PowerFlex 4-Class Options

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		✓

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.

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

		Used with PowerFlex Drive		
Description	Cat. No.	70	753/755	AFE
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		✓	

PowerFlex DC Drive Options
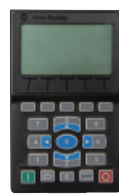
Blank Plate   20-HIM-A3   20-HIM-A5   20-HIM-A6

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