

# PowerFlex 4 and 40 AC Drives

Original Instructions



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## Product Overview

Providing users with powerful motor speed control in a compact, space saving design, the Allen-Bradley® PowerFlex® 4 and 40 AC drives are the smallest and most cost-effective members of the PowerFlex® family of drives. Available in power ratings from 0.2 to 11 kW (0.25 to 15 HP) and in voltage classes of 120, 240, 480 and 600 volts, PowerFlex 4 and 40 are designed to meet global OEM and end-user demands for flexibility, space savings, ease of use and are cost-effective alternatives for speed control of applications such as machine tools, fans, pumps and conveyors and material handling systems



## Reference Materials

For additional PowerFlex 4 and 40 data and general drive information, refer to the following publications:

Title	Publication	Online
PowerFlex 4 User Manual	22A-UM001	<a href="http://www.rockwellautomation.com/literature">www.rockwellautomation.com/literature</a>
PowerFlex 40 User Manual	22B-UM001	
Wiring and Grounding Guidelines for PWM AC Drives	DRIVES-IN001	
Preventive Maintenance of Industrial Control and Drive System Equipment	DRIVES-TD001	
Safety Guidelines for the Application, Installation and Maintenance of Solid State Control	SGL-1.1	

For other information, contact Allen-Bradley Drives Technical Support:

Title	Online
Allen-Bradley Drives Technical Support	<a href="http://www.ab.com/support/abdrives">www.ab.com/support/abdrives</a>

Shaded areas are applicable to PowerFlex 40 only.

## Packaging and Mounting

- Installation can be a virtual snap using the **DIN rail mounting** feature on A and B frame drives. Panel mounting is also available, providing added flexibility.
- **Flange mount** drives are available to reduce overall enclosure size.
- **Zero Stacking™** is allowable for ambient temperatures up to 40 °C, saving valuable panel space. 50 °C ambient temperatures are permitted with minimal spacing between drives.
- **Integral filtering** is available on all 230V single phase ratings, providing a cost-effective means of meeting EN55011, Class A and B EMC requirements. External filters provide compliance to Class A and B requirements for all PowerFlex 4 and 40 ratings.
- An optional **IP30, NEMA/UL Type 1 conduit box** is easily adapted to the standard IP20 (NEMA Type Open) product, providing increased environmental ratings.
- **IP66, NEMA/UL Type 4X/12** (Indoor) for mounting directly in the product environment. Listed by UL to resist dust, dirt, etc. and survive high pressure water spray. Also certified by NSF to ensure conformity with international food equipment standards.



## Start Up, Programming and Operation

- An **integral keypad** provides out of the box operation using the local potentiometer and control keys.
- The 10 most common application parameters are contained in the **Basic Program Group**, making programming fast and easy.
- The **programming keys** have the same function as all other PowerFlex drives, so if you can program one PowerFlex drive, you can program them all.
- **4 digit display** with 10 additional LED indicators provides an intuitive display of drive status and information.
- Integral **RS-485 communications** can be used for programming from a PC. It can also be used in a multi-drop network configuration. A serial converter module provides connectivity to any controller with a DF1 port.
- A **NEMA/UL Type 4X remote** and **NEMA/UL Type 1 hand-held LCD keypad** provide additional programming and control flexibility, both featuring the popular CopyCat function.

