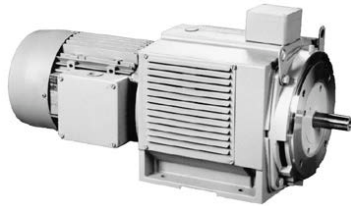
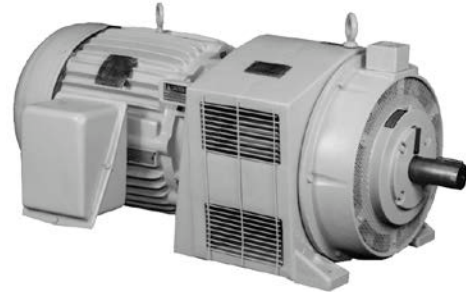


**“AT” Ajusto-Spede® Drives
1 through 200 HP**

**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.
one-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

Motor	HP and RPM Totally Enclosed Fan Cooled (TEFC) NEMA Design B Class F insulation, Class B rise 1.15 service factor ***Input power - see note below one-year warranty	See selection table - Page 41 Standard Standard Standard Standard 208/220 through 380V, 3 phase, 50 Hz 230 through 460V, 3 phase, 60 Hz 575V, 3 phase, 60 Hz Standard
Clutch	Stationary coil Coil voltages Rated for constant torque Starting torque Intermittent torque AC tachometer generator Cooling one-year warranty	Standard 45 or 90 VDC - Standard; 110, 220 VDC - Optional Standard Approximately 250% Approximately 250% Standard 100% self ventilated Standard
Controllers (Sold Separately)	Model 3000 and Model 4000 (Solid State) Model 4050, DSI-700 and Mark III (Solid State) Model EC-2000 and PDC-2000 (Digital) Closed loop speed control Speed regulation Regulated speed range Input power Enclosure Panel mount, open construction Output voltage, to clutch coil One-year warranty	Can be used with AT-140 through AT-250 Can be used with AT-140 through AT-440 Can be used with AT-140 through AT-440 Standard 0.5% Standard; 0.1% Optional (EC-2000 only) 34 to 1 available Line transformer (sold separately) - motor winding transformer not available NEMA 1 - Standard; NEMA 12 - Optional; NEMA 13 for 4000 & 4050 - Standard Optional 45 VDC or 90 VDC standard; 220 VDC optional (EC-2000 only) Standard
Status Indication	Speed indicating signal	0-60 VAC from tachometer generator for optional meter
Environmental Ratings	Storage temperature Operating temperature Maximum operating temperature Altitude	-20° to 65° C (-4° to 149° F) Standard 0° to 40° C (32° to 104° F) Standard (Others available; consult factory) 65° C (De-rating required) 1000 m (3300 Ft.) Standard
Codes and Standards	Mechanical NEMA, as applicable Mechanical CSA Controllers CSA	Standard Approved Approved
Reliability Testing	Mechanical 100% dynamometer tested Controllers Pre-tested components Computer test and pre-calibrated PCBs	Standard Standard 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	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	449TD
	1097-560	AT-441256-0145	449TD
150	1695-700	AT-441504-0145	449TD
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	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	449TD
	1097-560	AT-441256-0190	449TD
150	1695-700	AT-441504-0190	449TD
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. at Slip RPM of ❶					Rated Dissipation HP at Input RPM of ❷					Inertia Lb. Ft. ² Output 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 Frame	Overhung Load Lbs. at Output RPM of ❸						45V Clutch Coil Current (Hot Amps)	Weight 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 ²	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. ²	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 keyways 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

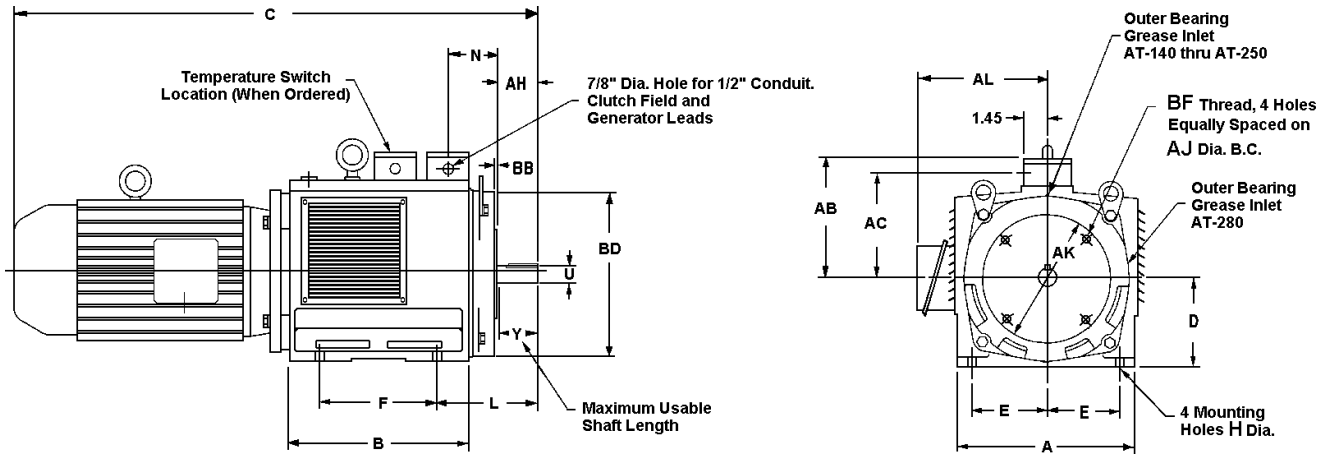
The full load motor currents shown in the following table are typical values for 4-pole motors. Full load current for 6-and 8-pole motors will typically be higher than the values listed for 4-pole motors. This table is intended for use as an aid in sizing motor branch circuit components. For setting 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 ①	13.2	6.6	-	-	-
7.5	20.4	10.2	-	-	11.7
10	26.2	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	-	-

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

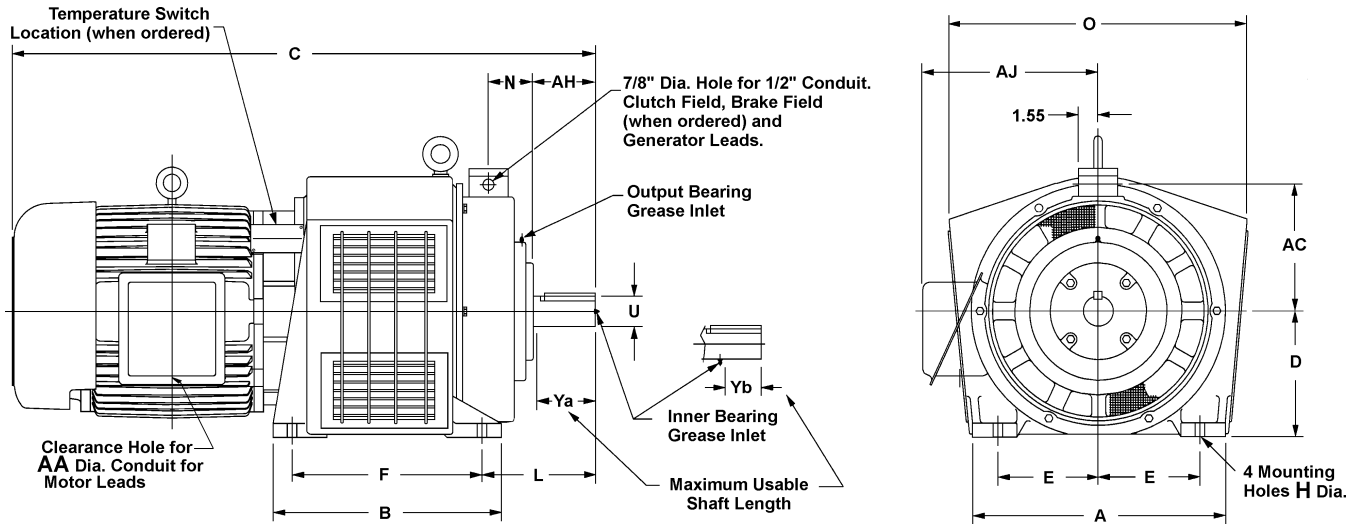
Model	Motor Frame	AJ	AK ^⑤	AL	BB	BD	BF
140	143TC 145TC	5.88	4.499	5.56	.12	8.38	3/8 - 16
180	182TC 184TC 213TC	7.25	8.499	7.19 7.50	.25	10.06	1/2 - 13
210	213TC 215TC 254TC	7.25	8.499	7.50 8.10	.27	11.82	1/2 - 13
250	254TD 256TD 284TD	7.25	8.499	10.00 12.31	.27	13.32	1/2 - 13
280	284TD 286TD 324TD 326TD	9.00	10.499	12.31 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 ^①	E	F	H	L	N	O	Shaft Extension		
												U ^②	Ya ^③	Yb ^③
320 (STD)	326T	20.00	18.00	49.50	10.00	8.00	15.00	.75	9.00	3.29	23.60	2.375	4.75	2.88
	365T			51.50										
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			63.12										
	445T			71.75										
440 (STD)	405T	24.00	24.00	67.50	12.00	10.00	21.00	.88	17.14	6.80	28.72	3.375	8.26	5.62
	445T			76.10										
	449T			84.14										

Model	Motor Frame	KEY	AA ^④	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

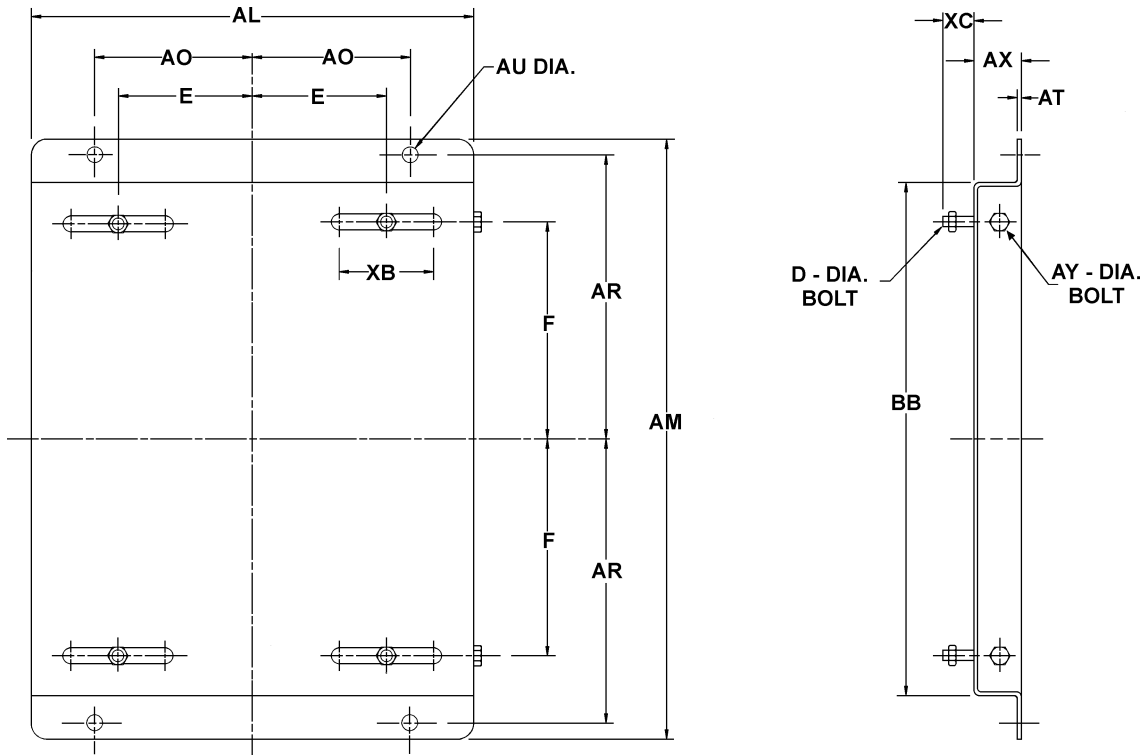
- ① D dimension will never be exceeded. When exact dimension is needed, shims up to .03 inch may be required.
- ② U shaft diameter tolerance: +.000/-.001 inch. Diameter shown is standard. Smaller diameter shafts of 2.125 for Model 320 and 2.375 for Model 360 are available upon request.
- ③ Y Dimensions 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