

PowerFlex™ 70



Optimized Simplicity.

PowerFlex 70 AC Drive

The Allen-Bradley PowerFlex 70 offers a compact package of power, control and operator interface designed to meet the demands for space, simplicity and reliability while providing a broad spectrum of features, allowing the user to easily configure the drive for most application needs.

Simplifying Installation

- Clearly marked, conveniently placed terminal blocks provide direct access for power and control wiring requiring a minimal amount of wire bending.
- Compact panel mount design, conserving valuable panel space.
- Packaging options such as integral Type 4X (IP56) and flange-mounted heatsink, providing flexibility and space savings.
- Integrated electromagnetic compatibility (EMC) solutions, allowing out-of-the-box performance around the globe.

Simplifying Drive Commissioning

- Both LED and multi-lingual LCD Human Interface Modules (HIMs) are available for the PowerFlex 70 offering the user flexible, cost-effective options for the application.
- The multi-lingual LCD HIM offers a S.M.A.R.T. Start feature, a start-up utility that quickly and easily provides users with a set of the most commonly programmed parameters, permitting simple drive set-up without in-depth knowledge of the parameter structure.
- Optimized global voltage settings designed to worldwide standards, allowing for quick set-up anywhere in the world.
- PC tools such as DriveExplorer™ assist with programming, monitoring and troubleshooting.

Simplifying Applications

- The PowerFlex 70 can be programmed for Volts per Hertz or Sensorless Vector control to cover a wide range of applications.
- Standard transistor and available drive-mounted (or separately mounted) braking resistor provide cost-effective dynamic brake options.
- A process PI function allows simple process control without the need for additional hardware.



*PowerFlex 70 AC Drive
0.37 to 15 kW; 0.5 to 20 hp*

Communications

The Allen-Bradley PowerFlex family of drives utilizes Rockwell Automation's NetLinx™ Open Network Architecture. This provides the common set of features and services for DeviceNet™, ControlNet™ and EtherNet/IP networks resulting in lower total cost of ownership. Users can easily manage information from shop floor to top floor and seamlessly integrate their complete system as they control, configure and collect data.

- PowerFlex drives offer a dedicated internal communications option helping the user to cost-effectively assemble highly integrated applications that link drives to the manufacturing process through Rockwell Automation NetLinx Open Architecture based networks including: DeviceNet, ControlNet, Universal Remote I/O, RS485 DF1 and other open communications including Profibus and Interbus-S.
- Status indicators for all internal communications options are visible on the cover for easy set-up and monitoring of drive communications.



**Rockwell
Automation**

Bringing Together Leading Brands in Industrial Automation

Application Logic

- Sensorless Vector Control
- Auto-economizer
- S-Curve acceleration and deceleration
- Integral dynamic brake
- DC bus regulation
- Slip compensation
- Reflected wave reduction
- Process PI loop
- Flying start

Operator Interface

- Choice of LED or LCD Human Interface Module (HIM)
- LED HIM displays programming information, drive status and troubleshooting on one 6-digit line
- LCD HIM places drive information in a 7-line by 21-character display that supports a variety of languages

Standards

- CSA/cUL Certified
- UL Listed
- C-Tick
- CE Marked
- EMC EN61800-3
- Low Voltage EN60204-1 / EN50178

Input Specifications

3-Phase Voltage: 200-240V / 400-480V / 500-600V ± 10%
Frequency: 47 to 63 Hz
Logic Control Ride Through: ≥ 0.5 seconds

Output Specifications

Voltage: Adjustable from 0V to rated motor voltage
Frequency Range: 0-400Hz
Intermittent Current: To 110% for 60 seconds, 150% for 3 Seconds
Instantaneous Over Current Trip: TBD

Enclosure and Ambient Operating Temperatures

Open Type: 0° - 50° C (32° - 122° F)
Type 1: 0° - 40° C (32° - 104° F)
IP20: 0° - 50° C (32° - 122° F)
IP56 (Type 4X): 0° - 40° C (32° - 104° F)

Dimensions mm (in) & Ratings

		225.8 (8.89) H x 121.9 (4.80) W x 179.8 (7.08) D		
A Frame				
Power	Volts	Amps Continuous	Amps for 1 Minute	Amps for 3 Seconds
0.5 to 3 hp	480	1.1 to 5.0	1.2 to 5.5	1.6 to 7.5
0.37 to 2.2 kW (w/o EMC Filter)	400	1.3 to 5.0	1.4 to 5.5	1.9 to 7.5
0.37 to 0.75 kW (0.5 to 1 hp)	200-240	2.2 to 4.2	2.4 to 4.8	3.3 to 6.4
TBD	500-600	TBD	TBD	TBD
B Frame				
Power	Volts	Amps Continuous	Amps for 1 Minute	Amps for 3 Seconds
5 hp	480	8	8.8	12
0.37 to 4.0 kW (w/EMC Filter)	400	1.3 to 8.7	1.4 to 9.9	1.9 to 13.2
1.5 kW (2 hp)	200-240	6.8	9	12
TBD	500-600	TBD	TBD	TBD
C Frame				
Power	Volts	Amps Continuous	Amps for 1 Minute	Amps for 3 Seconds
7.5 to 10 hp	480	11 to 14	12.1 to 16.5	16.5 to 22
5.5 to 7.5 kW	400	11.5 to 15.4	13 to 17.2	17.4 to 23.1
2.2 to 4.0 kW (3 to 5 hp)	200-240	9.6 to 15.3	10.6 to 17.4	14.4 to 23.2
TBD	500-600	TBD	TBD	TBD
D Frame				
Power	Volts	Amps Continuous	Amps for 1 Minute	Amps for 3 Seconds
15 to 20 hp	480	22 to 27	24.2 to 33	33 to 44
11 to 15 kW	400	22 to 30	24.2 to 33	33 to 45
5.5 to 7.5 kW (7.5 to 10 hp)	200-240	22 to 28	24.2 to 33	33 to 44
TBD	500-600	TBD	TBD	TBD

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DeviceNet is a trademark of the Open DeviceNet Vendor Association.
ControlNet is a trademark of ControlNet International, Ltd.

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