

# Product Details and Certifications

**Cross Reference RA Part Number: PN-53, 9,**

**Product: 20BB0( &A0AYNBNC0**

Description: PowerFlex70 AC Drive, G 400 V AC, 3 PH, 1 G Amps, F HP Normal Duty, F HP Heavy Duty, IP20 / NEMA Type 1, with conformal coating, No HIM, IGBT Installed, Without Drive Mounted Brake Resistor, Environment Filter per CE EMC directive (89/336/EEC), No Communication Module, No Feedback



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

## BASE DRIVE INFORMATION

|                   |  |
|-------------------|--|
| Input Voltage     | G 400 V AC, 3 PH                                     |
| Current Rating    | 1 G Amps   |
| Enclosure         | IP20 / NEMA Type 1, with conformal coating           |
| Frame Size        | Frame Size H   |
| Brake IGBT        | Brake IGBT   |
| Brake Resistor    |  |
| Filter Options    | Environment Filter per CE EMC directive (89/336/EEC) |
| CDPFCBGN: CFA5HCB |  |

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

### Catalog Number Explanation



*a*

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

*b*

| Voltage Rating |                |          |          |              |
|----------------|----------------|----------|----------|--------------|
| Code           | Voltage        | Ph.      | Prechg.  | Frames       |
| <b>B</b>       | <b>240V AC</b> | <b>3</b> | <b>-</b> | <b>0...6</b> |
| C              | 400V AC        | 3        | -        | 0...10       |
| 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        |
| <b>042</b>            | <b>48.3</b> | <b>42</b> | <b>15</b> | <b>3</b> |
| 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     |
| 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

**B** **042** **A** **0** **A** **Y** **N** **B** **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<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.

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 |
| A          | Yes         | Yes      |
| <b>B #</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.