

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 helping to 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.

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	<ul style="list-style-type: none"> V/Hz control Sensorless Vector Control
Communications	Integral RS 485, Common Industrial Protocol
User Interface	Integral programming keypad and local LED
Enclosures	IP20, IP30, IP66/NEMA 4X
Certifications	<ul style="list-style-type: none"> UL CE cUL C-Tick
Options	See pages 24... 31
Additional Information	PowerFlex 4/40 Technical Data, publication 22-TD001 PowerFlex 40 User Manual, publication 22B-UM001

100...120V AC, Single-Phase Drives (50/60 Hz, No Filter)

Drive Ratings			Frame Size	IP20, NEMA/UL Type Open	IP20 Flange Mount *	IP66, NEMA/UL Type 4X
kW	Hp	Output Current A		Cat. No.	Cat. No.	Cat. No.
0.4	0.5	2.3	B	22B-V2P3N104	22B-V2P3F104	22B-V2P3C104
0.75	1	5	B	22B-V5P0N104	22B-V5P0F104	22B-V5P0C104
1.1	1.5	6	B	22B-V6P0N104	22B-V6P0F104	22B-V6P0C104

* Meets IP40/54/65 (NEMA/UL Type 1/12/4/4X) when installed in an enclosure of like rating.

200...240V AC, Single-Phase Drives (50/60 Hz)

Drive Ratings			Frame Size	IP20, NEMA/UL Type Open	IP20 Flange Mount *	IP66, NEMA/UL Type 4X
kW	Hp	Output Current A		Cat. No.	Cat. No.	Cat. No.
w/Integral "S Type" EMC Filter †						
0.4	0.5	2.3	B	22B-A2P3N114	-	-
0.75	1	5	B	22B-A5P0N114	-	-
1.5	2	8	B	22B-A8P0N114	-	-
2.2	3	12	C	22B-A012N114	-	-
No Filter						
0.4	0.5	2.3	B	22B-A2P3N104	22B-A2P3F104	22B-A2P3C104
0.75	1	5	B	22B-A5P0N104	22B-A5P0F104	22B-A5P0C104
1.5	2	8	B	22B-A8P0N104	22B-A8P0F104	22B-A8P0C104
2.2	3	12	C	22B-A012N104	22B-A012F104	-

* Meets IP40/54/65 (NEMA/UL Type 1/12/4/4X) when installed in an enclosure of like rating.

† 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.

200...240V AC, Three-Phase Drives (50/60 Hz, No Filter)

Drive Ratings				IP20, NEMA/UL Type Open	IP20 Flange Mount *	IP66, NEMA/UL Type 4X
kW	Hp	Output Current	Frame Size	Cat. No.	Cat. No.	Cat. No.
		A				
0.4	0.5	2.3	B	22B-B2P3N104	22B-B2P3F104	22B-B2P3C104
0.75	1	5	B	22B-B5P0N104	22B-B5P0F104	22B-B5P0C104
1.5	2	8	B	22B-B8P0N104	22B-B8P0F104	22B-B8P0C104
2.2	3	12	B	22B-B012N104	22B-B012F104	22B-B012C104
3.7	5	17.5	B	22B-B017N104	22B-B017F104	22B-B017C104
5.5	7.5	24	C	22B-B024N104	22B-B024F104	-
7.5	10	33	C	22B-B033N104	22B-B033F104	-

* Meets IP40/54/65 (NEMA/UL Type 1/12/4/4X) when installed in an enclosure of like rating.

380...480V AC, Three-Phase Drives (50/60 Hz, No Filter)

Drive Ratings				IP20, NEMA/UL Type Open	IP20 Flange Mount *	IP66, NEMA/UL Type 4X
kW	Hp	Output Current	Frame Size	Cat. No.	Cat. No.	Cat. No.
		A				
0.4	0.5	1.4	B	22B-D1P4N104	22B-D1P4F104	22B-D1P4C104
0.75	1	2.3	B	22B-D2P3N104	22B-D2P3F104	22B-D2P3C104
1.5	2	4	B	22B-D4P0N104	22B-D4P0F104	22B-D4P0C104
2.2	3	6	B	22B-D6P0N104	22B-D6P0F104	22B-D6P0C104
4	5	10.5	B	22B-D010N104	22B-D010F104	22B-D010C104
5.5	7.5	12	C	22B-D012N104	22B-D012F104	-
7.5	10	17	C	22B-D017N104	22B-D017F104	-
11	15	24	C	22B-D024N104	22B-D024F104 ‡	-

* Meets IP40/54/65 (NEMA/UL Type 1/12/4/4X) when installed in an enclosure of like rating.

‡ Requires use of external DC Bus inductor or AC Line Reactor.

500...600V AC, Three-Phase Drives (50/60 Hz, No Filter)

Drive Ratings				IP20, NEMA/UL Type Open	IP20 Flange Mount *	IP66, NEMA/UL Type 4X
kW	Hp	Output Current	Frame Size	Cat. No.	Cat. No.	Cat. No.
		A				
0.75	1	1.7	B	22B-E1P7N104	22B-E1P7F104	22B-E1P7C104
1.5	2	3	B	22B-E3P0N104	22B-E3P0F104	22B-E3P0C104
2.2	3	4.2	B	22B-E4P2N104	22B-E4P2F104	22B-E4P2C104
4	5	6.6	B	22B-E6P6N104	22B-E6P6F104	22B-E6P6C104
5.5	7.5	9.9	C	22B-E9P9N104	22B-E9P9F104	-
7.5	10	12	C	22B-E012N104	22B-E012F104	-
11	15	19	C	22B-E019N104	22B-E019F104	-

* Meets IP40/54/65 (NEMA/UL Type 1/12/4/4X) when installed in an enclosure of like rating.



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.

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	<ul style="list-style-type: none"> V/Hz control Sensorless Vector Control
Communications	Integral RS 485, Common Industrial Protocol
User Interface	4 digit display, 3 additional LED indicators and scroll/reset button, optional Remote Human Interface Modules (HIM) or PC interface for programming
Enclosures	IP20, IP30, Flange Mount
Safety	DriveGuard Safe Torque-Off / EN 954-1 Cat. 3
Additional Features	<ul style="list-style-type: none"> Speed control with and without encoder feedback Fiber application specific features StepLogic allows operation as an independent position controller
Certifications	<ul style="list-style-type: none"> UL CE (240 and 480V Ratings) cUL C-Tick TÜV FS ISO/EN13849-1 (EN954-1) with Safe Torque-Off option
Options	See pages 24... 31
Additional Information	PowerFlex 40P Technical Data PowerFlex 40P User Manual

200...240V AC, Three-Phase Drives (50/60 Hz, No Filter)

Drive Ratings				IP20/NEMA Type Open	IP20 Plate Drive	IP20 Flange Mount *
kW	Hp	Output Current	Frame Size	Cat. No.	Cat. No.	Cat. No.
		A				
0.4	0.5	2.3	B	22D-B2P3N104	22D-B2P3H204	22D-B2P3F104
0.75	1	5	B	22D-B5P0N104	22D-B5P0H204	22D-B5P0F104
1.5	2	8	B	22D-B8P0N104	22D-B8P0H204	22D-B8P0F104
2.2	3	12	B	22D-B012N104	22D-B012H204	22D-B012F104
3.7	5	17.5	B	22D-B017N104	22D-B017H204	22D-B017F104
5.5	7.5	24	C	22D-B024N104	22D-B024H204	22D-B024F104
7.5	10	33	C	22D-B033N104	22D-B033H204	22D-B033F104

* Meets IP40/54/65 (NEMA 1/12/4/4X) when installed in an enclosure of like rating.

380...480V AC, Three-Phase Drives (50/60 Hz, No Filter)

Drive Ratings				IP20/NEMA Type Open	IP20 Plate Drive	IP20 Flange Mount *
kW	Hp	Output Current	Frame Size	Cat. No.	Cat. No.	Cat. No.
		A				
0.4	0.5	1.4	B	22D-D1P4N104	22D-D1P4H204	22D-D1P4F104
0.75	1	2.3	B	22D-D2P3N104	22D-D2P3H204	22D-D2P3F104
1.5	2	4	B	22D-D4P0N104	22D-D4P0H204	22D-D4P0F104
2.2	3	6	B	22D-D6P0N104	22D-D6P0H204	22D-D6P0F104
4	5	10.5	B	22D-D010N104	22D-D010H204	22D-D010F104
5.5	7.5	12	C	22D-D012N104	22D-D012H204	22D-D012F104
7.5	10	17	C	22D-D017N104	22D-D017H204	22D-D017F104
11	15	24	C	22D-D024N104	22D-D024H204	22D-D024F104

* Meets IP40/54/65 (NEMA 1/12/4/4X) when installed in an enclosure of like rating.

500...600V AC, Three-Phase Drives (50/60 Hz, No Filter)

Drive Ratings				IP20/NEMA Type Open	IP20 Plate Drive	IP20 Flange Mount *
kW	Hp	Output Current	Frame Size	Cat. No.	Cat. No.	Cat. No.
		A				
0.75	1	1.7	B	22D-E1P7N104	22D-E1P7H204	22D-E1P7F104
1.5	2	3	B	22D-E3P0N104	22D-E3P0H204	22D-E3P0F104
2.2	3	4.2	B	22D-E4P2N104	22D-E4P2H204	22D-E4P2F104
4	5	6.6	B	22D-E6P6N004	22D-E6P6H204	22D-E6P6F104
5.5	7.5	9.9	C	22D-E9P9N104	22D-E9P9H204	22D-E9P9F104
7.5	10	12	C	22D-E012N104	22D-E012H204	22D-E012F104
11	15	19	C	22D-E019N104	22D-E019H204	22D-E019F104

* Meets IP40/54/65 (NEMA 1/12/4/4X) when installed in an enclosure of like rating.