

# Product Details and Certifications

## Cross Reference RA Part Number: U-00820919060083

### Product: **20BC5P0A0AYNANN0**

Description: PowerFlex700 AC Drive, 400 VAC, 3 PH, 5 Amps, 2.2 kW ND, 1.5 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, Standard Control with No 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             | 5 Amps  |
| Enclosure                  | IP20 / Type 1, with conformal coating                       |
| Frame Size                 | Frame Size 0  |
| I/O                        | Standard Control with No I/O                                |
| Output Current Information | Output Amps: 5A Cont. 5.5A 1 Min. 7.5A 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. |
|-----------------------|---|

### 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        |
| <b>5P0</b>        | <b>5.0</b> | <b>2.2</b> | <b>0</b> |
| 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        |
| 170               | 170        | 90         | 6        |
| 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
5P0
A
0
A
Y
N
A
N
N
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     |

*f*

| Documentation |   |
|---------------|---|
| Code          | Type                                    |
| A             | Manual                                  |
| N             | No Manual                               |
| Q             | No Shipping Package (Internal Use Only) |

*k*

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

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

*d*

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

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

*g*

| Brake |                |
|-------|----------------|
| Code  | w/Brake IGBT ‡ |
| Y     | Yes            |
| N     | No             |

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

*l*

| Feedback |                 |
|----------|-----------------|
| Code     | Type            |
| 0        | None            |
| 1        | Encoder, 12V/5V |

*e*

| HIM  |  |
|------|--|
| Code | Operator Interface   |
| 0    | 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").

*h*

| Internal Braking Resistor |            |
|---------------------------|------------|
| Code                      | w/Resistor |
| Y                         | Yes *      |
| N                         | No         |

\* Not available for Frame 3 drives or larger.

*m*

| Future Use |  |
|------------|--|
|------------|--|

*i*

| Emission |             |          |
|----------|-------------|----------|
| Code     | CE Filter § | CM Choke |
| A        | 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.

*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.

*j*

| Comm Slot |                   |
|-----------|-------------------|
| Code      | Network Type      |
| C         | ControlNet (Coax) |
| D         | DeviceNet         |
| E         | EtherNet/IP       |
| N         | None              |