

Product Details and Certifications

Cross Reference RA Part Number: U-00820919021091

Product: **20BD2P1A0AYNANC0**

Description: PowerFlex700 AC Drive, 480 VAC, 3 PH, 2.1 Amps, 1 HP ND, 0.75 HP 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

| | |
|----------------------------|---|
| Bulletin Number | PowerFlex 700 AC Drive |
| Input Voltage | 480 VAC, 3 PH |
| Output Current | 2.1 Amps |
| Enclosure | IP20 / Type 1, with conformal coating |
| Frame Size | Frame Size 0 |
| I/O | Vector Control with 24V I/O |
| Output Current Information | Output Amps: 2.1A Cont. 2.4A 1 Min. 3.2A 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

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

LIFECICLE STATUS NOTE

| | |
|-----------------------|---|
| 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 |
| 20B | PowerFlex 700 |

b

| Voltage Rating | | | | |
|----------------|----------------|----------|----------|---------------|
| Code | Voltage | Ph. | Prechg. | Frames |
| B | 240V AC | 3 | - | 0...6 |
| 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 |
| 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 |
| 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
D
2P1
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 |

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 |

Δ 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 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.

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 |