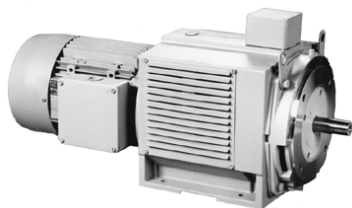
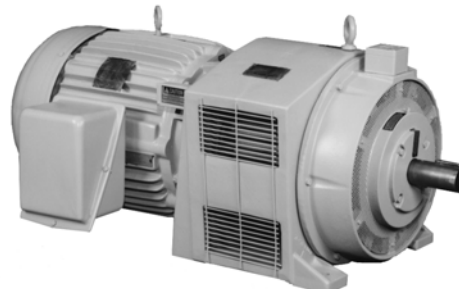


**“AT” Ajusto-Spede® Drives  
1 through 200 HP**

**MODELS AT-140 THROUGH AT-440 DRIVES  
Drive Information**



**AT-140 through AT-280**



**AT-320 through AT-440**

**Description**

Dynamatic® Model AT Drives is a combination of an air-cooled, adjustable speed clutch and a flange mounted AC induction motor. The AT Drive transmits torque at variable speeds. There is no physical contact between input and output members. This results in smooth response, thereby eliminating shock loading and extending equipment life. All drives have an integral tachometer generator

mounted around the output shaft to provide a feedback signal to the drive's controller. The controller provides the DC excitation for the clutch coil. The feedback signal from the tachometer generator is used as a reference signal within the controller to maintain accurate speed regulation. The controllers for the drives are described starting on Page 72 of this catalog.

| Features  | Customer Benefits   |
|---|---|
| AC power input - AT drives and controllers are available to run on virtually any three phase voltage input. | Compatible with existing wiring and plant power.  |
| Approximately 250% motor torque available at clutch output.   | Accelerates high inertia loads quickly and handles intermittent overloads without having to increase the horsepower rating. |
| Three-year warranty on AT mechanical drives.  | AT drives are built to give long, reliable, low cost life in diverse applications.  |
| Simple design - Drive consists of a clutch, AC induction motor and a separate controller.                   | Easy to understand, install, operate and maintain.  |
| Fewer wearing parts - All AT variable speed drives have only four bearings and no slip rings or brushes.    | Minimum downtime and maximum production from initial start-up.  |
| 0.5% speed regulation is standard.  | Provides a consistent, high quality customer product under changing load and environmental conditions.                      |
| Uses existing wiring and motor starters.  | Easy to retrofit in industrial environments.  |
| Controller circuits are isolated from power lines.  | Electronic controller is resistant to line noise.   |
| Totally enclosed fan cooled AC motor is standard.   | Suitable for harsh industrial environments.   |

**"AT" Ajusto-Spede® Drives  
1 through 200 HP**

**Specifications for AT-140 Through AT-440 Drives**

|  |  |  |
|--|--|--|
| <b>Motor</b>                             | HP and RPM<br>Totally Enclosed Fan Cooled (TEFC)<br>NEMA Design B<br>Class F insulation, Class B rise<br>1.15 service factor<br>***Input power - see note below<br><br>Three-year warranty   | See selection table - Page 41<br>Standard<br>Standard<br>Standard<br>Standard<br>208/220 through 380V, 3 phase, 50 Hz<br>230 through 460V, 3 phase, 60 Hz<br>575V, 3 phase, 60 Hz<br>Standard  |
| <b>Clutch</b>                            | Stationary coil<br>Coil voltages<br><br>Rated for constant torque<br>Starting torque<br>Intermittent torque<br>AC tachometer generator<br>Cooling<br>Three-year warranty   | Standard<br>45 or 90 VDC - Standard; 110, 220 VDC -<br>Optional<br>Standard<br>Approximately 250%<br>Approximately 250%<br>Standard<br>100% self ventilated<br>Standard  |
| <b>Controllers<br/>(Sold Separately)</b> | Model 3000 and Model 4000 (Solid State)<br>Model 4050, DSI-700 and Mark III (Solid State)<br>Model EC-2000 and PDC-2000 (Digital)<br>Closed loop speed control<br>Speed regulation<br>Regulated speed range<br>Input power<br><br>Enclosure<br><br>Panel mount, open construction<br>Output voltage, to clutch coil<br><br>One-year warranty | Can be used with AT-140 through AT-250<br>Can be used with AT-140 through AT-440<br>Can be used with AT-140 through AT-440<br>Standard<br>0.5% Standard; 0.1% Optional (EC-2000 only)<br>34 to 1 available<br>Line transformer (sold separately) - <b>motor winding transformer not available</b><br>NEMA 1 - Standard; NEMA 12 - Optional;<br>NEMA 13 for 4000 & 4050 - Standard<br>Optional<br>45 VDC or 90 VDC standard; 220 VDC<br>optional (EC-2000 only)<br>Standard |
| <b>Status Indication</b>                 | Speed indicating signal  | 0-60 VAC from tachometer generator for<br>optional meter   |
| <b>Environmental Ratings</b>             | Storage temperature<br>Operating temperature<br><br>Maximum operating temperature<br>Altitude  | -20° to 65° C (-4° to 149° F) Standard<br>0° to 40° C (32° to 104° F) Standard (Others<br>available; consult factory)<br>65° C (De-rating required)<br>1000 m (3300 Ft.) Standard  |
| <b>Codes and Standards</b>               | Mechanical NEMA, as applicable<br>Mechanical CSA<br>Controllers CSA  | Standard<br>Approved<br>Approved   |
| <b>Reliability Testing</b>               | Mechanical<br>100% dynamometer tested<br>Controllers<br>Pre-tested components<br>Computer test and pre-calibrated PCBs   | Standard<br><br>Standard<br>Standard   |

**\*\*\*NOTE: New factory standards for motor input power, two (2) options available:**  
 1) 208/220 through 380 VAC, 3 phase, 50 Hz.; 230 through 460 VAC, 3 phase, 60 Hz.  
 2) 575 VAC, 3 phase, 60 Hz.

**"AT" Ajusto-Spede® Drives  
1 through 200 HP**

**Ordering Information**

The Model AT drive includes an 1800 RPM, TEFC, AC induction motor, with 230 through 460 VAC, 3 phase, 60 Hz., 208/220 through 380 VAC, 3 phase, 50 Hz. or 575 VAC, 3 phase, 60 Hz., 1.15 SF, NEMA design B, Class F insulation, motor is flange mounted to a brushless clutch in a cast iron housing with 100% rated motor torque continuously available over the speed range shown. The service factor for drives specified with a 50 Hz. motor is 1.0. A controller is required, but not included. A Drive/Controller Compatibility and Selection Chart can be found starting on Page 70. Controllers can be found starting on Page 72. Operator stations can be found starting on Page 117. Model 4000 and 4050 controllers (except Press Drive versions) require a separate 115 VAC center tapped transformer for control. Standard units consist of 45 or 90 VDC epoxy clutch coil, a second (loose) nameplate, 230 through 460 VAC, 3 phase, 60 Hz., 208/220 through 380 VAC, 3 phase, 50 Hz. or 575 VAC, 3 phase, 60 Hz. TEFC motor and spherical roller bearing (available on Models AT-280 through AT-440 only).

**\*\*Consult factory for non-standard units).**

**Selection Table - 60 Hz 45V Coil**

| HP  | Speed Range (RPM) | Model Number   | Motor Frame Size |
|-----|-------------------|----------------|------------------|
| 1   | 1690-50           | AT-140014-0145 | 145TC            |
| 2   | 1650-50           | AT-140024-0145 | 145TC            |
| 3   | 1680-50           | AT-180034-0145 | 182TC            |
| 5   | 1650-50           | AT-180054-0145 | 184TC            |
| 7.5 | 1660-350          | AT-180074-0145 | 213TC            |
|     | 1680-50           | AT-210074-0145 | 213TC            |
| 10  | 1655-175          | AT-210104-0145 | 215TC            |
| 15  | 1625-700          | AT-210154-0145 | 254TC            |
|     | 1690-50           | AT-250154-0145 | 254TD            |
| 20  | 1665-350          | AT-250204-0145 | 256TD            |
| 25  | 1675-630          | AT-250254-0145 | 284TD            |
|     | 1670-50           | AT-280254-0145 | 284TD            |
|     | 1092-50           | AT-320256-0145 | 326TD            |
| 30  | 1695-175          | AT-280304-0145 | 286TD            |
|     | 1705-50           | AT-320304-0145 | 326TD            |
|     | 1097-50           | AT-320306-0145 | 326TD            |
| 40  | 1680-569          | AT-280404-0145 | 324TD            |
|     | 1665-50           | AT-320404-0145 | 326TD            |
|     | 1082-233          | AT-320406-0145 | 365TD            |
| 50  | 1655-805          | AT-280504-0145 | 326TD            |
|     | 1700-175          | AT-320504-0145 | 326TD            |
|     | 1122-50           | AT-360506-0145 | 365TD            |
| 60  | 1690-438          | AT-320604-0145 | 365TD            |
|     | 1670-50           | AT-360604-0145 | 365TD            |
|     | 1102-214          | AT-360606-0145 | 405TD            |
| 75  | 1665-700          | AT-320754-0145 | 405TD            |
|     | 1705-163          | AT-360754-0145 | 405TD            |
|     | 1097-156          | AT-440756-0145 | 405TD            |
| 100 | 1675-560          | AT-361004-0145 | 405TD            |
|     | 1685-175          | AT-441004-0145 | 405TD            |
|     | 1112-408          | AT-441006-0145 | 445TD            |
| 125 | 1650-798          | AT-361254-0145 | 445TD            |
|     | 1690-490          | AT-441254-0145 | 445TD            |
|     | 1097-560          | AT-441256-0145 | 445TD            |
| 150 | 1695-700          | AT-441504-0145 | 445TD            |
| 200 | 1660-963          | AT-442004-0145 | 449TD            |

**Selection Table - 60 Hz 90V Coil**

| HP  | Speed Range (RPM) | Model Number   | Motor Frame Size |
|-----|-------------------|----------------|------------------|
| 1   | 1690-50           | AT-140014-0190 | 145TC            |
| 2   | 1650-50           | AT-140024-0190 | 145TC            |
| 3   | 1680-50           | AT-180034-0190 | 182TC            |
| 5   | 1650-50           | AT-180054-0190 | 184TC            |
| 7.5 | 1660-350          | AT-180074-0190 | 213TC            |
|     | 1680-50           | AT-210074-0190 | 213TC            |
| 10  | 1655-175          | AT-210104-0190 | 215TC            |
| 15  | 1625-700          | AT-210154-0190 | 254TC            |
|     | 1690-50           | AT-250154-0190 | 254TD            |
| 20  | 1665-350          | AT-250204-0190 | 256TD            |
| 25  | 1675-630          | AT-250254-0190 | 284TD            |
|     | 1670-50           | AT-280254-0190 | 284TD            |
|     | 1092-50           | AT-320256-0190 | 326TD            |
| 30  | 1695-175          | AT-280304-0190 | 286TD            |
|     | 1705-50           | AT-320304-0190 | 326TD            |
|     | 1097-50           | AT-320306-0190 | 326TD            |
| 40  | 1680-569          | AT-280404-0190 | 324TD            |
|     | 1665-50           | AT-320404-0190 | 326TD            |
|     | 1082-233          | AT-320406-0190 | 365TD            |
| 50  | 1655-805          | AT-280504-0190 | 326TD            |
|     | 1700-175          | AT-320504-0190 | 326TD            |
|     | 1122-50           | AT-360506-0190 | 365TD            |
| 60  | 1690-438          | AT-320604-0190 | 365TD            |
|     | 1670-50           | AT-360604-0190 | 365TD            |
|     | 1102-214          | AT-360606-0190 | 405TD            |
| 75  | 1665-700          | AT-320754-0190 | 405TD            |
|     | 1705-163          | AT-360754-0190 | 405TD            |
|     | 1097-156          | AT-440756-0190 | 405TD            |
| 100 | 1675-560          | AT-361004-0190 | 405TD            |
|     | 1685-175          | AT-441004-0190 | 405TD            |
|     | 1112-408          | AT-441006-0190 | 445TD            |
| 125 | 1650-798          | AT-361254-0190 | 445TD            |
|     | 1690-490          | AT-441254-0190 | 445TD            |
|     | 1097-560          | AT-441256-0190 | 445TD            |
| 150 | 1695-700          | AT-441504-0190 | 445TD            |
| 200 | 1660-963          | AT-442004-0190 | 449TD            |

**\*\*Consult factory for any additional accessories and/or modifications you may require that are not listed on the next page.**

**"AT" Ajusto-Spede® Drives  
1 through 200 HP**

**Modifications**

**For the following modifications, please consult factory:**

**Bases, Slide** - Adjustable slide bases are available for the horizontal mounting of a drive with motor.

Part Number - AT-140 - 81453-0100

Part Number - AT-180 - 81453-0200

Part Number - AT-210 - 81453-0300

Part Number - AT-250 - 81453-0400

Part Number - AT-280 - 81453-0500

Part Number - AT-320 - 64131-0200

Part Number - AT-360 - 64131-0300

Part Number - AT-440 - 64131-0500

**Brake, Adjustable, Integrally Mounted** - A non-contacting, adjustable torque brake is integrally mounted to the drive for stopping purposes or for use with the Mutuatrol® controller modification. Brakes may require an adjustable brake circuit in the controller. Adjustable brake available for models AT-320 through AT-440 only. Factory installed only.

**Brake, Friction, Integrally Mounted** - An electromagnetic friction brake is integrally mounted to the drive for stopping or holding purposes. Brakes may require a fixed brake circuit in the controller. Friction brake available for models AT-320 through AT-440 only. Factory installed only.

**Protection, Coal Feeder** - Includes an epoxy encapsulated tachometer and clutch coil, external epoxy paint, soldered and epoxy coated tachometer leads and high temperature grease. Not available for Models AT-320 through AT-440.

**Protection, Food Plant** - Includes a TEFC motor, encapsulated tachometer and clutch coil, labyrinth shaft seal, external epoxy paint and nickel-plated end bell. This modification provides protection against semi-corrosive or semi-caustic wash down.

**Protection, Jungle** - Includes a TEFC motor, encapsulated clutch coil, screen over all air drive openings, discharge louvers in the "up" position and external epoxy paint.

**Protection No. 1** - Includes a TEFC motor, an epoxy encapsulated tachometer and clutch coil. This modification provides protection for outdoor applications.

**Protection, Paper Mill** - Includes all features of Protection No. 1 plus external epoxy paint. This modification provides protection against severe wash down elements.

**Protection, Screens Only** - Includes screens over all drive air openings. This modification provides protection from entry of rodents, stones, etc.

**Protection, Tropical** - Includes all features of Protection No. 1 plus, screens over all air openings and the spraying of all practical surfaces with a special fungus retarding varnish. This modification provides drive protection for jungle environments.

**Switch, Clutch Thermal** - To safeguard the clutch drum from excessive heat due to overload or high ambient temperatures, a thermal switch rated at 89° C is placed in the discharge air stream. This switch has a NC contact.

**VT Drive Duty** - Broader speed range is achieved for centrifugal loads. Minimum speed is 50 RPM.

**"AT" Ajusto-Spede® Drives  
1 through 200 HP**

**Drive Engineering Data**

**Adjustable Speed Drive Data**

| Model     | Clutch Torque Lb. Ft.<br>at Slip RPM of ❶ |       |       |       |        | Rated Dissipation HP at<br>Input RPM of ❷ |      |      |      |      | Inertia Lb. Ft. <sup>2</sup><br>Output<br>Member |
|-----------|---|-------|-------|-------|--------|---|------|------|------|------|--|
|           | 50  | 75    | 100   | 150   | 1750   | 900                                       | 1000 | 1200 | 1500 | 1800 |  |
| AT-140    | 4.5                                       | 6.0   | 7.2   | 9.5   | 25.0   | 1.6                                       | 1.8  | 2.0  | 2.6  | 3.0  | 0.9  |
| AT-140C ❸ | 6.0                                       | 7.5   | 9.0   | 12.0  | 27.0   | 1.6                                       | 1.8  | 2.0  | 2.6  | 3.0  | 0.9  |
| AT-180    | 10.0                                      | 13.5  | 16.0  | 21.0  | 46.0   | 3.3                                       | 3.6  | 4.1  | 5.2  | 6.0  | 2.0  |
| AT-180C   | 13.0                                      | 17.5  | 21.5  | 26.0  | 50.0   | 3.3                                       | 3.6  | 4.1  | 5.2  | 6.0  | 2.0  |
| AT-210    | 19.0                                      | 25.0  | 32.0  | 44.0  | 74.0   | 5.0                                       | 5.3  | 6.2  | 7.8  | 9.0  | 3.6  |
| AT-210C   | 23.0                                      | 33.0  | 38.0  | 50.0  | 78.0   | 5.0                                       | 5.3  | 6.2  | 7.8  | 9.0  | 3.6  |
| AT-250    | 42.0                                      | 56.0  | 68.0  | 82.0  | 115.0  | 8.8                                       | 9.5  | 11.0 | 14.0 | 16.0 | 6.2  |
| AT-250C   | 60.0                                      | 80.0  | 92.0  | 110.0 | 130.0  | 8.8                                       | 9.5  | 11.0 | 14.0 | 16.0 | 6.2  |
| AT-280    | 56.0                                      | 73.0  | 85.0  | 105.0 | 195.0  | 15.0                                      | 17.0 | 20.0 | 24.0 | 27.0 | 15.9   |
| AT-280C   | 100.0                                     | 128.0 | 160.0 | 200.0 | 230.0  | 15.0                                      | 17.0 | 20.0 | 24.0 | 27.0 | 15.9   |
| AT-320    | 70.0                                      | 110.0 | 140.0 | 185.0 | 460.0  | 24.5                                      | 27.0 | 32.0 | 39.0 | 45.0 | 30.5   |
| AT-320C   | 140.0                                     | 200.0 | 250.0 | 300.0 | 550.0  | 24.5                                      | 27.0 | 32.0 | 39.0 | 45.0 | 30.5   |
| AT-360    | 130.0                                     | 170.0 | 210.0 | 250.0 | 640.0  | 39.0                                      | 42.5 | 49.0 | 59.0 | 68.0 | 55.0   |
| AT-360C   | 230.0                                     | 320.0 | 370.0 | 440.0 | 700.0  | 39.0                                      | 42.5 | 49.0 | 59.0 | 68.0 | 55.0   |
| AT-440    | 325.0                                     | 380.0 | 415.0 | 485.0 | 860.0  | 51.0                                      | 56.0 | 65.0 | 78.0 | 90.0 | 123.0  |
| AT-440C   | 450.0                                     | 575.0 | 650.0 | 760.0 | 1060.0 | 51.0                                      | 56.0 | 65.0 | 78.0 | 90.0 | 123.0  |

**Adjustable Speed Drive Data**

| Model  | Motor<br>Frame | Overhung Load Lbs. at<br>Output RPM of ❸ |        |      |        |      |        | 45V<br>Clutch<br>Coil Current<br>(Hot Amps) | Weight<br>Lbs. ❹ |
|--------|----------------|--|--------|------|--------|------|--------|---|------------------|
|        |                | 900                                      |        | 1200 |        | 1800 |        |   |                  |
|        |                | Std.                                     | Spher. | Std. | Spher. | Std. | Spher. |   |                  |
| AT-140 | 143T/145T      | 378                                      | -      | 378  | -      | 378  | -      | 3.40  | 150              |
| AT-180 | 182T/215T      | 281                                      | -      | 281  | -      | 281  | -      | 3.90  | 263              |
| AT-210 | 213T/254T      | 790                                      | -      | 790  | -      | 680  | -      | 3.90  | 430              |
| AT-250 | 254T/286T      | 682                                      | -      | 682  | -      | 664  | -      | 4.20  | 630-675          |
| AT-280 | 284T/326T      | 1124                                     | 1124   | 1116 | -      | 961  | 1124   | 7.20  | 1050-1214        |
| AT-320 | 326T/365T      | 1490                                     | 1739   | 1341 | 1739   | 1156 | 1739   | 7.04  | 1297-1806        |
| AT-360 | 365T/405T      | 2012                                     | 2796   | 1811 | 2796   | 1560 | 2796   | 8.37  | 2490-2712        |
| AT-440 | 405T/447T      | 3372                                     | 3372   | 3372 | 3372   | 3372 | 3372   | 8.23  | 3055-3650        |

- ❶ Values are for four-pole motor speeds.
- ❷ Indicates maximum HP that can be safely dissipated at a given input speed. Dissipation should be de-rated 10% for each 10° F (5.5° C) above 100° F (38° C) ambient, to 150° F (71° C) maximum ambient.
- ❸ Values are based on B-10 bearing life of 15,000 hours. For 20,000 hours use 91% of the values shown. The figures are the maximum weights at the center of a standard output shaft keyway perpendicular to the axis. Ratings are for ball bearings or spherical roller bearings, as noted.
- ❹ Approximate weight of brake.
- ❺ Copper plated drum.

**"AT" Ajusto-Spede® Drives  
1 through 200 HP**

**Brake Engineering Data**

**Adjustable Torque Brake Data**

| Model   | Brake Torque in Lb. Ft. at Output RPM of Model |     |      |      | Brake Dissipation HP at Brake RPM of |     |      |      | Brake Rotor Lb. Ft <sup>2</sup> | 45 V Brake Coil Current (Hot Amps) | Wt. Lbs. ④ |
|---------|--|-----|------|------|--------------------------------------|-----|------|------|---------------------------------|------------------------------------|------------|
|         | 600  | 900 | 1200 | 1800 | 600                                  | 900 | 1200 | 1800 |                                 |                                    |            |
| AT-320B | 120  | 138 | 147  | 153  | 3.3                                  | 5.0 | 6.7  | 10.0 | 7.1                             | 5.5                                | 150        |
| AT-360B | 120  | 138 | 147  | 153  | 3.3                                  | 5.0 | 6.7  | 10.0 | 7.1                             | 5.5                                | 150        |
| AT-440B | 120  | 138 | 147  | 153  | 3.3                                  | 5.0 | 6.7  | 10.0 | 7.1                             | 5.5                                | 150        |

**Adjustable Speed Drive with Adjustable Torque Brake Data**

| Model   | Motor Frame | Drive with Motor Overhung Load in Lbs. at Output RPM of ③ |                |                |
|---------|-------------|---|----------------|----------------|
|         |             | 900 Spherical   | 1200 Spherical | 1800 Spherical |
| AT-320B | 326T/365T   | 1739  | 1739           | 1739           |
| AT-360B | 365T/405T   | 2796  | 2796           | 2796           |
| AT-440B | 405T/445T   | 3372  | 3372           | 3372           |

**Adjustable Speed Drive with Friction Brake Data**

| Model   | Motor Frame | Electrically Engaged  |                              |             | Drive with Overhung Load in Lbs. at Output RPM of |      |      | Weight Lbs. ④ |
|---------|-------------|-----------------------|------------------------------|-------------|---|------|------|---------------|
|         |             | Static Torque Lb. Ft. | Inertia Lb. Ft. <sup>2</sup> | Brake Model | 900   | 1200 | 1800 |               |
| AT-320F | 326T/365T   | 240                   | 1.06                         | 310         | 1490  | 1340 | 1155 | 30            |
| AT-360F | 365T/405T   | 465                   | 2.14                         | 312         | 2010  | 1810 | 1560 | 50            |
| AT-440F | 405T/445T   | -                     | -                            | -           | -   | -    | -    | -             |

③ Values are based on B-10 bearing life of 15,000 hours. For 20,000 hours use 91% of the values shown. The figures are the maximum weights at the center of a standard output shaft keyway perpendicular to the axis. Contact the factory for overhung load ratings on model/motor frame combinations and other configurations not listed.

④ Approximate weight of brake.

**"AT" Ajusto-Spede® Drives  
1 through 200 HP**

**Engineering Data**

**Noise Levels - AT Adjustable Speed Drives**


These sound pressure levels are **typical** values given for engineering information only, and it is **not guaranteed** that any particular production unit will exceed these values.

Microphone 3 feet from side of drive, tested in a semi-anechoic chamber above reflecting plane per IEEE-85. All readings are sound pressure level, dB; reference 20 micro-Newton's per square meter. Average sound pressure in a 3-foot radius hemispherical free field. Noise level for 1200 RPM drives will be 9 dB less than 1800-RPM values shown, and for 3600 RPM the noise level will be 15 dB greater.

| Model  | RPM  | Sound Pressure dB |                |
|--------|------|-------------------|----------------|
|        |      | Output Rating     | Output Stalled |
| AT-140 | 1800 | 65.0              | -              |
| AT-180 | 1800 | 72.0              | -              |
| AT-210 | 1800 | 72.0              | -              |
| AT-250 | 1800 | 76.0              | -              |
| AT-280 | 1800 | 78.0              | -              |
| AT-320 | 1800 | 83.2              | 86.4           |
| AT-360 | 1800 | 85.9              | 87.3           |
| AT-440 | 1800 | 87.1              | 89.0           |

**Full Load Motor Currents**

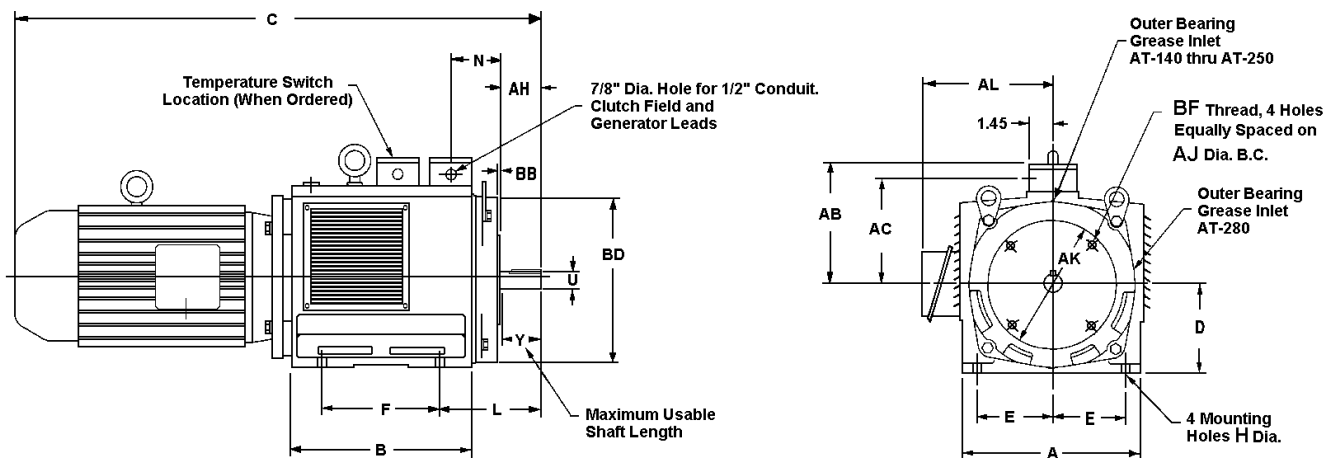
The full load motor currents shown in the following table are typical values for 4-pole motors. Full load current for 6-and 8-pole motors will typically be higher than the values listed for 4-pole motors. This table is intended for use as an aid in sizing motor branch circuit components. For setting motor over-current protection devices, consult the motor nameplate. For full load motor currents of 200 and 208-volt motors, increase the corresponding 230 volt motor full load current by 15% and 10% respectively. Multi-speed motors will have the full load current varying with speed in which case the nameplate rating shall be used.

| HP  | Full Load Amperes for 4 Pole Motors at |       |       |      |      |
|---|--|-------|-------|------|------|
|   | 230V                                   | 460V  | 575V  | 220V | 380V |
|   | 60Hz                                   | 60Hz  | 60Hz  | 50Hz | 50Hz |
| 1   | 3.4                                    | 1.7   | -     | 3.69 | 2.1  |
| 1.5   | 5.2                                    | 2.6   | -     | 5.48 | 3.2  |
| 2   | 6.4                                    | 3.2   | -     | 6.99 | 4.0  |
| 3   | 8.8                                    | 4.4   | -     | 9.83 | 5.7  |
| 5  | 13.2                                   | 6.6   | -     | -    | -    |
| 7.5   | 204                                    | 10.2  | -     | -    | 11.7 |
| 10  | 262                                    | 13.1  | -     | -    | 15.8 |
| 15  | 36.2                                   | 18.1  | -     | -    | 22.0 |
| 20  | 46.0                                   | 23.0  | -     | -    | 29.0 |
| 25  | 58.0                                   | 29.0  | -     | -    | 36.0 |
| 30  | 66.0                                   | 33.0  | -     | -    | 42.0 |
| 40  | 104.0                                  | 52.0  | 41.0  | -    | -    |
| 50  | 130.0                                  | 65.0  | 52.0  | -    | -    |
| 60  | 152.0                                  | 76.0  | 61.0  | -    | -    |
| 75  | 184.0                                  | 92.0  | 74.0  | -    | -    |
| 100   | 240.0                                  | 120.0 | 96.0  | -    | -    |
| 125   | 296.0                                  | 148.0 | 118.0 | -    | -    |
| 150   | 344.0                                  | 172.0 | 138.0 | -    | -    |
| 200   | 448.0                                  | 224.0 | 179.0 | -    | -    |

 184TC Frame

"AT" Ajusto-Spede® Drives  
1 through 200 HP

Outline Drawings – AT-140 through AT-280



D-81430

| Model | Motor Frame                      | A     | B     | C <sup>①</sup>                   | D <sup>②</sup> | E    | F    | H   | L     | N    | Shaft Extension |                |                       | AB    | AC    | AH   |
|-------|----------------------------------|-------|-------|----------------------------------|----------------|------|------|-----|-------|------|-----------------|----------------|-----------------------|-------|-------|------|
|       |                                  |       |       |                                  |                |      |      |     |       |      | U <sup>③</sup>  | Y <sup>④</sup> | KEY                   |       |       |      |
| 140   | 143TC<br>145TC                   | 8.68  | 8.41  | 22.40<br>24.90                   | 4.50           | 3.75 | 5.12 | .50 | 5.00  | 2.96 | .875            | 1.94           | .18 Sq. x<br>1.38 Lg. | 6.81  | 5.56  | 2.00 |
| 180   | 182TC<br>184TC<br>213TC          | 10.25 | 10.07 | 27.94<br>28.94<br>30.56          | 5.25           | 4.25 | 6.25 | .50 | 6.25  | 3.18 | 1.125           | 2.50           | .25 Sq. x<br>1.75 Lg. | 7.75  | 6.50  | 2.62 |
| 210   | 213TC<br>215TC<br>254TC          | 12.00 | 10.96 | 32.06<br>33.56<br>36.43          | 6.25           | 5.00 | 6.50 | .62 | 7.62  | 3.81 | 1.375           | 3.00           | .31 Sq. x<br>2.38 Lg. | 8.63  | 7.38  | 3.12 |
| 250   | 254TD<br>256TD<br>284TD          | 14.00 | 12.52 | 38.79<br>40.54<br>40.41          | 7.00           | 5.50 | 7.25 | .62 | 8.75  | 3.41 | 1.625           | 3.62           | .38 Sq. x<br>2.88 Lg. | 9.63  | 8.38  | 3.75 |
| 280   | 284TD<br>286TD<br>324TD<br>326TD | 18.00 | 13.00 | 42.91<br>44.41<br>45.30<br>46.80 | 9.00           | 7.50 | 8.12 | .75 | 10.00 | 5.35 | 1.875           | 3.83           | .50 Sq. x<br>3.50 Lg. | 12.09 | 10.84 | 3.83 |

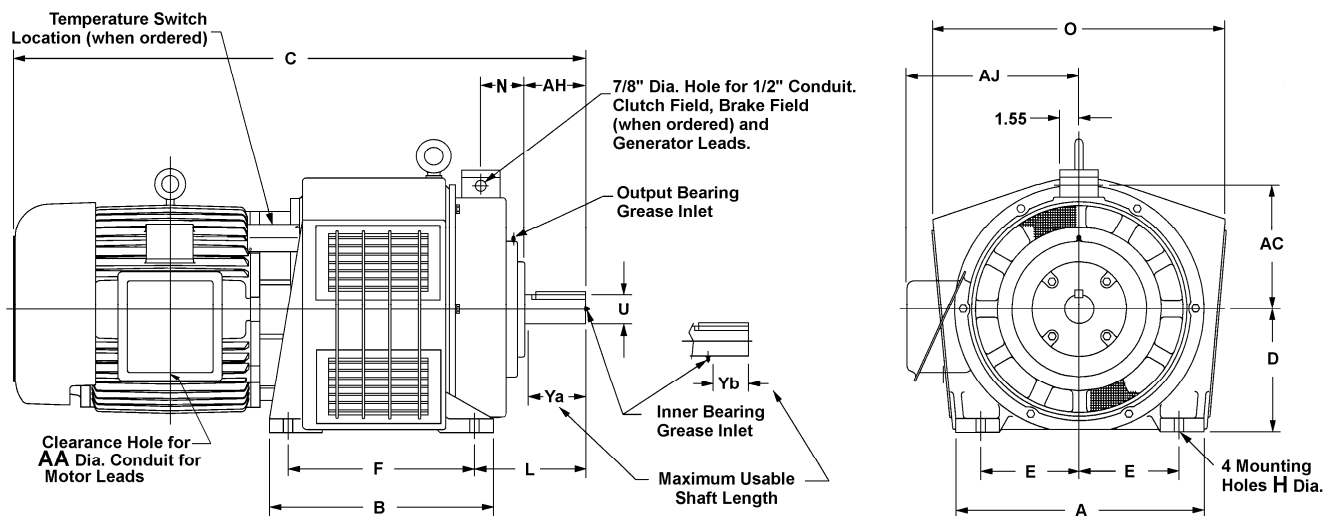
| Model | Motor Frame                      | AJ   | AK <sup>⑤</sup> | AL             | BB  | BD    | BF       |
|-------|----------------------------------|------|-----------------|----------------|-----|-------|----------|
| 140   | 143TC<br>145TC                   | 5.88 | 4.499           | 5.56           | .12 | 8.38  | 3/8 - 16 |
| 180   | 182TC<br>184TC<br>213TC          | 7.25 | 8.499           | 7.19<br>7.50   | .25 | 10.06 | 1/2 - 13 |
| 210   | 213TC<br>215TC<br>254TC          | 7.25 | 8.499           | 7.50<br>8.10   | .27 | 11.82 | 1/2 - 13 |
| 250   | 254TD<br>256TD<br>284TD          | 7.25 | 8.499           | 10.00<br>12.31 | .27 | 13.32 | 1/2 - 13 |
| 280   | 284TD<br>286TD<br>324TD<br>326TD | 9.00 | 10.499          | 12.31<br>14.38 | .25 | 15.20 | 1/2 - 13 |

- ① C is approximate overall dimension dependent on motor specified.
- ② D dimension will never be exceeded. When exact dimension is needed shims up to .03 may be required.
- ③ U shaft diameter tolerance 1.50" and smaller +.0000/-.0005, over 1.50" +.000/- .001.
- ④ Y is maximum useable shaft length.
- ⑤ AK Pilot diameter tolerance +.000/- .002.

DIMENSIONS ARE IN INCHES

**"AT" Ajusto-Spede® Drives  
1 through 200 HP**

**Outline Drawings – AT-320 through AT-440**



**C-92190/C-92191, C-93190/C-93191, C-94190/C-94191**

| Model     | Motor Frame | A     | B     | C     | D <sup>①</sup> | E     | F     | H   | L     | N    | O     | Shaft Extension |                 |                 |
|-----------|-------------|-------|-------|-------|----------------|-------|-------|-----|-------|------|-------|-----------------|-----------------|-----------------|
|           |             |       |       |       |                |       |       |     |       |      |       | U <sup>②</sup>  | Ya <sup>③</sup> | Yb <sup>④</sup> |
| 320 (STD) | 326T        | 20.00 | 18.00 | 47.57 | 10.00          | 8.00  | 15.00 | .75 | 9.00  | 3.29 | 23.60 | 2.375           | 4.75            | 2.88            |
|           | 365T        |       |       | 49.19 |                |       |       |     |       |      |       |                 |                 |                 |
| 360 (STD) | 365T        | 22.00 | 23.00 | 56.18 | 11.00          | 9.00  | 20.00 | .88 | 14.00 | 5.78 | 25.76 | 2.875           | 6.44            | 4.62            |
|           | 405T        |       |       | 59.62 |                |       |       |     |       |      |       |                 |                 |                 |
|           | 445T        |       |       | 64.24 |                |       |       |     |       |      |       |                 |                 |                 |
| 440 (STD) | 405T        | 24.00 | 24.00 | 64.02 | 12.00          | 10.00 | 21.00 | .88 | 17.14 | 6.80 | 28.72 | 3.375           | 8.26            | 5.62            |
|           | 445T        |       |       | 68.64 |                |       |       |     |       |      |       |                 |                 |                 |
|           | 449T        |       |       | 77.14 |                |       |       |     |       |      |       |                 |                 |                 |

| Model     | Motor Frame | KEY                | AA <sup>①</sup> | AB    | AC    | AH   | AJ    |
|-----------|-------------|--------------------|-----------------|-------|-------|------|-------|
| 320 (STD) | 326T        | .62 Sq. x 4.00 Lg. | 2.00            | 11.25 | 10.00 | 4.88 | 13.18 |
|           | 365T        |                    | 3.00            |       |       |      | 16.68 |
| 360 (STD) | 365T        | .75 Sq. x 6.00 Lg. | 3.00            | 12.37 | 11.12 | 6.57 | 16.68 |
|           | 405T        |                    |                 |       |       |      | 17.68 |
|           | 445T        |                    |                 |       |       |      | 19.75 |
| 440 (STD) | 405T        | .88 Sq. x 7.50 Lg. | 3.00            | 13.87 | 12.62 | 8.58 | 17.94 |
|           | 445T        |                    |                 |       |       |      | 19.56 |
|           | 449T        |                    |                 |       |       |      | 19.56 |

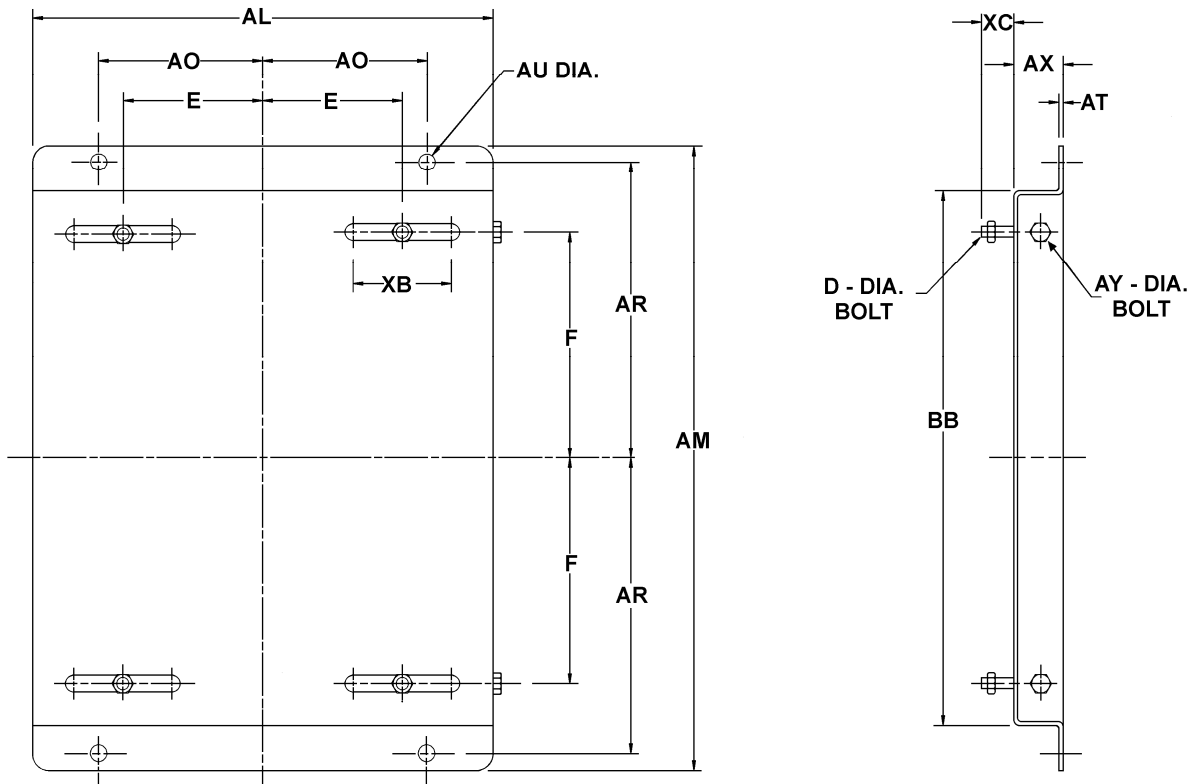
- ① D dimension will never be exceeded. When exact dimension is needed, shims up to .03 inch may be required.
- ② U shaft diameter tolerance: +.000/- .001 inch. Diameter shown is standard. Smaller diameter shafts of 2.125 for Model 320 and 2.375 for Model 360 are available upon request.
- ③ Y Dimensions are usable shaft lengths: Ya grease fitting on end; Yb grease fitting on side.
- ④ Conduit box can be turned to any of four positions: horizontally, vertically, opposite side or on top upon request.

To get weights on above units, please contact the factory.

DIMENSIONS ARE IN INCHES

**"AT" Ajusto-Spede® Drives  
1 through 200 HP**

**Outline Drawings – Adjustable Slide Base Models AT-140 - 440**



**C-81453, C-64131**

**Adjustable Slide Base for Dynamatic® Model AT-140 Through AT-440 Drives with Motor**

| Model  | Base Number | D-Bolt         | E     | F     | AL    | AM    | AO    | AR    | AT   | AU   |
|--------|-------------|----------------|-------|-------|-------|-------|-------|-------|------|------|
| AT-140 | 81453-0100  | 3/8 x 3.00 Lg. | 3.75  | 2.56  | 12.75 | 11.50 | 4.50  | 5.00  | .134 | .50  |
| AT-180 | 81453-0200  | 3/8 x 3.00 Lg. | 4.25  | 3.12  | 14.00 | 13.00 | 5.00  | 6.00  | .134 | .50  |
| AT-210 | 81453-0300  | 1/2 x 3.00 Lg. | 5.00  | 3.25  | 16.00 | 14.00 | 6.00  | 6.50  | .164 | .50  |
| AT-250 | 81453-0400  | 1/2 x 3.00 Lg. | 5.50  | 3.62  | 18.00 | 16.50 | 7.00  | 7.25  | .187 | .62  |
| AT-280 | 81453-0500  | 5/8 x 3.00 Lg. | 7.50  | 4.06  | 22.00 | 17.00 | 9.00  | 7.50  | .250 | .75  |
| AT-320 | 64131-0200  | 5/8 x 3.00 Lg. | 8.00  | 7.50  | 28.75 | 25.12 | 10.00 | 11.25 | .250 | .88  |
| AT-360 | 64131-0300  | 3/4 x 3.00 Lg. | 9.00  | 10.00 | 31.25 | 30.12 | 11.00 | 13.75 | .320 | .88  |
| AT-440 | 64131-0500  | 3/4 x 3.00 Lg. | 10.00 | 10.50 | 35.00 | 33.00 | 12.50 | 15.00 | .320 | 1.00 |

| Model  | Base Number | AX   | AY-Bolt         | BB    | XB   | XC   |
|--------|-------------|------|-----------------|-------|------|------|
| AT-140 | 81453-0100  | 1.50 | 1/2 Dia.        | 8.50  | 3.00 | 1.00 |
| AT-180 | 81453-0200  | 1.50 | 1/2 Dia.        | 10.00 | 3.00 | 1.00 |
| AT-210 | 81453-0300  | 1.75 | 1/2 Dia.        | 11.00 | 3.50 | 1.25 |
| AT-250 | 81453-0400  | 2.00 | 5/8 Dia.        | 12.50 | 4.00 | 1.25 |
| AT-280 | 81453-0500  | 2.25 | 5/8 Dia.        | 13.00 | 5.00 | 1.75 |
| AT-320 | 64131-0200  | 3.00 | 3/4 x 11.00 Lg. | 18.75 | 7.00 | 2.50 |
| AT-360 | 64131-0300  | 3.00 | 3/4 x 14.00 Lg. | 24.75 | 7.50 | 2.50 |
| AT-440 | 64131-0500  | 3.50 | 7/8 x 16.00 Lg. | 25.75 | 8.00 | 2.50 |

DIMENSIONS ARE IN INCHES