

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

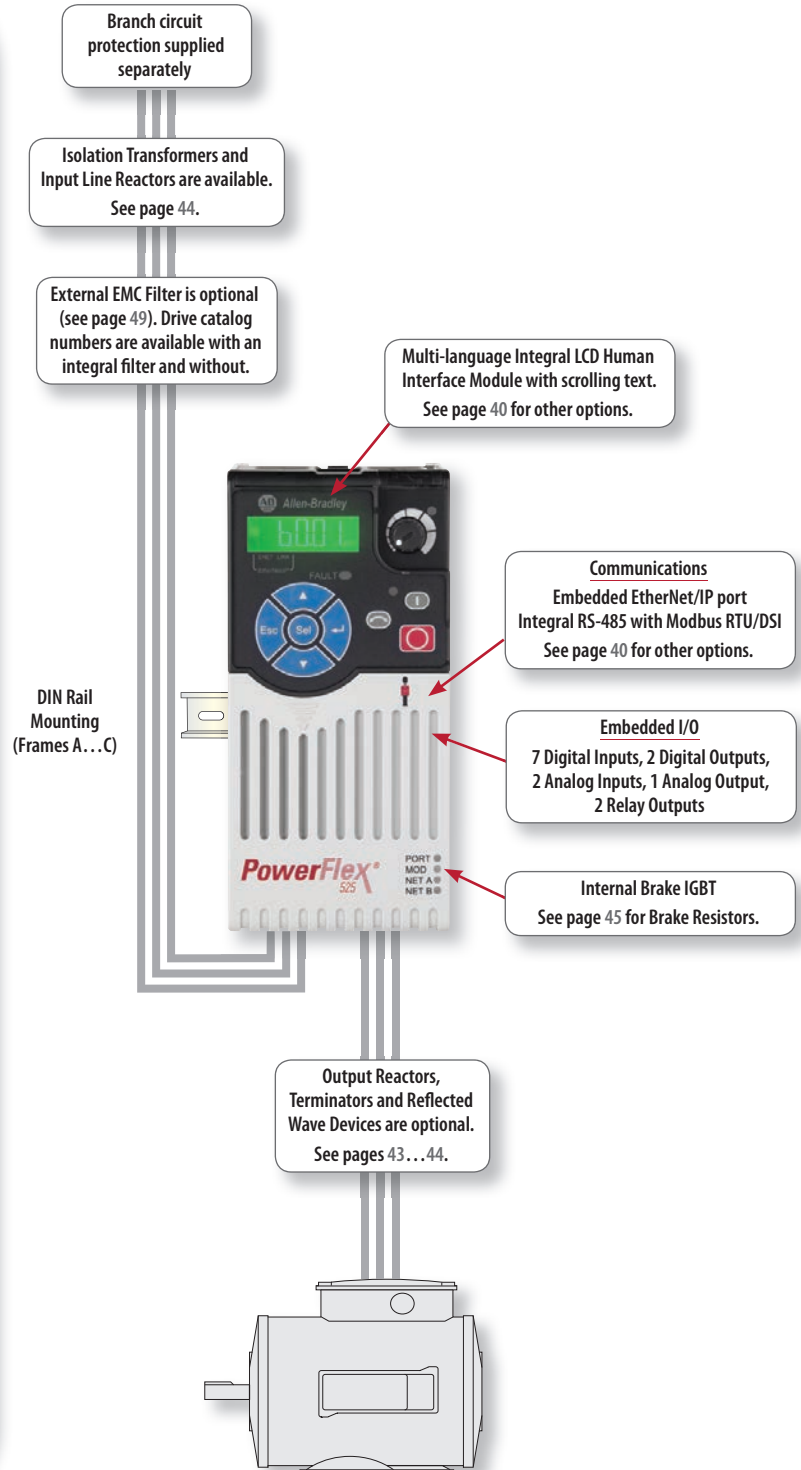
Certifications

- 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

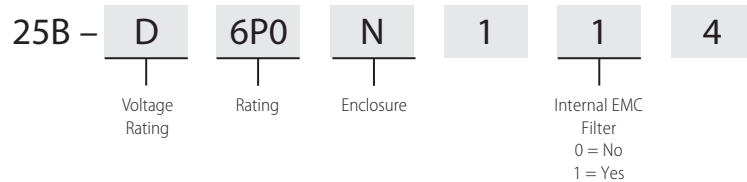
(1) Permanent magnet motor control is scheduled for a future firmware release.



Additional Information

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

Catalog Number Explanation



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	Frame Size	Cat. No.	Cat. No.
kW	Hp	kW	Hp	A			
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	Frame Size	Cat. No.	Cat. No.
kW	Hp	kW	Hp	A			
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	Frame Size	Cat. No.	Cat. No.
kW	Hp	kW	Hp	A			
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	Frame Size	Cat. No.	Cat. No.
kW	Hp	kW	Hp	A			
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

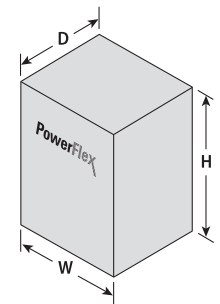
Drive Ratings						No Filter	with Integral EMC Filter
Normal Duty		Heavy Duty		Output Current	Frame Size	Cat. No.	Cat. No.
kW	Hp	kW	Hp	A			
0.4	0.5	0.4	0.5	0.9	A	25B-E0P9N104	—
0.75	1	0.75	1	1.7	A	25B-E1P7N104	—
1.5	2	1.5	2	3	A	25B-E3P0N104	—
2.2	3	2.2	3	4.2	A	25B-E4P2N104	—
4	5	4	5	6.6	B	25B-E6P6N104	—
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 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-C25 ⁽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-C25 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 Input Voltage	Normal Duty		Heavy Duty		Frame	Cat. No.	Used with PowerFlex Drive		
							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 Input Voltage	Normal Duty		Heavy Duty		Frame	No Filter	Used with PowerFlex Drive			with Integral EMC Filter	Used with PowerFlex Drive		
	kW	Hp	kW	Hp		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 Input Voltage	Normal Duty		Heavy Duty		No Filter	Used with PowerFlex Drive		
	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

Voltage	Drive Ratings			IP00 ⁽¹⁾ (NEMA/UL Open Type)	IP11 ⁽¹⁾ (NEMA/UL Type 1)
	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

Voltage	Drive Rating		Minimum Resistance	Resistance	Cat. No. ^{(1) (2)}
	kW	Hp	Ohms, $\pm 10\%$	Ohms, $\pm 5\%$	
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
	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⁾
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.