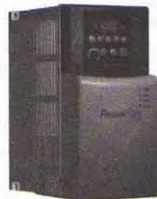


PowerFlex Selection Guide**PowerFlex
AC Drives
Comparison
Chart**

Attributes	PowerFlex® 4	PowerFlex® 40	PowerFlex® 400 For Fans and Pumps	PowerFlex® 70 Enhanced Control
Catalog Reference	22A ...	22B ...	22C ...	20A ...
Ratings 100-120V	0.2 - 1.1 kW 0.25 - 1.5 HP	0.4 - 1.1 kW 0.5 - 1.5 HP	N/A	N/A
Ratings 200-240V	0.2 - 3.7 kW 0.25 - 5 HP	0.4 - 7.5 kW 0.5 - 10 HP	2.2 - 37 kW 3.0 - 50 HP	0.37 - 18.5 kW 0.5 - 25 HP
Ratings 400-480V	0.4 - 3.7 kW 0.5 - 5 HP	0.4 - 11 kW 0.5 - 15 HP	2.2 - 110 kW 3.0 - 150 HP	0.37 - 37 kW 0.5 - 50 HP
Ratings 500-600V	N/A	0.75 - 11 kW 1 - 15 HP	N/A	0.37 - 37 kW 0.5 - 50 HP
Ratings 690V	N/A	N/A	N/A	N/A
Control Performance	Volts per Hertz Slip Compensation	Volts per Hertz Sensorless Vector Slip Compensation	Volts per Hertz Slip Compensation	Vector Control (VC) w/FORCE™ Technology Sensorless VC, Slip Compensation Encoder Speed Control Encoderless Speed Control Torque Regulation, Volts per Hertz
Features	Drive Overload (OL) Protection Ramp Regulation Flying Start	Drive OL Protection Ramp Regulation Standard PID Control Flying Start StepLogic™	Drive OL Protection Ramp Regulation Standard PID Control Flying Start Hand/Off/Auto Sleep-Wake Purge Input Damper Input	User Sets, Multi-Language Adv. Drive OL Protection Adv. Bus Regulation Adv. PID Control (Spd or Trq) Droop Analog Trim/Invert Adv. Flying Start Motor OL Protection DriveGuard™ Safe-Off Flux Braking
Ambient Temperature Limit for Enclosure Types	IP 20/Open = 50°C IP 30/NEMA 1 = 40°C Flange = 50°C	IP 20/Open = 50°C IP 30/NEMA 1 = 40°C Flange = 50°C	IP 30/NEMA 1 = 45°C	NEMA 1/IP 20/Open = 50°C Flange = 50°C NEMA 4X/12, IP 66 = 40°C
Communications Options	Integral RS485 Optional: *DeviceNet™ *EtherNet/IP™ *PROFIBUS DP™ Bluetooth® * Optional network for use only with External DSI Communications Kit	Integral RS485 Optional: DeviceNet EtherNet/IP PROFIBUS DP Bluetooth	Integral RS485 w/ Modbus RTU and Metasys® N2, Optional: DeviceNet EtherNet/IP PROFIBUS DP Bluetooth	DeviceNet ControlNet™ - Coax ControlNet - Fiber EtherNet/IP Remote I/O RS485 DF1 PROFIBUS DP Interbus™ LonWorks® Modbus RTU Metasys N2 Siemens P1 FLN Bluetooth





**PowerFlex® 700
Vector Control**

20B ...

N/A

0.37 - 55 kW
0.5 - 100 HP

0.37 - 132 kW
0.5 - 200 HP

0.75 - 110 kW
1 - 150 HP

45 - 132 kW

Vector Control (VC)
w/FORCE™ Technology
Sensorless VC, Slip Compensation
Encoder Speed Control
Encoderless Speed Control
Torque Regulation, Volts per Hertz
Adjustable Voltage Control

User Sets, Multi-Language
Adv. Drive OL Protection
Adv. Bus Regulation
Adv. PID Control (Spd or Trq)
Flux Braking, Fast Stop
Scale Blocks, Droop
Analog Trim/Invert
TorqProve™, Position Indexing/Speed Profiler
Adv. Flying Start
Motor OL Protection
Common Bus Capability
Parameter Linking
Open Motor Lead Detection

IP 20 / Open = 50°C
IP 21/NEMA 1 = 40°C
IP 54 Flange = 40°C

DeviceNet
ControlNet - Coax
ControlNet - Fiber
EtherNet/IP
Remote I/O
RS485 DF1
PROFIBUS DP
Interbus
Modbus RTU
Bluetooth



PowerFlex® 700H

20C ...

N/A

N/A

132 - 560 kW
200 - 900 HP

110 - 560 kW
150 - 800 HP

160 - 800 kW

Volts per Hertz
Sensorless Vector
Slip Compensation

User Sets
Multi-Language
Drive OL Protection
Bus Regulation
PI Control Speed
Droop
Analog Trim
Flying Start
Motor OL Protection

IP 21 / NEMA 1
Normal Duty = 40°C

DeviceNet
ControlNet - Coax
ControlNet - Fiber
EtherNet/IP
Remote I/O
RS485 DF1
PROFIBUS DP
Interbus
LonWorks
Modbus RTU
Metasys N2
Siemens P1 FLN
Bluetooth



PowerFlex® 700S

20D ...

N/A

0.75 - 55 kW
1 - 100 HP

0.75 - 800 kW
1 - 1250 HP

50 - 800 kW
1 - 1100 HP

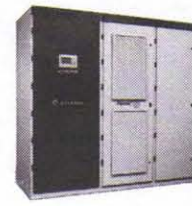
75 - 1200 kW

Vector Control (VC)
w/FORCE Technology
Sensorless VC, Slip Compensation
Encoder Speed Control
Encoderless Speed Control
Torque Regulation, Volts per Hertz
Permanent Magnet Control

Adv. Drive OL Protection
Adv. Bus Regulation
Adv. PI Control (Spd or Trq)
Droop
Analog Trim/Invert
Feedback Loss Switchover
Stegmann Interface, Heidenhain Interface
Resolver Interface, Stahltronic and
Temposonics SSI Interface
Integral Position Loop
SynchLink™
DriveLogix™ Option
Inertia Adaptation
User Function Blocks
Motor Overload Common Bus Capability

IP 20 / Open = 50°C
IP 21/NEMA 1 = 40°C
IP 54 Flange = 40°C

DeviceNet
ControlNet - Coax
ControlNet - Fiber
EtherNet/IP
Remote I/O
RS485 DF1
PROFIBUS DP
Interbus
Modbus RTU
Bluetooth



**PowerFlex® 7000
Medium Voltage**

7000A, 7000B, 7000C

N/A

2400V 60Hz
150 - 1500 kW, 200 - 2000 HP

3300V 50Hz
187 - 2050 kW, 250 - 2750 HP

4160V 50/60Hz
260 - 3730 kW, 350 - 5000 HP

6600V 50Hz
400 - 6340 kW, 500 - 8500 HP

Digital Sensorless Direct Vector
Full Vector Control with Tach
Feedback (optional)

6.5KV SGCT Power
Semiconductor with Integrated
Gate Drive
Patented PowerCage™
Converter Modules
Set-up Wizard
Auto Tuning
Remote "Dial-In" Access
Field Programmable Gate
Arrays
Drive Identity Module

IP 21/NEMA 1 = 40° C

Internal - DPI
DeviceNet
ControlNet - Coax
ControlNet - Fiber
EtherNet/IP
Remote I/O
RS485 DF1
RS485 HVAC
Modbus RTU
Modbus Plus
PROFIBUS DP
RS232 DFI
Bluetooth

**PowerFlex Standard
Packaged Drives**

Attributes	PowerFlex® 40 Standard Packaged Drive	PowerFlex® 70 Enhanced Control Standard Packaged Drive	PowerFlex® 700 Vector Control Standard Packaged Drive
Catalog Reference	23B	21A	21B
Ratings 480V	0.5-15 HP	0.5-50 HP	0.5-200 HP
Control Performance	Volts per Hertz Sensorless Vector Slip Compensation	Vector Control (VC) w/FORCE™ Technology Sensorless VC, Slip Compensation Encoder Speed Control Encoderless Speed Control Torque Regulation Volts per Hertz	Vector Control (VC) w/FORCE™ Technology Sensorless VC, Slip Compensation Encoder Speed Control Encoderless Speed Control Torque Regulation Volts per Hertz Adjustable Voltage Control
Features	All Standard Drive Features Power Disconnect Options Control and Interface Options I/O Options Quick Disconnect Options Program Specific Documentation Additional Custom Capabilities	All Standard Drive Features Power Disconnect Options Control and Interface Options Bypass and Bypass Options Power Conditioning Options Motor Interface Options Order Specific Documentation Additional Custom Capabilities	All Standard Drive Features Power Disconnect Options Control and Interface Options Bypass and Bypass Options Power Conditioning Options Motor Interface Options Order Specific Documentation Additional Custom Capabilities
Ambient Temperature Limit for Enclosure Types	IP 66/NEMA 4/12 = 0° to 40°C (NEMA 4 indoor/outdoor) IP 66/NEMA 4X = 0° to 40°C (indoor/outdoor)	IP 20/NEMA 1 = 0° to 40°C IP 65/NEMA 4/12 (indoor) = 0° to 40°C IP 65/NEMA 4 (outdoor) = 0° to 40°C	IP 20/NEMA 1 = 0° to 40°C IP 54/NEMA 12 Fan & Filter = 0° to 40°C
Communications Options	Integral RS485 Optional: DeviceNet EtherNet/IP PROFIBUS DP Bluetooth	DeviceNet ControlNet-Coax ControlNet-Fiber EtherNet/IP Remote I/O RS485 DF1 PROFIBUS DP Interbus LonWorks Modbus RTU Metasys N2 Siemens P1 FLN Bluetooth	DeviceNet ControlNet-Coax ControlNet-Fiber EtherNet/IP Remote I/O RS485 DF1 PROFIBUS DP Interbus Modbus RTU Bluetooth

Catalog Number Explanation

To interpret the meaning of a catalog number, match the values of the catalog number code in positions **a**, **b**, **c**, etc. with the tables labeled **a**, **b**, **c**, etc. below.

Position

1-3	4	5	6-8	9	10	11	12	13-14
22A	-	A	1P5	N	1	1	4	AA
<i>a</i>		<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>

a

Drive	
Code	Type
22A	PowerFlex 4

b

Voltage Rating		
Code	Voltage	Ph.
V	120V ac	1
A	240V ac	1
B	240V ac	3
D	480V ac	3

c1

Rating		
100-120V Single-Phase Input		
Code	Amps	kW (Hp)
1P5	1.5	0.2 (0.25)
2P3	2.3	0.4 (0.5)
4P5	4.5	0.75 (1.0)
6P0	6.0	1.1 (1.5)

c2

Rating		
200-240V Single-Phase Input - No Brake		
Code	Amps	kW (Hp)
1P4	1.4	0.2 (0.25)
2P1	2.1	0.4 (0.5)
3P6	3.6	0.75 (1.0)
6P8	6.8	1.5 (2.0)
9P6	9.6	2.2 (3.0)

c3

Rating		
200-240V Single-Phase Input		
Code	Amps	kW (Hp)
1P5	1.5	0.2 (0.25)
2P3	2.3	0.4 (0.5)
4P5	4.5	0.75 (1.0)
8P0	8.0	1.5 (2.0)

c4

Rating		
200-240V Three-Phase Input		
Code	Amps	kW (Hp)
1P5	1.5	0.2 (0.25)
2P3	2.3	0.4 (0.5)
4P5	4.5	0.75 (1.0)
8P0	8.0	1.5 (2.0)
012	12.0	2.2 (3.0)
017	17.5	3.7 (5.0)

c5

Rating		
380-480V Three-Phase Input		
Code	Amps	kW (Hp)
1P4	1.4	0.4 (0.5)
2P3	2.3	0.75 (1.0)
4P0	4.0	1.5 (2.0)
6P0	6.0	2.2 (3.0)
8P7	8.7	3.7 (5.0)

d

Enclosure	
Code	Enclosure
N	Panel Mount - IP 20 (NEMA Type Open)
F	Flange Mount - IP 20 (NEMA Type Open)
H	Replacement Plate Drive - IP 20 (NEMA Type Open) - Contact factory for ordering information.

e

HIM	
Code	Interface Module
1	Fixed Keypad

f

Emission Class	
Code	Rating
0	Not Filtered
1	Filtered

g *

Version	
Code	Version
3	No Brake IGBT
4	Standard

* This position of the Catalog Number now indicates drive version. All PowerFlex 4 drives are equipped with RS485 communication.

h

Optional	
Code	Purpose
AA through ZZ	Reserved for custom firmware

Catalog Number Explanation

Position

1-3	4	5	6-8	9	10	11	12	13-14
22B	-	A	2P3	N	1	1	4	AA
<i>a</i>		<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>

a

Drive	
Code	Type
22B	PowerFlex 40

b

Voltage Rating		
Code	Voltage	Ph.
V	120V ac	1
A	240V ac	1
B	240V ac	3
D	480V ac	3
E	600V ac	3

c1

Rating		
100-120V Single-Phase Input		
Code	Amps	kW (Hp)
2P3	2.3	0.4 (0.5)
5P0	5.0	0.75 (1.0)
6P0	6.0	1.1 (1.5)

c2

Rating		
200-240V Single-Phase Input		
Code	Amps	kW (Hp)
2P3	2.3	0.4 (0.5)
5P0	5.0	0.75 (1.0)
8P0	8.0	1.5 (2.0)
012	12	2.2 (3.0)

c3

Rating		
200-240V Three-Phase Input		
Code	Amps	kW (Hp)
2P3	2.3	0.4 (0.5)
5P0	5.0	0.75 (1.0)
8P0	8.0	1.5 (2.0)
012	12	2.2 (3.0)
017	17.5	3.7 (5.0)
024	24	5.5 (7.5)
033	33	7.5 (10)

c4

Rating		
380-480V Three-Phase Input		
Code	Amps	kW (Hp)
1P4	1.4	0.4 (0.5)
2P3	2.3	0.75 (1.0)
4P0	4.0	1.5 (2.0)
6P0	6.0	2.2 (3.0)
010	10.5	4.0 (5.0)
012	12	5.5 (7.5)
017	17	7.5 (10)
024	24	11 (15)

c5

Rating		
460-600V Three-Phase Input		
Code	Amps	kW (Hp)
1P7	1.7	0.75 (1.0)
3P0	3.0	1.5 (2.0)
4P2	4.2	2.2 (3.0)
6P6	6.6	4.0 (5.0)
9P9	9.9	5.5 (7.5)
012	12	7.5 (10)
019	19	11 (15)

d

Enclosure	
Code	Enclosure
N	Panel Mount - IP 20 (NEMA Type Open)
F	Flange Mount - IP 20 (NEMA Type Open)
H	Replacement Plate Drive - IP 20 (NEMA Type Open) - Contact factory for ordering information.

e

HIM	
Code	Interface Module
1	Fixed Keypad

f

Emission Class	
Code	Rating
0	Not Filtered
1	Filtered

*g **

Version	
Code	Version
3	No Brake IGBT
4	Standard

* This position of the Catalog Number now indicates drive version. All PowerFlex 40 drives are equipped with RS485 communication.

h

Optional	
Code	Purpose
AA through ZZ	Reserved for custom firmware



Catalog Number Explanation

To interpret the meaning of a catalog number, match the values of the catalog number code in positions **a**, **b**, **c**, etc. with the tables labeled **a**, **b**, **c**, etc. below.

1-3 4 5 6-8 9 10 11 12
22C **-** **D** **038** **A** **1** **0** **3**
a **b** **c** **d** **e** **f** **g**

a

Drive	
Code	Type
22C	PowerFlex 400

b

Voltage Rating		
Code	Voltage	Ph.
B	240V ac	3
D	480V ac	3

c1

Rating			
200...240V Input			
Code	Amps	kW (Hp)	Frame
012	12	2.2 (3.0)	C
017	17.5	3.7 (5.0)	C
024	24	5.5 (7.5)	C
033	33	7.5 (10)	C
049	49	11 (15)	D
065	65	15 (20)	D
075	75	18.5 (25)	D
090	90	22 (30)	D
120	120	30 (40)	E
145	145	37 (50)	E

c2

Rating			
380...480V Input			
Code	Amps	kW (Hp)	Frame
6P0	6.0	2.2 (3.0)	C
010	10.5	4.0 (5.0)	C
012	12	5.5 (7.5)	C
017	17	7.5 (10)	C
022	22	11 (15)	C
030	30	15 (20)	C
038	38	18.5 (25)	D
045	45.5	22 (30)	D
060	60	30 (40)	D
072	72	37 (50)	E
088	88	45 (60)	E
105	105	55 (75)	E
142	142	75 (100)	E
170	170	90 (125)	F
208	208	110 (150)	F

d

Enclosure	
Code	Enclosure
N	Panel Mount - IP20/UL Open-Type *
A	Panel Mount - IP30/NEMA 1/UL Type 1 *
F	Flange Mount - IP20/UL Open Type ‡

* Frame C drives only available with IP20/UL Open-Type enclosure. Field installed conversion kit available to achieve IP30/NEMA 1/UL Type 1 rating.

* Frame D, E and F drives only available with IP30/NEMA 1/UL Type 1 enclosure.

‡ Frame C drives only.

e

HIM	
Code	Interface Module
1	Fixed Keypad

f

Emission Class	
Code	Rating
0	Not Filtered

g

Version	
Code	Version
3	RS485



Catalog Number Explanation

Many of the catalog codes below represent factory installed options, which can increase lead times. Most of these options can also be ordered as user installed with a shorter lead time. Refer to page 48 for normally stocked IP20/NEMA Type 1 drives and page 53 for user installed options.

1-3			4	5-7			8	Position Number				13	14	15	16
20A			B	2P2			A	3	A	Y	Y	N	N	C	0
a			b	c			d	e	f	g	h	i	j	k	l

a		
Drive		
Code	Type	
20A	PowerFlex 70	

b		
Voltage Rating		
Code	Voltage	Ph.
B	240V ac	3
C	400V ac	3
D	480V ac	3
E	600V ac	3

c1		
ND Rating		
208V, 60 Hz Input		
Code	Amps	kW (Hp)
2P2	2.5	0.37 (0.5)
4P2	4.8	0.75 (1.0)
6P8	7.8	1.5 (2.0)
9P6	11	2.2 (3.0)
015	17.5	4.0 (5.0)
022	25.3	5.5 (7.5)
028	32.2	7.5 (10)
042	43	11 (15)
054	62.1	15 (20)
070	78.2	18.5 (25)

c2		
ND Rating		
240V, 60 Hz Input		
Code	Amps	kW (Hp)
2P2	2.2	0.37 (0.5)
4P2	4.2	0.75 (1.0)
6P8	6.8	1.5 (2.0)
9P6	9.6	2.2 (3.0)
015	15.3	4.0 (5.0)
022	22	5.5 (7.5)
028	28	7.5 (10)
042	42	11 (15)
054	54	15 (20)
070	70	18.5 (25)

c3		
ND Rating		
400V, 50 Hz Input		
Code	Amps	kW (Hp)
1P3	1.3	0.37 (0.5)
2P1	2.1	0.75 (1.0)
3P5	3.5	1.5 (2.0)
5P0	5.0	2.2 (3.0)
8P7	8.7	4.0 (5.0)
011	11.5	5.5 (7.5)
015	15.4	7.5 (10)
022	22	11 (15)
030	30	15 (20)
037	37	18.5 (25)
043	43	22 (30)
060	60	30 (40)
072	72	37 (50)

c4		
ND Rating		
480V, 60 Hz Input		
Code	Amps	kW (Hp)
1P1	1.1	0.37 (0.5)
2P1	2.1	0.75 (1.0)
3P4	3.4	1.5 (2.0)
5P0	5.0	2.2 (3.0)
8P0	8.0	3.7 (5.0)
011	11	5.5 (7.5)
014	14	7.5 (10)
022	22	11 (15)
027	27	15 (20)
034	34	18.5 (25)
040	40	22 (30)
052	52	30 (40)
065	65	37 (50)

c5		
ND Rating		
600V, 60 Hz Input		
Code	Amps	kW (Hp)
0P9	0.9	0.37 (0.5)
1P7	1.7	0.75 (1.0)
2P7	2.7	1.5 (2.0)
3P9	3.9	2.2 (3.0)
6P1	6.1	4.0 (5.0)
9P0	9.0	5.5 (7.5)
011	11	7.5 (10)
017	17	11 (15)
022	22	15 (20)
027	27	18.5 (25)
032	32	22 (30)
041	41	30 (40)
052	52	37 (50)

d	
Enclosure	
Code	Enclosure
A	Panel Mount - IP 20, NEMA Type 1
C	Wall/Machine Mount = IP66, NEMA Type 4X/12 for indoor use only
F	Flange Mount - Front Chassis = IP 20, NEMA Type 1; Rear Heatsink = IP66, UL Type 4x/12 for indoor/outdoor use
G	Wall/Machine Mount - IP54, NEMA Type 12

e	
HIM *	
Code	Interface Module
0	Blank Cover
2	Digital LCD
3	Full Numeric LCD
5	Prog. Only LCD

* IP66, NEMA Type 4X/12 (Enclosure Code C) is available only with HIM Codes 0, 3, or 5.

f

Documentation	
Code	Type
A	English User Manual and Multi-Language Quick Start
N	No Manual

g

Brake IGBT	
Code	w/Brake IGBT
Y	Yes

h

Internal Brake Resistor	
Code	w/Resistor
Y	Yes
N	No

i

Emission Class	
Code	Rating
A	Filtered* A* & B Frames (Optional) C, D, & E Frames (Standard)
N	Not Filtered* A & B Frames (Optional) C, D, & E Frames

* 600V Frames A through D available only without filter (Cat. Code N). 600V Frame E available only with filter (Cat. Code A).

* Increases size to Frame B.

j

Comm Slot	
Code	Version
C	ControlNet (Coax)
D	DeviceNet
E	EtherNet/IP
H	RS485 HVAC
R	RIO
S	RS485 DF1
N	None

k

Control & I/O		
Code	Control	Safe-Off
N	Standard	N/A
C	Enhanced	No
G*	Enhanced	Yes

* Not available as factory installed option for 600V ratings.

l

Feedback	
Code	Feedback
N	N/A
0	None
1	5V/12V Encoder

Catalog Number Explanation

1-3	4	5-7	8	9	10	11	12	13	14	15	16	17-18	19-20
20B	D	2P1	A	3	A	Y	N	A	R	C	0	NN	AD
<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	<i>l</i>	<i>m</i>	<i>n</i>

a

Drive	
Code	Type
20B	PowerFlex 700

b

Voltage Rating			
Code	Voltage	Ph.	Prechg.
B	240V ac	3	-
C	400V ac	3	-
D	480V ac	3	-
E	600V ac	3	-
F	690V ac	3	-
H	540V dc	-	N
J	650V dc	-	N
P	540V dc	-	Y
R	650V dc	-	Y

⚡ Frames 5 & 6 Only.

c1

ND Rating			
208/240V, 60 Hz Input			
Code	208V Amps	240V Amps	Hp
2P2	2.5	2.2	0.5
4P2	4.8	4.2	1.0
6P8	7.8	6.8	2.0
9P6	11	9.6	3.0
015	17.5	15.3	5.0
022	25.3	22	7.5
028	32.2	28	10
042	48.3	42	15
052	56	52	20
070	78.2	70	25
080	92	80	30
104	120	104	40
130	130	130	50
154	177	154	60
192	221	192	75
260	260	260	100

c2

ND Rating		
400V, 50 Hz Input		
Code	Amps	kW
1P3	1.3	0.37
2P1	2.1	0.75
3P5	3.5	1.5
5P0	5.0	2.2
8P7	8.7	4.0
011	11.5	5.5
015	15.4	7.5
022	22	11
030	30	15
037	37	18.5
043	43	22
056	56	30
072	72	37
085	85	45
105	105	55
140	140	75
170	170	90
260	260	132

c3

ND Rating		
480V, 60 Hz Input		
Code	Amps	Hp
1P1	1.1	0.5
2P1	2.1	1.0
3P4	3.4	2.0
5P0	5.0	3.0
8P0	8.0	5.0
011	11	7.5
014	14	10
022	22	15
027	27	20
034	34	25
040	40	30
052	52	40
065	65	50
077	77	60
096	96	75
125	125	100
156	156	125
180	180	150
248	248	200

c4

ND Rating		
600V, 60 Hz Input		
Code	Amps	Hp
1P7	1.7	1.0
2P7	2.7	2.0
3P9	3.9	3.0
6P1	6.1	5.0
9P0	9.0	7.5
011	11	10
017	17	15
022	22	20
027	27	25
032	32	30
041	41	40
052	52	50
062	62	60
077	77	75
099	99	100
125	125	125
144	144	150

c5

ND Rating		
690V, 50 Hz Input		
Code	Amps	kW
052	52	45
060	60	55
082	82	75
098	98	90
119	119	110
142	142	132



d

Enclosure	
Code	Enclosure
A	IP21, NEMA Type 1
F	Flange Mount Front - IP20/NEMA Type Open Back/Heatsink - IP54/NEMA Type 12
G	Stand-Alone/Wall Mount IP54, NEMA Type 12

e

HIM	
Code	Operator Interface
0	Blank Cover
2	Digital LCD
3	Full Numeric LCD
4	Analog LCD
5	Prog. Only LCD
J >	Door Mount, IP66/NEMA Type 12 Full Numeric LCD HIM
K >	Door Mount, IP66/NEMA Type 12 Prog. Only LCD HIM

> Only available with Stand-Alone IP54 drives.

f

Documentation	
Code	Type
A	User Manual
N	No Manual

g

Brake	
Code	w/Brake IGBT *
Y	Yes
N	No

* Brake IGBT is standard on Frames 0-3 and optional on Frames 4-6.

h

Brake Resistor	
Code	w/Resistor
Y	Yes *
N	No

* Not available for Frame 3 drives or larger.

i

Emission		
Code	CE Filter ‡	CM Choke
A	Yes	Yes
B	Yes	No

‡ Note: CE Certification testing has not been performed on 600V class drives below 77 Amps.

j

Comm Slot	
Code	Version
C	ControlNet (Coax)
D	DeviceNet
E	EtherNet/IP
R	RIO
S	RS-485
N	None

k

I/O		
Code	Control	I/O Volts
A	Std.	24V dc/ac
B	Std.	115V ac
C	Vector *	24V dc
D	Vector *	115V ac
N	Std.	None

* Vector Control Option utilizes DPI Only.

l

Feedback	
Code	Type
0	None
1	Encoder, 12V

m

Future Use	
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n

Custom Firmware	
Code	Type
AD >	60 Hz Maximum

> Must be used with Vector Control option C or D (Position k). Positions m-n are only required when custom firmware is supplied.

Catalog Number Explanation

1-3			4	5-7	8	9			10	11	12	13	14	15	16
20C			D	261	A	3			A	Y	N	B	N	N	0
<i>a</i>			<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>			<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	<i>l</i>

a

Drive

Code	Type
20C	PowerFlex 700H

b

Voltage Rating

Code	Voltage	Ph.
C	400V ac	3
D	480V ac	3
E	600V ac	3
F	690V ac	3

c1

ND Rating

400V, 50Hz Input

Code	Amps - ND (HD)	kW - ND (HD)
261	261 (205)	132 (110)
300	300 (245)	160 (132)
385	385 (300)	200 (160)
460	460 (385)	250 (200)
500	500 (420)	250 (250)
590	590 (520)	315 (250)
650	650 (590)	355 (315)
730	730 (650)	400 (355)
820	820 (730)	450 (400)
920	920 (820)	500 (450)
1K0	1030 (920)	560 (500)

c2

ND Rating

480V, 60Hz Input

Code	Amps - ND (HD)	Hp - ND (HD)
261	261 (205)	200 (150)
300	300 (245)	250 (200)
385	385 (300)	300 (250)
460	460 (385)	350 (300)
500	500 (420)	450 (350)
590	590 (520)	500 (450)
650	650 (590)	500 (500)
730	730 (650)	600 (500)
820	820 (730)	700 (600)
920	920 (820)	800 (700)
1K0	1030 (920)	900 (800)

Position

c3

ND Rating

600V, 60Hz Input

Code	Amps - ND (HD)	Hp - ND (HD)
170	170 (144)	150 (150)
208	208 (170)	200 (150)
261	261 (208)	250 (200)
325	325 (261)	350 (250)
385	385 (325)	400 (350)
416	416 (325)	450 (350)
460	460 (385)	450 (400)
502	502 (460)	500 (450)
590	590 (502)	600 (500)
650	650 (590)	700 (650)
750	750 (650)	800 (700)
820	820 (750)	900 (700)

c4

ND Rating

690V, 50Hz Input

Code	Amps - ND (HD)	kW - ND (HD)
170	170 (144)	160 (132)
208	208 (170)	200 (160)
261	261 (208)	250 (200)
325	325 (261)	315 (250)
385	385 (325)	355 (315)
416	416 (325)	400 (315)
460	460 (385)	450 (355)
500	502 (460)	500 (450)
590	590 (502)	560 (500)
650	650 (590)	630 (560)
750	750 (650)	710 (630)
820	820 (750)	800 (630)

d

Enclosure

Code	Enclosure
A	IP 21, NEMA Type 1

e

HIM

Code	Operator Interface
0	Blank Cover
3	Full Numeric LCD, Drive Mounted
C	Full Numeric LCD, Door Mount *

* Frame 10 & up only.

f

Documentation

Code	Type
A	User Manual

g

Brake

Code	w/Brake IGBT *
Y	Yes
N	No

* Brake IGBT is available on Frame 9 drives only.

h

Brake Resistor

Code	w/Resistor
N	No

i

Emission

Code	CE Filter	CM Choke
B	Yes	No
N ‡	No	No

‡ For use on ungrounded distribution systems (Frame 9 drives only).

j

Comm Slot

Code	Version
N	None

k

I/O

Code	I/O Volts
A	24V dc
B	115V ac
N	None

l

Feedback

Code	Type
0	None

Phase II Catalog Number Explanation

Position

1-3	4	5-7	8	9	10	11	12	13	14	15	16	17
20D	D	2P1	A	0	E	Y	N	A	N	A	N	E
<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	<i>l</i>	<i>m</i>

a

Drive

Code	Type
20D	PowerFlex 700S

b

Voltage Rating

Code	Voltage	Ph.	Prechg.
B §	240V ac	3	—
C §	400V ac	3	—
D §	480V ac	3	—
E ♣ §	600V ac	3	—
F %	690V ac	3	—
H %	540V dc	—	N
J %	650V dc	—	N
K %	810V dc	—	N
M %	932V dc	—	N
P ▶	540V dc	—	Y
R ▶	650V dc	—	Y

♣ Note: CE Certification testing has not been performed on 600V class drives.

▶ Frames 5 & 6 Only.

% Frames 5 & up.

§ For DC input on Frames 1...4, use the corresponding AC input code B, C, D, or E.

c1

ND Rating

208/240V, 60Hz Input

Code	208V Amps	240V Amps	Hp
4P2	4.8	4.2	1.0
6P8	7.8	6.8	2.0
9P6	11	9.6	3.0
015	17.5	15.3	5.0
022	25.3	22	7.5
028	32.2	28	10
042	48.3	42	15
052	56	52	20
070	78.2	70	25
080	92	80	30
104	120	104	40
130	130	130	50
154	177	154	60
192	221	192	75
260	260	260	100

c2

ND Rating

400V, 50 Hz Input

Code	Amps	kW
2P1	2.1	0.75
3P5	3.5	1.5
5P0	5.0	2.2
8P7	8.7	4.0
011	11.5	5.5
015	15.4	7.5
022	22	11
030	30	15
037	37	18.5
043	43	22
056	56	30
072	72	37
085	85	45
105	105	55
125	125	55
140	140	75
170	170	90
260	260	132
261	261	132
300	300	160
385	385	200
460	460	250
500	500	250
590	590	315
650	650	355
730	730	400
820 ♣	820	450
920 ♣	920	500
1K0 ♣	1030	560

♣ Release pending at date of printing. Verify before ordering.

c3

ND Rating

480V, 60 Hz Input

Code	Amps	Hp
2P1	2.1	1.0
3P4	3.4	2.0
5P0	5	3.0
8P0	8	5.0
011	11	7.5
014	14	10
022	22	15
027	27	20
034	34	25
040	40	30
052	52	40
065	65	50
077	77	60
096	96	75
125	125	100
156	156	125
180	180	150
248	248	200
261	261	200
300	300	250
385	385	300
460	460	350
500	500	450
590	590	500
650	650	500
730	730	600
820 ♣	820	700
920 ♣	920	800
1K0 ♣	1030	900

♣ Release pending at date of printing. Verify before ordering.



c4

ND Rating 600V, 60Hz Input *		
Code	Amps	Hp
1P7	1.7	1
2P7	2.7	2
3P9	3.9	3
6P1	6.1	5
9P0	9	7.5
011	11	10
017	17	15
022	22	20
027	27	25
032	32	30
041	41	40
052	52	50
062	62	60
077	77	75
099	99	100
125	125	125
144	144	150
170	170	150
208	208	200
261	261	250
325	325	350
385	385	400
416	416	450
460 *	460	450
502 *	502	500
590 *	590	600
650 *	650	700
750 *	750	800
820 *	820	900

* CE Certification testing has not been performed on 600V class drives.

* Release pending at date of printing. Verify before ordering.

d

Enclosure	
Code	Enclosure
A	IP20, NEMA Type 1
N +	Open/IP00
F %	IP54, NEMA Type 12

+ Frames 9 & up Only.

% Frames 5 & 6 pending.

e

HIM	
Code	Operator Interface
0	Blank Cover
2	Digital LCD
3	Full Numeric LCD
5	Prog. Only LCD
C	Full Numeric LCD, Door Mount *

* Frames 10 & up only.

c5

ND Rating 690V, 50 Hz Input *		
Code	Amps	Hp
052	52	45
060	60	55
082	82	75
098	98	90
119	119	110
142	142	132
170	170	160
208	208	200
261	261	250
325	325	315
385	385	355
416	416	400
460 *	460	450
502 *	502	500
590 *	590	560
650 *	650	630
750 *	750	710
820 *	820	800

* CE Certification testing has not been performed on 600V class drives.

* Release pending at date of printing. Verify before ordering.

f

Documentation	
Code	Documents
E	Quick Start Guide
N	No Documentation

g

Brake	
Code	w/Brake IGBT ‡
Y	Yes
N	No

‡ Brake IGBT is standard on Frames 1-3 and optional on Frames 4-9 ONLY.

h

Brake Resistor	
Code	w/Resistor
Y	Yes *
N	No

* Not available for Frame 3 drives or larger.

i

Emission		
Code	CE Filter	CM Choke
A *	Yes	Yes
B >	Yes	No
N §	No	No

* Frames 1-6 Only.

> Frames 9 & up Only.

§ For use on ungrounded distribution systems (Frame 9 drives only).

j

Comm Slot	
Code	Version
N	None
C	DPI ControlNet (Coax)
D	DPI DeviceNet
E	DPI EtherNet/IP
Q	DPI ControlNet (Fiber)
R	DPI RIO
S	DPI RS-485 DF1
1	DriveLogix ControlNet (Coax)
2	DriveLogix ControlNet Redundant (Coax)
3	DriveLogix ControlNet (Fiber)
4	DriveLogix ControlNet Redundant (Fiber)
5	DriveLogix DeviceNet (Open Conn.)
6	DriveLogix EtherNet/IP

k

Control Options				
Code	Control Option	Logic Expansion	Synch -Link	Cassette
A	Phase II	No	No	Expanded
B	Phase II	No	Yes	Expanded
C	Phase II	Yes	No	Expanded
D	Phase II	Yes	Yes	Expanded
G	Phase II	N/A	No	Slim
H	Phase II	N/A	Yes	Slim

l

Feedback	
Code	Option
N	None
A *	Resolver
B *	Stegman Hi-Resolution Encoder
C *	Multi-Device Interface
E *	2nd Encoder
S *	Safe-Off (w/2nd Encoder)

* Expanded cassette required.

m

Additional Config.	
Code	Description
E	Phase II Control
K	Phase II DriveLogix5730
L	Phase II DriveLogix5730 w/EtherNet/IP