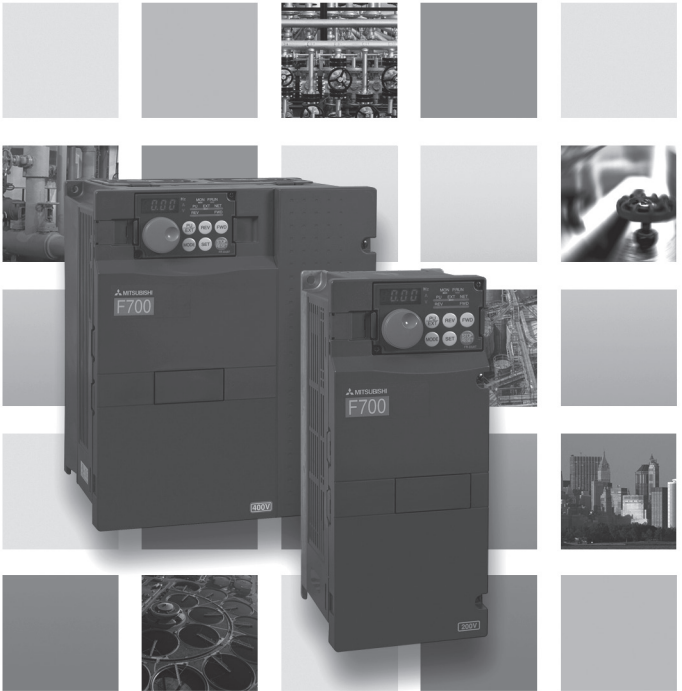


# F700 Series

## Variable Frequency Drives



POCKET REFERENCE GUIDE

## F500 – F700 Conversion Chart

| F500 Model Number | F700 Model Number |
|-------------------|-------------------|
| <b>240 Volt</b>   |                   |
| FR-F520-3.7K-NA   | FR-F720-00167-NA  |
| FR-F520-5.5K-NA   | FR-F720-00250-NA  |
| FR-F520-7.5K-NA   | FR-F720-00340-NA  |
| FR-F520-11K-NA    | FR-F720-00490-NA  |
| FR-F520-15K-NA    | FR-F720-00630-NA  |
| FR-F520-18.5K-NA  | FR-F720-00770-NA  |
| FR-F520-22K-NA    | FR-F720-00930-NA  |
| FR-F520-30K-NA    | FR-F720-01250-NA  |
| FR-F520-37K-NA    | FR-F720-01540-NA  |
| FR-F520-45K-NA    | FR-F720-01870-NA  |
| FR-F520-55K-NA    | FR-F720-02330-NA  |
| <b>480 Volt</b>   |                   |
| FR-F540-3.7K-NA   | FR-F740-00083-NA  |
| FR-F540-5.5K-NA   | FR-F740-00126-NA  |
| FR-F740-7.5K-NA   | FR-F740-00170-NA  |
| FR-F540-11K-NA    | FR-F740-00250-NA  |
| FR-F540-15K-NA    | FR-F740-00310-NA  |
| FR-F540-18.5K-NA  | FR-F740-00380-NA  |
| FR-F540-22K-NA    | FR-F740-00470-NA  |
| FR-F540-30K-NA    | FR-F740-00620-NA  |
| FR-F540-37K-NA    | FR-F740-00770-NA  |
| FR-F540-45K-NA    | FR-F740-00930-NA  |
| FR-F540-55K-NA    | FR-F740-01160-NA  |
| FR-F540L-75K-NA   | FR-F740-01800-NA  |
| FR-F540L-90K-NA   | FR-F740-02160-NA  |
| FR-F540L-110K-NA  | FR-F740-02600-NA  |
| FR-F540L-132K-NA  | FR-F740-03250-NA  |
| FR-F540L-160K-NA  | FR-F740-03610-NA  |
| FR-F540L-185K-NA  | FR-F740-04320-NA  |
| FR-F540L-220K-NA  | FR-F740-04810-NA  |
| FR-F540L-280K-NA  | FR-F740-06100-NA  |
| FR-F540L-375K-NA  | FR-F740-07700-NA  |

This chart shows the closest equivalent in performance between the F500 and F700 inverters. In some cases this may result in the selection of a drive with a higher rating than necessary for a specific motor size.

## 240V Selection Chart

| Motor HP | Inverter Model Number | SLD Rating | LD Rating | Frame Size |
|----------|-----------------------|------------|-----------|------------|
| 1        | FR-F720-00046-NA      | 4.6        | 4.2       | A          |
| 2        | FR-F720-00077-NA      | 7.7        | 7         | B          |
| 3        | FR-F720-00105-NA      | 10.5       | 9.6       | C          |
| 5        | FR-F720-00167-NA      | 16.7       | 15.2      | C          |
| 7.5      | FR-F720-00250-NA      | 25         | 23        | C          |
| 10       | FR-F720-00340-NA      | 34         | 31        | D          |
| 15       | FR-F720-00490-NA      | 49         | 45        | D          |
| 20       | FR-F720-00630-NA      | 63         | 58        | E          |
| 25       | FR-F720-00770-NA      | 77         | 70        | F          |
| 30       | FR-F720-00930-NA      | 93         | 85        | F          |
| 40       | FR-F720-01250-NA      | 125        | 114       | F          |
| 50/60    | FR-F720-01540-NA      | 154        | 140       | G          |
| 60       | FR-F720-01870-NA      | 187        | 170       | H          |
| 75       | FR-F720-02330-NA      | 233        | 212       | H          |
| 100/125  | FR-F720-03160-NA      | 316        | 288       | K          |
| 150      | FR-F720-03800-NA      | 380        | 346       | K          |
| 200      | FR-F720-04750-NA      | 475        | 432       | K          |



## 480V Selection Chart

| Motor HP | Inverter Model Number | SLD Rating | LD Rating | Frame Size |
|----------|-----------------------|------------|-----------|------------|
| 1        | FR-F740-00023-NA      | 2.3        | 2.1       | C          |
| 2        | FR-F740-00038-NA      | 3.8        | 3.5       | C          |
| 3        | FR-F740-00052-NA      | 5.2        | 4.8       | C          |
| 5        | FR-F740-00083-NA      | 8.3        | 7.6       | C          |
| 7.5      | FR-F740-00126-NA      | 12.6       | 11.5      | C          |
| 10       | FR-F740-00170-NA      | 17         | 16        | D          |
| 15       | FR-F740-00250-NA      | 25         | 23        | D          |
| 20       | FR-F740-00310-NA      | 31         | 29        | E          |
| 25       | FR-F740-00380-NA      | 38         | 35        | E          |
| 30       | FR-F740-00470-NA      | 47         | 43        | F          |
| 40       | FR-F740-00620-NA      | 62         | 57        | F          |
| 50/60    | FR-F740-00770-NA      | 77         | 70        | G          |
| 60       | FR-F740-00930-NA      | 93         | 85        | H          |
| 75       | FR-F740-01160-NA      | 116        | 106       | H          |
| 100/150  | FR-F740-01800-NA      | 180        | 144       | H          |
| 150      | FR-F740-02160-NA      | 216        | 180       | J          |
| 200      | FR-F740-02600-NA      | 260        | 216       | J          |
| 250      | FR-F740-03250-NA      | 325        | 260       | K          |
| 300      | FR-F740-03610-NA      | 361        | 325       | K          |
| 350      | FR-F740-04320-NA      | 432        | 361       | L          |
| 400      | FR-F740-04810-NA      | 481        | 432       | L          |
| 450      | FR-F740-05470-NA      | 547        | 481       | M          |
| 500      | FR-F740-06100-NA      | 610        | 547       | M          |
| 550      | FR-F740-06830-NA      | 683        | 610       | M          |
| 650      | FR-F740-07700-NA      | 770        | 683       | N          |
| 700      | FR-F740-08660-NA      | 866        | 770       | N          |
| 800      | FR-F740-09620-NA      | 962        | 866       | P          |
| 900      | FR-F740-10940-NA      | 1094       | 962       | P          |
| 1000     | FR-F740-12120-NA      | 1212       | 1094      | P          |

SLD = 40° C Ambient, 110% overload 60 secs, 120% for 3 secs, 2 kHz switching frequency

LD = 50° C Ambient, 120% overload 60 secs, 150% for 3 secs, 2 kHz switching frequency

## Dimensions – 240V and 480V Drives

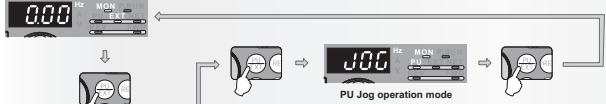
| Frame Size | Dimensions in inches (mm) |            |            |
|------------|---------------------------|------------|------------|
|            | Height                    | Width      | Depth      |
| A          | 10.2 (260)                | 4.3 (110)  | 4.3 (110)  |
| B          | 10.2 (260)                | 4.3 (110)  | 4.9 (125)  |
| C          | 10.2 (260)                | 5.9 (150)  | 5.5 (140)  |
| D          | 10.2 (260)                | 8.7 (220)  | 6.7 (170)  |
| E          | 11.8 (300)                | 8.7 (220)  | 7.5 (190)  |
| F          | 15.8 (400)                | 9.8 (250)  | 7.5 (190)  |
| G          | 21.7(550)                 | 12.8 (325) | 7.7 (195)  |
| H          | 21.7(550)                 | 17.1 (435) | 9.8 (250)  |
| J          | 24.4 (620)                | 18.3 (465) | 11.8 (300) |
| K          | 29.1 (740)                | 18.3 (465) | 14.2 (360) |
| L          | 39.8 (1010)               | 19.6 (498) | 15 (380)   |
| M          | 39.8 (1010)               | 26.8 (680) | 15 (380)   |
| N          | 52.4 (1330)               | 31.1 (790) | 17.3 (440) |
| P          | 62.2 (1580)               | 39.2 (995) | 17.3 (440) |

## Details of Factory Supplied DC Link Chokes

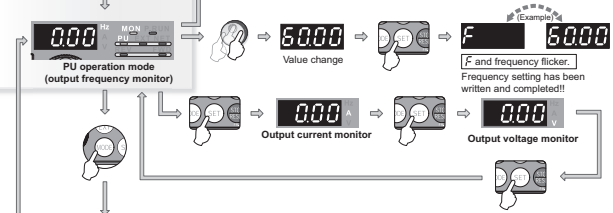
| FR-F740-<br>□□□□□<br>-NA | Dimensions in inches (mm) |           |            | Approx. Weight<br>lbs (kg) |
|--------------------------|---------------------------|-----------|------------|----------------------------|
|                          | Height                    | Width     | Depth      |                            |
| 01800                    | 13.4 (340)                | 5.9 (150) | 7.5 (190)  | 44 (20)                    |
| 02160                    | 13.4 (340)                | 5.9 (150) | 7.7 (195)  | 48 (22)                    |
| 02600                    | 15.9 (405)                | 6.9 (175) | 7.9 (200)  | 57 (26)                    |
| 03250                    | 15.9 (405)                | 6.9 (175) | 8 (205)    | 62 (28)                    |
| 03610                    | 15.9 (405)                | 6.9 (175) | 9.4 (240)  | 64 (29)                    |
| 04320                    | 15.9 (405)                | 6.9 (175) | 9.4 (240)  | 66 (30)                    |
| 04810                    | 17.3 (440)                | 7.5 (190) | 9.8 (250)  | 77 (35)                    |
| 05470                    | 17.3 (440)                | 7.5 (190) | 10 (255)   | 84 (38)                    |
| 06100                    | 19.5 (495)                | 8.3 (210) | 9.8 (250)  | 92 (42)                    |
| 06830                    | 19.5 (495)                | 8.3 (210) | 9.8 (250)  | 101 (46)                   |
| 07700                    | 19.7 (500)                | 8.7 (220) | 9.8 (250)  | 110 (50)                   |
| 08660                    | 19.7 (500)                | 8.7 (220) | 10.6 (270) | 125 (57)                   |
| 09620                    | 17.9 (455)                | 8.5 (215) | 13.6 (345) | 147 (67)                   |
| 10940                    | 18.1 (460)                | 8.5 (215) | 14.2 (360) | 187 (85)                   |
| 12120                    | 18.1 (460)                | 8.5 (215) | 14.2 (360) | 209 (95)                   |

Operation mode switchover

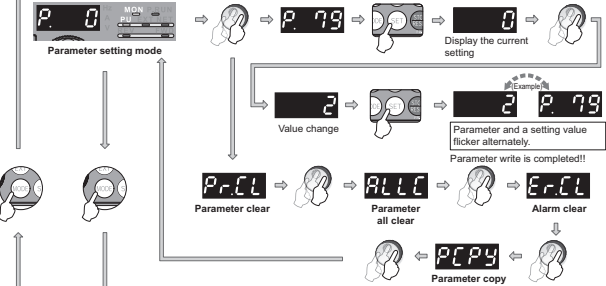
At powering on (external operation mode)



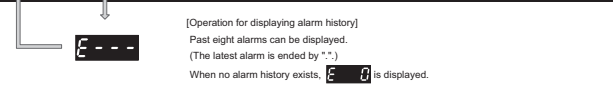
Monitor/frequency setting



Parameter setting



Alarm history



[Operation for displaying alarm history]  
 Past eight alarms can be displayed.  
 (The latest alarm is ended by ".").  
 When no alarm history exists, E 0 is displayed.

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