

ACCU-Torq® Totally Enclosed Blower Cooled (TEBC) Vector Duty Induction Motors



Horsepower: 3 – 350 HP

Speed Range: 5000:1

Poles: 4 and 6

Rated Voltages: 230/460 and 460 Volts

Temp Rise: Continuous duty at 40°C Ambient

Insulation: Class H

Warranty: Three year limited warranty*

*For details, refer to: www.usmotors.com

Product Features:

- INVERTER GRADE® insulation system
- Constant torque operation from zero to base speed
- Constant power (HP) operation to two times base speed up to 250 frame and 1.5 times base speed above 250 frame
- F-1 Standard, field convertible to F-2
- Normally closed class F thermostats standard (One per phase)
- Shaft grounding ring standard on all ratings
- Encoder provision on all ratings
- Radial blower configurations available as ETO
- Corro-Duty construction on TEBC models
- Insulated shaft ODE 400 frame and above

Product Overview and Options

ACCU-Torq® TEBC motors are used in variable frequency drive applications requiring full rated torque at zero speed utilizing Closed- or Open-Loop (Sensorless Vector) controls. The cast iron construction makes this motor an ideal choice for process lines, chemical plants, paper mills or any other severe duty environment.

Typical Applications:

- Packaging machinery
- Extruders
- Winders
- Process Lines
- Cranes and Hoists
- Slitters



ACCU-Torq® Motor

| HP | RPM (Max Safe RPM) | Voltage | Frame | Catalog Number | "C" Dim. (inches) | Est Ship Wt (lbs) | Full Load Eff. | Full Load Amps | Blower Full Load Amps | Notes |
|-----|--------------------|---------|-------|----------------|-------------------|-------------------|----------------|----------------|-----------------------|-------|
| 3 | 1800(4000) | 230/460 | 182TC | HN3T2BC | 16.5 | 100 | 89.5 | 9.1/4.5 | --- | 28 |
| | 1200(4000) | 230/460 | 213TC | HN3T3BC | 20.0 | 160 | 89.5 | 8.8/4.4 | --- | 28 |
| 5 | 1800(4000) | 230/460 | 213TC | HN5T2BC | 20.0 | 160 | 89.5 | 16/8 | --- | 28 |
| | 1200(4000) | 230/460 | 215TC | HN5T3BC | 20.0 | 175 | 89.5 | 15/8 | --- | 28 |
| 7.5 | 1800(4000) | 230/460 | 213TC | HN5T2BC | 20.0 | 160 | 91.7 | 22/11 | --- | 28 |
| | 1200(4000) | 230/460 | 254TC | HN5T3BC | 25.1 | 300 | 91.0 | 20/10 | --- | 28 |
| 10 | 1800(4000) | 230/460 | 254TC | HN10T2BC | 25.1 | 300 | 91.7 | 28/14 | --- | 28 |
| | 1200(4000) | 230/460 | 256TC | HN10T3BC | 25.1 | 340 | 91.0 | 27/14 | --- | 28 |
| | 1800(4000) | 230/460 | 215TC | B10T2BC | 31.3 | 280 | 91.7 | 26.5/13.9 | 1.5/0.75 | 8 |
| | 1200(4000) | 230/460 | 256TC | B10T3BC | 36.2 | 470 | 91.7 | 26.1/13 | 1.5/0.75 | 8 |
| 15 | 1800(4000) | 230/460 | 254TC | B15T2BC | 36.2 | 470 | 93.6 | 38/19 | 1.5/0.75 | 8 |
| | 1200(4000) | 230/460 | 284T | B15T3B | 39.4 | 540 | 92.4 | 38/19.1 | 1.7/0.9 | 8 |
| 20 | 1800(4000) | 230/460 | 256TC | B20T2BC | 36.2 | 480 | 93.0 | 51/25.6 | 1.5/0.75 | 8 |
| | 1200(4000) | 230/460 | 286T | B20T3B | 39.4 | 560 | 91.7 | 53/26.6 | 1.7/0.9 | 8 |
| 25 | 1800(4000) | 230/460 | 284T | B25T2B | 39.4 | 550 | 94.1 | 62/31 | 1.7/0.9 | 8 |
| | 1200(3000) | 230/460 | 324T | B25T3B | 44.6 | 750 | 93.0 | 71/36 | 3/1.5 | 8 |
| 30 | 1800(4000) | 230/460 | 286T | B30T2B | 39.4 | 570 | 93.6 | 75/37 | 1.7/0.9 | 8 |
| | 1200(3000) | 230/460 | 326T | B30T3B | 44.6 | 770 | 93.0 | 80/40 | 3/1.5 | 8 |
| 40 | 1800(3000) | 230/460 | 324T | B40T2B | 44.6 | 770 | 95.0 | 101/50 | 3/1.5 | 8 |
| | 1200(3000) | 230/460 | 364T | B40T3B | 46.5 | 1010 | 93.6 | 97/48 | 3/1.5 | 8 |
| 50 | 1800(3000) | 230/460 | 326T | B50T2B | 44.6 | 790 | 95.0 | 116/58 | 3/1.5 | 8 |
| | 1200(3000) | 230/460 | 365T | B50T3B | 46.5 | 1040 | 94.5 | 118/59 | 3/1.5 | 8 |
| 60 | 1800(3000) | 230/460 | 364T | B60T2B | 46.5 | 1020 | 95.4 | 137/69 | 3/1.5 | 8 |
| | 1200(3000) | 230/460 | 404T | B60T3B | 51.3 | 1390 | 94.5 | 149/74 | 5.7/2.8 | 8 |
| 75 | 1800(3000) | 230/460 | 365T | B75T2B | 46.5 | 1060 | 95.4 | 182/91 | 3/1.5 | 8 |
| | 1200(3000) | 230/460 | 405T | B75T3B | 51.3 | 1430 | 94.5 | 188/94 | 5.7/2.8 | 8 |
| 100 | 1800(3000) | 230/460 | 405T | B100T2B | 51.3 | 1410 | 95.4 | 225/113 | 5.7/2.8 | 8 |
| | 1200(3000) | 230/460 | 444T | B100T3B | 57.1 | 1880 | 95.8 | 245/122 | 5.7/2.8 | 8 |
| 125 | 1800(3000) | 460 | 444T | B125T2C | 57.1 | 1870 | 95.8 | 164 | 5.7/2.8 | 8 |
| 150 | 1800(3000) | 460 | 445T | B150T2C | 57.1 | 1900 | 95.8 | 180 | 5.7/2.8 | 8 |
| 200 | 1800(3000) | 460 | 447T | B200T2C | 60.6 | 2230 | 96.5 | 240 | 5.7/2.8 | 8 |
| 250 | 1800(2000) | 460 | 449T | B250T2C | 69.0 | 2860 | 96.5 | 289 | 7.8/3.9 | 8 |
| 300 | 1800(2000) | 460 | 449T | B300T2C | 69.0 | 3020 | 96.8 | 327 | 7.8/3.9 | 8 |
| 350 | 1800(2000) | 460 | 449T | B350T2C | 69.0 | 3090 | 96.8 | 396 | 7.8/3.9 | 8 |

Note 8 230/460 Blower Voltage
Note 28 TENV Enclosure

Special Application, ACCU-Torq® Blower Data

Blower Motor Data

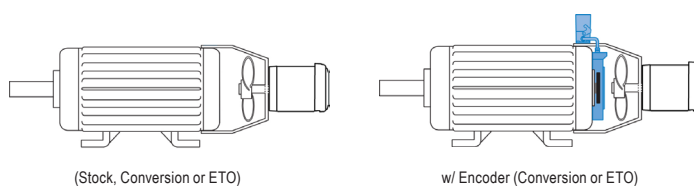
| MOTOR FRAME SIZE | AXIAL BLOWER SPARE PARTS | | | | | RADIAL BLOWER SPARE PARTS | | | | | |
|------------------|--------------------------|------------------|--------------------|-----------------------------|-------------------|---------------------------|------------------|--------------------|-----------------------------|-------------------|---------------------|
| | BLOWER MOTOR HP | BLOWER MOTOR RPM | BLOWER MOTOR FRAME | BLOWER MOTOR CATALOG NUMBER | SPARE MOTOR PRICE | BLOWER MOTOR HP | BLOWER MOTOR RPM | BLOWER MOTOR FRAME | BLOWER MOTOR CATALOG NUMBER | SPARE MOTOR PRICE | RADIAL BLOWER ADDER |
| 215TC | 1/3 | 1800 | 42CZ | T13S2D4ZCR | | 1/3 | 3600 | 56C | T13S1ACR | \$279 | \$2,300 |
| 254TC | 1/3 | 1800 | 42CZ | T13S2D4ZCR | | 1/3 | 3600 | 56C | T13S1ACR | \$279 | \$2,500 |
| 256TC | 1/3 | 1800 | 42CZ | T13S2D4ZCR | | 1/3 | 3600 | 56C | T13S1ACR | \$279 | \$2,500 |
| 284T | 1/2 | 1800 | 56C | U12S2ACR | | 1 1/2 | 3600 | 56C | T32P1ACR | \$485 | \$2,900 |
| 286T | 1/2 | 1800 | 56C | U12S2ACR | | 1 1/2 | 3600 | 56C | T32P1ACR | \$485 | \$2,900 |
| 324T | 1 | 1800 | 56C | U1P2DFCR | | 1 1/2 | 3600 | 56C | T32P1ACR | \$485 | \$3,300 |
| 326T | 1 | 1800 | 56C | U1P2DFCR | | 1 1/2 | 3600 | 56C | T32P1ACR | \$485 | \$3,300 |
| 364T | 1 | 1800 | 56C | U1P2DFCR | | 1 1/2 | 3600 | 56C | T32P1ACR | \$485 | \$3,700 |
| 365T | 1 | 1800 | 56C | U1P2DFCR | | 1 1/2 | 3600 | 56C | T32P1ACR | \$485 | \$3,700 |
| 405T | 2 | 1800 | 145TC | U2P2DCR | | 1 | 1800 | 56C | U1P2DFCR | \$425 | \$4,150 |
| 444T | 2 | 1800 | 145TC | U2P2DCR | | 1 | 1800 | 56C | U1P2DFCR | \$425 | \$4,550 |
| 445T | 2 | 1800 | 145TC | U2P2DCR | | 1 | 1800 | 56C | U1P2DFCR | \$425 | \$4,550 |
| 447T | 2 | 1800 | 145TC | U2P2DCR | | 1 | 1800 | 56C | U1P2DFCR | \$425 | \$4,550 |
| 449T | 3 | 1800 | 182TCH | U3P2DKR | | 1 | 1800 | 56C | U1P2DFCR | \$425 | \$4,950 |
| 449T | 3 | 1800 | 182TCH | U3P2DKR | | 1 | 1800 | 56C | U1P2DFCR | \$425 | \$4,950 |
| 449T | 3 | 1800 | 182TCH | U3P2DKR | | 1 | 1800 | 56C | U1P2DFCR | \$425 | \$4,950 |

Encoders

Table by availability and list price.

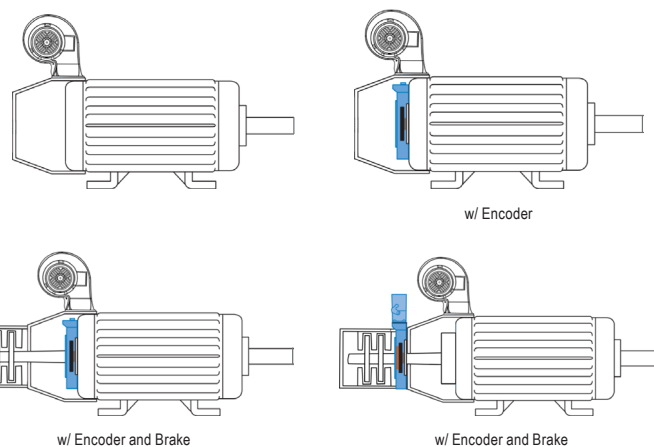
Axial Blower Configurations:

| MAKE | MODEL | FRAME, SPEED RANGE AND ENCLOSURE TYPE | | | | |
|---------|-------|---------------------------------------|----------------------------|----------------------------|----------------------------|------------------------------|
| | | 56-256 5000:1 CT TENV | 182-256 20:1 CT TENV | 182-256 20:1 CT TEFC | 182-447 20:1 CT TEFC | 254-449 5000:1 CT TEBC |
| AVTRON | AV56 | \$1,600 | \$1,600 | - | - | \$1,600 |
| DYNAPAR | ST56 | \$2,410 | \$2,410 | - | - | \$2,410 |
| AVTRON | AV32 | \$1,125 | \$1,125 | \$1,125 | \$1,125 | \$1,125 |
| AVTRON | HS25A | \$1,125 | \$1,125 | \$1,125 | - | - |
| DYNAPAR | HS20 | \$1,200 | \$1,200 | \$1,200 | - | - |
| EPC | 260 | \$1,125 | \$1,125 | \$1,125 | - | - |
| AVTRON | HS35A | - | - | \$1,300 | \$1,300 | \$1,300 |
| DYNAPAR | HS35R | - | - | \$1,530 | \$1,530 | \$1,530 |
| EPC | 25T | - | - | \$1,300 | \$1,300 | \$1,300 |



Radial Blower Configurations:

(All ETO Only)



Brakes

Motors: TENV, 182-256 Frame

Brakes: Stearns, 56,000 Series, IP23 Steel Housing Enclosure

| NOM STATIC TORQUE | COIL VOLTS | LIST |
|-------------------|-------------|-------|
| 6 lb-ft | 115/238-230 | \$766 |
| 10 lb-ft | 115/238-230 | \$911 |
| 6 lb-ft | 208-230/460 | \$766 |
| 10 lb-ft | 208-230/460 | \$911 |
| 6 lb-ft | 575 | \$766 |
| 10 lb-ft | 575 | \$911 |

† All marks shown within this document are properties of their respective owners.

Nidec Motor Corporation, 2017; All Rights Reserved. U.S. MOTORS® is a registered trademark of Nidec Motor Corporation. Nidec Motor Corporation trademarks followed by the ® symbol are registered with the U.S. Patent and Trademark Office.



8050 W. Florissant Avenue | St. Louis, MO 63136
Phone: 888-637-7333 | Fax: 866-422-7758