

# Fincor DC Motors

## Shunt Wound DC Motors - Series 9200

Fincor Series 9200 motors are industrial rated general purpose DC motors designed for use with single-phase DC drives. Series 9200 motors are shunt-wound, or stabilized shunt-wound and are suitable for constant torque-adjustable speed operation by armature voltage control to base speed. The field winding is typically excited by a separate power supply. With constant armature voltage and field excitation, a shunt-wound motor offers relatively flat speed-torque characteristics.



### Shunt Wound DC Motors - Series 9200

| HP  | Base Speed | Armature Volts | Armature Amps | Field Volts | Enclosure | Frame | Stock Number | Order Code | Weight (lbs) |
|-----|------------|----------------|---------------|-------------|-----------|-------|--------------|------------|--------------|
| 1/6 | 1750       | 90             | 2             | 50/100      | TEFC      | 56C   | 5002698      | 9201609TFB | 23           |
| 1/4 | 1750       | 90             | 2.8           | 50/100      | TEFC      | 56C   | 5002319      | 9202509TFB | 24           |
| 1/3 | 1750       | 90             | 3.5           | 50/100      | TEFC      | 56C   | 5002396      | 9203309TFB | 24           |
| 1/2 | 1750       | 90             | 5.4           | 50/100      | TEFC      | 56C   | 5002291      | 9205009TFB | 29           |
|     |            | 180            | 2.6           | 100/200     | TEFC      | 56C   | 5002454      | 9205018TFB | 29           |
| 3/4 | 1750       | 90             | 8.1           | 50/100      | TEFC      | 56C   | 5002320      | 9207509TFB | 34           |
|     |            | 180            | 3.8           | 100/200     | TEFC      | 56C   | 5002292      | 9207518TFB | 34           |
| 1   | 1750       | 90             | 10.5          | 50/100      | TEFC      | 56C   | 5002401      | 9210009TFB | 52           |
|     |            | 180            | 5.5           | 100/200     | TEFC      | 56C   | 5002649      | 9210018TFB | 53           |
| 1.5 | 1750       | 180            | 8.2           | 100/200     | DPG       | 184C  | 5002378      | 9215018DPB | 84           |
|     |            |                |               |             | TEFC      | 184C  | 5002648      | 9215018TFB | 84           |
| 2   | 1750       | 180            | 11.6          | 100/200     | DPG       | 184C  | 5002631      | 9220018DPB | 98           |
|     |            |                |               |             | TEFC      | 184C  | 5002632      | 9220018TFB | 98           |
| 3   | 1750       | 180            | 15.1          | 100/200     | DPG       | 215C  | 5002248      | 9230018DPB | 137          |
|     |            |                |               |             | TEFC      | 215C  | 5002284      | 9230018TFB | 137          |
| 5   | 1750       | 180            | 24            | 100/200     | DPG       | 256UC | 5002297      | 9250018DPB | 304          |
|     |            |                |               |             | TEFC      | 256UC | 5002296      | 9250018TFB | 304          |

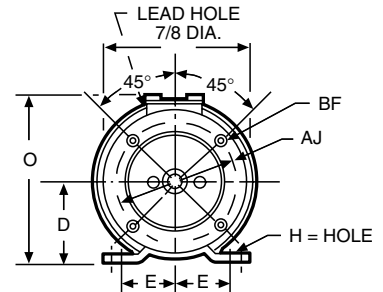
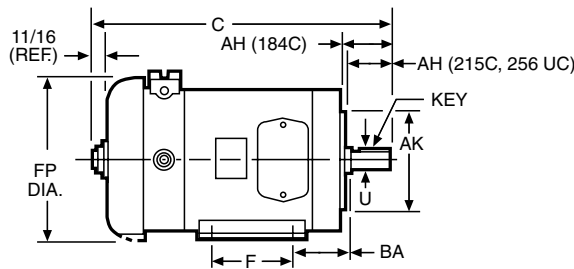
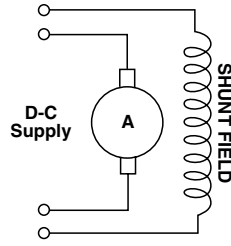
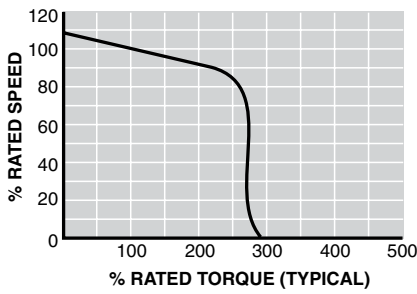
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### Options for Model TFB & DPB Series 9200 DC Motors

| Description   | Field Installed Order Code | Factory Installed Order Suffix |
|---|----------------------------|--------------------------------|
| DC Tachometer Generator Type XPY, 50V/1000 rpm with mounting hardware | 1/6 to 3/4 hp              | 106343222                      |
|   | 1 hp                       | 106343223                      |
|   | 1.5 to 2 hp                | 106343224                      |
|   | 3 hp DPG                   | 106343225                      |
|   | 3 hp TEFC                  | 106343226                      |
|   | 5 hp DPG                   | 106343227                      |
| Mounting Hardware Only for XPY or Fincor DC Tachometer Generator for  | 5 hp TEFC                  | 106343228                      |
|   | 1/6 to 3/4 hp              | 104355801                      |
|   | 1 hp                       | 104355809                      |
|   | 1.5 to 2 hp                | 104355808                      |
|   | 3 hp DPG                   | 104355804                      |
|   | 3 hp TEFC                  | 104355805                      |
| Thermostats   | 5 hp DPG                   | 104355806                      |
|   | 5 hp TEFC                  | 104355807                      |

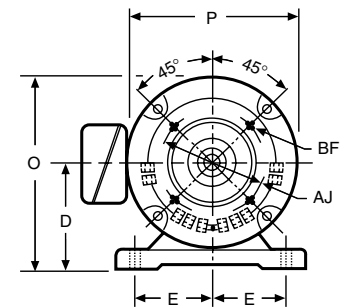
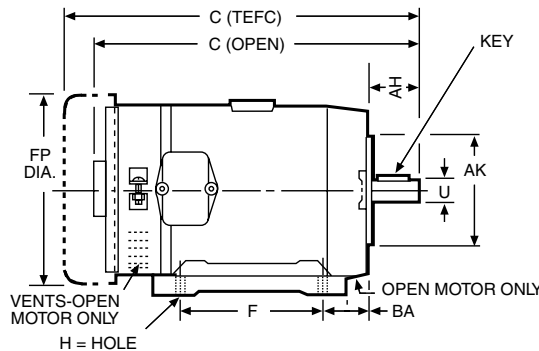
Field Installed items are shipped "loose" for customer mounting  
Consult Factory for Availability

### SPEED TORQUE CURVE



### TBF Models

| HP  | Frame Size <sup>1</sup> | Model Number | Dimensions, Inches <sup>2</sup> |       |       |            |            |       |       |       |       |       |       |      |        |         |       |
|-----|-------------------------|--------------|---------------------------------|-------|-------|------------|------------|-------|-------|-------|-------|-------|-------|------|--------|---------|-------|
|     |                         |              | C                               | D     | E     | F          | H          | Key   | O     | P     | U     | AH    | AJ    | AK   | BA     | BF(tap) | FP    |
| 1/6 | 56C                     | 9201609TFB   | 13.25                           | 3.5   | 2.438 | 3.0 or 4.0 | 0.344 slot | 0.188 | 7.25  | 5.688 | 0.625 | 2.06  | 5.875 | 4.5  | 2.75   | 3/8-16  | 6.125 |
| 1/4 |                         | 9202509TFB   | 13.25                           | 3.5   | 2.438 | 3.0 or 4.0 | 0.344 slot | 0.188 | 7.25  | 5.688 | 0.625 | 2.06  | 5.875 | 4.5  | 2.75   | 3/8-16  | 6.125 |
| 1/3 |                         | 9203309TFB   | 13.25                           | 3.5   | 2.438 | 3.0 or 4.0 | 0.344 slot | 0.188 | 7.25  | 5.688 | 0.625 | 2.06  | 5.875 | 4.5  | 2.75   | 3/8-16  | 6.125 |
| 1/2 |                         | 9205009TFB   | 14.25                           | 3.5   | 2.438 | 3.0 or 4.0 | 0.344 slot | 0.188 | 7.25  | 5.688 | 0.625 | 2.06  | 5.875 | 4.5  | 2.75   | 3/8-16  | 6.125 |
|     |                         | 9205018TFB   | 14.25                           | 3.5   | 2.438 | 3.0 or 4.0 | 0.344 slot | 0.188 | 7.25  | 5.688 | 0.625 | 2.06  | 5.875 | 4.5  | 2.75   | 3/8-16  | 6.125 |
| 3/4 |                         | 9207509TFB   | 14.75                           | 3.5   | 2.438 | 3.0 or 4.0 | 0.344 slot | 0.188 | 7.25  | 5.688 | 0.625 | 2.06  | 5.875 | 4.5  | 2.75   | 3/8-16  | 6.125 |
|     |                         | 9207518TFB   | 14.75                           | 3.5   | 2.438 | 3.0 or 4.0 | 0.344 slot | 0.188 | 7.25  | 5.688 | 0.625 | 2.06  | 5.875 | 4.5  | 2.75   | 3/8-16  | 6.125 |
| 1   |                         | 9210009TFB   | 16.125                          | 3.5   | 2.438 | 3.0        | 0.406 slot | 0.188 | 7.75  | 6.625 | 0.625 | 2.06  | 5.875 | 4.5  | 2.75   | 3/8-16  | 7.188 |
|     | 9210018TFB              | 16.125       | 3.5                             | 2.438 | 3.0   | 0.406 slot | 0.188      | 7.75  | 6.625 | 0.625 | 2.06  | 5.875 | 4.5   | 2.75 | 3/8-16 | 7.188   |       |



### TBF & DPB Models

| HP    | Frame Size <sup>1</sup> | Model Number | Dimensions, Inches <sup>2</sup> |      |      |      |       |       |        |        |       |       |       |     |      |         |        |
|-------|-------------------------|--------------|---------------------------------|------|------|------|-------|-------|--------|--------|-------|-------|-------|-----|------|---------|--------|
|       |                         |              | C                               | D    | E    | F    | H     | Key   | O      | P      | U     | AH    | AJ    | AK  | BA   | BF(tap) | FP     |
| 1-1/2 | 184C                    | 9215018DPB   | 15.438                          | 4.5  | 3.75 | 5.5  | 0.406 | 0.188 | 8.375  | 7.75   | 0.875 | 2.125 | 5.875 | 4.5 | 2.75 | 3/8-16  | -      |
|       |                         | 9215018TFB   | 17.375                          | 4.5  | 3.75 | 5.5  | 0.406 | 0.188 | 8.375  | 7.75   | 0.875 | 2.125 | 5.875 | 4.5 | 2.75 | 3/8-16  | 8.5    |
| 2     | 184C                    | 9220018DPB   | 18.625                          | 4.5  | 3.75 | 5.5  | 0.406 | 0.188 | 8.375  | 7.875  | 0.875 | 2.125 | 5.875 | 4.5 | 2.75 | 3/8-16  | 8.5    |
|       |                         | 9220018TFB   | 18.625                          | 4.5  | 3.75 | 5.5  | 0.406 | 0.188 | 8.375  | 7.75   | 0.875 | 2.125 | 5.875 | 4.5 | 2.75 | 3/8-16  | 8.5    |
| 3     | 215C                    | 9230018DPB   | 20.938                          | 5.25 | 4.25 | 7.0  | 0.406 | 0.25  | 9.938  | 9.375  | 1.125 | 2.75  | 7.25  | 8.5 | 3.5  | 1/2-13  | -      |
|       |                         | 9230018TFB   | 21.188                          | 5.25 | 4.25 | 7.0  | 0.406 | 0.25  | 9.938  | 9.375  | 1.125 | 2.75  | 7.25  | 8.5 | 3.5  | 1/2-13  | 10.188 |
| 5     | 256UC                   | 9250018DPB   | 24.75                           | 6.25 | 5.0  | 10.0 | 0.531 | 0.313 | 11.938 | 11.375 | 1.375 | 3.50  | 7.25  | 8.5 | 4.25 | 1/2-13  | -      |
|       |                         | 9250018TFB   | 25.875                          | 6.25 | 5.0  | 10.0 | 0.531 | 0.313 | 11.938 | 11.375 | 1.375 | 3.50  | 7.25  | 8.5 | 4.25 | 1/2-13  | 12.375 |

Notes:

- 1 1750 RPM Base Speed only.
- 2 Dimensions for estimating only.

# Fincor DC Motors

## Permanent Magnet DC Motors

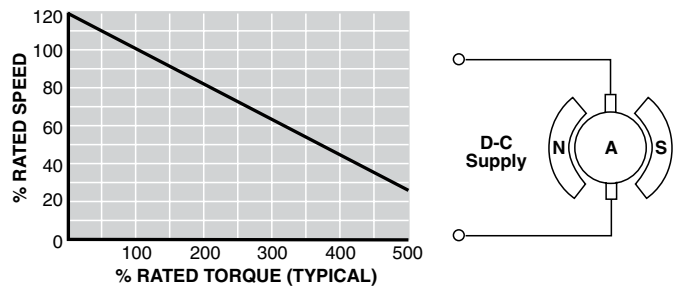
### Series 9300

Fincor Series 9300 permanent magnet motors are industrial rated general purpose DC motors designed for use with single-phase DC drives. They provide constant-torque adjustable-speed operation by armature voltage control to base speed. The motors are suitable for a wide range of applications including full power start-stop conditions, continuous high speed operation, precision speed regulation, regenerative braking and reversing, low speed contactor reversing, power off dynamic braking, and crawling duty.

Series 9300 motors feature a permanent magnet field with a conventional wound armature and feature excellent starting torque, speed regulation, dynamic response, and heat dissipation. Series 9300 motors should only be plug reversed when reversing currents are limited to less than locked rotor current.



**SPEED TORQUE CURVE**



### Permanent Magnet DC Motors - Series 9300

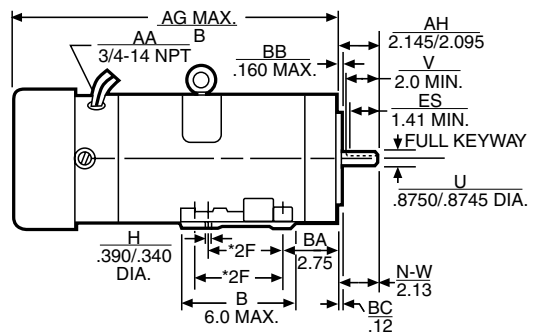
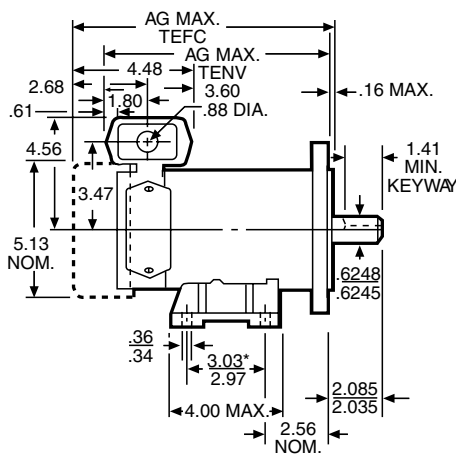
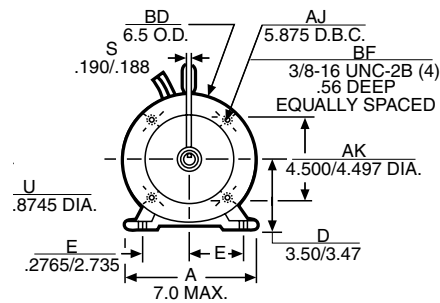
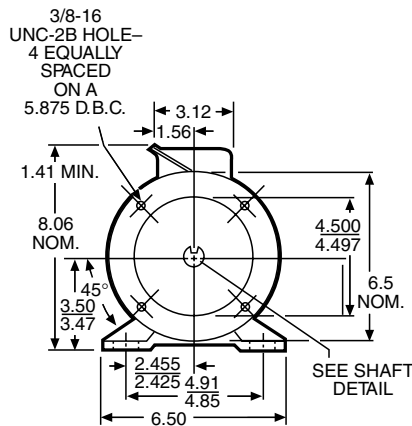
| HP  | Base Speed | Armature Volts | Armature Amps | Enclosure | Frame    | Stock Number | Order Code | Weight (lbs) |
|-----|------------|----------------|---------------|-----------|----------|--------------|------------|--------------|
| 1/6 | 1725       | 90             | 2.2           | TENV      | 56C      | 5009322      | 9301609TNL | 15           |
| 1/4 | 1725       | 90             | 2.5           | TENV      | 56C      | 5009323      | 9302509TNL | 17           |
| 1/3 | 1725       | 90             | 3.5           | TENV      | 56C      | 5009324      | 9303309TNL | 21           |
| 1/2 | 1725       | 90             | 5             | TEFC      | 56C      | 5009325      | 9305009TFL | 25           |
|     |            | 180            | 2.5           | TEFC      | 56C      | 5009326      | 9305018TFL | 25           |
| 3/4 | 1725       | 90             | 7.3           | TEFC      | 56C      | 5009327      | 9307509TFL | 32           |
|     |            | 180            | 3.8           | TEFC      | 56C      | 5009328      | 9307518TFL | 32           |
| 1   | 1725       | 90             | 10.6          | TEFC      | 56C      | 5009329      | 9310009TFL | 39           |
|     |            | 180            | 5             | TEFC      | 56C      | 5009330      | 9310018TFL | 39           |
| 1.5 | 1750       | 180            | 7.5           | TEFC      | 145TC    | 5009331      | 9315018TFL | 68           |
| 2   | 1750       | 180            | 9.5           | TEFC      | 145TC    | 5009332      | 9320018TFL | 73           |
| 3   | 1750       | 180            | 12.9          | TEFC      | 182/45TC | 5009333      | 9330018TFL | 93           |
| 5   | 1750       | 180            | 19.6          | TEFC      | 1810ATC  | 5008070      | 9350018TFB | 157          |

Removable Mounting Feet are Included  
All items normally stocked

### Options for Model TNL, TFL Series 9300 DC Motors

| Description   |                        | Field Installed Order Code | Factory Installed Order Code |
|---|------------------------|----------------------------|------------------------------|
| DC Tachometer Generator Type XPY, 50V/1000 rpm with mounting hardware | 1/6 to 3/4 hp          | 106890101                  | -5056                        |
|   | 1 hp                   | 106890102                  |                              |
|   | 182/145TC motor frames | 106890103                  |                              |
| Mounting Hardware Only for XPY or DC Tachometer                       | 1/6 to 3/4 hp          | 106890301                  | -5063A                       |
|   | 1 hp                   | 106890302                  |                              |
|   | 182/145TC motor frames | 106890303                  |                              |
| Thermostat  |                        |                            | -5064A                       |

All motors are designed to comply with standard NEMA mounting dimensions, and manufactured to meet or exceed NEMA electrical and mechanical specifications and test procedures.



\*The optional mounting feet have six mounting holes for mounting either the 143TC or 145TC Frame.  
 2F: 143TC Frame 4.030/3.970  
 2F: 145TC Frame 5.030/4.970

\* MOUNTING FEET ARE OPTIONAL.

### TNL & TFL Models

| HP  | Model Number | AG Maximum <sup>1</sup> |                 | Wt. (lbs.) <sup>2</sup> | Enclosure |
|-----|--------------|-------------------------|-----------------|-------------------------|-----------|
|     |              | <sup>a</sup> A°         | <sup>a</sup> B° |                         |           |
| 1/6 | 9301609TNL   | 7.13                    | —               | 15                      | TENV      |
| 1/4 | 9302509TNL   | 7.66                    | —               | 17                      |           |
| 1/3 | 9303309TNL   | 8.16                    | —               | 21                      |           |
| 1/2 | 9305009TFL   | —                       | 9.875           | 25                      | TEFC      |
|     | 9305018TFL   | —                       | 9.875           |                         |           |
| 3/4 | 9307509TFL   | —                       | 12.375          | 32                      |           |
|     | 9307518TFL   | —                       | 12.375          |                         |           |
| 1   | 9310009TFL   | —                       | 14.375          | 39                      |           |
|     | 9310018TFL   | —                       | 14.375          |                         |           |

### TFL Models

| HP    | Model Number | AG Maximum <sup>1</sup> |  | Wt. (lbs.) <sup>2</sup> | Enclosure |
|-------|--------------|-------------------------|--|-------------------------|-----------|
|       |              | <sup>a</sup> B°         |  |                         |           |
| 1 1/2 | 9315018TFL   | 16.35                   |  | 68                      | TEFC      |
| 2     | 9320018TFL   | 17.35                   |  | 73                      |           |
| 3     | 9330018TFL   | 19.75                   |  | 93                      |           |

Notes:

- To convert dimension figures shown to metric equivalents (mm) multiply by 25.4.
- To convert weights shown to metric equivalents (kgs) multiply by 0.45.