

# Product Details and Certifications

## Cross Reference RA Part Number: U-00820919110924

### Product: **20BC170A0AYNANC0**

Description: PowerFlex700 AC Drive, 400 VAC, 3 PH, 170 Amps, 90 kW ND, 75 kW HD, IP20 / NEMA Type 1, with conformal coating, No HIM (Blank Plate), Brake IGBT Installed, without Drive Mounted Brake Resistor, Second Environment Filter per CE EMC directive (89/336/EEC), No Communication Module, Vector Control with 24V I/O, No Feedback



Representative Photo Only (actual product may vary based on configuration sections)

### **BASE DRIVE INFORMATION**

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Bulletin Number	PowerFlex 700 AC Drive
Input Voltage	400 VAC, 3 PH
Output Current	170 Amps
Enclosure	IP20 / Type 1, with conformal coating
Frame Size	Frame Size 6
I/O	Vector Control with 24V I/O
Output Current Information	Output Amps: 170A Cont. 187A 1 Min. 255A 3 Sec
Brake IGBT	Brake IGBT Installed
Brake Resistor	No Brake Resistor
EMC Filtering Options	Second Environment Filter per CE EMC directive (89/336/EEC)

### **OPTION INFORMATION**

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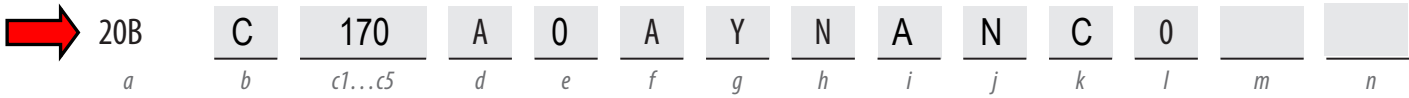
Base Plus Options	Base Plus Options Method
Internal Communication Module	No Communication Module

### **LIFECICLE STATUS NOTE**

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LifeCycle Status Note	PowerFlex 700 Frame 7 - 10 drives are now in End of Life status. They are still available for sale, but we recommend that you consider the new generation PowerFlex 755 drive family as an alternative.
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### Catalog Number Explanation



*a*

Drive	
Code	Type
<b>20B</b>	<b>PowerFlex 700</b>

*b*

Voltage Rating				
Code	Voltage	Ph.	Prechg.	Frames
B	240V AC	3	-	0...6
<b>C</b>	<b>400V AC</b>	<b>3</b>	<b>-</b>	<b>0...10</b>
D	480V AC	3	-	0...10
E	600V AC	3	-	0...6
F	690V AC	3	-	5...6
H	540V DC	-	N	5...6, 10
J	650V DC	-	N	5...6, 10
N	325V DC	-	Y	5...6
P	540V DC	-	Y	5...9
R	650V DC	-	Y	5...9
T	810V DC	-	Y	5...6
W	932V DC	-	Y	5...6

*c1*

ND Rating				
208/240V, 60 Hz Input				
Code	208V Amps	240V Amps	Hp	Frame
2P2	2.5	2.2	0.5	0
4P2	4.8	4.2	1.0	0
6P8	7.8	6.8	2.0	1
9P6	11	9.6	3.0	1
015	17.5	15.3	5.0	1
022	25.3	22	7.5	1
028	32.2	28	10	2
042	48.3	42	15	3
052	56	52	20	3
070	78.2	70	25	4
080	92	80	30	4
104	120	104	40	5
130	130	130	50	5
154	177	154	60	6
192	221	192	75	6
260	260	260	100	6

*c2*

ND Rating			
400V, 50 Hz Input			
Code	Amps	kW	Frame
1P3	1.3	0.37	0
2P1	2.1	0.75	0
3P5	3.5	1.5	0
5P0	5.0	2.2	0
8P7	8.7	4.0	0
011	11.5	5.5	0
015	15.4	7.5	1
022	22	11	1
030	30	15	2
037	37	18.5	2
043	43	22	3
056	56	30	3
072	72	37	3
085	85	45	4
105	105	55	5
125	125	55	5
140	140	75	5
<b>170</b>	<b>170</b>	<b>90</b>	<b>6</b>
205	205	110	6
260	260	132	6
292	292	160	7
325	325	180	7
365	365	200	8
415	415	240	8
481	481	280	8
535	535	300	8
600	600	350	8
730	730	400	9
875	875	500	10

*c3*

ND Rating			
480V, 60 Hz Input			
Code	Amps	Hp	Frame
1P1	1.1	0.5	0
2P1	2.1	1.0	0
3P4	3.4	2.0	0
5P0	5.0	3.0	0
8P0	8.0	5.0	0
011	11	7.5	0
014	14	10	1
022	22	15	1
027	27	20	2
034	34	25	2
040	40	30	3
052	52	40	3
065	65	50	3
077	77	60	4
096	96	75	5
125	125	100	5
156	156	125	6
180	180	150	6
248	248	200	6
292	292	250	7
325	325	250	7
365	365	300	8
415	415	350	8
481	481	400	8
535	535	450	8
600	600	500	8
730	730	600	9
875	875	700	10

*c4*

ND Rating			
600V, 60 Hz Input			
Code	Amps	Hp	Frame
1P7	1.7	1.0	0
2P7	2.7	2.0	0
3P9	3.9	3.0	0
6P1	6.1	5.0	0
9P0	9.0	7.5	0
011	11	10	1
017	17	15	1
022	22	20	2
027	27	25	2
032	32	30	3
041	41	40	3
052	52	50	3
062	62	60	4
077	77	75	5
099	99	100	5
125	125	125	6
144	144	150	6


20B
C
170
A
0
A
Y
N
A
N
C
0

*a*      *b*      *c1...c5*      *d*      *e*      *f*      *g*      *h*      *i*      *j*      *k*      *l*      *m*      *n*

*c5*

ND Rating			
690V, 50 Hz Input			
Code	Amps	KW	Frame
052	52	45	5
060	60	55	5
082	82	75	5
098	98	90	6
119	119	110	6
142	142	132	6

*d*

Enclosure	
Code	Enclosure
<b>A</b>	IP20, NEMA/UL Type 1
F ♦	Open/Flange Mount Front: IP00, NEMA/UL Type Open Back/Heatsink: IP54, NEMA Type 12
N ♦	Open/Flange Mount Front: IP00, NEMA/UL Type Open Back/Heatsink: IP54, NEMA 12
G ♦	Stand-Alone/Wall Mount IP54, NEMA/UL Type 12
U	Roll-In Front: IP00, NEMA/UL Type Open Back/Heatsink: IP54, NEMA 12 Frames 8 & 9 Only

♦ Only available for Frame 5 & Frame 6 drives, 400...690V.  
♦ Only available for Frames 7...10.

*e*

HIM	
Code	Operator Interface
<b>0</b>	Blank Cover
3	LCD Display, Full Numeric Keypad
J ♦	Remote (Panel Mount), IP66, NEMA/UL Type 12 Full Numeric LCD HIM
K ♦	Remote (Panel Mount), IP66, NEMA/UL Type 12 Prog. Only LCD HIM

♦ Available with Frames 5...6 Stand-Alone IP54 drives (Enclosure Code "G").

*f*

Documentation	
Code	Type
<b>A</b>	Manual
N	No Manual
Q	No Shipping Package (Internal Use Only)

*g*

Brake	
Code	w/Brake IGBT ‡
<b>Y</b>	Yes
N	No

‡ Brake IGBT is standard on Frames 0-3, optional on Frames 4-6 and not available on Frames 7...10.

*h*

Internal Braking Resistor	
Code	w/Resistor
Y	Yes *
<b>N</b>	No

\* Not available for Frame 3 drives or larger.

*i*

Emission		
Code	CE Filter §	CM Choke
<b>A</b>	Yes	Yes
B #	Yes	No
N	No	No

§ Note: 600V class drives below 77 Amps (Frames 0-4) are declared to meet the Low Voltage Directive. It is the responsibility of the user to determine compliance to the EMC directive. Frames 7...10, 400/480V AC drives (Voltage Rating codes "C" and "D") meet CE certification requirements when installed per recommendations.  
# Only available for 208...240V Frame 0-3 drives.

*j*

Comm Slot	
Code	Network Type
C	ControlNet (Coax)
D	DeviceNet
E	EtherNet/IP
<b>N</b>	None

*k*

Control & I/O		
Code	Control	I/O Volts
A	Standard ♦	24V DC/AC
B	Standard ♦	115V AC
<b>C</b>	Vector Δ	24V DC
D	Vector Δ	115V AC
N	Standard	None

Δ Vector Control Option utilizes DPI Only.  
♦ Frame 0...6 drives only.

*l*

Feedback	
Code	Type
<b>0</b>	None
1	Encoder, 12V/5V

*m*

Future Use	

*n*

Special Firmware (Frames 0...6 Only)	
Code	Type
AD ♦	60 Hz Maximum
AE ♦	Cascading Fan/Pump Control
AX ♦	82 Hz Maximum
BA ♦	Pump Off (for pump jack)

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