

# Type MPF AC Motor Run Capacitors

## Oval and Round, Oil Filled, 70 °C, Metallized Polypropylene Capacitors



Type MPF AC metallized polypropylene film dielectric capacitors offer a reliable option for alternating current applications. All devices are oil filled in metal cases with 4-prong quick disconnect terminals for easy assembly. These capacitors pack high capacitance and voltage capabilities into a small, light-weight package. The MPF is internally protected for fail-safe operation. These capacitors have extremely low DF that is ideal for AC motor-run applications.

### Highlights

- Low DF
- Protected with a pressure sensitive interrupter
- Small size and light weight
- UL E71645
- CSA 219950
- Air conditioning and refrigeration applications
- Power factor correction
- Motors



Complies with the EU Directive 2002/95/EC requirement restricting the use of Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent chromium (Cr(VI)), PolyBrominated Biphenyls (PBB) and PolyBrominated Diphenyl Ethers (PBDE).

### Specifications

|                                     |                           |
|-------------------------------------|---------------------------|
| <b>Capacitance Range:</b>           | 1 to 80 $\mu$ F           |
| <b>Voltage Ratings:</b>             | 330 Vac, 370 Vac, 440 Vac |
| <b>Capacitance Tolerance:</b>       | $\pm 10\%$                |
| <b>Operating Temperature Range:</b> | -40 °C to +70 °C          |
| <b>Operating Frequency:</b>         | 50 to 60 Hz               |
| <b>Dissipation Factor:</b>          | 0.1% max @ 60 Hz          |

### Outline Drawings

| Oval  |          |          |        |                  |
|-------|----------|----------|--------|------------------|
| Style | A        | B        | D      | Industry Type    |
| 32    | 1 5/16"  | 2 5/32"  | 13/16" | 1 1/4" Flat Oval |
| 37    | 1 29/32" | 2 29/32" | 13/16" | 1 3/4" Flat Oval |
| 38    | 1 31/32" | 3 21/32" | 13/16" | 2.0" Flat Oval   |

\*See Ratings Table for "H" dimension



| Round |        |        |        |               |
|-------|--------|--------|--------|---------------|
| Style | A      | B      | D      | Industry Type |
| 21    | 1 3/4" | 1 7/8" | 13/16" | 1 3/4" Round  |
| 23    | 2.0"   | 2 1/8" | 13/16" | 2.0" Round    |
| 24    | 2 1/2" | 2 5/8" | 13/16" | 2 1/2" Round  |

\*See Ratings Table for "H" dimension



# Type MPF AC Motor Run Capacitors

## Ratings

### Oval

| Cap<br>( $\mu$ F) | Volts<br>(Vac) | Base<br>Style | Height<br>(In.) | Catalog<br>Part Number |
|-------------------|----------------|---------------|-----------------|------------------------|
| <b>370 Vac</b>    |                |               |                 |                        |
| 1.0               | 370            | 32            | 2.13            | 32FD3701-F             |
| 2.0               | 370            | 32            | 2.13            | 32FD3702-F             |
| 3.0               | 370            | 32            | 2.13            | 32FD3703-F             |
| 4.0               | 370            | 32            | 2.13            | 32FD3704-F             |
| 5.0               | 370            | 32            | 2.38            | 32FD3705-F             |
| 6.0               | 370            | 32            | 2.38            | 32FD3706-F             |
| 7.5               | 370            | 32            | 2.38            | 32FD37075-F            |
| 10.0              | 370            | 32            | 2.63            | 32FD3710-F             |
| 12.5              | 370            | 32            | 3.00            | 32FD37125-F            |
| 12.5              | 370            | 37            | 2.63            | 37FD37125-F            |
| 15.0              | 370            | 37            | 2.63            | 37FD3715-F             |
| 17.5              | 370            | 37            | 2.63            | 37FD37175-F            |
| 20.0              | 370            | 37            | 2.63            | 37FD3720-F             |
| 22.5              | 370            | 37            | 2.63            | 37FD37225-F            |
| 25.0              | 370            | 37            | 2.63            | 37FD3725-F             |
| 27.5              | 370            | 38            | 3.00            | 38FD37275-F            |
| 30.0              | 370            | 37            | 3.00            | 37FD3730-F             |
| 30.0              | 370            | 38            | 3.00            | 38FD3730-F             |
| 35.0              | 370            | 37            | 3.75            | 37FD3735-F             |
| 35.0              | 370            | 38            | 3.00            | 38FD3735-F             |
| 40.0              | 370            | 37            | 3.75            | 37FD3740-F             |
| 40.0              | 370            | 38            | 3.00            | 38FD3740-F             |
| 45.0              | 370            | 37            | 3.75            | 37FD3745-F             |
| 45.0              | 370            | 38            | 3.00            | 38FD3745-F             |
| 50.0              | 370            | 38            | 3.00            | 38FD3750-F             |
| 70.0              | 370            | 38            | 3.75            | 38FD3770-F             |
| <b>440 Vac</b>    |                |               |                 |                        |
| 1.0               | 440            | 32            | 2.13            | 32FB4401-F             |
| 2.0               | 440            | 32            | 2.13            | 32FB4402-F             |
| 3.0               | 440            | 32            | 2.38            | 32FB4403-F             |
| 4.0               | 440            | 32            | 2.38            | 32FB4404-F             |
| 5.0               | 440            | 32            | 2.63            | 32FB4405-F             |
| 6.0               | 440            | 32            | 2.63            | 32FB4406-F             |
| 7.5               | 440            | 32            | 2.63            | 32FB44075-F            |
| 7.5               | 440            | 37            | 2.63            | 37FB44075-F            |
| 10.0              | 440            | 32            | 3.75            | 32FB4410-F             |
| 10.0              | 440            | 37            | 2.63            | 37FB4410-F             |
| 12.5              | 440            | 37            | 2.63            | 37FB44125-F            |
| 15.0              | 440            | 37            | 2.63            | 37FB4415-F             |
| 17.5              | 440            | 37            | 2.63            | 37FB44175-F            |
| 20.0              | 440            | 37            | 3.00            | 37FB4420-F             |
| 20.0              | 440            | 38            | 3.00            | 38FB4420-F             |
| 25.0              | 440            | 37            | 3.75            | 37FB4425-F             |
| 25.0              | 440            | 38            | 3.75            | 38FB4425-F             |
| 30.0              | 440            | 38            | 3.75            | 38FB4430-F             |
| 35.0              | 440            | 37            | 4.75            | 37FB4435-F             |
| 35.0              | 440            | 38            | 3.75            | 38FB4435-F             |
| 40.0              | 440            | 37            | 4.75            | 37FB4440-F             |
| 40.0              | 440            | 38            | 3.75            | 38FB4440-F             |
| 45.0              | 440            | 38            | 3.75            | 38FB4445-F             |
| 50.0              | 440            | 38            | 3.75            | 38FB4450-F             |
| 55.0              | 440            | 38            | 4.75            | 38FB4455-F             |
| 60.0              | 440            | 38            | 4.75            | 38FB4460-F             |

### Round

| Cap<br>( $\mu$ F) | Volts<br>(Vac) | Base<br>Style | Height<br>(In.) | Catalog<br>Part Number |
|-------------------|----------------|---------------|-----------------|------------------------|
| <b>330 Vac</b>    |                |               |                 |                        |
| 3.0               | 330            | 23            | 2.63            | 23FD3303-F             |
| 4.0               | 330            | 23            | 2.63            | 23FD3304-F             |
| 5.0               | 330            | 23            | 2.63            | 23FD3305-F             |
| 6.0               | 330            | 23            | 2.63            | 23FD3306-F             |
| 7.0               | 330            | 23            | 2.63            | 23FD3307-F             |
| 8.0               | 330            | 23            | 2.63            | 23FD3308-F             |
| 10.0              | 330            | 23            | 2.63            | 23FD3310-F             |
| <b>370 Vac</b>    |                |               |                 |                        |
| 3.0               | 370            | 21            | 2.63            | 21FD3703-F             |
| 4.0               | 370            | 21            | 2.63            | 21FD3704-F             |
| 5.0               | 370            | 21            | 2.63            | 21FD3705-F             |
| 6.0               | 370            | 21            | 2.63            | 21FD3706-F             |
| 7.0               | 370            | 21            | 2.63            | 21FD3707-F             |
| 8.0               | 370            | 21            | 2.63            | 21FD3708-F             |
| 10.0              | 370            | 21            | 2.63            | 21FD3710-F             |
| 12.5              | 370            | 21            | 2.63            | 21FD37125-F            |
| 15.0              | 370            | 21            | 2.63            | 21FD3715-F             |
| 17.5              | 370            | 21            | 2.63            | 21FD37175-F            |
| 20                | 370            | 21            | 2.63            | 21FD3720-F             |
| 25                | 370            | 21            | 3.00            | 21FD3725-F             |
| 25                | 370            | 23            | 3.00            | 23FD3725-F             |
| 30                | 370            | 21            | 3.00            | 21FD3730-F             |
| 30                | 370            | 23            | 3.00            | 23FD3730-F             |
| 35                | 370            | 21            | 3.75            | 21FD3735-F             |
| 35                | 370            | 23            | 3.00            | 23FD3735-F             |
| 40                | 370            | 21            | 3.75            | 21FD3740-F             |
| 40                | 370            | 23            | 3.00            | 23FD3740-F             |
| 45                | 370            | 23            | 3.75            | 23FD3745-F             |
| 45                | 370            | 24            | 3.00            | 24FD3745-F             |
| 50                | 370            | 23            | 3.75            | 23FD3750-F             |
| 50                | 370            | 24            | 3.00            | 24FD3750-F             |
| 55                | 370            | 23            | 3.75            | 23FD3755-F             |
| 55                | 370            | 24            | 3.00            | 24FD3755-F             |
| 60                | 370            | 23            | 3.75            | 23FD3760-F             |
| 60                | 370            | 24            | 3.00            | 24FD3760-F             |
| 65                | 370            | 24            | 3.75            | 24FD3765-F             |
| 70                | 370            | 24            | 3.75            | 24FD3770-F             |
| 80                | 370            | 24            | 4.75            | 24FD3780-F             |
| <b>440 Vac</b>    |                |               |                 |                        |
| 15                | 440            | 21            | 2.63            | 21FB4415-F             |
| 20                | 440            | 21            | 3.00            | 21FB4420-F             |
| 20                | 440            | 23            | 3.00            | 23FB4420-F             |
| 22.5              | 440            | 21            | 3.00            | 21FB44225-F            |
| 22.5              | 440            | 23            | 3.00            | 23FB44225-F            |
| 25                | 440            | 21            | 3.75            | 21FB4425-F             |
| 25                | 440            | 23            | 3.00            | 23FB4425-F             |
| 30                | 440            | 23            | 3.75            | 23FB4430-F             |
| 30                | 440            | 24            | 3.00            | 24FB4430-F             |
| 35                | 440            | 23            | 3.75            | 23FB4435-F             |
| 35                | 440            | 24            | 3.00            | 24FB4435-F             |
| 40                | 440            | 23            | 3.75            | 23FB4440-F             |
| 40                | 440            | 24            | 3.75            | 24FB4440-F             |
| 45                | 440            | 24            | 3.75            | 24FB4445-F             |
| 50                | 440            | 24            | 3.75            | 24FB4450-F             |
| 55                | 440            | 24            | 3.75            | 24FB4455-F             |
| 60                | 440            | 24            | 4.75            | 24FB4460-F             |
| 70                | 440            | 24            | 4.75            | 24FB4470-F             |

# Type MPF AC Motor Run Capacitors

## Hardware for Round and Oval Metals Cans

### Oval Capacitor Hardware

#### Mounting Brackets #32107

| Case Code | Bracket |
|-----------|---------|
| A         | 32107-1 |
| C         | 32107-2 |
| D         | 32107-3 |



#### End Mount Footed Bracket (2 required) #30434

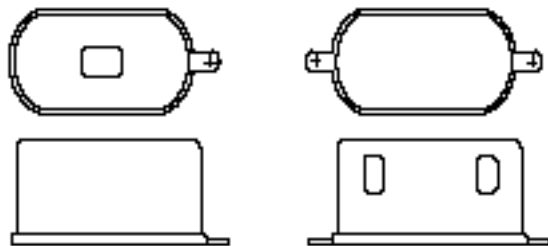


#### Side Mount Footed Bracket (2 required) #31762



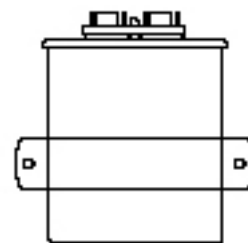
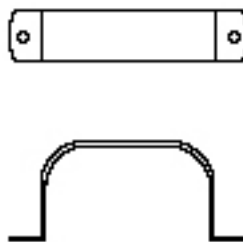
| H (Inches) | End Mount | Side Mount |
|------------|-----------|------------|
| 2.13       | 30434-33  | 31762-45   |
| 2.38       | 30434-37  | 31762-46   |
| 2.63       | 30434-41  | 31762-47   |
| 2.88       | 30434-45  | 31762-48   |
| 3.13       | 30434-49  | 31762-49   |
| 3.50       | 30434-55  | 31762-50   |
| 3.75       | 30434-59  | 31762-83   |
| 3.88       | 30434-61  | 31762-51   |
| 4.25       | 30434-67  | 31762-52   |
| 4.75       | 30434-75  | 31762-54   |
| 5.13       | 30434-81  | 31762-132  |
| 5.25       | 30434-83  | 31762-55   |
| 5.75       | 30434-91  | 31762-56   |
| 6.25       | 30434-99  | 31762-59   |
| 6.75       | 30434-107 | 31762-60   |
| 7.25       | 30434-115 | 31762-62   |
| 8.00       | 30434-127 | 31762-63   |
| 9.00       | 30434-143 | 31762-78   |

#### Insulating Terminal Boots UL Approved Material



#### Wrap Around Bracket

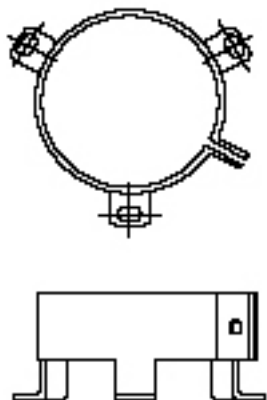
| Case Code | Bracket |
|-----------|---------|
| A         | 30393-5 |
| C         | 30393-9 |
| D         | OB3     |



### Round Capacitor Hardware

#### 3 Footed Round Mounting Bracket

| Case Code | Bracket |
|-----------|---------|
| P         | VR6B    |
| S         | VR8B    |
| T         | VR10B   |



#### 2 Footed Round Mounting Bracket

| Case Code | Bracket |
|-----------|---------|
| P         | 32107-6 |
| S         | 32107-7 |
| T         | 32107-8 |



#### Wrap Around Bracket



| Case Code | Bracket |
|-----------|---------|
| P         | RB175   |
| S         | RB200   |
| T         | RB250   |

## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

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Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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