives or to connect left side of drive to a CENTERLINE 2500 cabinet	20-750-MBUSL1-3200	8…10

Cabinet Options (continued)

PowerFlex 755 Empty Option Bay [1]

Description	Cat. No.	Frame
Option Bay, 600 mm wide by 600 mm deep, Beige	20-750-PBAY-66	8…10
Option Bay, 800 mm wide by 600 mm deep, Beige	20-750-PBAY-86	8…10
Option Bay, 1200 mm wide by 600 mm deep, Beige	20-750-PBAY-126	8…10
Option Bay, 600 mm wide by 800 mm deep, Beige	20-750-PBAY-68	8…10
Option Bay, 800 mm wide by 800 mm deep, Beige	20-750-PBAY-88	8…10
Option Bay, 1200 mm wide by 800 mm deep, Beige	20-750-PBAY-128	8…10
Option Bay Hardware Kit (one kit is required for each cabinet selected)	20-750-PBAY-HWD-1	8…10
Option Bay Seal Kit, IP54	20-750-PBAY-IP54	8…10
Empty Bay, RH Bus Bar, 975 A Maximum	20-750-PBAY-RHBB-975	8…10
Empty Bay, RH Bus Bar, 1235 A Maximum	20-750-PBAY-RHBB-1235	8…10
Empty Bay, RH Bus Bar, 1625 A Maximum	20-750-PBAY-RHBB-1625	8…10
Empty Bay, RH Bus Bar, 2437 A Maximum	20-750-PBAY-RHBB-2437	8…10
Right Mount Bus Bar, Cable Connection, 2-Hole	20-750-PBAY-LBRK-2	8…10
Right Mount Bus Bar, Cable Connection, 4-Hole	20-750-PBAY-LBRK-4	8…10
Right Mount Bus Bar, Installation Kit, 3-Phase Connection	20-750-PBAY-INS-3	8…10
Right Mount Bus Bar, Installation Kit, DC Connection	20-750-PBAY-INS-2	8…10
Rear Drive Bus Bar, Cable Connection	20-750-PBAY-RBRK-2	8…10

(1) Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

Drive Options - AC Input (2500 MCC Style Cabinet)

To configure a catalog number for a drive with options:

1. Select the base drive catalog number from the tables that follow.
2. Select the System Overload Duty Cycle and Power Disconnect options from the Required Options table. Add the desired option codes to the end of the base catalog number, separating each option code with a dash. For example: 21G1AxC460JN0NNNNN-**LD-P3**.
3. Select other options from the Additional Options table. Add the option code(s) to the end of the catalog number separating each code with a dash. For example: 21G1AxC460JN0NNNNN-**LD-P3-P11**.

Required Options (1)

Type	Option		Frame	Description
System Overload Duty Cycle (2) (3)	LD	Light Duty	8...10	100% continuous current, 110% current for 1 minute.
	ND	Normal Duty		100% continuous current, 110% current for 1 minute, 150% for 3 seconds.
	HD	Heavy Duty		100% continuous current, 150% current for 1 minute, 180% for 3 seconds.
Power Disconnect (2)	P3	Input Thermal Magnetic Circuit Breaker	8...10 (4)	This option is for disconnecting drive power. An Allen-Bradley 140U Molded Case Circuit Breaker is provided. All switches include flange style handle operators that are door interlocking and padlockable.
	P5	Input Non-Fused Molded Case Disconnect Switch	8 Only	This option is for disconnecting drive power. An Allen-Bradley 140U Molded Case Switch is provided. All switches include flange style handle operators that are door interlocking and padlockable. Please note that PowerFlex 755 Frame 8 converter modules have input fuses installed as standard equipment.
Wiring Only Bay	P14	Wiring Only Bay	8...10	This option identifies that an extra bay will be provided for the purpose of wiring the drive. This option will extend the drive power bus from the drive bay into the option bay, making field connection options more flexible. No drive input protection is supplied with this option. Documentation to reflect input disconnection and protection is customer supplied. See page 69 for more information on power cable entry/exit locations.

(1) Frame 9 and 10 drives require an 800 mm deep option bay when selecting any of the options on this page.
(2) Only one option of this type may be selected.
(3) See previous selection tables for specific rating information.
(4) Frame 10 ordered via Engineered-To-Order (ETO) process.

Additional Options (1)

Type	Option		Applicable Frame	Description
Contactors (2) (3)	P11	Input Contactor	8 Only	A contactor is provided between the AC line and the drive. The contactor is controlled by customer supplied 120V AC (480V input) or 230V AC (400V input) remote contact closure logic. A terminal block for control is provided for customer use, and is wired to 1 N.O. and 1 N.C. auxiliary contact on the contactor. **Important:** The P11 option "Alternate Contact Circuit" is not intended to be used as a Start/Stop circuit.
	P12	Output Contactor	8 Only	A contactor is provided between the drive output and the motor. The contactor is controlled by customer supplied 120V AC (480V input) or 230V AC (400V input) remote contact closure logic. A terminal block for control is provided for customer use and is wired to 1 N.O. and 1 N.C. auxiliary contact on the contactor. **Note:** As an alternative to an output contactor, certain safety applications can be satisfied using the PowerFlex 750-Series Safe Torque-Off Option Card (Cat. No. 20-750-S). Safe Torque-Off is ideal for safety related applications requiring removal of rotational power to the motor without removing power from the drive. Safe Torque-Off functionality offers the benefit of quick start-up after a demand on the safety system and helps reduce wear from repetitive start-up. It also provides safety ratings up to and including SIL CL3, PLe, and CAT 3.
Reactors (2) (4)	L1	3% Input Reactor	8...9	Provides an open core drive input line reactor that mounts inside the drive enclosure. Typical impedance is 3%.
	L2	3% Output Reactor	8...9	Provides an open core drive output load reactor, which mounts inside the drive enclosure. Typical impedance is 3%.
	L3	5% Input Reactor	8 Only	Provides an open core drive input line reactor that mounts inside the drive enclosure. Typical impedance is 5%.
	L4	5% Output Reactor	8 Only	Provides an open core drive output load reactor, which mounts inside the drive enclosure. Typical impedance is 5%.
MCC Power Bus Capacity (2)	P20	1250 Amp Bus	8...10	Provides a 1250 Amp MCC Bus.
	P22	2000 Amp Bus	8...10	Provides a 2000 Amp MCC Bus.
	P24	3000 Amp Bus	8...10	Provides a 3000 Amp MCC Bus.
UPS Control Bus	P30	UPS Control Bus, DC Input with Precharge	8...10	Provides a UPS Control Bus, DC Input with Precharge only.
Auxiliary Power	X1	Auxiliary Transformer	8 Only	Auxiliary transformer providing 500VA. Available as an option on frame 8, IP20 units and standard on all other cabinet configurations.

(1) Frame 9 and 10 drives require an 800 mm deep option bay when selecting any of the options on this page.
(2) Only one option of this type may be selected.
(3) Contactor options are not available for systems with MCC power bus.
(4) To accommodate a larger reactor, an 800 mm deep cabinet must be selected for the following Frame 8 drives; C750, C770, D710, D740 light duty (LD) and C770 normal-duty (ND).

Drive Options - DC Input with Precharge (2500 MCC Style Cabinet)

To configure a catalog number for a drive with options:

1. Select the base drive catalog number from the tables that follow.
2. Select the System Overload Duty Cycle and MCC Power Bus Capacity from the Required Options table below. Add the UPC Control Bus option (if needed) to the end of the base catalog number, separating it with a dash. For example: 21G14TF500AN0NNNNN**-ND-P22-P30**.

Required Options [1]

Type	Option		Applicable Frame	Description
System Overload Duty Cycle [2] [3]	LD	Light Duty	8...10	100% continuous current, 110% current for 1 minute.
	ND	Normal Duty		100% continuous current, 110% current for 1 minute, 150% for 3 seconds.
	HD	Heavy Duty		100% continuous current, 150% current for 1 minute, 180% for 3 seconds.
MCC Power Bus Capacity [2]	P20	1250 Amp Bus	8...10	Provides a 1250 Amp MCC Bus.
	P22	2000 Amp Bus	8...10	Provides a 2000 Amp MCC Bus.
	P24	3000 Amp Bus	8...10	Provides a 3000 Amp MCC Bus.

(1) Frame 9 and 10 drives require an 800 mm deep option bay when selecting any of the options on this page.
(2) Only one option of this type may be selected.
(3) See previous selection tables for specific rating information.

Additional Options [1]

Type	Option		Applicable Frame	Description
UPS Control Bus	P30	UPS Control Bus, DC Input with Precharge	8...10	Provides a UPS Control Bus, DC Input with Precharge only.

(1) Frame 9 and 10 drives require an 800 mm deep option bay when selecting any of the options on this page.

PowerFlex 755 Splice Kits for DC Input Drives with Precharge

Description	Cat No.	Frame
1200A Splice Kit to connect right side of drive to a CENTERLINE 2500 cabinet	20-750-DBUSR1-1200	8...10
2000A Splice Kit to connect right side of drive to a CENTERLINE 2500 cabinet	20-750-DBUSR1-2000	8...10
3000A Splice Kit to connect right side of drive to a CENTERLINE 2500 cabinet	20-750-DBUSR1-3200	8...10
1200A Splice Kit to connect multiple Frame 8...10 drives or to connect left side of drive to a CENTERLINE 2500 cabinet	20-750-DBUSL1-1200	8...10
2000A Splice Kit to connect multiple Frame 8...10 drives or to connect left side of drive to a CENTERLINE 2500 cabinet	20-750-DBUSL1-2000	8...10
3000A Splice Kit to connect multiple Frame 8...10 drives or to connect left side of drive to a CENTERLINE 2500 cabinet	20-750-DBUSL1-3200	8...10

IP20, NEMA/UL Type 1 and Options (2500 MCC Style Cabinet)

380…400V AC, Three-Phase and 540V DC Input Drives [1] [2]

Light Duty (-LD)				Normal Duty (-ND)				Heavy Duty (-HD)					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Base Drive Cat. No. [3] [4]	Frame Size
540	594	NA	315	460	506	693	250	385	578	693	200	21G1A*C460JN0NNNNNN [5]	8
585	644		315	540	594	821	315	456	684	821	250	21G1A*C540JN0NNNNNN [5]	8
612	673		355	567	624	851	315	472	708	851	250	21G1A*C567JN0NNNNNN [5]	8
750	825		400	650	715	975	355	540	810	975	315	21G1A*C650JN0NNNNNN [5]	8
796	876		450	750	825	1125	400	585	878	1125	315	21G1A*C750JN0NNNNNN [5]	8
832	915		450	770	847	1155	400	642	963	1155	355	21G1A*C770JN0NNNNNN [5]	8
1040	1144		560	910	1001	1365	500	750	1125	1365	400	21G11*C910JN0NNNNNN [5]	9
1090	1199		630	1040	1144	1584	560	880	1320	1584	500	21G11*C1K0JN0NNNNNN [5]	9
1175	1293		710	1090	1199	1638	630	910	1365	1638	500	21G11*C1K1JN0NNNNNN [5]	9
1465	1612		800	1175	1293	1872	710	1040	1560	1962	560	21G11*C1K2JN0NNNNNN [5]	9
1480	1628		850	1465	1612	2198	800	1090	1635	2198	630	21G11*C1K4JN0NNNNNN [5]	9
1600	1760		900	1480	1628	2220	850	1175	1763	2220	710	21G11*C1K5JN0NNNNNN [5]	9
1715	1887		1000	1590	1749	2385	900	1325	1988	2385	710	21G11*C1K6JN0NNNNNN [5]	10
2330	2563		1400	2150	2365	3225	1250	1800	2700	3225	1000	21G11*C2K1JN0NNNNNN [5]	10

(1) Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

(2) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

(3) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

(4) The 5th character determines Input Type. "1" = AC and DC input with precharge. "4" = DC input with precharge. "A" = AC input with precharge and no DC terminals.

(5) The 6th character (designated by an * in this table) determines Enclosure Type and Depth. "B" = IP20, NEMA/UL Type 1, MCC style 600 mm (23.6 in.) deep. "L" = IP20, NEMA/UL Type 1, MCC style 800 mm (31.5 in.) deep. "P" = Packaged Drive - IP20, NEMA/UL Type 1, MCC style with MCC bus, 800 mm (31.5 in.) deep. "W" = Packaged Drive - IP20, NEMA/UL Type 1, MCC style with MCC bus, 800 mm (31.5 in.) deep, gray. Refer to Power Wiring Options on page 69.

480V AC, Three-Phase and 650V DC Input Drives [1] [2]

Light Duty (-LD)				Normal Duty (-ND)				Heavy Duty (-HD)					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Base Drive Cat. No. [3]	Frame Size
485	534	NA	400	430	473	666	350	370	555	666	300	21G1A*D430AN0NNNNNN [4]	8
545	600		450	485	534	745	400	414	621	745	350	21G1A*D485AN0NNNNNN [4]	8
590	649		500	545	600	818	450	454	681	818	350	21G1A*D545AN0NNNNNN [4]	8
710	781		600	617	679	926	500	485	728	926	400	21G1A*D617AN0NNNNNN [4]	8
765	842		650	710	781	1065	600	545	818	1065	450	21G1A*D710AN0NNNNNN [4]	8
800	880		700	740	817	1110	650	617	926	1110	500	21G1A*D740AN0NNNNNN [4]	8
960	1056		800	800	880	1278	700	710	1065	1278	600	21G11*D800AN0NNNNNN [4]	9
1045	1150		900	960	1056	1440	800	795	1193	1440	700	21G11*D960AN0NNNNNN [4]	9
1135	1249		1000	1045	1150	1568	900	800	1200	1568	750	21G11*D1K0AN0NNNNNN [4]	9
1365	1502		1100	1135	1249	1728	1000	960	1440	1728	800	21G11*D1K2AN0NNNNNN [4]	9
1420	1562		1250	1365	1502	2048	1100	1045	1568	2048	900	21G11*D1K3AN0NNNNNN [4]	9
1540	1694		1350	1420	1562	2130	1250	1135	1703	2130	1000	21G11*D1K4AN0NNNNNN [4]	9
1655	1821		1500	1525	1678	2288	1350	1270	1905	2288	1100	21G11*D1K5JN0NNNNNN [4]	10
2240	2464		2000	2070	2277	3105	1750	1730	2595	3105	1650	21G11*D2K0JN0NNNNNN [4]	10

(1) Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

(2) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

(3) The 5th character determines Input Type. "1" = AC input with precharge and DC terminals. "4" = DC input with precharge. "A" = AC input with precharge and no DC terminals.

(4) The 6th character (designated by an * in this table) determines Enclosure Type and Depth. "B" = IP20, NEMA/UL Type 1, MCC style 600 mm (23.6 in.) deep. "L" = IP20, NEMA/UL Type 1, MCC style 800 mm (31.5 in.) deep. "P" = Packaged Drive - IP20, NEMA/UL Type 1, MCC style with MCC bus, 800 mm (31.5 in.) deep. "W" = Packaged Drive - IP20, NEMA/UL Type 1, MCC style with MCC bus, 800 mm (31.5 in.) deep, gray. Refer to Power Wiring Options on page 69.

IP20, NEMA/UL Type 1 and Options (continued)

600V AC, Three-Phase and 810V DC Input Drives [1] [2]

Light Duty (-LD)				Normal Duty (-ND)				Heavy Duty (-HD)					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Base Drive Cat. No. [3]	Frame Size
355	391	NA	350	295	325	490	300	272	408	490	250	21G1A*E295ANONNNNNN [4]	8
395	435		400	355	391	533	350	295	443	533	300	21G1A*E355ANONNNNNN [4]	8
435	479		450	395	435	593	400	329	494	593	350	21G1A*E395ANONNNNNN [4]	8
460	506		500	435	479	639	450	355	533	639	350	21G1A*E435ANONNNNNN [4]	8
510	561		500	460	506	711	500	395	593	711	400	21G1A*E460ANONNNNNN [4]	8
545	600		550	510	561	765	500	425	638	765	450	21G1A*E510ANONNNNNN [4]	8
690	759		700	595	655	918	600	510	765	918	500	21G11*E595ANONNNNNN [4]	9
760	836		800	630	693	1071	700	595	893	1071	600	21G11*E630ANONNNNNN [4]	9
835	919		900	760	836	1140	800	630	945	1140	700	21G11*E760ANONNNNNN [4]	9
900	990		950	825	908	1260	900	700	1050	1260	750	21G11*E825ANONNNNNN [4]	9
980	1078		1000	900	990	1368	950	760	1140	1368	800	21G11*E900ANONNNNNN [4]	9
1045	1150		1100	980	1078	1470	1000	815	1223	1470	900	21G11*E980ANONNNNNN [4]	9
1220	1342		1200	1110	1221	1665	1100	920	1380	1665	1000	21G11*E1K1ANONNNNNN [4]	10
1530	1683		1500	1430	1573	2145	1400	1190	1785	2145	1250	21G11*E1K4ANONNNNNN [4]	10

(1) Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

(2) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95

(3) The 5th character determines Input Type. "1" = AC input with precharge and DC terminals. "4" = DC input with precharge. "A" = AC input with precharge and no DC terminals.

(4) The 6th character (designated by an * in this table) determines Enclosure Type and Depth. "B" = IP20, NEMA/UL Type 1, MCC style 600 mm (23.6 in.) deep. "L" = IP20, NEMA/UL Type 1, MCC style 800 mm (31.5 in.) deep. "P" = Packaged Drive - IP20, NEMA/UL Type 1, MCC style with MCC bus, 800 mm (31.5 in.) deep. "W" = Packaged Drive - IP20, NEMA/UL Type 1, MCC style with MCC bus, 800 mm (31.5 in.) deep, gray. Refer to Power Wiring Options on page 69.

690V AC, Three-Phase and 932V DC Input Drives [1] [2]

Light Duty (-LD)				Normal Duty (-ND)				Heavy Duty (-HD)					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Base Drive Cat. No. [3] [4]	Frame Size
330	363	NA	315	265	292	375	250	215	323	375	200	21G1A*F265ANONNNNNN [5]	8
370	407		355	330	363	473	315	265	398	473	250	21G1A*F330ANONNNNNN [5]	8
410	451		400	370	407	555	355	308	462	555	300	21G1A*F370ANONNNNNN [5]	8
460	506		450	415	457	639	400	370	555	639	355	21G1A*F415ANONNNNNN [5]	8
500	550		500	460	506	675	450	375	563	675	375	21G1A*F460ANONNNNNN [5]	8
530	583		530	500	550	750	500	413	620	750	400	21G1A*F500ANONNNNNN [5]	8
650	715		630	590	649	885	560	460	690	885	450	21G11*F590ANONNNNNN [5]	9
710	781		710	650	715	975	630	500	750	975	500	21G11*F650ANONNNNNN [5]	9
790	869		800	710	781	1065	710	590	885	1065	560	21G11*F710ANONNNNNN [5]	9
860	946		850	765	842	1170	750	650	975	1170	630	21G11*F765ANONNNNNN [5]	9
960	1056		900	795	875	1350	800	750	1125	1350	710	21G11*F795ANONNNNNN [5]	9
1020	1122		1000	960	1056	1440	900	795	1193	1440	800	21G11*F960ANONNNNNN [5]	9
1150	1265		1100	1040	1144	1560	1000	865	1298	1560	900	21G11*F1K0ANONNNNNN [5]	10
1485	1634		1500	1400	1540	2100	1400	1160	1740	2100	1120	21G11*F1K4ANONNNNNN [5]	10

(1) Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

(2) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

(3) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

(4) The 5th character determines Input Type. "1" = AC input with precharge and DC terminals. "4" = DC input with precharge. "A" = AC input with precharge and no DC terminals.

(5) The 6th character (designated by an * in this table) determines Enclosure Type and Depth. "B" = IP20, NEMA/UL Type 1, MCC style 600 mm (23.6 in.) deep. "L" = IP20, NEMA/UL Type 1, MCC style 800 mm (31.5 in.) deep. "P" = Packaged Drive - IP20, NEMA/UL Type 1, MCC style with MCC bus, 800 mm (31.5 in.) deep. "W" = Packaged Drive - IP20, NEMA/UL Type 1, MCC style with MCC bus, 800 mm (31.5 in.) deep, gray. Refer to Power Wiring Options on page 69.

IP54, NEMA Type 12 and Options (2500 MCC Style Cabinet)

380…400V AC, Three-Phase and 540V DC Input Drives [1] [2]

Light Duty (-LD)				Normal Duty (-ND)				Heavy Duty (-HD)					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Base Drive Cat. No. [3] [4]	Frame Size
540	594	NA	315	460	506	693	250	385	578	693	200	21G1A*C460JN0NNNNNN [5]	8
585	644		315	540	594	821	315	456	684	821	250	21G1A*C540JN0NNNNNN [5]	8
612	673		355	567	624	851	315	472	708	851	250	21G1A*C567JN0NNNNNN [5]	8
750	825		400	650	715	975	355	540	810	975	315	21G1A*C650JN0NNNNNN [5]	8
796	876		450	750	825	1125	400	585	878	1125	315	21G1A*C750JN0NNNNNN [5]	8
832	915		450	770	847	1155	400	642	963	1155	355	21G1A*C770JN0NNNNNN [5]	8
1040	1144		560	910	1001	1365	500	750	1125	1365	400	21G11*C910JN0NNNNNN [5]	9
1090	1199		630	1040	1144	1584	560	880	1320	1584	500	21G11*C1K0JN0NNNNNN [5]	9
1175	1293		710	1090	1199	1638	630	910	1365	1638	500	21G11*C1K1JN0NNNNNN [5]	9
1465	1612		800	1175	1293	1872	710	1040	1560	1962	560	21G11*C1K2JN0NNNNNN [5]	9
1480	1628		850	1465	1612	2198	800	1090	1635	2198	630	21G11*C1K4JN0NNNNNN [5]	9
1600	1760		900	1480	1628	2220	850	1175	1763	2220	710	21G11*C1K5JN0NNNNNN [5]	9
1715	1887		1000	1590	1749	2385	900	1325	1988	2385	710	21G11*C1K6JN0NNNNNN [5]	10
2330	2563		1400	2150	2365	3225	1250	1800	2700	3225	1000	21G11*C2K1JN0NNNNNN [5]	10

(1) Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

(2) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

(3) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

(4) The 5th character determines Input Type. "1" = AC input with precharge and DC terminals. "4" = DC input with precharge. "A" = AC input with precharge and no DC terminals.

(5) The 6th character (designated by an * in this table) determines Enclosure Type and Depth. "K" = IP54, NEMA Type 12, MCC style 800 mm (31.5 in.) deep, standard color. "Y" = IP54, NEMA Type 12, MCC style 800 mm (31.5 in.) deep, gray. Refer to Power Wiring Options on page 69.

480V AC, Three-Phase and 650V DC Input Drives [1] [2]

Light Duty (-LD)				Normal Duty (-ND)				Heavy Duty (-HD)					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Base Drive Cat. No. [3]	Frame Size
485	534	NA	400	430	473	666	350	370	555	666	300	21G1A*D430AN0NNNNNN [4]	8
545	600		450	485	534	745	400	414	621	745	350	21G1A*D485AN0NNNNNN [4]	8
590	649		500	545	600	818	450	454	681	818	350	21G1A*D545AN0NNNNNN [4]	8
710	781		600	617	679	926	500	485	728	926	400	21G1A*D617AN0NNNNNN [4]	8
765	842		650	710	781	1065	600	545	818	1065	450	21G1A*D710AN0NNNNNN [4]	8
800	880		700	740	817	1110	650	617	926	1110	500	21G1A*D740AN0NNNNNN [4]	8
960	1056		800	800	880	1278	700	710	1065	1278	600	21G11*D800AN0NNNNNN [4]	9
1045	1150		900	960	1056	1440	800	795	1193	1440	700	21G11*D960AN0NNNNNN [4]	9
1135	1249		1000	1045	1150	1568	900	800	1200	1568	750	21G11*D1K0AN0NNNNNN [4]	9
1365	1502		1100	1135	1249	1728	1000	960	1440	1728	800	21G11*D1K2AN0NNNNNN [4]	9
1420	1562		1250	1365	1502	2048	1100	1045	1568	2048	900	21G11*D1K3AN0NNNNNN [4]	9
1540	1694		1350	1420	1562	2130	1250	1135	1703	2130	1000	21G11*D1K4AN0NNNNNN [4]	9
1655	1821		1500	1525	1678	2288	1350	1270	1905	2288	1100	21G11*D1K5JN0NNNNNN [4]	10 [1]
2240	2464		2000	2070	2277	3105	1750	1730	2595	3105	1650	21G11*D2K0JN0NNNNNN [4]	10 [1]

(1) Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

(2) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

(3) The 5th character determines Input Type. "1" = AC input with precharge and DC terminals. "4" = DC input with precharge. "A" = AC input with precharge and no DC terminals.

(4) The 6th character (designated by an * in this table) determines Enclosure Type and Depth. "K" = IP54, NEMA Type 12, MCC style 800 mm (31.5 in.) deep, standard color. "Y" = IP54, NEMA Type 12, MCC style 800 mm (31.5 in.) deep, gray. Refer to Power Wiring Options on page 69.

IP54, NEMA Type 12 and Options (continued)

600V AC, Three-Phase and 810V DC Input Drives [1] [2]

Light Duty (-LD)				Normal Duty (-ND)				Heavy Duty (-HD)					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Cont.	1 Min.	3 Sec.	Hp	Base Drive Cat. No. [3]	Frame Size
355	391	NA	350	295	325	490	300	272	408	490	250	21G1A*E295ANONNNNN [4]	8
395	435		400	355	391	533	350	295	443	533	300	21G1A*E355ANONNNNN [4]	8
435	479		450	395	435	593	400	329	494	593	350	21G1A*E395ANONNNNN [4]	8
460	506		500	435	479	639	450	355	533	639	350	21G1A*E435ANONNNNN [4]	8
510	561		500	460	506	711	500	395	593	711	400	21G1A*E460ANONNNNN [4]	8
545	600		550	510	561	765	500	425	638	765	450	21G1A*E510ANONNNNN [4]	8
690	759		700	595	655	918	600	510	765	918	500	21G11*E595ANONNNNN [4]	9
760	836		800	630	693	1071	700	595	893	1071	600	21G11*E630ANONNNNN [4]	9
835	919		900	760	836	1140	800	630	945	1140	700	21G11*E760ANONNNNN [4]	9
900	990		950	825	908	1260	900	700	1050	1260	750	21G11*E825ANONNNNN [4]	9
980	1078		1000	900	990	1368	950	760	1140	1368	800	21G11*E900ANONNNNN [4]	9
1045	1150		1100	980	1078	1470	1000	815	1223	1470	900	21G11*E980ANONNNNN [4]	9
1220	1342		1200	1110	1221	1665	1100	920	1380	1665	1000	21G11*E1K1ANONNNNN [4]	10
1530	1683		1500	1430	1573	2145	1400	1190	1785	2145	1250	21G11*E1K4ANONNNNN [4]	10

(1) Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

(2) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

(3) The 5th character determines Input Type. "1" = AC input with precharge and DC terminals. "4" = DC input with precharge. "A" = AC input with precharge and no DC terminals.

(4) The 6th character (designated by an * in this table) determines Enclosure Type and Depth. "K" = IP54, NEMA Type 12, MCC style 800 mm (31.5 in.) deep, standard color. "Y" = IP54, NEMA Type 12, MCC style 800 mm (31.5 in.) deep, gray. Refer to Power Wiring Options on page 69.

690V AC, Three-Phase and 932V DC Input Drives [1] [2]

Light Duty (-LD)				Normal Duty (-ND)				Heavy Duty (-HD)					
Output Amps				Output Amps				Output Amps					
Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Cont.	1 Min.	3 Sec.	kW	Base Drive Cat. No. [3] [4]	Frame Size
330	363	NA	315	265	292	375	250	215	323	375	200	21G1A*F265ANONNNNN [5]	8
370	407		355	330	363	473	315	265	398	473	250	21G1A*F330ANONNNNN [5]	8
410	451		400	370	407	555	355	308	462	555	300	21G1A*F370ANONNNNN [5]	8
460	506		450	415	457	639	400	370	555	639	355	21G1A*F415ANONNNNN [5]	8
500	550		500	460	506	675	450	375	563	675	375	21G1A*F460ANONNNNN [5]	8
530	583		530	500	550	750	500	413	620	750	400	21G1A*F500ANONNNNN [5]	8
650	715		630	590	649	885	560	460	690	885	450	21G11*F590ANONNNNN [5]	9
710	781		710	650	715	975	630	500	750	975	500	21G11*F650ANONNNNN [5]	9
790	869		800	710	781	1065	710	590	885	1065	560	21G11*F710ANONNNNN [5]	9
860	946		850	765	842	1170	750	650	975	1170	630	21G11*F765ANONNNNN [5]	9
960	1056		900	795	875	1350	800	750	1125	1350	710	21G11*F795ANONNNNN [5]	9
1020	1122		1000	960	1056	1440	900	795	1193	1440	800	21G11*F960ANONNNNN [5]	9
1150	1265		1100	1040	1144	1560	1000	865	1298	1560	900	21G11*F1K0ANONNNNN [5]	10
1485	1634		1500	1400	1540	2100	1400	1160	1740	2100	1120	21G11*F1K4ANONNNNN [5]	10

(1) Contact your local Rockwell Automation sales office or Allen-Bradley distributor for availability.

(2) A Roll-out Cart is required with Frame 8…10 drives to assist with power wiring and cabinet mounting. Refer to page 95.

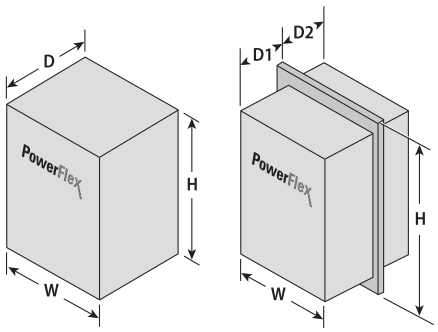
(3) The 11th character determines default Filtering and Common Mode Cap jumper configuration. "J" = Installed, "A" = Removed.

(4) The 5th character determines Input Type. "1" = AC input with precharge and DC terminals. "4" = DC input with precharge. "A" = AC input with precharge and no DC terminals.

(5) The 6th character (designated by an * in this table) determines Enclosure Type and Depth. "K" = IP54, NEMA Type 12, MCC style 800 mm (31.5 in.) deep, standard color. "Y" = IP54, NEMA Type 12, MCC style 800 mm (31.5 in.) deep, gray. Refer to Power Wiring Options on page 69.

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP00/IP20, NEMA/UL Type Open

Frame	H	W	D	Weight
1	400.5 (15.77)	110.0 (4.33)	211.0 (8.31)	6.00 (12.8)
2	424.2 (16.70)	134.5 (5.30)	212.0 (8.35)	7.80 (17.2)
3	454.0 (17.87)	190.0 (7.48)	212.0 (8.35)	11.80 (26.1)
4	474.0 (18.66)	222.0 (8.74)	212.0 (8.35)	13.60 (30.0)
5	550.0 (21.65)	270.0 (10.63)	212.0 (8.35)	20.40 (45.0)
6	665.5 (26.20)	308.0 (12.13)	346.4 (13.64)	38.60 (85.0)
7	881.5 (34.70)	430.0 (16.93)	349.6 (13.76)	72.60...108.90 (160.0...240.0)

IP20, NEMA/UL Type 1, MCC Style Cabinet

Frame	H	W	D	Weight [1]
8	2453.0 (96.60)	600.0 (23.60)	600.0 (23.60) or 800.0 (31.50)	623.00 (1374.0)
8 with Drive and Option Cabinet	2453.0 (96.60)	1200.0 (47.20)	600.0 (23.60) or 800.0 (31.50)	1145.00 (2525.0)
9	2453.0 (96.60)	1200.0 (47.20)	600.0 (23.60) or 800.0 (31.50)	1246.00 (2748.0)
9 with Drive and Option Cabinet	2453.0 (96.60)	1800.0 (70.90)	800.0 (31.50)	2290.00 (5051.0)
10	2453.0 (96.60)	1800.0 (70.90)	600.0 (23.60) or 800.0 (31.50)	1869.00 (4122.0)
10 with Drive and Option Cabinet	2453.0 (96.60)	2400.0 (94.50)	800.0 (31.50)	3435.00 (7576.0)

(1) Weights are approximate. Refer to the PowerFlex 750-Series Technical Data, publication 750-TD001 for detailed weight information.

Flange Mount

Frame	H	W	D1	D2	Weight [1]
2	481.8 (18.97)	206.2 (8.12)	148.3 (5.84)	63.7 (2.51)	8.00 (17.0)
3	515.0 (20.28)	260.0 (10.24)	127.4 (5.02)	84.6 (3.33)	12.00 (26.0)
4	535.0 (21.06)	292.0 (11.50)	127.4 (5.02)	84.6 (3.33)	14.00 (30.0)
5	611.0 (24.06)	340.0 (13.39)	127.4 (5.02)	84.6 (3.33)	20.00 (45.0)
6	665.5 (26.20)	308.0 (12.13)	208.4 (8.20)	138.0 (5.43)	38.00 (84.0)
7	875.0 (34.45)	430.0 (16.93)	208.4 (8.20)	138.0 (5.43)	96.00 (212.0)

(1) Weights are approximate. Refer to the PowerFlex 750-Series Technical Data, publication 750-TD001 for detailed weight information.

Approximate Dimensions and Weights (continued)

IP54, NEMA/UL Type 12

Frame	H	W	D	Weight [1]
2	543.2 (21.39)	215.3 (8.48)	222.2 (8.75)	8.00 (17.0)
3	551.0 (21.69)	268.0 (10.55)	220.1 (8.67)	12.00 (26.0)
4	571.0 (22.48)	300.0 (11.81)	220.1 (8.67)	14.00 (30.0)
5	647.0 (25.47)	348.0 (13.70)	220.1 (8.67)	20.00 (45.0)
6	1298.3 (51.11)	609.4 (23.99)	464.7 (18.30)	91.00 (200.0)
7	1614.0 (63.54)	609.4 (23.99)	464.7 (18.30)	162.00 (357.0)

(1) Weights are approximate. Refer to the PowerFlex 750-Series Technical Data, publication 750-TD001 for detailed weight information.

IP54, NEMA Type 12, MCC Style Cabinet

Frame	H	W	D	Weight [1]
8	2477.0 (97.50)	600.0 (23.60)	800.0 (31.50) 898.0 (35.40) with Filter	644.00 (1419.0)
8 with Drive and Option Cabinets	2477.0 (97.50)	1200.0 (47.20)	800.0 (31.50) 898.0 (35.40) with Filter	1166.00 (2570.0)
9	2477.0 (97.50)	1200.0 (47.20)	800.0 (31.50) 898.0 (35.40) with Filter	1287.00 (2838.0)
9 with Drive and Option Cabinets	2477.0 (97.50)	1800.0 (70.90)	800.0 (31.50) 898.0 (35.40) with Filter	2332.00 (5141.0)
10	2477.0 (97.50)	1800.0 (70.90)	800.0 (31.50) 898.0 (35.40) with Filter	1931.00 (4257.0)
10 with Drive and Option Cabinets	2477.0 (97.50)	2400.0 (94.50)	800.0 (31.50) 898.0 (35.40) with Filter	3498.00 (7711.0)

(1) Weights are approximate. Refer to the PowerFlex 750-Series Technical Data, publication 750-TD001 for detailed weight information.

IP00, NEMA/UL Open Type *

Frame	H	W	D
8	2145.0 (84.45)	777.9 (30.63)	424.9 (16.73)
9	2145.0 (84.45)	1577.8 (62.12)	424.9 (16.73)
10	2145.0 (84.45)	2377.9 (93.62)	424.9 (16.73)

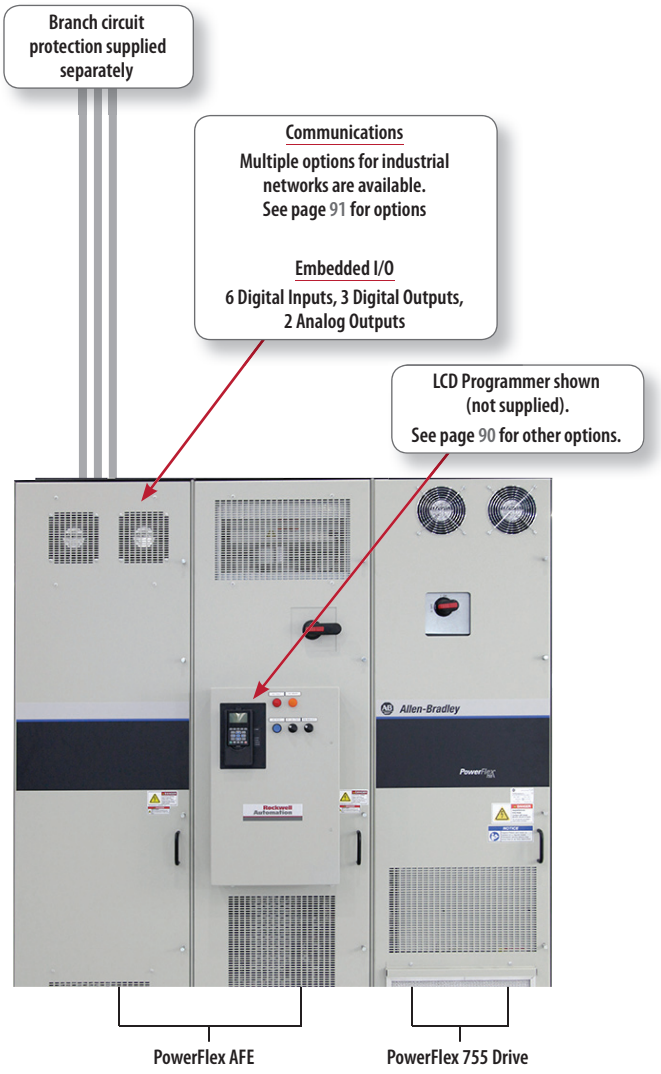
(1) Refer to the PowerFlex 750-Series Technical Data, publication 750-TD001 for detailed information.

Maximum Component Weights - Frames 8…10

Component	AC Input	Common DC Input
Converter/DC Input with Precharge	64.00 (140.0)	64.00 (140.0)
Inverter	222.00 (490.0)	165.00 (363.0)
Drive Assembly (Open, IP00)	286.00 (630.0)	229.00 (504.0)

PowerFlex Active Front End

The PowerFlex Active Front End (AFE) is a great fit for applications that require regeneration of power back to the utility and/or low harmonics to meet IEEE-519 and CE standards. The AFE is a regenerative DC bus supply used to provide DC power to a line-up of common bus AC drives or a single common bus drive. The AFE utilizes a pulse width modulated (PWM) controlled IGBT converter to allow bi-directional power flow to the AC line. Internal communication options help you to cost-effectively assemble highly integrated applications. In addition, the PowerFlex AFE uses the same HIMs, communication modules, software, and configuration tools as the PowerFlex Architecture-class drives.



PowerFlex AFE at a glance

Ratings	
400…480V:	309…873 kW / 497…1404 Hp / 460…1300 A
600…690V:	439…1390 Hp / 376…1193 kW / 325…1030 A
Enclosures	• IP21 Rittal Enclosure, NEMA / UL Type 1 (1) • IP20, NEMA / UL Type 1, 2500 MCC-style Enclosure with Power Bus, 800 mm (31.5 in.) Deep, Standard Cabinet Color (RAL7032) (2) • IP20, NEMA / UL Type 1, 2500 MCC-style Enclosure with Power Bus, 800 mm (31.5 in.) Deep, CenterLine 2100 Gray (ASA49) (2)
Additional Features	• Regenerative Braking for Energy Savings • Low AC Input Harmonics • Improved Power Factor • Voltage Boost
Certifications	• c-UL-us • CE
Options	See pages 90…93

(1) Includes AFE power module, LCL filter, control assembly, motor-controlled circuit breaker, and precharge circuit in a Rittal enclosure.

(2) Includes AFE power module, LCL filter, control assembly, incoming circuit breaker, and precharge circuit for 2500 MCC-style enclosure. Frame 10 has 1250 A DC bus and Frame 13 has 3000 A DC bus.

Additional Information

PowerFlex 700AFE Product Profile, publication 20Y-PP001
PowerFlex Active Front End User Manual, publication 20Y-UM001

Catalog Number Explanation

20Y	D	1K3	A	0	A	N	N	A	N	A	0
	Voltage Rating	Rating	Enclosure								

Product Selection

Ratings Information - Applies to Rittal and MCC-Style Enclosures

400V AC, Three-Phase Drives

400V AC Input							
AC Input Amps		DC Output Amps	PWM Frequency				
Cont.	1 Min.	Cont.	kHz	Normal Duty kW	Heavy Duty kW	Cat. No.	Frame Size
460	506	520	3.6	309		20YD460	10
385	578	435	3.6		258		
1300	1430	1469	3.6	873		20YD1K3	13
1150	1725	1299	3.6		772		

480V AC, Three-Phase Drives

480V AC Input							
AC Input Amps		DC Output Amps	PWM Frequency				
Cont.	1 Min.	Cont.	kHz	Normal Duty Hp	Heavy Duty Hp	Cat. No.	Frame Size
460	506	520	3.6	497		20YD460	10
385	578	435	3.6		416		
1300	1430	1469	3.6	1404		20YD1K3	13
1150	1725	1299	3.6		1242		

600V AC, Three-Phase Drives

600V AC Input							
AC Input Amps		DC Output Amps	PWM Frequency				
Cont.	1 Min.	Cont.	kHz	Normal Duty Hp	Heavy Duty Hp	Cat. No.	Frame Size
325	358	367	3.6	439		20YF325	10
240	360	272	3.6		324		
1030	1133	1164	3.6	1390		20YF1K0 (1)	13

(1) Heavy duty rating is not applicable to frame 13.

690V AC, Three-Phase Drives

690V AC Input							
AC Input Amps		DC Output Amps	PWM Frequency				
Cont.	1 Min.	Cont.	kHz	Normal Duty kW	Heavy Duty kW	Cat. No.	Frame Size
325	358	367	3.6	376		20YF325	10
240	360	272	3.6		278		
1030	1133	1164	3.6	1193		20YF1K0 (1)	13

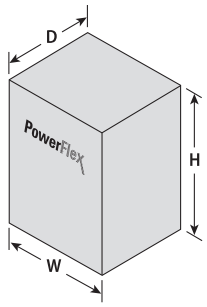
(1) Heavy duty rating is not applicable to frame 13.

Option Kits for PowerFlex 700 AFE in 2500 MCC-Style Enclosure

Frame	Option Kit	Cat. No.
10	PowerFlex 700AFE MCC Barrier Kit	SK-Y1-MCCBARRIER
13		
10	PowerFlex 700AFE Bus Splice Kit	SK-Y1-BUSSPLICE-F10
13	PowerFlex 700AFE Bus Splice Kit, Left Side	SK-Y1-BUSSPLICE-F13L
13	PowerFlex 700AFE Bus Splice Kit, Right Side	SK-Y1-BUSSPLICE-F13R

Approximate Dimensions and Weights

Dimensions are in mm (in.) - weights are in kg (lb)



IP20, 2500 MCC-Style Enclosure

Frame	H	W	D	Weight
10	2380.1 (94)	1204.1 (47)	958 (38)	1035 (2282)
13	2379.8 (93.7)	2400.1 (95)	958 (38)	2200 (4850)

IP21 Rittal Enclosure

Frame	H	W	D	Weight
10	2270.5 (89.4)	1000 (39.4)	670.7 (26.4)	600 (1323)
13	2270.5 (89.4)	1800 (70.9)	690 (27.2)	1280 (2821.9)

PowerFlex 7-Class and AFE Options

Human Interface Modules


Blank Plate


20-HIM-A3


20-HIM-A5


20-HIM-A6


20-HIM-C3S


20-HIM-C5S


20-HIM-C6S

Description	Cat. No.	Used with PowerFlex Drive		AFE
		70	753/755	
No HIM (Blank Plate), Handheld/Local (Drive Mount)	20-HIM-A0	✓	✓	✓
LCD Display, Full Numeric Keypad, Handheld/Local (Drive Mount)	20-HIM-A3	✓		✓
LCD Display, Programmer Only, Handheld/Local (Drive Mount)	20-HIM-A5	✓		✓
Enhanced, LCD, Full Numeric Keypad, Handheld/Local (Drive Mount)	20-HIM-A6	✓	✓	✓
Remote (Panel Mount) LCD Display, Full Numeric Keypad (1) (2)	20-HIM-C3S	✓		✓
Remote (Panel Mount) LCD Display, Programmer Only (1) (2)	20-HIM-C5S	✓		✓
Enhanced, LCD, Full Numeric Keypad (1) (2)	20-HIM-C6S	✓	✓	✓

(1) IP66, NEMA Type 4X/12—for indoor use only.

(2) Includes a 1202-C30 interface cable (3 m/9.8 ft) for connection to drive.

Human Interface Module (HIM) Accessories

Description	Cat. No.	Used with PowerFlex Drive		AFE
		70	753/755	
Bezel Kit for LCD HIMs, NEMA Type 1 (1)	20-HIM-B1	✓	✓	✓
PowerFlex HIM Interface Cable, 1 m (3.3 ft) (2)	20-HIM-H10	✓	✓	✓
Comm Option Cable Kit (Male-Male)				
0.33 m (1.1 ft)	1202-C03	✓	✓	✓
1 m (3.3 ft)	1202-C10	✓	✓	✓
3 m (9.8 ft)	1202-C30	✓	✓	✓
9 m (29.5 ft)	1202-C90	✓	✓	✓
Cable Kit (Male-Female) (3)				
0.33 m (1.1 ft)	1202-H03	✓	✓	✓
1 m (3.3 ft)	1202-H10	✓	✓	✓
3 m (9.8 ft)	1202-H30	✓	✓	✓
9 m (29.5 ft)	1202-H90	✓	✓	✓
DPI™ Cable Kit with Connectors, Tools and 100 m (328 ft) Cable	1202-CBL-KIT-100M	✓	✓	✓
DPI Cable Connector Kit	1202-TB-KIT-SET	✓	✓	✓
DPI/SCANport™ One to Two Port Splitter Cable	1203-S03	✓	✓	✓

(1) Includes a 1202-C30 interface cable (3 m/9.8 ft) for connection to drive.

(2) Required only when HIM is used as handheld or remote.

(3) Required in addition to 20-HIM-H10 for distances up to a total maximum of 10 m (32.8 ft).

Communication Option Kits

Description	Cat. No.	Used with PowerFlex Drive		
		70	753/755	AFE
BACnet/IP Option Module	20-750-BNETIP		✓	
BACnet® MS/TP RS485 Communication Adapter	20-COMM-B	✓		✓
Coaxial ControlNet™ Option Module	20-750-CNETC		✓	
ControlNet™ Communication Adapter (Coax)	20-COMM-C	✓	✓ (1)	✓
DeviceNet™ Option Module	20-750-DNET		✓	
DeviceNet™ Communication Adapter	20-COMM-D	✓	✓ (1)	✓
Dual-port EtherNet/IP Option Module	20-750-ENETR		✓	
EtherNet/IP™ Communication Adapter	20-COMM-E	✓	✓ (1)	✓
Dual-port EtherNet/IP™ Communication Adapter	20-COMM-ER	✓		✓
HVAC Communication Adapter	20-COMM-H	✓	✓ (1)	✓
CANopen® Communication Adapter	20-COMM-K	✓	✓ (1)	✓
LonWorks® Communication Adapter	20-COMM-L	✓	✓ (1)	✓
Modbus/TCP Communication Adapter	20-COMM-M	✓	✓ (1)	✓
Profibus DPV1 Option Module	20-750-PBUS		✓	
Single-port Profinet I/O Option Module	20-750-PNET		✓	
Dual-port Profinet I/O Option Module	20-750-PNET2P		✓	
PROFIBUS™ DP Communication Adapter	20-COMM-P	✓	✓ (1)	✓
ControlNet™ Communication Adapter (Fiber)	20-COMM-Q	✓	✓ (1)	✓
Remote I/O Communication Adapter (2)	20-COMM-R	✓	✓ (1)	✓
RS485 DF1 Communication Adapter	20-COMM-S	✓	✓ (1)	✓
External Communications Kit Power Supply	20-XCOMM-AC-PS1	✓	✓	✓
DPI External Communications Kit	20-XCOMM-DC-BASE	✓	✓	✓
External DPI I/O Option Board (3)	20-XCOMM-IO-OPT1	✓	✓	✓
Compact I/O Module (3 Channel)	1769-SM1	✓	✓	✓

(1) Requires a Communication Carrier Card (20-750-20COMM or 20-750-20COMM-F1). Refer to PowerFlex 750-Series Legacy Communication Compatibility for details.

(2) This item has Silver Series status.

(3) For use only with DPI External Communications Kits 20-XCOMM-DC-BASE.

PowerFlex 750-Series Legacy Communication Compatibility

Most legacy communication adapters (20-COMM) can be used with the PowerFlex 753/755. However, the restrictions stated below do apply.

Frame 1 - It is recommended that the 20-750-20COMM-F1 Communication Carrier Card only be installed in Port 4. Port 5 will not be accessible when this module is installed.

Frames 2 and larger - It is recommended that the 20-750-20COMM Communication Carrier Card be installed in Port 6. Using Port 4 or 5 will make the adjacent left port inaccessible to other option modules and may interfere with network cable connections.

Adapter		Accesses Ports 0…6 for I/O Connections (Implicit and Explicit Messaging)	Accesses Ports 7 and Higher (I/O, Explicit Messaging)	Supports Drive Add-on Profiles	Supports Asian-Languages [1]
Cat. No.	Type				
20-COMM-B	BACnet MS/TP	Not Compatible			
20-COMM-C	ControlNet (Coax)	✓ v3.001 [2]	✓ v3.001 [2]	✓ [3]	✓ v3.001 [2]
20-COMM-D	DeviceNet	✓ [4]	Not Compatible		
20-COMM-E	EtherNet/IP	✓ v4.001 [2]	✓ v4.001 [2]	✓ [3]	✓ v4.001 [2]
20-COMM-H	RS-485 HVAC	✓ v2.009 [5] [2]	Not Compatible		
20-COMM-K	CANopen	✓ v1.001 [2]			
20-COMM-L	LonWorks	✓ v1.007 [2]			
20-COMM-M	Modbus/TCP	✓ v2.001 [2]	✓ v2.001 [2]	Not Compatible	✓ v2.001 [2]
20-COMM-P	ControlNet (Fiber)	✓ v1.006 [2]	✓ v1.006 [2]		Not Compatible
20-COMM-Q	PROFIBUS DP	✓ v3.001 [2]	✓ v3.001 [2]	✓ [3]	✓ v3.001 [2]
20-COMM-R [6]	Remote I/O	✓ [4]	Not Compatible		
20-COMM-S	RS-485 DF1	✓ [4]			

(1) Chinese, Japanese, and Korean languages are supported at the time of publication.
(2) Requires this adapter firmware version or higher.
(3) Requires firmware version v1.05 or higher of the drive Add-on Profiles for Studio 5000 Logix Designer software.
(4) Controller must be capable of reading/writing 32-bit floating point (REAL) values.
(5) Supports all three modes of operation (RTU, P1, N2).
(6) This item has Silver Series status.

Communication Accessories

Description	Cat. No.	Used with PowerFlex Drive		AFE
		70	753/755	
Serial Null Modem Adapter	1203-SNM	✓	✓	✓
Smart Self-powered Serial Converter (RS232) includes 1203-SFC and 1202-C10 Cables	1203-SSS	✓	✓	✓
Universal Serial Bus™ (USB) Converter includes 2m USB, 20-HIM-H10 and 22-HIM-H10 Cables	1203-USB	✓	✓	✓
ControlNet T-tap Straight	1786-TPS		✓	
Communication Carrier Card for PowerFlex 750-Series Frame 1 drives	20-750-20COMM-F1		✓	
Communication Carrier Card for PowerFlex 750-Series Frame 2 or higher drives	20-750-20COMM		✓	

I/O Option Kits

Description	Cat. No.	Used with PowerFlex Drive		AFE
		70	753/755	
ATEX Option Module with 1 Thermosensor Input Connection (requires 11-Series I/O Module below)	20-750-ATEX		✓ (1)	
24V DC 11-Series I/O Module with 1 Analog In, 1 Analog Out, 3 Digital In and 2 Relay Outputs	20-750-1132C-2R		✓ (1)	
24V DC 11-Series I/O Module with 1 Analog In, 1 Analog Out, 3 Digital In, 1 Relay and 2 Transistor Outputs	20-750-1133C-1R2T		✓ (1)	
115V AC 11-Series I/O Module with 1 Analog In, 1 Analog Out, 3 Digital In and 2 Relay Outputs	20-750-1132D-2R		✓ (1)	
24V DC 22-Series I/O Module with 2 Analog In, 2 Analog Out, 6 Digital In and 2 Relay Outputs	20-750-2262C-2R		✓ (1)	
115V AC 22-Series I/O Module with 2 Analog In, 2 Analog Out, 6 Digital In and 2 Relay Outputs	20-750-2262D-2R		✓ (1)	
24V DC 22-Series I/O Module with 2 Analog In, 2 Analog Out, 6 Digital In, 3 Digital Out, 1 Relay and 2 Transistor Outputs	20-750-2263C-1R2T		✓ (1)	

(1) I/O option kits are not allowed in CIP motion mode.

Safety Options

Description	Cat. No.	Used with PowerFlex Drive	
		70	753/755
DriveGuard Safe Torque-Off	20A-DG01	✓	
Safe Torque-Off	20-750-S		✓ (1)
Safe Speed Monitor	20-750-S1		✓ (1) (2)

(1) Drive can accommodate only one option.

(2) Requires the Dual Incremental Encoder or Universal Feedback Option. Also requires the 20-750-EMCSSM1-F8 EMC Option Kit with Frame 8…9 drives.

Feedback Options

Description	Cat. No.	Used with PowerFlex Drive	
		70	753/755
5V/12V Encoder (1)	20A-ENC-1	✓	
Incremental Encoder	20-750-ENC-1		✓ (2)
Dual Incremental Encoder	20-750-DENC-1		✓ (2)
Universal Feedback (includes Stegmann, Heidenhain, SSI, Biss, 5V Incremental)	20-750-UFB-1		✓ (3)

(1) Works only with PowerFlex 70 Enhanced Control.

(2) Homing and registration functions are not supported when using this device with Studio 5000 Logix Designer embedded motion instructions. To use these functions, the Universal Feedback Board (20-750-UFB-1) must be used.

(3) PowerFlex 755 only.

PowerFlex 750-Series Option Kits

Description		Frame	Cat. No.	Used with PowerFlex Drive	
				70	753/755
Auxiliary Power Supply	24V Aux Power Supply	1...7 [1]	20-750-APS		✓
DC Bus Bar Option Kit	DC Bus Bars for 380...480V AC drives	6	20-750-DCBB1-F6		✓
		7	20-750-DCBB1-F7		✓
	DC Bus Bars for 600...690V AC drives	6	20-750-DCBB2-F6		✓
		7	20-750-DCBB2-F7		✓
DC Bus Connection Kit	Connects the drive DC bus terminals to the cabinet bus rails.	8...10	20-750-BUS1A-F8		✓
EMC Option Kit	EMC Plate with Core for 380...480V AC drives	1	20-750-EMC1-F1		✓
		2	20-750-EMC1-F2		✓
		3	20-750-EMC1-F3		✓
	EMC Plate with Core for 600V AC drives	3	20-750-EMC3-F3		✓
	EMC Plate with Cores for 380...480V AC drives	4	20-750-EMC1-F4		✓
		5	20-750-EMC1-F5		✓
	EMC Plate with Cores for 600V AC drives	4	20-750-EMC3-F4		✓
		5	20-750-EMC3-F5		✓
	EMC Core for 380...480V AC drives	1	20-750-EMC2-F1		✓
		2	20-750-EMC2-F2		✓
		3	20-750-EMC2-F3		✓
	EMC Core for 600V AC drives	3	20-750-EMC4-F3		✓
	EMC Cores for 380...480V AC drives	4...5	20-750-EMC2-F45		✓
	EMC Cores for 600V AC drives	4	20-750-EMC4-F4		✓
		5	20-750-EMC4-F5		✓
	EMC Plate with Cores for 600...690V AC drives	6	20-750-EMC3-F6		✓
		7	20-750-EMC3-F7		✓
	EMC Plate with Cores for 600...690V AC drives (IP54 Only)	6	20-750-EMC5-F6		✓
		7	20-750-EMC5-F7		✓
	EMC Core – Inverter-mounted output, for 380...690V AC input and DC input drives.	8...10	20-750-EMCCM1-F8		✓
	EMC Core – Cabinet-mounted input, for 380...690V Common DC Input drives only.	8...10	20-750-CBPEMCCM1-F8		✓
	EMC Core – Cabinet-mounted input, for 380...690V AC input drives only.	8...10	20-750-EMCCM1-F9		✓
	EMC Cores – Required when using the Safe Speed Monitor option 20-750-S1 with 380...690V drives.	8...10	20-750-EMCSSM1-F8		✓
	Door Shielding Kit	10	20-750-EMCDK1-F10		✓
Exhaust Hood	Exhaust Hood – IP20, NEMA/UL Type 1 drives.	8	20-750-HOOD1-F8		✓
Flange Adapter Kit	Converts Open Type drive to external heatsink (flange) with NEMA/UL Type 1 integrity backside. This kit is for use with IP20, NEMA/UL Type 0 drives and **will not provide** an air-tight or water-tight seal. Where sealing is required (e.g. contaminated, dirty or wet environments), a drive with an "F" enclosure option must be used.	2	20-750-FLNG1-F2		✓
		3	20-750-FLNG1-F3		✓
		4	20-750-FLNG1-F4		✓
		5	20-750-FLNG1-F5		✓
	Converts Open Type drive to external heatsink (flange) with NEMA/UL Type 4X/12 integrity backside.	6	20-750-FLNG4-F6		✓
		7	20-750-FLNG4-F7		✓
L Bus Bar Kit	Includes three L-brackets	8...10	20-750-LBRKT1		✓
NEMA/UL Type 1 Option Kit	NEMA/UL Type 1 Kit	1	20-750-NEMA1-F1		✓
		2	20-750-NEMA1-F2		✓
		3	20-750-NEMA1-F3		✓
		4	20-750-NEMA1-F4		✓
		5	20-750-NEMA1-F5		✓
		6	20-750-NEMA1-F6		✓
		7	20-750-NEMA1-F7		✓
Power Terminal Extension	Allows connection of two parallel leads to the AC terminals.	6	20-750-ACTE1-F6		✓

continued

PowerFlex 750-Series Option Kits (continued)

Description		Frame	Cat. No.	Used with PowerFlex Drive	
				70	753/755
Power Terminal Guard	Provides additional protection against contact with the power terminals.	6	20-750-PTG1-F6		✓
		7	20-750-PTG1-F7		✓
Remote Control POD Mounting Kit	Hardware, fiber-optic, and power supply cables to remotely mount the control POD up to 23 m (75 ft) from the drive.	8...10	20-750-RPD1-F8		✓
Roll-Out Cart	A wheeled roll-out cart that facilitates drive installation and removal. Required for Frame 8 and larger drives.	8...10	20-750-CART1-F8		✓

(1) Frame 8 and up drives can be powered from an external 24V DC source, a 20-750-APS is not required.

Other Options

Description	Cat. No.	Used with PowerFlex Drive	
		70	753/755
115V AC Interface	AK-M9-115VAC-1	✓	
Frame E Flange Gasket	AK-M9-GASKET1-E4	✓	
Service Connection Board [(1)]	SK-M9-SCB1	✓	

(1) Provides temporary DPI/HIM connection for NEMA/UL Type 1 and Flange drives with cover removed.

PowerFlex 70 Small Duty Internal Dynamic Brake Resistors

Limited duty resistors mount directly to the back surface of the drive and require no extra panel space. Internal resistors are non-destructive and do not require a resistor overheat external safety circuit.

PowerFlex 70 AC Drive			Small Duty Internal DB Resistor								
								Application Type 1		Application Type 2	
Normal Duty [1] kW (Hp)	Heavy Duty [1] kW (Hp)	Min DB Res Ohms ±10%	Cat. No.	Resistance [2] Ohms ±5%	Continuous Power kW	Max Energy kJ	Max Braking Torque % of ND Motor	Braking Torque % of ND Motor	Duty Cycle	Braking Torque % of ND Motor	Duty Cycle
200…240 Volt AC Input Drives											
0.37 (0.5)	0.25 (0.33)	33	20AB-DB1-A	62	0.048	8.3	307%	100%	25.9%	150%	17.3%
0.75 (1.0)	0.55 (0.75)	33	20AB-DB1-A	62	0.048	7.3	300%	100%	12.8%	150%	8.5%
1.5 (2.0)	1.1 (1.5)	33	20AB-DB1-B	62	0.028	0.8	160%	100%	3.7%	150%	2.5%
2.2 (3.0)	1.5 (2.0)	33	20AB-DB1-B	62	0.028	0.8	109%	100%	2.5%	109%	2.3%
4.0 (5.0)	3.0 (3.0)	30	20AB-DB1-C	62	0.040	0.8	60%	60%	3.3%	N/A	N/A
5.5 (7.5)	4.0 (5.0)	21	20AB-DB1-D	22	0.036	0.9	117%	100%	1.3%	117%	1.1%
7.5 (10)	5.5 (7.5)	21	20AB-DB1-D	22	0.036	0.9	86%	86%	1.1%	N/A	N/A
400…480 Volt AC Input Drives											
0.37 (0.5)	0.25 (0.33)	68	20AD-DB1-A	115	0.048	8.3	320%	100%	25.9%	150%	17.3%
0.75 (1.0)	0.55 (0.75)	68	20AD-DB1-A	115	0.048	9.0	259%	100%	12.8%	150%	8.5%
1.5 (2.0)	1.1 (1.5)	68	20AD-DB1-A	115	0.048	2.4	243%	100%	6.4%	150%	4.3%
2.2 (3.0)	1.5 (2.0)	68	20AD-DB1-B	115	0.028	0.9	206%	100%	2.5%	150%	1.7%
4.0 (5.0)	3.0 (3.0)	68	20AD-DB1-B	115	0.028	0.9	129%	100%	1.4%	129%	1.1%
5.5 (7.5)	4.0 (5.0)	74	20AD-DB1-C	115	0.04	0.9	94%	94%	1.5%	N/A	N/A
7.5 (10)	5.5 (7.5)	74	20AD-DB1-C	115	0.04	0.9	69%	69%	1.5%	N/A	N/A
11 (15)	7.5 (10)	44	20AD-DB1-D	62	0.036	0.8	87%	87%	0.8%	N/A	N/A
15 (20)	11 (15)	31	20AD-DB1-D	62	0.036	0.8	64%	64%	0.8%	N/A	N/A
500…600 Volt AC Input Drives											
0.37 (0.5)	0.25 (0.33)	117	20AD-DB1-A	115	0.048	8.3	287%	100%	25.9%	150%	17.3%
0.75 (1.0)	0.55 (0.75)	117	20AD-DB1-A	115	0.048	9.0	263%	100%	12.8%	150%	8.5%
1.5 (2.0)	1.1 (1.5)	117	20AD-DB1-A	115	0.048	2.4	243%	100%	6.4%	150%	4.3%
2.2 (3.0)	1.5 (2.0)	117	20AD-DB1-B	115	0.028	0.9	202%	100%	2.5%	150%	1.7%
4.0 (5.0)	3.0 (3.0)	80	20AD-DB1-B	115	0.028	0.9	193%	100%	1.4%	150%	0.9%
5.5 (7.5)	4.0 (5.0)	80	20AD-DB1-C	115	0.04	0.9	147%	100%	1.5%	147%	1.0%
7.5 (10)	5.5 (7.5)	80	20AD-DB1-C	115	0.04	0.9	108%	100%	1.1%	108%	1.0%
11 (15)	7.5 (10)	48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15 (20)	11 (15)	48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

(1) Duty cycle listed is based on full speed to zero speed deceleration. For constant regen at full speed, duty cycle capability is half of what is listed. Application Type 1 represents maximum capability up to 100% braking torque where possible. Application Type 2 represents more than 100% braking torque where possible, up to a maximum of 150%.

(2) Always check resistor Ohms against minimum resistance for drive being used.

PowerFlex 70 Medium Duty External Dynamic Brake Resistors

These resistors provide a larger duty cycle capability than the internal type. Includes an internal thermal switch for use in external safety circuit.

PowerFlex 70 AC Drive			Medium Duty External DB Resistor								
								Application Type 1		Application Type 2	
Normal Duty [1] kW (Hp)	Heavy Duty [1] kW (Hp)	Min DB Res Ohms ±10%	Cat. No.	Resistance [2] Ohms ±5%	Continuous Power kW	Max Energy kJ	Max Braking Torque % of ND Motor	Braking Torque % of ND Motor	Duty Cycle	Braking Torque % of ND Motor	Duty Cycle
200…240 Volt AC Input Drives											
0.37 (0.5)	0.25 (0.33)	33	AK-R2-091P500	91	0.086	17	293%	100%	46%	150%	31%
0.75 (1.0)	0.55 (0.75)	33	AK-R2-091P500	91	0.086	17	218%	100%	23%	150%	15%
1.5 (2.0)	1.1 (1.5)	33	AK-R2-091P500	91	0.086	17	109%	100%	11%	109%	11%
2.2 (3.0)	1.5 (2.0)	33	AK-R2-047P500	47	0.166	33	144%	100%	15%	144%	11%
4.0 (5.0)	3.0 (3.0)	30	AK-R2-047P500	47	0.166	33	79%	79%	11%	N/A	N/A
5.5 (7.5)	4.0 (5.0)	23	AK-R2-030P1K2	30	0.26	52	90%	90%	10%	N/A	N/A
7.5 (10)	5.5 (7.5)	23	AK-R2-030P1K2	30	0.26	52	66%	66%	10%	N/A	N/A
400…480 Volt AC Input Drives											
0.37 (0.5)	0.25 (0.33)	68	AK-R2-360P500	360	0.086	17	305%	100%	47%	150%	31%
0.75 (1.0)	0.55 (0.75)	68	AK-R2-360P500	360	0.086	17	220%	100%	23%	150%	15%
1.5 (2.0)	1.1 (1.5)	68	AK-R2-360P500	360	0.086	17	110%	100%	12%	110%	11%
2.2 (3.0)	1.5 (2.0)	68	AK-R2-120P1K2	120	0.26	52	197%	100%	24%	150%	16%
4.0 (5.0)	3.0 (3.0)	68	AK-R2-120P1K2	120	0.26	52	124%	100%	13%	124%	10%
5.5 (7.5)	4.0 (5.0)	74	AK-R2-120P1K2	120	0.26	52	90%	90%	10%	N/A	N/A
7.5 (10)	5.5 (7.5)	74	AK-R2-120P1K2	120	0.26	52	66%	66%	10%	N/A	N/A
11 (15) [3]	7.5 (10) [3]	44	[3]	60	0.52	104	90%	90%	10%	N/A	N/A
15 (20) [3]	11 (15) [3]	31	[3]	60	0.52	104	66%	66%	10%	N/A	N/A
500…600 Volt AC Input Drives											
0.37 (0.5)	0.25 (0.33)	117	AK-R2-360P500	360	0.086	17	274%	100%	46%	150%	31%
0.75 (1.0)	0.55 (0.75)	117	AK-R2-360P500	360	0.086	17	251%	100%	23%	150%	15%
1.5 (2.0)	1.1 (1.5)	117	AK-R2-360P500	360	0.086	17	172%	100%	11%	150%	8%
2.2 (3.0)	1.5 (2.0)	117	AK-R2-120P1K2	120	0.26	52	193%	100%	24%	150%	16%
4.0 (5.0)	3.0 (3.0)	80	AK-R2-120P1K2	120	0.26	52	185%	100%	13%	150%	9%
5.5 (7.5)	4.0 (5.0)	80	AK-R2-120P1K2	120	0.26	52	141%	100%	9%	141%	7%
7.5 (10)	5.5 (7.5)	80	AK-R2-120P1K2	120	0.26	52	103%	100%	7%	103%	7%
11 (15) [3]	7.5 (10) [3]	48	[3]	60	0.52	104	141%	100%	9%	141%	7%
15 (20) [3]	11 (15) [3]	48	[3]	60	0.52	104	103%	100%	7%	103%	7%

(1) Duty cycle listed is based on full speed to zero speed deceleration. For constant regen at full speed, duty cycle capability is half of what is listed. Application Type 1 represents maximum capability up to 100% braking torque where possible. Application Type 2 represents more than 100% braking torque where possible, up to a maximum of 150%.

(2) Always check resistor Ohms against minimum resistance for drive being used.

(3) For 11 and 15 kW (15 and 20 Hp) applications, use two 7.5 kW (10 Hp) size resistors wired in parallel.

Internal Dynamic Brake Resistor Kits

These resistors have a limited duty cycle. Refer to the PowerFlex Dynamic Braking Resistor Calculator, publication PFLEX-AT001 to determine if an internal resistor will be sufficient for your application. An external resistor may be required.

Drive Input Voltage	Brake Resistance Ω	Frame	Cat. No.	Used with PowerFlex Drive 70	Used with PowerFlex Drive 753/755
380…600V AC	115	1 (1…3 Hp)	20-750-DB1-D1		✓
	62	1 (5…10 Hp)	20-750-DB1-D1A		✓
	62	2	20-750-DB1-D2		✓

Terminators

Description (1)	Cat. No.	Used with PowerFlex Drive 70	Used with PowerFlex Drive 753/755
for use with 3.7 kW (5 Hp) and below drives	1204-TFA1	✓	✓
for use with 1.5 kW (2 Hp) and up drives	1204-TFB2	✓	✓

(1) For selection information, refer to Appendix A of the Wiring and Grounding Guidelines for Pulse Width Modulated (PWM) AC Drives, publication Drives-IN001.

Reflected Wave Reduction Modules with Common Mode Choke

Description (1)	Cat. No.	Used with PowerFlex Drive 70	Used with PowerFlex Drive 753/755
17A with Common Mode Choke	1204-RWC-17-A	✓	✓

(1) For selection information, refer to Appendix A of the Wiring and Grounding Guidelines for Pulse Width Modulated (PWM) AC Drives, publication Drives-IN001.

Reflected Wave Reduction Modules

Voltage	ND kW	ND Hp	Cat. No.	Used with PowerFlex Drive	
				70	753/755
380…480V AC	4	5	1321-RWR8-DP	✓	✓
	5.5	7.5	1321-RWR12-DP	✓	✓
	7.5	10	1321-RWR18-DP	✓	✓
	11	15	1321-RWR25-DP	✓	✓
	15	20	1321-RWR35-DP	✓	✓
	18.5	25	1321-RWR35-DP	✓	✓
	22	30	1321-RWR45-DP	✓	✓
	30	40	1321-RWR55-DP	✓	✓
	37	50	1321-RWR80-DP	✓	✓
	45	60	1321-RWR80-DP		✓
	55	75	1321-RWR100-DP		✓
	75	100	1321-RWR130-DP		✓
	90	125	1321-RWR160-DP		✓
	110	150	1321-RWR200-DP		✓
	149	200	1321-RWR250-DP		✓
	187	250	1321-RWR320-DP		✓
500…600V AC	4	5	1321-RWR8-EP	✓	✓
	5.5	7.5	1321-RWR12-EP	✓	✓
	7.5	10	1321-RWR12-EP	✓	
			1321-RWR18-EP		✓
	11	15	1321-RWR18-EP	✓	
			1321-RWR25-EP		✓
	15	20	1321-RWR25-EP	✓	
			1321-RWR35-EP		✓
	18.5	25	1321-RWR35-EP	✓	✓
	22	30	1321-RWR35-EP	✓	
			1321-RWR45-EP		✓
	30	40	1321-RWR45-EP	✓	
			1321-RWR55-EP		✓
	37	50	1321-RWR55-EP	✓	
			1321-RWR80-EP		✓
	45	60	1321-RWR80-EP		✓
	55	75	1321-RWR100-EP		✓
	75	100	1321-RWR130-EP		✓
	90	125	1321-RWR160-EP		✓
	110	150	1321-RWR200-EP		✓
	149	200	1321-RWR250-EP		✓

Isolation Transformers - IP32, NEMA/UL Type 3R Standalone, 4…6% Nominal Impedance

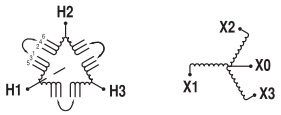


Diagram 1

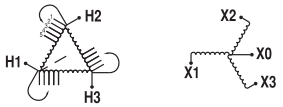


Diagram 2

Motor Rating		Wiring	240V, 60 Hz, Three-Phase Primary & 240V Secondary (1)	460V, 60 Hz, Three-Phase Primary & 460V Secondary	575V, 60 Hz, Three-Phase Primary & 575V Secondary (1)	Used with PowerFlex Drive	
kW	Hp	Diagram	Cat. No.	Cat. No.	Cat. No.	70	753/755
0.25	0.33	1	1321-3TW005-AA	1321-3TW005-BB	–	✓	
0.37	0.5	1	1321-3TW005-AA	1321-3TW005-BB	1321-3TW005-CC	✓	
0.55	0.75	1	1321-3TW005-AA	1321-3TW005-BB	–	✓	
0.75	1	1	1321-3TW005-AA	1321-3TW005-BB	1321-3TW005-CC	✓	✓
1.1	1.5	1	1321-3TW005-AA	1321-3TW005-BB	–	✓	
1.5	2	1	1321-3TW005-AA	1321-3TW005-BB	1321-3TW005-CC	✓	✓
2.2	3	1	1321-3TW005-AA	1321-3TW005-BB	1321-3TW005-CC	✓	✓
22	30	2	1321-3TW040-AA	1321-3TW040-BB	1321-3TW040-CC	✓	✓
30	40	2	1321-3TW051-AA	1321-3TW051-BB	1321-3TW051-CC	✓	✓
37	50	2	1321-3TH063-AA	1321-3TH063-BB	1321-3TH063-CC	✓	✓
45	60	2	1321-3TH075-AA	1321-3TH075-BB	1321-3TH075-CC		✓
55	75	2	1321-3TH093-AA	1321-3TH093-BB	1321-3TH093-CC		✓
75	100	2	–	1321-3TH118-BB	1321-3TH118-CC		✓
90	125	2	–	1321-3TH145-BB	1321-3TH145-CC		✓
110	150	2	–	1321-3TH175-BB	1321-3TH175-CC		✓
149	200	2	–	1321-3TH220-BB	1321-3TH220-CC		✓
187	250	2	–	1321-3TH275-BB	1321-3TH275-CC		✓
224	300	2	–	1321-3TH330-BB	1321-3TH330-CC		✓
224	300	1	–	–	1321-3TH330-CC		✓
261	350	1	–	1321-3TH440-BB	1321-3TH440-CC		✓
298	400	1	–	1321-3TH440-BB	1321-3TH550-CC		✓
336	450	1	–	1321-3TH550-BB	1321-3TH550-CC		✓
373	500	1	–	1321-3TH550-BB	1321-3TH660-CC		✓
410	550	1	–	–	1321-3TH660-CC		✓
448	600	1	–	1321-3TH660-BB	1321-3TH770-CC		✓
522	700	1	–	1321-3TH770-BB	1321-3TH770-CC		✓
597	800	1	–	1321-3TH880-BB	1321-3TH880-CC		✓
671	900	–	–	900 kVA (2)	950 kVA (2)		✓
709	950	–	–	–	1000 kVA (2)		✓
746	1000	–	–	1000 kVA (2)	1100 kVA (2)		✓
821	1100	–	–	1200 kVA (2)	–		✓
895	1200	–	–	–	1200 kVA (2)		✓
933	1250	–	–	1200 kVA (2)	–		✓
1007	1350	–	–	1300 kVA (2)	–		✓
1119	1500	–	–	1500 kVA (2)	1500 kVA (2)		✓
1492	2000	–	–	2000 kVA (2)	–		✓

(1) Not applicable for the PowerFlex 755.

(2) 1321 Isolation Transformer solution is not available. Approximate drive kVA is listed.

Input and Output Reactors - 200…240V, 50/60 Hz, Three-Phase, 3% Impedance

			Input Line Reactor [1]		Output Reactor [1]		Used with PowerFlex Drive	
kW	Hp	Duty	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	753/755
0.25	0.33	Heavy	1321-3R2-D	1321-3RA2-D	1321-3R2-D	1321-3RA2-D	✓	
0.37	0.5	Normal	1321-3R2-D	1321-3RA2-D	1321-3R2-D	1321-3RA2-D	✓	
0.55	0.75	Heavy	1321-3R4-A	1321-3RA4-A	1321-3R4-A	1321-3RA4-A	✓	
0.75	1	Normal	1321-3R4-A	1321-3RA4-A	1321-3R4-A	1321-3RA4-A	✓	
1.1	1.5	Heavy	1321-3R8-B	1321-3RA8-B	1321-3R8-A	1321-3RA8-A	✓	
1.5	2	Normal	1321-3R8-A	1321-3RA8-A	1321-3R8-A	1321-3RA8-A	✓	
		Heavy	1321-3R8-A	1321-3RA8-A	1321-3R12-A	1321-3RA12-A	✓	
2.2	3	Normal	1321-3R12-A	1321-3RA12-A	1321-3R12-A	1321-3RA12-A	✓	
		Heavy	1321-3R12-A	1321-3RA12-A	1321-3R18-A	1321-3RA18-A	✓	
4	5	Normal	1321-3R18-A	1321-3RA18-A	1321-3R18-A	1321-3RA18-A	✓	
		Heavy	1321-3R18-A	1321-3RA18-A	1321-3R25-A	1321-3RA25-A	✓	
5.5	7.5	Normal	1321-3R25-A	1321-3RA25-A	1321-3R25-A	1321-3RA25-A	✓	
		Heavy	1321-3R25-A	1321-3RA25-A	1321-3R35-A	1321-3RA35-A	✓	
7.5	10	Normal	1321-3R35-A	1321-3RA35-A	1321-3R35-A	1321-3RA35-A	✓	
		Heavy	1321-3R35-A	1321-3RA35-A	1321-3R45-A	1321-3RA45-A	✓	
11	15	Normal	1321-3R45-A	1321-3RA45-A	1321-3R45-A	1321-3RA45-A	✓	
		Heavy	1321-3R45-A	1321-3RA45-A	1321-3R55-A	1321-3RA55-A	✓	
15	20	Normal	1321-3R55-A	1321-3RA55-A	1321-3R55-A	1321-3RA55-A	✓	
		Heavy	1321-3R55-A	1321-3RA55-A	1321-3R80-A	1321-3RA80-A	✓	
18.5	25	Normal	1321-3R80-A	1321-3RA80-A	1321-3R80-A	1321-3RA80-A	✓	

(1) Input line reactors were sized based on the NEC fundamental motor amps. Output line reactors were sized based on the VFD rated output currents.

Input and Output Reactors - 200…240V, 50/60 Hz, Three-Phase, 5% Impedance

			Input Line Reactor [1]		Output Reactor [1]		Used with PowerFlex Drive	
kW	Hp	Duty	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	753/755
0.25	0.33	Heavy	1321-3R2-A	1321-3RA2-A	1321-3R2-A	1321-3RA2-A	✓	
0.37	0.5	Normal	1321-3R2-A	1321-3RA2-A	1321-3R2-A	1321-3RA2-A	✓	
0.55	0.75	Heavy	1321-3R4-B	1321-3RA4-B	1321-3R4-B	1321-3RA4-B	✓	
0.75	1	Normal	1321-3R4-B	1321-3RA4-B	1321-3R4-B	1321-3RA4-B	✓	
1.1	1.5	Heavy	1321-3R8-B	1321-3RA8-B	1321-3R8-B	1321-3RA8-B	✓	
1.5	2	Normal	1321-3R8-B	1321-3RA8-B	1321-3R8-B	1321-3RA8-B	✓	
		Heavy	1321-3R8-B	1321-3RA8-B	1321-3R12-B	1321-3RA12-B	✓	
2.2	3	Normal	1321-3R12-B	1321-3RA12-B	1321-3R12-B	1321-3RA12-B	✓	
		Heavy	1321-3R12-B	1321-3RA12-B	1321-3R18-B	1321-3RA18-B	✓	
4	5	Normal	1321-3R18-B	1321-3RA18-B	1321-3R18-B	1321-3RA18-B	✓	
		Heavy	1321-3R18-B	1321-3RA18-B	1321-3R25-B	1321-3RA25-B	✓	
5.5	7.5	Normal	1321-3R25-B	1321-3RA25-B	1321-3R25-B	1321-3RA25-B	✓	
		Heavy	1321-3R25-B	1321-3RA25-B	1321-3R35-B	1321-3RA35-B	✓	
7.5	10	Normal	1321-3R35-B	1321-3RA35-B	1321-3R35-B	1321-3RA35-B	✓	
		Heavy	1321-3R35-B	1321-3RA35-B	1321-3R45-B	1321-3RA45-B	✓	
11	15	Normal	1321-3R45-B	1321-3RA45-B	1321-3R45-B	1321-3RA45-B	✓	
		Heavy	1321-3R45-B	1321-3RA45-B	1321-3R55-B	1321-3RA55-B	✓	
15	20	Normal	1321-3R55-B	1321-3RA55-B	1321-3R55-B	1321-3RA55-B	✓	
		Heavy	1321-3R55-B	1321-3RA55-B	1321-3R80-B	1321-3RA80-B	✓	

(1) Input line reactors were sized based on the NEC fundamental motor amps. Output line reactors were sized based on the VFD rated output currents.

Input and Output Reactors - 380…480V, 50/60 Hz, Three-Phase, 3% Impedance

			Input Line Reactor [1]		Output Reactor [1]		Used with PowerFlex Drive	
kW	Hp	Duty	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	753/755
0.25	0.33	Heavy	1321-3R1-C	1321-3RA1-C	1321-3R2-B	1321-3RA2-B	✓	
0.37	0.5	Normal	1321-3R1-C	1321-3RA1-C	1321-3R2-B	1321-3RA2-B	✓	
0.55	0.75	Heavy	1321-3R2-A	1321-3RA2-A	1321-3R2-A	1321-3RA2-A	✓	
0.75	1	Normal	1321-3R2-A	1321-3RA2-A	1321-3R2-A	1321-3RA2-A	✓	✓
1.1	1.5	Heavy	1321-3R4-C	1321-3RA4-C	1321-3R4-B	1321-3RA4-B	✓	✓
1.5	2	Normal	1321-3R4-B	1321-3RA4-B	1321-3R4-B	1321-3RA4-B	✓	✓
		Heavy	1321-3R4-B	1321-3RA4-B	1321-3R8-C	1321-3RA8-C	✓	✓
2.2	3	Normal	1321-3R8-C	1321-3RA8-C	1321-3R8-C	1321-3RA8-C	✓	✓
		Heavy	1321-3R8-C	1321-3RA8-C	1321-3R8-B	1321-3RA8-B	✓	✓
4	5	Normal	1321-3R8-B	1321-3RA8-B	1321-3R8-B	1321-3RA8-B	✓	✓
		Heavy	1321-3R8-B	1321-3RA8-B	1321-3R12-B	1321-3RA12-B	✓	✓
5.5	7.5	Normal	1321-3R12-B	1321-3RA12-B	1321-3R12-B	1321-3RA12-B	✓	✓
		Heavy	1321-3R12-B	1321-3RA12-B	1321-3R18-B	1321-3RA18-B	✓	✓
7.5	10	Normal	1321-3R18-B	1321-3RA18-B	1321-3R18-B	1321-3RA18-B	✓	✓
		Heavy	1321-3R18-B	1321-3RA18-B	1321-3R25-B	1321-3RA25-B	✓	✓
11	15	Normal	1321-3R25-B	1321-3RA25-B	1321-3R25-B	1321-3RA25-B	✓	✓
		Heavy	1321-3R25-B	1321-3RA25-B	1321-3R25-B	1321-3RA25-B	✓	✓
15	20	Normal	1321-3R35-B	1321-3RA35-B	1321-3R25-B	1321-3RA25-B	✓	✓
		Heavy	1321-3R35-B	1321-3RA35-B	1321-3R35-B	1321-3RA35-B	✓	✓
18.5	25	Normal	1321-3R35-B	1321-3RA35-B	1321-3R35-B	1321-3RA35-B	✓	✓
		Heavy	1321-3R35-B	1321-3RA35-B	1321-3R45-B	1321-3RA45-B	✓	✓
22	30	Normal	1321-3R45-B	1321-3RA45-B	1321-3R45-B	1321-3RA45-B	✓	✓
		Heavy	1321-3R45-B	1321-3RA45-B	1321-3R55-B	1321-3RA55-B	✓	✓
30	40	Normal	1321-3R55-B	1321-3RA55-B	1321-3R55-B	1321-3RA55-B	✓	✓
		Heavy	1321-3R55-B	1321-3RA55-B	1321-3R80-B	1321-3RA80-B	✓	✓
37	50	Normal	1321-3R80-B	1321-3RA80-B	1321-3R80-B	1321-3RA80-B	✓	✓
		Heavy	1321-3R80-B	1321-3RA80-B	1321-3R80-B	1321-3RA80-B		✓
45	60	Normal/Heavy	1321-3R80-B	1321-3RA80-B	1321-3R80-B	1321-3RA80-B		✓
55	75	Normal/Heavy	1321-3R100-B	1321-3RA100-B	1321-3R100-B	1321-3RA100-B		✓
75	100	Normal/Heavy	1321-3R130-B	1321-3RA130-B	1321-3R130-B	1321-3RA130-B		✓
90	125	Normal/Heavy	1321-3R160-B	1321-3RA160-B	1321-3R160-B	1321-3RA160-B		✓
110	150	Normal	1321-3R200-B	1321-3RA200-B	1321-3R200-C	1321-3RA200-C		✓
		Heavy	1321-3R200-B	1321-3RA200-B	1321-3R200-C	1321-3RA200-C		✓
–	200	Normal/Heavy	1321-3RB250-B	1321-3RAB250-B	1321-3RB250-B	1321-3RAB250-B		✓
132	–	Normal/Heavy	1321-3RB250-B	1321-3RAB250-B	1321-3RB250-B	1321-3RAB250-B		✓
160	250	Normal/Heavy	1321-3RB320-B	1321-3RAB320-B	1321-3RB320-B	1321-3RAB320-B		✓
200	300	Normal	1321-3RB400-B	1321-3RAB400-B	1321-3RB400-B	1321-3RAB400-B		✓
		Heavy	1321-3RB400-B	1321-3RAB400-B	1321-3RB400-B	1321-3RAB400-B		✓
–	350	Normal/Heavy	1321-3R500-B	1321-3R500-B	1321-3R500-B	1321-3R500-B		✓
250	–	Normal/Heavy	1321-3R500-B	1321-3RA500-B	1321-3R500-B	1321-3RA500-B		✓

continued

Input and Output Reactors - 380…480V, 50/60 Hz, Three-Phase, 3% Impedance (continued)

kW	Hp	Duty [2]	Input Line Reactor [1]		Output Reactor [1]		Used with PowerFlex Drive	
			IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	753/755
–	400	Light/Normal/Heavy	1321-3R500-B	1321-3RA500-B	1321-3R500-B	1321-3RA500-B		✓
315	–	Light/Normal/Heavy	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓
–	450	Light/Normal/Heavy	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓
355	–	Light/Normal/Heavy	1321-3R750-B	1321-3RA750-B	1321-3R750-B	1321-3RA750-B		✓
–	500	Light	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓
		Normal/Heavy	1321-3R750-B	1321-3RA750-B	1321-3R750-B	1321-3RA750-B		✓
400	–	Light/Heavy	1321-3R750-B	1321-3RA750-B	1321-3R750-B	1321-3RA750-B		✓
		Normal	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B		✓
–	600	Light/Normal/Heavy	1321-3R750-B	1321-3RA750-B	1321-3R750-B	1321-3RA750-B		✓
450	–	Light	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B		✓
–	650	Light	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B		✓
		Normal	1321-3R750-B	1321-3RA750-B	1321-3R750-B	1321-3RA750-B		✓
–	700	Light/Normal/Heavy	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B		✓
–	750	Heavy	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B		✓
500	–	Normal/Heavy	1321-3R1000-B	1321-3RA1000-B	1321-3R1000-B	1321-3RA1000-B		✓
–	800	Light/Normal/Heavy	1321-3R1000-B	1321-3RA1000-B	1321-3R1000-B	1321-3RA1000-B		✓
560	–	Light/Normal/Heavy	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓ [3]
630	900	Light/Normal/Heavy	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓ [3]
710	1000	Light/Normal/Heavy	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓ [3]
800	1100	Light/Normal	1321-3R750-B	1321-3RA750-B	1321-3R750-B	1321-3RA750-B		✓ [3]
850	–	Light/Normal	1321-3R750-B	1321-3RA750-B	1321-3R750-B	1321-3RA750-B		✓ [3]
900	–	Light	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B		✓ [3]
–	1250	Light/Normal	1321-3R750-B	1321-3RA750-B	1321-3R750-B	1321-3RA750-B		✓ [3]
–	1350	Light	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B		✓ [3]
–	1500	Light	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B		✓ [4]
1000	–	Light	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B		✓ [4]
–	2000	Light	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B		✓ [4]
1400	–	Light	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B		✓ [4]

(1) Input line reactors were sized based on the NEC fundamental motor amps. Output line reactors were sized based on the VFD rated output currents.

(2) Light Duty refers to PowerFlex 755 drives only.

(3) Requires two reactors wired in parallel.

(4) Requires three reactors wired in parallel.

Input and Output Reactors - 380…480V, 50/60 Hz, Three-Phase, 5% Impedance

			Input Line Reactor ‡		Output Reactor ‡		Used with PowerFlex Drive	
kW	Hp	Duty	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	753/755
0.25	0.33	Heavy	1321-3R1-B	1321-3RA1-B	1321-3R2-C	1321-3RA2-C	✓	
0.37	0.5	Normal	1321-3R1-B	1321-3RA1-B	1321-3R2-C	1321-3RA2-C	✓	
0.55	0.75	Heavy	1321-3R2-C	1321-3RA2-C	1321-3R2-B	1321-3RA2-B	✓	
0.75	1	Normal	1321-3R2-B	1321-3RA2-B	1321-3R2-B	1321-3RA2-B	✓	✓
1.1	1.5	Heavy	1321-3R4-D	1321-3RA4-D	1321-3R4-D	1321-3RA4-D	✓	✓
1.5	2	Normal	1321-3R4-D	1321-3RA4-D	1321-3R4-D	1321-3RA4-D	✓	✓
		Heavy	1321-3R4-D	1321-3RA4-D	1321-3R8-D	1321-3RA8-D	✓	✓
2.2	3	Normal	1321-3R8-D	1321-3RA8-D	1321-3R8-D	1321-3RA8-D	✓	✓
		Heavy	1321-3R8-D	1321-3RA8-D	1321-3R8-C	1321-3RA8-C	✓	✓
4	5	Normal	1321-3R8-C	1321-3RA8-C	1321-3R8-C	1321-3RA8-C	✓	✓
		Heavy	1321-3R8-C	1321-3RA8-C	1321-3R12-C	1321-3RA12-C	✓	✓
5.5	7.5	Normal	1321-3R12-C	1321-3RA12-C	1321-3R12-C	1321-3RA12-C	✓	✓
		Heavy	1321-3R12-C	1321-3RA12-C	1321-3R18-C	1321-3RA18-C	✓	✓
7.5	10	Normal	1321-3R18-C	1321-3RA18-C	1321-3R18-C	1321-3RA18-C	✓	✓
		Heavy	1321-3R18-C	1321-3RA18-C	1321-3R25-C	1321-3RA25-C	✓	✓
11	15	Normal/Heavy	1321-3R25-C	1321-3RA25-C	1321-3R25-C	1321-3RA25-C	✓	✓
15	20	Normal	1321-3R35-C	1321-3RA35-C	1321-3R25-C	1321-3RA25-C	✓	✓
		Heavy	1321-3R35-C	1321-3RA35-C	1321-3R35-C	1321-3RA35-C	✓	✓
18.5	25	Normal	1321-3R35-C	1321-3RA35-C	1321-3R35-C	1321-3RA35-C	✓	✓
		Heavy	1321-3R35-C	1321-3RA35-C	1321-3R45-C	1321-3RA45-C	✓	✓
22	30	Normal	1321-3R45-C	1321-3RA45-C	1321-3R45-C	1321-3RA45-C	✓	✓
		Heavy	1321-3R45-C	1321-3RA45-C	1321-3R55-C	1321-3RA55-C	✓	✓
30	40	Normal	1321-3R55-C	1321-3RA55-C	1321-3R55-C	1321-3RA55-C	✓	✓
		Heavy	1321-3R55-C	1321-3RA55-C	1321-3R80-C	1321-3RA80-C	✓	✓
37	50	Normal	1321-3R80-C	1321-3RA80-C	1321-3R80-C	1321-3RA80-C	✓	✓
		Heavy	1321-3R80-C	1321-3RA80-C	1321-3R80-C	1321-3RA80-C		✓
45	60	Normal/Heavy	1321-3R80-C	1321-3RA80-C	1321-3R80-C	1321-3RA80-C		✓
55	75	Normal/Heavy	1321-3R100-C	1321-3RA100-C	1321-3R100-C	1321-3RA100-C		✓
75	100	Normal/Heavy	1321-3R130-C	1321-3RA130-C	1321-3R130-C	1321-3RA130-C		✓
90	125	Normal/Heavy	1321-3R160-C	1321-3RA160-C	1321-3R160-C	1321-3RA160-C		✓
110	150	Normal	1321-3R200-C	1321-3RA200-C	1321-3R200-C	1321-3RA200-C		✓
		Heavy	1321-3R200-C	1321-3RA200-C	1321-3R200-C	1321-3RA200-C		✓
–	200	Normal/Heavy	1321-3RB250-C	1321-3RAB250-C	1321-3RB250-C	1321-3RAB250-C		✓
132	–	Normal/Heavy	1321-3RB320-C	1321-3RAB320-C	1321-3RB320-C	1321-3RAB320-C		✓
160	250	Normal/Heavy	1321-3RB320-C	1321-3RAB320-C	1321-3RB320-C	1321-3RAB320-C		✓
–	300	Normal/Heavy	1321-3RB400-C	1321-3RAB400-C	1321-3RB400-C	1321-3RAB400-C		✓
200	–	Normal/Heavy	1321-3RB400-C	1321-3RAB400-C	1321-3RB400-C	1321-3RAB400-C		✓
–	350	Normal/Heavy	1321-3R500-C	1321-3R500-C	1321-3R500-C	1321-3R500-C		✓
250	–	Normal/Heavy	1321-3R500-C	1321-3RA500-C	1321-3R500-C	1321-3RA500-C		✓

continued

Input and Output Reactors - 380…480V, 50/60 Hz, Three-Phase, 5% Impedance (continued)

kW	Hp	Duty [2]	Input Line Reactor [1]		Output Reactor [1]		Used with PowerFlex Drive	
			IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	753/755
–	400	Light/Normal/Heavy	1321-3R500-C	1321-3RA500-C	1321-3R500-C	1321-3RA500-C		✓
315	–	Light/Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓
–	450	Light/Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓
355	–	Light/Normal/Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C		✓
–	500	Light	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓
		Normal/Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C		✓
400	–	Light/Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C		✓
		Normal	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C		✓
–	600	Light/Normal/Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C		✓
450	–	Light	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C		✓
500	–	Normal/Heavy	1321-3R1000-C	1321-3RA1000-C	1321-3R1000-C	1321-3RA1000-C		✓
–	650	Light	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C		✓
		Normal	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C		✓
–	700	Light/Normal/Heavy	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C		✓
–	750	Heavy	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C		✓
–	800	Light/Normal/Heavy	1321-3R1000-C	1321-3RA1000-C	1321-3R1000-C	1321-3RA1000-C		✓
560	–	Light/Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓ [3]
630	–	Light/Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓ [3]
–	900	Light/Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓ [3]
710	–	Light/Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓ [3]
–	1000	Light/Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓ [3]
–	1100	Light/Normal	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C		✓ [3]
800	–	Light/Normal	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C		✓ [3]
850	–	Light/Normal	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C		✓ [3]
–	1250	Light/Normal	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C		✓ [3]
900	–	Light	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C		✓ [3]
–	1350	Light	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C		✓ [3]
–	1500	Light	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C		✓ [4]
1000	–	Light	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C		✓ [4]
–	2000	Light	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C		✓ [4]
1400	–	Light	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C		✓ [4]

(1) Input line reactors were sized based on the NEC fundamental motor amps. Output line reactors were sized based on the VFD rated output currents.
(2) Light Duty refers to PowerFlex 755 drives only.
(3) Requires two output reactors wired in parallel.
(4) Requires three reactors wired in parallel.

Input and Output Reactors - 500…690V, 50/60 Hz, Three-Phase, 3% Impedance

			Input Line Reactor [1]		Output Reactor [1]		Used with PowerFlex Drive	
kW	Hp	Duty	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	753/755
0.25	0.33	Heavy	1321-3R1-C [2]	1321-3RA1-C [2]	1321-3R1-B [2]	1321-3RA1-B [2]	✓	
0.37	0.5	Normal	1321-3R1-C [2]	1321-3RA1-C [2]	1321-3R1-B [2]	1321-3RA1-B [2]	✓	
0.55	0.75	Heavy	1321-3R2-B [2]	1321-3RA2-B [2]	1321-3R2-B [2]	1321-3RA2-B [2]	✓	
0.75	1	Normal	1321-3R2-B [2]	1321-3RA2-B [2]	1321-3R2-B [2]	1321-3RA2-B [2]	✓	✓
		Heavy	1321-3R2-B [2]	1321-3RA2-B [2]	1321-3R4-D [2]	1321-3RA4-D [2]		✓
1.1	1.5	Heavy	1321-3R2-A [2]	1321-3RA2-A [2]	1321-3R4-D [2]	1321-3RA4-D [2]	✓	
1.5	2	Normal	1321-3R4-C [2]	1321-3RA4-C [2]	1321-3R4-D [2]	1321-3RA4-D [2]	✓	
		Heavy	1321-3R4-C [2]	1321-3RA4-C [2]	1321-3R4-C [2]	1321-3RA4-C [2]	✓	✓
		Normal	1321-3R4-D [2]	1321-3RA4-D [2]	1321-3R4-D [2]	1321-3RA4-D [2]		✓
		Heavy	1321-3R4-D [2]	1321-3RA4-D [2]	1321-3R4-C [2]	1321-3RA4-C [2]		✓
2.2	3	Normal	1321-3R4-C [2]	1321-3RA4-C [2]	1321-3R4-C [2]	1321-3RA4-C [2]	✓	✓
		Heavy	1321-3R4-C [2]	1321-3RA4-C [2]	1321-3R8-C [2]	1321-3RA8-C [2]	✓	
4	5	Normal	1321-3R8-C [2]	1321-3RA8-C [2]	1321-3R8-C [2]	1321-3RA8-C [2]	✓	✓
		Heavy	1321-3R8-C [2]	1321-3RA8-C [2]	1321-3R12-C [2]	1321-3RA12-C [2]	✓	✓
5.5	7.5	Normal	1321-3R12-C [2]	1321-3RA12-C [2]	1321-3R12-C [2]	1321-3RA12-C [2]	✓	✓
		Heavy	1321-3R12-C [2]	1321-3RA12-C [2]	1321-3R12-B [2]	1321-3RA12-B [2]	✓	✓
7.5	10	Normal	1321-3R12-B [2]	1321-3RA12-B [2]	1321-3R12-B [2]	1321-3RA12-B [2]	✓	✓
		Heavy	1321-3R12-B [2]	1321-3RA12-B [2]	1321-3R18-B [2]	1321-3RA18-B [2]	✓	✓
11	15	Normal	1321-3R18-B [2]	1321-3RA18-B [2]	1321-3R18-B [2]	1321-3RA18-B [2]	✓	✓
		Heavy	1321-3R18-B [2]	1321-3RA18-B [2]	1321-3R25-B [2]	1321-3RA25-B [2]	✓	✓
15	20	Normal	1321-3R25-B [2]	1321-3RA25-B [2]	1321-3R25-B [2]	1321-3RA25-B [2]	✓	✓
		Heavy	1321-3R25-B [2]	1321-3RA25-B [2]	1321-3R35-C [2]	1321-3RA35-C [2]	✓	✓
18.5	25	Normal	1321-3R35-C [2]	1321-3RA35-C [2]	1321-3R35-C [2]	1321-3RA35-C [2]	✓	✓
		Heavy	1321-3R35-C [2]	1321-3RA35-C [2]	1321-3R35-B [2]	1321-3RA35-B [2]	✓	✓
22	30	Normal	1321-3R35-B [2]	1321-3RA35-B [2]	1321-3R35-B [2]	1321-3RA35-B [2]	✓	✓
		Heavy	1321-3R35-B [2]	1321-3RA35-B [2]	1321-3R45-B [2]	1321-3RA45-B [2]	✓	✓
30	40	Normal	1321-3R45-B [2]	1321-3RA45-B [2]	1321-3R45-B [2]	1321-3RA45-B [2]	✓	✓
		Heavy	1321-3R45-B [2]	1321-3RA45-B [2]	1321-3R55-B [2]	1321-3RA55-B [2]	✓	✓
37	50	Normal	1321-3R55-B	1321-3RA55-B	1321-3R55-B	1321-3RA55-B	✓	✓
		Heavy	1321-3R55-B	1321-3RA55-B	1321-3R80-B	1321-3RA80-B		✓
45	60	Normal/Heavy	1321-3R80-B	1321-3RA80-B	1321-3R80-B	1321-3RA80-B		✓
55	75	Normal/Heavy	1321-3R80-B	1321-3RA80-B	1321-3R80-B	1321-3RA80-B		✓
75	100	Normal/Heavy	1321-3R100-B	1321-3RA100-B	1321-3R100-B	1321-3RA100-B		✓
90	125	Normal/Heavy	1321-3R130-B	1321-3RA130-B	1321-3R130-B	1321-3RA130-B		✓
110	150	Normal	1321-3R160-B	1321-3RA160-B	1321-3R160-B	1321-3RA160-B		✓
–	300	Heavy	1321-3RB320-B	1321-3RAB320-B	1321-3RB320-B	1321-3RAB320-B		✓
200	–	Heavy	1321-3R250-B	1321-3RA250-B	1321-3R250-B	1321-3RA250-B		✓
–	350	Light/Normal/Heavy	1321-3RB400-B	1321-3RAB400-B	1321-3RB400-B	1321-3RAB400-B		✓
250	–	Normal/Heavy	1321-3RB320-B	1321-3RAB320-B	1321-3RB320-B	1321-3RAB320-B		✓

continued

Input and Output Reactors - 500…690V, 50/60 Hz, Three-Phase, 3% Impedance (continued)

kW	Hp	Duty	Input Line Reactor [1]		Output Reactor [1]		Used with PowerFlex Drive	
			IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	753/755
–	400	Light/Normal/Heavy	1321-3RB400-B	1321-3RAB400-B	1321-3RB400-B	1321-3RAB400-B		✓
300	–	Heavy	1321-3RB400-B	1321-3RAB400-B	1321-3RB400-B	1321-3RAB400-B		✓
–	450	Light/Normal/Heavy	1321-3R500-B	1321-3RA500-B	1321-3R500-B	1321-3RA500-B		✓
315	–	Light/Normal	1321-3RB400-B	1321-3RAB400-B	1321-3RB400-B	1321-3RAB400-B		✓
–	500	Light/Normal/Heavy	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓
355	–	Light/Normal/Heavy	1321-3R500-B	1321-3RA500-B	1321-3R500-B	1321-3RA500-B		✓
–	550	Light	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓
375	–	Heavy	1321-3R500-B	1321-3RA500-B	1321-3R500-B	1321-3RA500-B		✓
400	–	Light/Normal/Heavy	1321-3R500-B	1321-3RA500-B	1321-3R500-B	1321-3RA500-B		✓
–	600	Normal/Heavy	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓
450	–	Light/Normal	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓
500	–	Light/Normal/Heavy	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓
–	700	Light/Normal/Heavy	1321-3R750-B	1321-3RA750-B	1321-3R750-B	1321-3RA750-B		✓
530	–	Light	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓
560	–	Normal/Heavy	1321-3R750-B	1321-3RA750-B	1321-3R750-B	1321-3RA750-B		✓
–	750	Heavy	1321-3R750-B	1321-3RA750-B	1321-3R750-B	1321-3RA750-B		✓
–	800	Light/Normal/Heavy	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B		✓
630	–	Light/Normal/Heavy	1321-3R750-B	1321-3RA750-B	1321-3R750-B	1321-3RA750-B		✓
–	900	Light/Normal/Heavy	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B		✓
710	–	Light/Normal/Heavy	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B		✓
–	950	Light/Normal	1321-3R1000-B	1321-3RA1000-B	1321-3R1000-B	1321-3RA1000-B		✓
750	–	Normal	1321-3R850-B	1321-3RA850-B	1321-3R850-B	1321-3RA850-B		✓
800	–	Light/Normal/Heavy	1321-3R1000-B	1321-3RA1000-B	1321-3R1000-B	1321-3RA1000-B		✓
–	1000	Light/Normal	1321-3R1000-B	1321-3RA1000-B	1321-3R1000-B	1321-3RA1000-B		✓
–	1100	Light	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓ [3]
850	–	Light	1321-3R1000-B	1321-3RA1000-B	1321-3R1000-B	1321-3RA1000-B		✓
900	–	Light/Normal	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓ [3]
1000	–	Light	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓ [3]
1100	–	Light/Normal	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓ [4]
–	1200	Light	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓ [4]
1500	–	Light/Normal	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓ [4]
–	1500	Light	1321-3R600-B	1321-3RA600-B	1321-3R600-B	1321-3RA600-B		✓ [4]

(1) Input line reactors were sized based on the NEC fundamental motor amps. Output line reactors were sized based on the VFD rated output currents.

(2) Only rated for 600V and cannot be used on 690V applications.

(3) Requires two reactors wired in parallel.

(4) Requires three reactors wired in parallel.

Input and Output Reactors - 500…690V, 50/60 Hz, Three-Phase, 5% Impedance

			Input Line Reactor [1]		Output Reactor [1]		Used with PowerFlex Drive	
kW	Hp	Duty	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	753/755
0.25	0.33	Heavy	1321-3R1-A [2]	1321-3RA1-A [2]	1321-3R1-B [2]	1321-3RA1-B [2]	✓	
0.37	0.5	Normal	1321-3R1-B [2]	1321-3RA1-B [2]	1321-3R1-B [2]	1321-3RA1-B [2]	✓	
0.55	0.75	Heavy	1321-3R2-C [2]	1321-3RA2-C [2]	1321-3R2-C [2]	1321-3RA2-C [2]	✓	
0.75	1	Normal	1321-3R2-C [2]	1321-3RA2-C [2]	1321-3R2-C [2]	1321-3RA2-C [2]	✓	✓
		Heavy	1321-3R2-C [2]	1321-3RA2-C [2]	1321-3R4-D [2]	1321-3RA4-D [2]		✓
1.1	1.5	Heavy	1321-3R2-B [2]	1321-3RA2-B [2]	1321-3R4-D [2]	1321-3RA4-D [2]	✓	
1.5	2	Normal/Heavy	1321-3R4-D [2]	1321-3RA4-D [2]	1321-3R4-D [2]	1321-3RA4-D [2]	✓	✓
2.2	3	Normal	1321-3R4-D [2]	1321-3RA4-D [2]	1321-3R4-D [2]	1321-3RA4-D [2]	✓	✓
		Heavy	1321-3R4-D [2]	1321-3RA4-D [2]	1321-3R8-D [2]	1321-3RA8-D [2]	✓	✓
4	5	Normal	1321-3R8-D [2]	1321-3RA8-D [2]	1321-3R8-D [2]	1321-3RA8-D [2]	✓	✓
		Heavy	1321-3R8-D [2]	1321-3RA8-D [2]	1321-3R12-C [2]	1321-3RA12-C [2]	✓	✓
5.5	7.5	Normal/Heavy	1321-3R12-C [2]	1321-3RA12-C [2]	1321-3R12-C [2]	1321-3RA12-C [2]	✓	✓
7.5	10	Normal	1321-3R12-C [2]	1321-3RA12-C [2]	1321-3R12-C [2]	1321-3RA12-C [2]	✓	✓
		Heavy	1321-3R12-C [2]	1321-3RA12-C [2]	1321-3R18-C [2]	1321-3RA18-C [2]	✓	✓
11	15	Normal	1321-3R18-C [2]	1321-3RA18-C [2]	1321-3R18-C [2]	1321-3RA18-C [2]	✓	✓
		Heavy	1321-3R18-C [2]	1321-3RA18-C [2]	1321-3R25-C [2]	1321-3RA25-C [2]	✓	✓
15	20	Normal	1321-3R25-C [2]	1321-3RA25-C [2]	1321-3R25-C [2]	1321-3RA25-C [2]	✓	✓
		Heavy	1321-3R25-C [2]	1321-3RA25-C [2]	1321-3R35-C [2]	1321-3RA35-C [2]	✓	✓
18.5	25	Normal/Heavy	1321-3R35-C [2]	1321-3RA35-C [2]	1321-3R35-C [2]	1321-3RA35-C [2]	✓	✓
22	30	Normal	1321-3R35-C [2]	1321-3RA35-C [2]	1321-3R35-C [2]	1321-3RA35-C [2]	✓	✓
		Heavy	1321-3R35-C [2]	1321-3RA35-C [2]	1321-3R45-C [2]	1321-3RA45-C [2]	✓	✓
30	40	Normal	1321-3R45-C [2]	1321-3RA45-C [2]	1321-3R45-C [2]	1321-3RA45-C [2]	✓	✓
		Heavy	1321-3R45-C [2]	1321-3RA45-C [2]	1321-3R55-C [2]	1321-3RA55-C [2]	✓	✓
37	50	Normal	1321-3R55-C	1321-3RA55-C	1321-3R55-C	1321-3RA55-C	✓	✓
		Heavy	1321-3R55-C	1321-3RA55-C	1321-3R80-C	1321-3RA80-C		✓
45	60	Normal/Heavy	1321-3R80-C	1321-3RA80-C	1321-3R80-C	1321-3RA80-C		✓
55	75	Normal/Heavy	1321-3R80-C	1321-3RA80-C	1321-3R80-C	1321-3RA80-C		✓
75	100	Normal/Heavy	1321-3R100-C	1321-3RA100-C	1321-3R100-C	1321-3RA100-C		✓
90	125	Normal/Heavy	1321-3R130-C	1321-3RA130-C	1321-3R130-C	1321-3RA130-C		✓
110	150	Normal	1321-3R160-C	1321-3RA160-C	1321-3R160-C	1321-3RA160-C		✓
–	300	Heavy	1321-3RB320-C	1321-3RAB320-C	1321-3RB320-C	1321-3RAB320-C		✓
200	–	Heavy	1321-3R250-C	1321-3RA250-C	1321-3R250-C	1321-3RA250-C		✓
–	350	Light/Normal/Heavy	1321-3RB400-C	1321-3RAB400-C	1321-3RB400-C	1321-3RAB400-C		✓
250	–	Normal/Heavy	1321-3RB320-C	1321-3RAB320-C	1321-3RB320-C	1321-3RAB320-C		✓
–	400	Light/Normal/Heavy	1321-3RB400-C	1321-3RAB400-C	1321-3RB400-C	1321-3RAB400-C		✓

continued

Input and Output Reactors - 500…690V, 50/60 Hz, Three-Phase, 5% Impedance (continued)

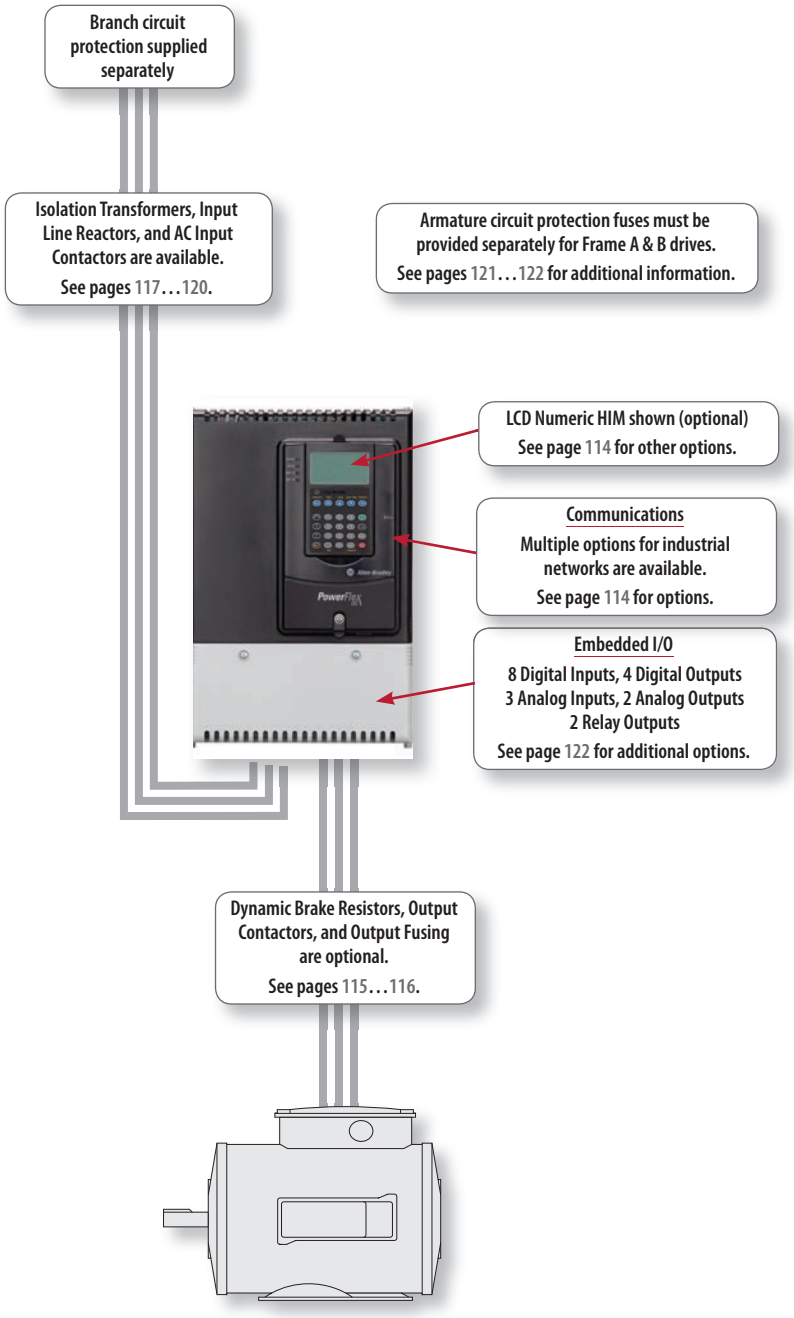
kW	Hp	Duty	Input Line Reactor [1]		Output Reactor [1]		Used with PowerFlex Drive	
			IP00 (Open Style)	IP11 (NEMA/UL Type 1)	IP00 (Open Style)	IP11 (NEMA/UL Type 1)	70	753/755
300	–	Heavy	1321-3RB400-C	1321-3RAB400-C	1321-3RB400-C	1321-3RAB400-C		✓
315	–	Light/Normal	1321-3RB400-C	1321-3RAB400-C	1321-3RB400-C	1321-3RAB400-C		✓
–	450	Light/Normal/Heavy	1321-3R500-C	1321-3RA500-C	1321-3R500-C	1321-3RA500-C		✓
–	500	Light/Normal	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓
355	–	Light/Normal/Heavy	1321-3R500-C	1321-3RA500-C	1321-3R500-C	1321-3RA500-C		✓
–	550	Light	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓
375	–	Heavy	1321-3R500-C	1321-3RA500-C	1321-3R500-C	1321-3RA500-C		✓
400	–	Light/Normal/Heavy	1321-3R500-C	1321-3RA500-C	1321-3R500-C	1321-3RA500-C		✓
–	600	Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓
450	–	Light/Normal/Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓
500	–	Heavy	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓
–	700	Light/Normal/Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C		✓
530	–	Light	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓
–	750	Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C		✓
560	–	Normal/Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C		✓
–	800	Light/Normal/Heavy	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C		✓
630	–	Light/Normal/Heavy	1321-3R750-C	1321-3RA750-C	1321-3R750-C	1321-3RA750-C		✓
–	900	Light/Normal/Heavy	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C		✓
–	950	Light/Normal	1321-3R1000-C	1321-3RA1000-C	1321-3R1000-C	1321-3RA1000-C		✓
710	–	Light/Normal/Heavy	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C		✓
750	–	Normal	1321-3R850-C	1321-3RA850-C	1321-3R850-C	1321-3RA850-C		✓
–	1000	Light/Normal	1321-3R1000-C	1321-3RA1000-C	1321-3R1000-C	1321-3RA1000-C		✓
800	–	Light/Normal/Heavy	1321-3R1000-C	1321-3RA1000-C	1321-3R1000-C	1321-3RA1000-C		✓
–	1100	Light	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓ [3]
850	–	Light	1321-3R1000-C	1321-3RA1000-C	1321-3R1000-C	1321-3RA1000-C		✓
900	–	Light/Normal	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓ [3]
1000	–	Light	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓ [3]
1100	–	Light/Normal	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓ [4]
–	1200	Light	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓ [4]
1500	–	Light/Normal	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓ [4]
–	1500	Light	1321-3R600-C	1321-3RA600-C	1321-3R600-C	1321-3RA600-C		✓ [4]

(1) Input line reactors were sized based on the NEC fundamental motor amps. Output line reactors were sized based on the VFD rated output currents.
(2) Only rated for 600V and cannot be used on 690V applications.
(3) Requires two output reactors wired in parallel.
(4) Requires three reactors wired in parallel.

PowerFlex DC Drive

The PowerFlex DC drive combines powerful performance with flexible control to produce a highly functional, cost effective drive and control solution. This drive also offers many features that allow the user to easily configure the drive for most application needs. Basic drive modules are available in both regenerative and non-regenerative configurations and standard IP20 open type enclosure. The PowerFlex DC comes standard with an armature converter, regulated field converter for field weakening or economy applications, an advanced regulator with integrated DPI functionality, DC tachometer and encoder capability.

PowerFlex DC at a glance	
Ratings	
200…240V:	1.2…224 kW / 1.5…300 Hp / 7…1050 A
380…480V:	1.5…671 kW / 2…900 Hp / 4.1…1494 A
500…600V:	37…932 kW / 50…1250 Hp / 67.5…1688 A
690V::	298…1044 kW / 400…1400 Hp / 452…1582 A
Motor Control	• Full-wave • Full Control • 6-SCR • Field Weakening and Economize
Enclosures	• IP20, NEMA/UL Type Open
Additional Features	• Overload Protection • PID Control (Speed or Torque) • Adaptive Gain, Droop, Feedback Loss Switchover • TorqProve™ Control
Certifications	• c-UL-us • CE • EAC • IEC (Designed to Meet) • KCC • RCM • UL
Options	See pages 114…122



Additional Information

PowerFlex Digital DC Drive Technical Data, publication 20P-TD001
PowerFlex Digital DC Drive User Manual, publication 20P-UM001

Catalog Number Explanation

20P	4	1	A	D	4P1	R	A	0	N	N	N
	Motor Operation		Enclosure	Voltage Rating	Rating						

Product Selection

IP00/IP20, NEMA/UL Type Open

All drives are rated 150% overload for 60 seconds, 200% for 3 seconds.

200…240V AC, Three-Phase Drives

Drive Output Rating - 230V AC Input			Regenerative Drives	
Normal Duty kW	Normal Duty Hp	Amps	Cat. No.	Frame Size
1.2	1.5	7	20P41AB7P0RA0NNN	A
1.5	2	9	20P41AB9P0RA0NNN	A
2.2	3	12	20P41AB012RA0NNN	A
3.7	5	20	20P41AB020RA0NNN	A
5.5	7.5	29	20P41AB029RA0NNN	A
7.5	10	38	20P41AB038RA0NNN	A
11	15	55	20P41AB055RA0NNN	A
15	20	73	20P41AB073RA0NNN	A
18.5	25	93	20P41AB093RA0NNN	A
22	30	110	20P41AB110RA0NNN	A
30	40	146	20P41AB146RA0NNN	B
37	50	180	20P41AB180RA0NNN	B
45	60	218	20P41AB218RA0NNN	B
56	75	265	20P41AB265RA0NNN	B
75	100	360	20P41AB360RA0NNN	B
93	125	434	20P41AB434RA0NNN	B
112	150	521	20P41AB521RA0NNN	C
149	200	700	20P41AB700RA0NNN	C
186	250	875	20P41AB875RA0NNN	D
224	300	1050	20P41AB1K0RA0NNN	D

380…480V AC, Three-Phase Drives

Drive Output Rating - 460V AC Input			Non-regenerative Drives	Regenerative Drives	
Normal Duty kW	Normal Duty Hp	Amps	Cat. No.	Cat. No.	Frame Size
1.5	2	4.1	20P21AD4P1RA0NNN	20P41AD4P1RA0NNN	A
2.2	3	6	20P21AD6P0RA0NNN	20P41AD6P0RA0NNN	A
3.7	5	10	20P21AD010RA0NNN	20P41AD010RA0NNN	A
5.5	7.5	14	20P21AD014RA0NNN	20P41AD014RA0NNN	A
7.5	10	19	20P21AD019RA0NNN	20P41AD019RA0NNN	A
11	15	27	20P21AD027RA0NNN	20P41AD027RA0NNN	A
15	20	35	20P21AD035RA0NNN	20P41AD035RA0NNN	A
18.5	25	45	20P21AD045RA0NNN	20P41AD045RA0NNN	A
22	30	52	20P21AD052RA0NNN	20P41AD052RA0NNN	A
30	40	73	20P21AD073RA0NNN	20P41AD073RA0NNN	A
37	50	86	20P21AD086RA0NNN	20P41AD086RA0NNN	A
45	60	100	20P21AD100RA0NNN	20P41AD100RA0NNN	A
56	75	129	20P21AD129RA0NNN	20P41AD129RA0NNN	A
75	100	167	20P21AD167RA0NNN	20P41AD167RA0NNN	B
93	125	207	20P21AD207RA0NNN	20P41AD207RA0NNN	B
112	150	250	20P21AD250RA0NNN	20P41AD250RA0NNN	B
149	200	330	20P21AD330RA0NNN	20P41AD330RA0NNN	B
187	250	412	20P21AD412RA0NNN	20P41AD412RA0NNN	B
224	300	495	20P21AD495RA0NNN	20P41AD495RA0NNN	C
298	400	667	20P21AD667RA0NNN	20P41AD667RA0NNN	C
373	500	830	20P21AD830RA0NNN	20P41AD830RA0NNN	D
447	600	996	20P21AD996RA0NNN	20P41AD996RA0NNN	D
552	700	1162	20P21AD1K1RA0NNN	20P41AD1K1RA0NNN	D
597	800	1328	20P21AD1K3RA0NNN	20P41AD1K3RA0NNN	D
671	900	1494	20P21AD1K4RA0NNN	20P41AD1K4RA0NNN	D

500…600V AC, Three-Phase Drives

Drive Output Rating - 460V AC Input			Non-regenerative Drives	Regenerative Drives	
Normal Duty kW	Normal Duty Hp	Amps	Cat. No.	Cat. No.	Frame Size
37	50	67.5	20P21AE067RA0NNN	20P41AE067RA0NNN	B
56	75	101.3	20P21AE101RA0NNN	20P41AE101RA0NNN	B
75	100	135	20P21AE135RA0NNN	20P41AE135RA0NNN	B
149	200	270	20P21AE270RA0NNN	20P41AE270RA0NNN	B
224	300	405	20P21AE405RA0NNN	20P41AE405RA0NNN	B
298	400	540	20P21AE540RA0NNN	20P41AE540RA0NNN	C
373	500	675	20P21AE675RA0NNN	20P41AE675RA0NNN	C
447	600	810	20P21AE810RA0NNN	20P41AE810RA0NNN	D
597	800	1080	20P21AE1K0RA0NNN	20P41AE1K0RA0NNN	D
671	900	1215	20P21AE1K2RA0NNN	20P41AE1K2RA0NNN	D
746	1000	1350	20P21AE1K3RA0NNN	20P41AE1K3RA0NNN	D
932	1250	1688	20P21AE1K6RA0NNN	20P41AE1K6RA0NNN	D

690V AC, Three-Phase Drives

Drive Output Rating - 460V AC Input			Non-regenerative Drives	Regenerative Drives	
Normal Duty kW	Normal Duty Hp	Amps	Cat. No.	Cat. No.	Frame Size
298	400	452	20P21AF452RA0NNN	20P41AF452RA0NNN	C
373	500	565	20P21AF565RA0NNN	20P41AF565RA0NNN	C
447	600	678	20P21AF678RA0NNN	20P41AF678RA0NNN	D
552	700	791	20P21AF791RA0NNN	20P41AF791RA0NNN	D
597	800	904	20P21AF904RA0NNN	20P41AF904RA0NNN	D
671	900	1017	20P21AF1K0RA0NNN	20P41AF1K0RA0NNN	D
746	1000	1130	20P21AF1K1RA0NNN	20P41AF1K1RA0NNN	D
820	1100	1243	20P21AF1K2RA0NNN	20P41AF1K2RA0NNN	D
932	1250	1413	20P21AF1K4RA0NNN	20P41AF1K4RA0NNN	D
1044	1400	1582	20P21AF1K5RA0NNN	20P41AF1K5RA0NNN	D

PowerFlex DC Drive Options


Blank Plate


20-HIM-A3


20-HIM-A5


20-HIM-A6


20-HIM-C3S


20-HIM-C5S


20-HIM-C6S

Human Interface Modules

Description	Cat. No.
No HIM (Blank Plate), Handheld/Local (Drive Mount)	20-HIM-A0
LCD Display, Full Numeric Keypad, Handheld/Local (Drive Mount)	20-HIM-A3
LCD Display, Programmer Only, Handheld/Local (Drive Mount)	20-HIM-A5
Enhanced, LCD, Full Numeric Keypad, Handheld/Local (Drive Mount)	20-HIM-A6
Remote (Panel Mount) LCD Display, Full Numeric Keypad (1) (2)	20-HIM-C3S
Remote (Panel Mount) LCD Display, Programmer Only (1) (2)	20-HIM-C5S
Enhanced, LCD, Full Numeric Keypad (1) (2)	20-HIM-C6S

(1) IP66, NEMA Type 4X/12—for indoor use only.

(2) Includes a 1202-C30 interface cable (3 m/9.8 ft) for connection to drive.

Human Interface Module (HIM) Accessories

Description	Cat. No.
Bezel Kit for LCD HIMs, NEMA Type 1 (1)	20-HIM-B1
PowerFlex HIM Interface Cable, 1 m (3.3 ft) (2)	20-HIM-H10
Cable Kit (Male-Female) (3)	
0.33 m (1.1 ft)	1202-H03
1 m (3.3 ft)	1202-H10
3 m (9.8 ft)	1202-H30
9 m (29.5 ft)	1202-H90
DPI/SCANport™ One to Two Port Splitter Cable	1203-S03

(1) Includes a 1202-C30 interface cable (3 m/9.8 ft) for connection to drive.

(2) Required only when HIM is used as handheld or remote.

(3) Required in addition to 20-HIM-H10 for distances up to a total maximum of 10 m (32.8 ft).

Communication Accessories

Description	Cat. No.
Serial Null Modem Adapter	1203-SNM
Smart Self-powered Serial Converter (RS232) includes 1203-SFC and 1202-C10 Cables	1203-SSS
Universal Serial Bus™ (USB) Converter includes 2m USB, 20-HIM-H10 & 22-HIM-H10 Cables	1203-USB

Communication Option Kits

Description	Cat. No.
BACnet® MS/TP RS485 Communication Adapter	20-COMM-B
ControlNet™ Communication Adapter (Coax)	20-COMM-C
DeviceNet™ Communication Adapter	20-COMM-D
EtherNet/IP™ Communication Adapter	20-COMM-E
HVAC Communication Adapter	20-COMM-H
Modbus/TCP Communication Adapter	20-COMM-M
PROFIBUS™ DP Communication Adapter	20-COMM-P
ControlNet™ Communication Adapter (Fiber)	20-COMM-Q
Remote I/O Communication Adapter (1)	20-COMM-R
RS485 DF1 Communication Adapter	20-COMM-S
External Communications Kit Power Supply	20-XCOMM-AC-PS1
DPI External Communications Kit (2)	20-XCOMM-DC-BASE
External DPI I/O Option Board	20-XCOMM-IO-OPT1
Compact I/O Module (3 Channel)	1769-SM1

(1) This item has Silver Series status. For information, refer to http://www.rockwellautomation.com/legacy.

(2) For use only with DPI External Communications Kits 20-XCOMM-DC-BASE.

I/O Option Kits

Description	Cat. No.
I/O Expansion Board (4 - 24V DC Digital Inputs, 4 Digital Outputs, 2 Analog Outputs)	20P-S5V62
115V AC to 24V DC 8 Channel I/O Converter Board (converts 8 Digital Inputs)	20P-S520L

Feedback Options

Description	Cat. No.
Resolver Feedback Option Module	20P-RES-A0

Dynamic Brake Resistors Kits and DC Output Contactors - 230V AC Input Drives

Frame	Drive Current Rating Code	DC Amps	AC Line Amps	Hp	Dynamic Brake Resistor Kit	Armature Voltage	Total DB Resistance	DC Loop Contactor Cat. No. (2)		DC Contactor Crimp Lugs (3)
					Cat. No.	Volts	Ohms	Drive without Dynamic Brake	Drive with Dynamic Brake	Cat. No.
A	7P0	7	5.7	1.5	1370-DBL62	240	20	1370-NC56	1370-DC56	1370-LG40
	9P0	9	7.4	2	1370-DBL63	240	20	1370-NC56	1370-DC56	1370-LG40
	012	12	9.8	3	1370-DBL64	240	15	1370-NC56	1370-DC56	1370-LG40
	020	20	16	5	1370-DBL65	240	8.6	1370-NC56	1370-DC56	1370-LG40
	029	29	24	7.5	1370-DBL66	240	6	1370-NC56	1370-DC56	1370-LG40
	038	38	31	10	1370-DBL67	240	5	1370-NC56	1370-DC56	1370-LG40
	055	55	45	15	1370-DBL68	240	3.5	1370-NC56	1370-DC56	1370-LG56
	073	73	60	20	1370-DBL69	240	2.6	1370-NC110	1370-DC110	1370-LG92
	093	93	76	25	1370-DBL70	240	2	1370-NC110	1370-DC110	1370-LG92
	110	110	90	30	1370-DBL71	240	2	1370-NC110	1370-DC110	1370-LG110
B	146	146	119	40	1370-DBL72	240	1.4	1370-NC180	1370-DC180	1370-LG160
	180	180	147	50	1370-DBL73	240	1.0	1370-NC180	1370-DC180	1370-LG180
	218	218	178	60	1370-DBL74	240	1.0	1370-NC280	1370-DC280	1370-LG228
	265	265	217	75	1370-DBL75	240	0.67	1370-NC280	1370-DC280	1370-LG268
	360	360	294	100	1370-DBL76	240	0.47	(1)	(1)	(4)
	434	434	355	125	(1)	240	0.4	(1)	(1)	(4)
C	521	521	426	150	(1)	240	0.322	(1)	(1)	(4)
	700	700	572	200	(1)	240	0.25	(1)	(1)	(4)
D	875	875	715	250	(1)	240	0.2	(1)	(1)	(4)
	1K0	1050	858	300	(1)	240	0.2	(1)	(1)	(4)

(1) No Dynamic Brake Resistor kit available for this drive rating - must be sourced locally.

(2) Coil voltage = 115V AC, 50/60 Hz.

(3) See DC Contactor Crimp Lug Kit Specifications in the PowerFlex Digital DC Drive Technical Data, publication 20D-TD001, for more information.

(4) Wire and Lug size dependant on enclosure dimensions and local codes.

Dynamic Brake Resistors Kits and DC Output Contactors - 460V AC Input Drives

Frame	Drive Current Rating Code	DC Amps	AC Line Amps	Hp	Dynamic Brake Resistor Kit	Armature Voltage	Total DB Resistance	DC Loop Contactor Cat. No. (2)		DC Contactor Crimp Lugs (3)
					Cat. No.	Volts	Ohms	Drive without Dynamic Brake	Drive with Dynamic Brake	Cat. No.
A	4P1	4.1	3.3	2	1370-DBH63	500	81	1370-NC56	1370-DC56	1370-LG40
	6P0	6	4.9	3	1370-DBH64	500	62	1370-NC56	1370-DC56	1370-LG40
	010	10	8.2	5	1370-DBH65	500	45	1370-NC56	1370-DC56	1370-LG40
	014	14	11.4	7.5	1370-DBH66	500	27	1370-NC56	1370-DC56	1370-LG40
	019	19	15.5	10	1370-DBH67	500	20	1370-NC56	1370-DC56	1370-LG40
	027	27	22.1	15	1370-DBH68	500	12	1370-NC56	1370-DC56	1370-LG40
	035	35	28.6	20	1370-DBH69	500	10	1370-NC56	1370-DC56	1370-LG40
	045	45	36.8	25	1370-DBH70	500	9	1370-NC56	1370-DC56	1370-LG52
	052	52	42.5	30	1370-DBH71	500	7	1370-NC56	1370-DC56	1370-LG52
	073	73	59.6	40	1370-DBH72	500	5.2	1370-NC110	1370-DC110	1370-LG92
	086	86	70.3	50	1370-DBH73	500	4	1370-NC110	1370-DC110	1370-LG92
	100	100	81.7	60	1370-DBH74	500	4	1370-NC110	1370-DC110	1370-LG110
	129	129	105.4	75	1370-DBH75	500	3	1370-NC180	1370-DC180	1370-LG140
B	167	167	136.4	100	1370-DBH76	500	2.1	1370-NC180	1370-DC180	1370-LG180
	207	207	169.1	125	1370-DBH77	500	2.1	1370-NC280	1370-DC280	1370-LG228
	250	250	204.3	150	1370-DBH78	500	1.5	1370-NC280	1370-DC280	1370-LG268
	330	330	269.6	200	1370-DBH79	500	1.05	(1)	(1)	(4)
	412	412	336.6	250	(1)	500	1	(1)	(1)	(4)
C	495	495	404.4	300	(1)	500	0.8	(1)	(1)	(4)
	667	667	544.9	400	(1)	500	0.625	(1)	(1)	(4)
D	800	830	678.1	500	(1)	500	0.463	(1)	(1)	(4)
	960	996	813.7	600	(1)	500	0.322	(1)	(1)	(4)
	1K1	1162	949.4	700	(1)	500	0.322	(1)	(1)	(4)
	1K3	1328	1085.0	800	(1)	500	0.255	(1)	(1)	(4)
	1K4	1494	1220.6	900	(1)	500	0.255	(1)	(1)	(4)

(1) No Dynamic Brake Resistor kit available for this drive rating - must be sourced locally.

(2) Coil voltage = 115V AC, 50/60 Hz.

(3) See DC Contactor Crimp Lug Kit Specifications in the PowerFlex Digital DC Drive Technical Data, publication 20D-TD001, for more information.

(4) Wire and Lug size dependant on enclosure dimensions and local codes.

AC Input Line Reactors and Contactors - 230V AC Input Drives

An AC contactor is not required if a DC contactor is used in the armature circuit.

Drive Cat. No.	DC Amps	AC Line Amps	Hp	IP00 (Open Style) Line Reactor	Line Reactor	AC Input Contactor
Regenerative				Cat. No.	kW (Hp)	Cat. No.
20P41AB7P0RA0NNN	7	5.7	1.5	1321-3R8-A	0.75 (1)	100-C12D10
20P41AB9P0RA0NNN	9	7.4	2	1321-3R12-A	1.49 (2)	100-C12D10
20P41AB012RA0NNN	12	9.8	3	1321-3R18-A	0.75…3.7 (1…5)	100-C12D10
20P41AB020RA0NNN	20	16	5	1321-3R18-A	0.75…3.7 (1…5)	100-C23D10
20P41AB029RA0NNN	29	24	7.5	1321-3R55-A	5.5…11 (7.5…15)	100-C30D10
20P41AB038RA0NNN	38	31	10	1321-3R55-A	5.5…11 (7.5…15)	100-C37D10
20P41AB055RA0NNN	55	45	15	1321-3R55-A	5.5…11 (7.5…15)	100-C60D10
20P41AB073RA0NNN	73	60	20	1321-3R80-A	15 (20)	100-C60D10
20P41AB093RA0NNN	93	76	25	1321-3R100-A	18.5…22 (25…30)	100-C85D10
20P41AB110RA0NNN	110	90	30	1321-3R100-A	18.5…22 (25…30)	100-D110D11
20P41AB146RA0NNN	146	119	40	1321-3R160-A	30…37 (40…50)	100-D140D11
20P41AB180RA0NNN	180	147	50	1321-3R160-A	30…37 (40…50)	100-D180D11
20P41AB218RA0NNN	218	178	60	1321-3RB250-A	45…56 (60…75)	100-D180D11
20P41AB265RA0NNN	265	217	75	1321-3RB250-A	45…56 (60…75)	100-D250ED11
20P41AB360RA0NNN	360	294	100	1321-3RB320-A	75 (100)	100-D300ED11
20P41AB434RA0NNN	434	355	125	1321-3RB400-A	93 (125)	100-D420ED11
20P41AB521RA0NNN	521	426	150	1321-3R500-A	112 (150)	100-D630ED11
20P41AB700RA0NNN	700	572	200	1321-3R600-A	149 (200)	100-D630ED11
20P41AB875RA0NNN	875	715	250	1321-3R750-A	186 (250)	100-D860ED11
20P41AB1K0RA0NNN	1050	858	300	1321-3R850-A	224 (300)	100-D860ED11

AC Input Line Reactors and Contactors - 460V AC Input Drives

Drive Cat. No.		DC Amps	AC Line Amps	Hp	IP00 (Open Style) Line Reactor	Line Reactor	AC Input Contactor
Non-Regenerative	Regenerative				Cat. No.	kW (Hp)	Cat. No.
20P21AD4P1RA0NNN	20P41AD4P1RA0NNN	4.1	3.3	2	1321-3R4-A	0.55 (0.75)	100-C12D10
20P21AD6P0RA0NNN	20P41AD6P0RA0NNN	6	4.9	3	1321-3R8-A	0.75 (1)	100-C12D10
20P21AD010RA0NNN	20P41AD010RA0NNN	10	8.2	5	1321-3R18-B	1.5…7.5 (2…10)	100-C12D10
20P21AD014RA0NNN	20P41AD014RA0NNN	14	11.4	7.5	1321-3R18-B	1.5…7.5 (2…10)	100-C12D10
20P21AD019RA0NNN	20P41AD019RA0NNN	19	15.5	10	1321-3R18-B	1.5…7.5 (2…10)	100-C23D10
20P21AD027RA0NNN	20P41AD027RA0NNN	27	22.1	15	1321-3R55-B	11…22 (15…30)	100-C23D10
20P21AD035RA0NNN	20P41AD035RA0NNN	35	28.6	20	1321-3R55-B	11…22 (15…30)	100-C30D10
20P21AD045RA0NNN	20P41AD045RA0NNN	45	36.8	25	1321-3R55-B	11…22 (15…30)	100-C37D10
20P21AD052RA0NNN	20P41AD052RA0NNN	52	42.5	30	1321-3R55-B	11…22 (15…30)	100-C43D10
20P21AD073RA0NNN	20P41AD073RA0NNN	73	59.6	40	1321-3R80-B	30 (40)	100-C60D10
20P21AD086RA0NNN	20P41AD086RA0NNN	86	70.3	50	1321-3R100-B	37…45 (50…60)	100-C85D10
20P21AD100RA0NNN	20P41AD100RA0NNN	100	81.7	60	1321-3R100-B	37…45 (50…60)	100-C85D10
20P21AD129RA0NNN	20P41AD129RA0NNN	129	105.4	75	1321-3R160-B	56…75 (75…100)	100-D110D11
20P21AD167RA0NNN	20P41AD167RA0NNN	167	136.4	100	1321-3R160-B	56…75 (75…100)	100-D140D11
20P21AD207RA0NNN	20P41AD207RA0NNN	207	169.1	125	1321-3RB250-B	93…112 (125…150)	100-D180D11
20P21AD250RA0NNN	20P41AD250RA0NNN	250	204.3	150	1321-3RB250-B	93…112 (125…150)	100-D210ED11
20P21AD330RA0NNN	20P41AD330RA0NNN	330	269.6	200	1321-3RB320-B	149 (200)	100-D300ED11
20P21AD412RA0NNN	20P41AD412RA0NNN	412	336.6	250	1321-3RB400-B	186.4 (250)	100-D420ED11
20P21AD495RA0NNN	20P41AD495RA0NNN	495	404.4	300	1321-3R500-B	223.7 (300)	100-D420ED11
20P21AD667RA0NNN	20P41AD667RA0NNN	667	544.9	400	1321-3R600-B	298.3 (400)	100-D630ED11
20P21AD830RA0NNN	20P41AD830RA0NNN	830	678.1	500	1321-3R750-B	372.8 (500)	100-D860ED11
20P21AD996RA0NNN	20P41AD996RA0NNN	996	813.7	600	1321-3R850-B	447,4 (600)	100-D860ED11
20P21AD1K1RA0NNN	20P41AD1K1RA0NNN	1162	949.4	700	1321-3R1000-B	552 (700)	100-G860KD22
20P21AD1K3RA0NNN	20P41AD1K3RA0NNN	1328	1085.0	800	2 x1321-3R600-B	596.6 (800)	100-G860KD22
20P21AD1K4RA0NNN	20P41AD1K4RA0NNN	1494	1220.6	900	2 x1321-3R600-B	671.1 (900)	100-G1200KD12

AC Input Line Reactors and Contactors - 575V AC Input Drives

Drive Cat. No.		DC Amps	AC Line Amps	Hp	IP00 (Open Style) Line Reactor	Line Reactor	AC Input Contactor
Non-Regenerative	Regenerative				Cat. No.	kW (Hp)	Cat. No.
20P21AE067RA0NNN	20P41AE067RA0NNN	67.5	55.1	50	1321-3R55-B	37 (50)	100-C60D10
20P21AE101RA0NNN	20P41AE101RA0NNN	101.25	82.7	75	1321-3R100-B	56 (75)	100-C85D10
20P21AE135RA0NNN	20P41AE135RA0NNN	135	110.3	100	1321-3R130-B	75 (100)	100-D110D11
20P21AE270RA0NNN	20P41AE270RA0NNN	270	220.6	200	1321-3RB250-B	149 (200)	100-D250ED11
20P21AE405RA0NNN	20P41AE405RA0NNN	405	330.9	300	1321-3RB320-B	224 (300)	100-D420ED11
20P21AE540RA0NNN	20P41AE540RA0NNN	540	441.2	400	1321-3RB500-B	298 (400)	100-D630ED11
20P21AE675RA0NNN	20P41AE675RA0NNN	675	551.5	500	1321-3R600-B	373 (500)	100-D630ED11
20P21AE810RA0NNN	20P41AE810RA0NNN	810	661.8	600	1321-3R750-B	447 (600)	100-D860ED11
20P21AE1K0RA0NNN	20P41AE1K0RA0NNN	1080	882.4	800	1321-3R1000-B	597 (800)	100-G700KD22
20P21AE1K2RA0NNN	20P41AE1K2RA0NNN	1215	992.7	900	1321-3R1000-B	671 (900)	100-G860KD22
20P21AE1K3RA0NNN	20P41AE1K3RA0NNN	1350	1103.0	1000	2 x 1321-3R600-B	746 (1000)	100-G1000KD12
20P21AE1K6RA0NNN	20P41AE1K6RA0NNN	1687.5	1378.7	1250	2 X 1321-3R750-B	–	(1)

(1) No AC input contactor available for this drive rating - must be sourced locally.

AC Input Line Reactors and Contactors - 690V AC Input Drives

Drive Cat. No.		DC Amps	AC Line Amps	Hp	IP00 (Open Style) Line Reactor	Line Reactor	AC Input Contactor
Non-Regenerative	Regenerative				Cat. No.	kW (Hp)	Cat. No.
20P21AF452RA0NNN	20P41AF452RA0NNN	452	369	400	1321-3RB500-C	–	100-D420ED11
20P21AF565RA0NNN	20P41AF565RA0NNN	565	462	500	1321-3RB600-C	–	100-D630ED11
20P21AF678RA0NNN	20P41AF678RA0NNN	678	554	600	1321-3R750-C	–	100-D630ED11
20P21AF791RA0NNN	20P41AF791RA0NNN	791	646	700	1321-3R750-C	–	100-D860ED11
20P21AF904RA0NNN	20P41AF904RA0NNN	904	739	800	1321-3R1000-C	–	100-D860ED11
20P21AF1K0RA0NNN	20P41AF1K0RA0NNN	1017	831	900	1321-3R1000-C	–	100-D860ED11
20P21AF1K1RA0NNN	20P41AF1K1RA0NNN	1130	923	1000	2 X 1321-3R600-C	–	100-G700KD22
20P21AF1K2RA0NNN	20P41AF1K2RA0NNN	1243	1016	1100	2 X 1321-3R600-C	–	100-G860KD22
20P21AF1K4RA0NNN	20P41AF1K4RA0NNN	1412.5	1154	1250	2 X 1321-3R750-C	–	100-G1200KD12
20P21AF1K5RA0NNN	20P41AF1K5RA0NNN	1582	1292	1400	2 X 1321-3R750-C	–	100-G1200KD12

Isolation Transformers - IP32, NEMA / UL Type 3R Standalone, 4…6% Nominal Impedance

Isolation transformers are available for installations that have specific types of AC supply configurations or require drive protection due to AC line distrubances.

Three-Phase Primary			Three-Phase Secondary		
			230V Secondary	460V Secondary	575V Secondary
kVA	Kw (Hp)	Voltage	Cat. No.	Cat. No.	Cat. No.
5	1.2…2.2 (1.5…3)	230	1321-3TW005-AA	1321-3TW005-AB	–
		460	1321-3TW005-BA	1321-3TW005-BB	–
		575	1321-3TW005-CA	1321-3TW005-CB	–
40	22 (30)	230	1321-3TW040-AA	1321-3TW040-AB	–
		460	1321-3TW040-BA	1321-3TW040-BB	–
		575	1321-3TW040-CA	1321-3TW040-CB	–
51	30 (40)	230	1321-3TW051-AA	1321-3TW051-AB	–
		460	1321-3TW051-BA	1321-3TW051-BB	–
		575	1321-3TW051-CA	1321-3TW051-CB	–
63	37 (50)	230	1321-3TH063-AA	1321-3TH063-AB	1321-3TH063-AC
		460	1321-3TH063-BA	1321-3TH063-BB	1321-3TH063-BC
		575	1321-3TH063-CA	1321-3TH063-CB	1321-3TH063-CC
75	45 (60)	230	1321-3TH075-AA	1321-3TH075-AB	1321-3TH075-AC
		460	1321-3TH075-BA	1321-3TH075-BB	1321-3TH075-BC
		575	1321-3TH075-CA	1321-3TH075-CB	1321-3TH075-CC
93	56 (75)	230	1321-3TH093-AA	1321-3TH093-AB	1321-3TH093-AC
		460	1321-3TH093-BA	1321-3TH093-BB	1321-3TH093-BC
		575	1321-3TH093-CA	1321-3TH093-CB	1321-3TH093-CC
118	75 (100)	230	1321-3TH118-AA	1321-3TH118-AB	1321-3TH118-AC
		460	1321-3TH118-BA	1321-3TH118-BB	1321-3TH118-BC
		575	1321-3TH118-CA	1321-3TH118-CB	1321-3TH118-CC
145	93 (125)	230	1321-3TH145-AA	1321-3TH145-AB	1321-3TH145-AC
		460	1321-3TH145-BA	1321-3TH145-BB	1321-3TH145-BC
		575	1321-3TH145-CA	1321-3TH145-CB	1321-3TH145-CC
175	112 (150)	230	1321-3TH175-AA	1321-3TH175-AB	1321-3TH175-AC
		460	1321-3TH175-BA	1321-3TH175-BB	1321-3TH175-BC
		575	1321-3TH175-CA	1321-3TH175-CB	1321-3TH175-CC
220	145 (200)	230	1321-3TH220-AA	1321-3TH220-AB	1321-3TH220-AC
		460	1321-3TH220-BA	1321-3TH220-BB	1321-3TH220-BC
		575	1321-3TH220-CA	1321-3TH220-CB	1321-3TH220-CC
275	187 (250)	230	1321-3TH275-AA	1321-3TH275-AB	1321-3TH275-AC
		460	1321-3TH275-BA	1321-3TH275-BB	1321-3TH275-BC
		575	1321-3TH275-CA	1321-3TH275-CB	1321-3TH275-CC
330	224 (300)	230	1321-3TH330-AA	1321-3TH330-AB	1321-3TH330-AC
		460	1321-3TH330-BA	1321-3TH330-BB	1321-3TH330-BC
		575	1321-3TH330-CA	1321-3TH330-CB	1321-3TH330-CC

continue

Isolation Transformers - IP32, NEMA / UL Type 3R Standalone, 4…6% Nominal Impedance (continued)

Three-Phase Primary			Three-Phase Secondary		
			230V Secondary	460V Secondary	575V Secondary
kVA	Kw (Hp)	Voltage	Cat. No.	Cat. No.	Cat. No.
440	298 (400)	230	–	1321-3TH440-AB	1321-3TH440-AC
		460	–	1321-3TH440-BB	1321-3TH440-BC
		575	–	1321-3TH440-CB	1321-3TH440-CC
550	373 (500)	230	–	1321-3TH550-AB	1321-3TH550-AC
		460	–	1321-3TH550-BB	1321-3TH550-BC
		575	–	1321-3TH550-CB	1321-3TH550-CC
660	448 (600)	230	–	1321-3TH660-AB	1321-3TH660-AC
		460	–	1321-3TH660-BB	1321-3TH660-BC
		575	–	1321-3TH660-CB	1321-3TH660-CC
770	522 (700)	230	–	1321-3TH770-AB	1321-3TH770-AC
		460	–	1321-3TH770-BB	1321-3TH770-BC
		575	–	1321-3TH770-CB	1321-3TH770-CC
880	597 (800)	230	–	1321-3TH880-AB	1321-3TH880-AC
		460	–	1321-3TH880-BB	1321-3TH880-BC
		575	–	1321-3TH880-CB	1321-3TH880-CC

Frame D Terminal Adapter Kits

The following frame D drives require the listed terminal adapter kits in order to meet UL installation requirements.

Voltage Class	Drive Current Rating Code	U, V, W Terminal Adapter Kit	C, D Terminal Adapter Kit
230	1K0	SK-20P-S726172	–
460	1K1	SK-20P-S726171	–
	1K3		–
	1K4		–
575	1K0	SK-20P-S726172	–
	1K2	SK-20P-S726171	–
	1K3		–
	1K6		SK-20P-S726173
690	1K0	SK-20P-S726172	–
	1K1	SK-20P-S726171	–
	1K2		–
	1K4		–
	1K5		–

Frame A and Frame B AC Input Line Fuses - 230V AC Input Drives

Frame	Drive Current Rating Code	DC Amps	AC Line Amps	Bussmann		Mersen	
				Ferrule FWP Type	North American FWP Type	Ferrule A70QS Type	North American A70P/A70QS Type
A	7P0	7	5.7	FWP-10A14F	FWP-10B	A70QS10-14F	A70P10-4
	9P0	9	7.4	FWP-15A14F	FWP-15B	A70QS16-14F	A70P15-4
	012	12	9.8	FWP-20A14F	FWP-20B	A70QS20-14F	A70P20-4
	020	20	16	FWP-25A14F	FWP-25B	A70QS25-14F	A70P25-4
	029	29	24	FWP-40A22F	FWP-40B	A70QS40-22F	A70QS40-4
	038	38	31	FWP-63A22F	FWP-60B	A70QS63-22F	A70QS60-4
	055	55	45	FWP-80A22F	FWP-80B	A70QS80-22F	A70QS80-4
	073	73	60	–	FWP-100A	–	A70QS100-4K
	093	93	76	–	FWP-150A	–	A70QS150-4K
	110	110	90	–	FWP-175A	–	A70QS175-4K
B	146	146	119	–	FWP-250A	–	A70QS250-4
	180	180	147	–	FWP-300A	–	A70QS300-4
	218	218	178	–	FWP-350A	–	A70QS350-4
	265	265	217	–	FWP-400A	–	A70QS400-4
	360	360	294	–	FWP-600A	–	A70QS600-4K
	434	434	355	–	FWP-600A	–	A70QS600-4

Frame A and Frame B AC Input Line Fuses - 460V AC Input Drives

Frame	Drive Current Rating Code	DC Amps	AC Line Amps	Bussmann		Mersen	
				Ferrule FWP Type	North American FWP Type	Ferrule A70QS Type	North American A70P/A70QS Type
A	4P1	4.1	3.3	FWP-10A14F	FWP-10B	A70QS10-14F	A70P10-4
	6P0	6	4.9	FWP-10A14F	FWP-10B	A70QS10-14F	A70P10-4
	010	10	8.2	FWP-20A14F	FWP-20B	A70QS20-14F	A70P25-4
	014	14	11.4	FWP-25A14F	FWP-25B	A70QS25-14F	A70P25-4
	019	19	15.5	FWP-25A14F	FWP-25B	A70QS25-14F	A70P25-4
	027	27	22.1	FWP-40A22F	FWP-40B	A70QS40-22F	A70QS40-4
	035	35	28.6	FWP-63A22F	FWP-60B	A70QS63-22F	A70QS60-4
	045	45	36.8	FWP-80A22F	FWP-80B	A70QS80-22F	A70QS80-4
	052	52	42.5	FWP-80A22F	FWP-80B	A70QS80-22F	A70QS80-4
	073	73	59.6	–	FWP-100A	–	A70QS100-4K
	086	86	70.3	–	FWP-150A	–	A70QS150-4K
	100	100	81.7	–	FWP-175A	–	A70QS175-4K
	129	129	105.4	–	FWP-175A	–	A70QS175-4K
B	167	167	136.4	–	FWP-300A	–	A70QS300-4
	207	207	169.1	–	FWP-350A	–	A70QS350-4
	250	250	204.3	–	FWP-400A	–	A70QS400-4
	330	330	269.6	–	FWP-600A	–	A70QS600-4K
	412	412	336.6	–	FWP-600A	–	A70QS600-4

Frame B AC Input Line Fuses - 575V AC Input Drives

Frame	Drive Current Rating Code	DC Amps	AC Line Amps	Bussmann		Mersen	
				Ferrule FWP Type	North American FWP Type	Ferrule A70QS Type	North American A70P/A70QS Type
B	067	67.5	55.1	–	FWP-100A	–	A70QS100-4
	101	101.3	82.7	–	FWP-175A	–	A70QS175-4K
	135	135	110.3	–	FWP-225A	–	A70QS225-4
	270	270	220.6	–	FWP-450A	–	A70QS450-4
	405	405	330.9	–	FWP-600A	–	A70QS600-4K

Frame A and Frame B Armature DC Output Fuses - 230V AC Input Drives

Frame	Drive Current Rating Code	DC Amps	AC Line Amps	Bussmann		Mersen	
				Ferrule FWP Type	North American FWP Type	Ferrule A70QS Type	North American A70P/A70QS Type
A	7P0	7	5.7	FWP-15A14F	FWP-15B	A70QS16-14F	A70P15-4
	9P0	9	7.4	FWP-20A14F	FWP-20B	A70QS20-14F	A70P20-4
	012	12	9.8	FWP-25A14F	FWP-25B	A70QS25-14F	A70P25-4
	020	20	16	FWP-40A14F	FWP-40B	A70QS40-14F	A70QS40-4
	029	29	24	FWP-63A22F	FWP-60B	A70QS63-22F	A70QS60-4
	038	38	31	FWP-80A22F	FWP-80B	A70QS80-22F	A70QS80-4
	055	55	45	–	FWP-125A	–	A70QS125-4K
	073	73	60	–	FWP-150A	–	A70QS150-4K
	093	93	76	–	FWP-200A	–	A70QS200-4K
	110	110	90	–	FWP-225A	–	A70QS250-4
B	146	146	119	–	FWP-300A	–	A70QS300-4
	180	180	147	–	FWP-350A		A70QS350-4
	218	218	178	–	FWP-450A	–	A70QS450-4
	265	265	217	–	FWP-600A	–	A70QS600-4K
	360	360	294	–	FWP-700A	–	A70QS700-4
	434	434	355	–	FWP-900A	–	A70P900-4

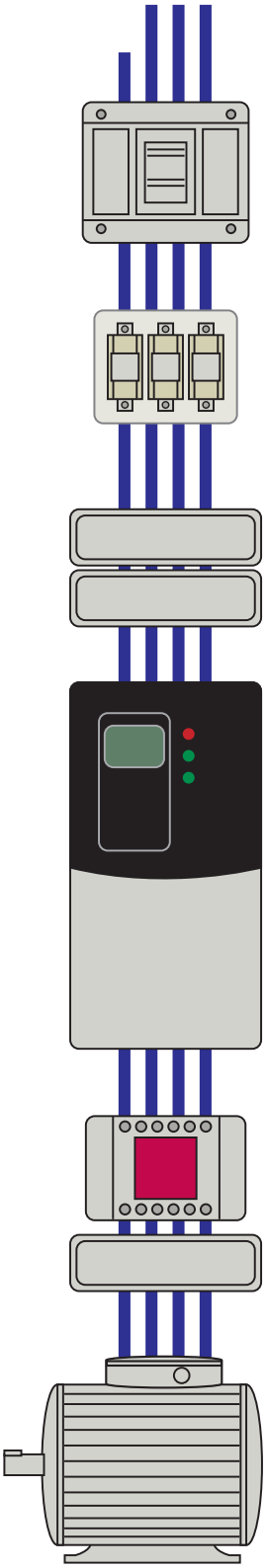
Frame A and Frame B Armature DC Output Fuses - 460V AC Input Drives

Frame	Drive Current Rating Code	DC Amps	AC Line Amps	Bussmann		Mersen	
				Ferrule FWP Type	North American FWP Type	Ferrule A70QS Type	North American A70P/A70QS Type
A	4P1	4.1	3.3	FWP-10A14F	FWP-10B	A70QS10-14F	A70P10-4
	6P0	6	4.9	FWP-15A14F	FWP-15B	A70QS16-14F	A70P15-4
	010	10	8.2	FWP-20A14F	FWP-20B	A70QS20-14F	A70P20-4
	014	14	11.4	FWP-30A14F	FWP-30B	A70QS32-14F	A70P30-4
	019	19	15.5	FWP-40A14F	FWP-40B	A70QS40-14F	A70QS40-4
	027	27	22.1	FWP-63A22F	FWP-60B	A70QS63-22F	A70QS60-4
	035	35	28.6	FWP-80A22F	FWP-70B	A70QS80-22F	A70QS70-4
	045	45	36.8	FWP-100A22F	FWP-90B	–	A70QS90-4
	052	52	42.5	FWP-100A22F	FWP-100B	–	A70QS100-4
	073	73	59.6	–	FWP-150A	–	A70QS150-4K
	086	86	70.3	–	FWP-175A	–	A70QS175-4K
	100	100	81.7	–	FWP-200A	–	A70QS200-4K
	129	129	105.4	–	FWP-250A	–	A70QS250-4
B	167	167	136.4	–	FWP-350A	–	A70QS350-4
	207	207	169.1	–	FWP-400A	–	A70QS400-4
	250	250	204.3	–	FWP-500A	–	A70QS500-4K
	330	330	269.6	–	FWP-700A	–	A70QS700-4
	412	412	336.6	–	FWP-800A	–	A70QS800-4

Frame B Armature DC Output Fuses - 575V AC Input Drives

Frame	Drive Current Rating Code	DC Amps	AC Line Amps	Bussmann		Mersen	
				Ferrule FWP Type	North American FWP Type	Ferrule A70QS Type	North American A70P/A70QS Type
B	067	67.5	55.1	FWP-125A	A70QS125-4K	–	A70QS100-4
	101	101.3	82.7	FWP-200A	A70QS200-4K	–	A70QS175-4K
	135	135	110.3	FWP-250A	A70QS250-4	–	A70QS225-4
	270	270	220.6	FWP-600A	A70QS600-4K	–	A70QS450-4
	405	405	330.9	FWP-800A	A70QS800-4	–	A70QS600-4K

Line & Load Options



AC supply source

Input line reactor recommended when line voltage imbalances are greater than 2%

Input fusing and circuit breakers

See listings in the product user manuals.

Line reactor

Needs to be applied if:

a) Installation site has switched power factor correction capacitors

b) Installation site has power interruptions or voltage dips

c) The transformer is too large in comparison to the drive

(www.rockwellautomation.com/literature, refer to publication: DRIVES-IN001_).

Input filter

Compact PowerFlex drives: External EMC filter required for EMC compliance. With PowerFlex 523, 525 and 527 AC drives, EMC filtering is embedded at 200V and 400V. Architecture drives: External EMC filter only required with long motor cables and/or specific immunity requirements.

AC drive

Normal duty (ND) rating: 110% overload for 1 minute and 150% overload for 3 seconds. No excessive starting overload, transient overload or high duty cycle. The majority of typical AC drive applications are ND.

Heavy duty (HD) rating: 150% overload for 1 minute and 180% overload for 3 seconds. Required for high starting torque (e.g., heavily loaded conveyors), high brake-away torque (e.g., extruders and mixers) and high running torque (e.g., reciprocating compressors).

Output device or cable termination

Required if motor cable lengths exceed stated values (www.rockwellautomation.com/literature, refer to publication: DRIVES-IN001_).

AC motor

Tools & Resources

Product Selection Toolbox

The Product Selection Toolbox is a collection of product selection and system design software tools that help you select Allen-Bradley products and design application solutions using those products.

From this tool you can create a single bill of material for the complete range of Allen-Bradley products; configure Motor Control Bus Systems, Motor Control Centers, Automation Systems, and Motion Control Systems; and create project bids and submittal documents.

Product Selection

- Drive Selector Wizard in ProposalWorks™ – Select a Low Voltage Drive
- Integrated Architecture Builder – Configure Automation Systems
- CenterONE® – Design Low Voltage Motor Control Centers
- MCS™ Star – Design Modular Motor Control Systems

System Design and Support Tools

- eCADWorks – Get CAD Drawings
- MotionAnalyzer – Design tool for speed and positioning applications
- RailBuilder™ – Design DIN Mountable Systems

Download the tools at:
http://www.rockwellautomation.com/en/e-tools/

Motion Analyzer

Motion Analyzer software helps machine builders by making it faster and easier to analyze, optimize, and select motion and drive control systems. A cloud-based architecture and a wide range of tools and features help users find the right set of products for their application.

Download the tool at:
https://motionanalyzer.rockwellautomation.com

Energy Savings Calculators

See how installing a PowerFlex drive for your fan or pump applications can reduce energy costs when compared with a traditional flow control method.

Download the tools at:
http://www.rockwellenergycalc.com

Rockwell Automation

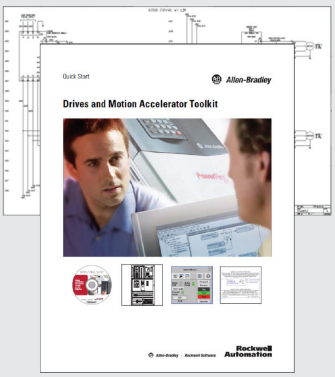
Rockwell Automation

Available on the App Store

GET IT ON Google play

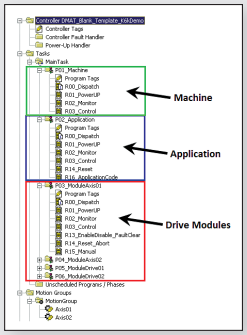
Drives and Motion Accelerator Toolkit

This collection of design tools can help you significantly reduce the time and cost of developing a new application using Allen-Bradley equipment, especially PowerFlex® AC Drives and Kinetix® Servo Drives



The toolkit includes the powerful System Development Wizard which takes system data entered by the designer and automatically generates the files you need to jumpstart your design, including:

- Custom Bill Of Material
- Custom set of CAD drawings
- Logic program for the specific controller, drives and names used in the application
- Custom set of instructions to quickly adapt a starting HMI application



Information is delivered in a modular format.

- Module provides control and information for individual product or function
- Selecting specific modules allows you to tailor the application
- Modules are designed to interact in standard understandable and usable ways
- Selects the specific modules needed for the application
- Selected modules are combined, using standard design tools, to build starting BOM, CAD, Logic and HMI application files

Download the tool at: www.ab.com/go/iatools

Rockwell Automation Services & Support

We understand your need to capture and utilize production information, reduce downtime, improve safety, increase productivity and perform diagnostics–because they're our goals too.

Rockwell Automation can help you improve the performance of your people and maximize your automation investment with offerings like:

Start-up and Commissioning

- We can help you commission and start-up your new equipment, and in turn, reduce the time between integration and actual start-up
- Our process validates that the necessary electrical, mechanical and environmental criteria have been met and the appropriate steps have been taken to ensure proper equipment operation
- Our highly experienced Field Service Professionals work with you to:
  - Ensure on-time production
  - Improve equipment operation
  - Reduce risk of performance problems and premature equipment failures
  - Reduce total maintenance costs

Parts Management Agreement (PMA)

- Provides quick access to Rockwell Automation spare parts
- Reduces operating costs to maintain and manage inventory
- We own and manage your spare parts inventory for a fixed monthly or quarterly cost

Drives Training Curriculum

- Maximize job and automation asset performance through skill-building courses that introduce concepts and techniques to help properly wire drives and diagnose specific faults
- Exercises offer extensive hands-on practice using the drive

Safety Services

- Meet industry and global safety compliance regulations
- Rockwell Automation Machine Safety Consultants can perform any safety assessment and can assist at any step of a safeguarding project

Preventive Maintenance

- Regularly scheduled maintenance for your automation and related equipment to prevent potential problems and extend component/system life
- Your preventive maintenance program provides the following and much more:
  - Full-service warranty
  - 24/7 remote troubleshooting
  - Fully warranted remanufactured replacement parts

Remanufacturing Services

- Remanufacturing and Exchange Services go far beyond other repair services with a comprehensive seven-step remanufacturing process that restores failed Allen-Bradley® and Reliance Electric™ equipment to its original operating condition to make sure it will function reliably

Online & Phone Support

- TechConnect℠ Support provides unlimited, real-time access to our technical support engineers
- Rockwell Automation Knowledgebase is the online resource for technical information, assistance, technical notes, software updates, product/service e-mail notifications, and more

Assurance™ Integrated Support

- An annual guaranteed support agreement helps keep your systems running by combining remote support, replacement parts and on-site service into one comprehensive agreement for one flat fee
- Minimize equipment downtime, eliminate unplanned repair expenses, ease staffing burdens and lower the total lifecycle cost of your assets

For more information, visit: www.rockwellautomation.com/go/services

Notes

Notes

Rockwell Automation Services & Support

Global Support. Local Address. Peace of Mind.

Providing the resources you need, when and where you need them, Rockwell Automation has an integrated, global network of ISO-certified repair centers, exchange hubs, field service professionals, IACET-recognized training centers, certified technical phone support centers and online tools.

www.rockwellautomation.com/go/services

Meet Your Everyday Technical Needs

Remote Support & Monitoring	Training Services	OnSite Services	Repair Services
• Real-time product, system and application-level support • Unlimited online resources and tools • Live chat and support forums • Secure equipment monitoring, alarming and diagnostics	• Instructor-led and computer or web-based courses • Virtual classroom • Training assessments • Workstations and job aids	• Embedded engineering • Preventive maintenance • Migrations and conversions • Start-up and commissioning	• Product remanufacturing • Repair services on a full range of industrial automation brands and products • Annual repair agreements

Maximize Your Automation Investment

MRO Demand Management	Lifecycle Extension & Migrations	Network & Security Services	Safety Services
• Comprehensive asset management planning • Reliability services • Warranty tracking • Quick access to global spare parts inventory	• Installed Base Evaluation™ • Pinpoint obsolescence risk • Tools and Lifecycle support service agreements to mitigate production risk	• Control system lifecycle services • Manage network convergence Security technology, policies and procedures services	• Safety assessments and remediation • Safety design, integration and validation services

Visit the Rockwell Automation Support Center at www.rockwellautomation.com/knowledgebase for technical information and assistance, plus:

- View technical/application notes
- Obtain software patches
- Subscribe for product/service email notifications
- Submit a Question, Live Chat, Support Forums and more

Visit Get Support Now at www.rockwellautomation.com/go/support to select your country and find your local support information.

Connect with us.

www.rockwellautomation.com

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