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"AS" Ajusto-Spede® Drives
1 through 30 HP

MODELS AS-14 THROUGH AS-27
Drive Information



Description:
Ajusto-Spede® Drives are a combination of an air-cooled, adjustable speed clutch and an integrally mounted NEMA B, AC induction motor. The Ajusto-Spede® Drive transmits constant 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 a C-Face endbell on both ends, TEFC Construction and an internal 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 compared to 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 - Ajusto-Spede® 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 Ajusto-Spede® mechanical drives.	Ajusto-Spede® 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 Ajusto-Spede® 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 transformer isolated from power lines.	Electronic controller is immune to line noise.
Stationary clutch coil design is standard.	Suitable for harsh industrial environments.
Controller operates on less than 2% of input power.	No need for costly, full power conversion units.

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"AS" Ajusto-Spede® Drives
1 through 30 HP

Specifications for AS-14 Through AS-27 Drives

Motor	HP and RPM	See selection table - Page 27
	Totally Enclosed Fan Cooled	Standard; ODP - Optional
	NEMA design B	Standard
	Class F insulation, class B rise	Standard
	1.15 service factor	Standard
	Frame type	Common housing - Standard
	***Input power - see note below	208/220 through 380V, 3 phase, 50 Hz 230 through 460V, 3 phase, 60 Hz 575V, 3 phase, 60 Hz
	one-year warranty	Standard
Clutch	Coil voltages	45 and 90 VDC - Standard; 110, 220 VDC - Optional
	Rated for constant torque	Standard
	Starting torque	Approximately 250%
	Intermittent torque	Approximately 250%
	AC tachometer generator	Standard
	Cooling	100% self ventilated at all times -Standard
	one-year warranty	Standard
Controllers (Sold separately)	Model 3000 and Model 4000 (Solid State)	Can be used with AS-14 through AS-25
	Model 4050, DSI-700 and Mark III (Solid State)	Can be used with AS-14 through AS-27
	EC-2000 and PDC-2000 (Digital)	Can be used with AS-14 through AS-27
	Closed loop speed control	Standard
	Speed regulation	0.5% standard; 0.1% optional (EC-2000 only)
	Regulated speed range	34 to 1 available
	Input power	115 VAC Motor transformer winding (Standard Models only) – Standard; Line transformer - Optional
	Enclosure	NEMA 1 - Standard; NEMA 12 - Optional;
	Panel mount, open construction	NEMA 13 for 4000 & 4050 - Standard Optional
	Output voltage, to clutch coil	45 VDC or 90 VDC standard; 220 VDC optional (EC-2000 only)
	One-year warranty	Standard
Status Indication	Speed indicating signal	0-60 VAC from tachometer generator for optional meter.
Environmental Ratings	Storage temperature	-20° to 65° C (-4° to 149° F) Standard
	Operating temperature	0° to 40° C (32° to 104° F) Standard
	Maximum operating temperature	65° C - Optional
	Altitude	1000m (3300 Ft.) Standard
Codes and Standards	Mechanical NEMA, as applicable	Standard
	Mechanical CSA	Approved
	Controllers CSA	Approved
Reliability Testing	Mechanical	
	100% dynamometer tested	Standard
	Controllers	
	Pre-tested components	Standard
	Computer test and pre-calibrated PCBs	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.**

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"AS" Ajusto-Spede® Drives

Ordering Information

The Ajusto-Spede® Model AS Drive includes an 1800 RPM AC 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., TEFC, 1.15 SF, NEMA design B, Class F insulation, integrally mounted to a brushless clutch in a common 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. If an open drip-proof, 50 Hz. motor is specified, the service factor remains 1.15.

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. An internal 115 VAC center tapped transformer winding is included in the motor for controller power on standard units only. Standard units consist of the following: 45 or 90 VDC epoxy clutch coil, a second (loose) nameplate and 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. A spherical roller bearing is included as standard on model AS-27 units only. ****Consult factory for non-standard units.**

Selection Table – 60 Hz, 45V Coil

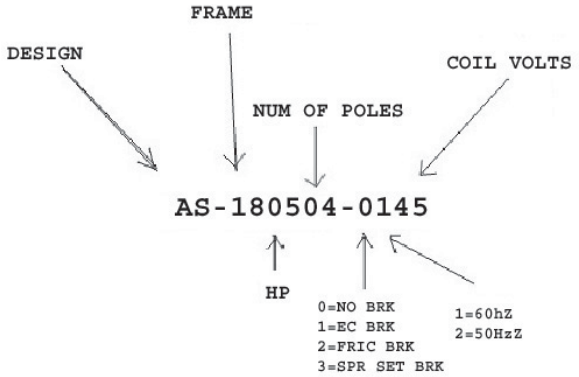
HP	Speed Range (RPM)	Model Number
1	1730-0 1095-0	AS-140104-0145 AS-140106-0145
1.5	1695-0 1130-0	AS-140154-0145 AS-180156-0145
2	1640-0 1120-0	AS-140204-0145 AS-180206-0145
3	1710-570 1710-0 1105-0	AS-140304-0145 AS-180304-0145 AS-180306-0145
5	1670-0 1115-0	AS-180504-0145 AS-210506-0145
7.5	1670-0 1140-0	AS-210754-0145 AS-250756-0145
10	1650-175 1120-0	AS-211004-0145 AS-251006-0145
15	1660-0 1110-0	AS-251504-0145 AS-271506-0145
20	1660-440 1710-0 1080-100	AS-252004-0145 AS-272004-0145 AS-272006-0145
25	1690-0 1090-320	AS-272504-0145 AS-272506-0145
30	1665-150	AS-273004-0145
40	1665-560	AS-274004-0145

Selection Table – 60Hz, 90V Coil

HP	Speed Range (RPM)	Model Number
1	1730-0 1095-0	AS-140104-0190 AS-140106-0190
1.5	1695-0 1130-0	AS-140154-0190 AS-180156-0190
2	1640-0 1120-0	AS-140204-0190 AS-180206-0190
3	1710-570 1710-0 1105-0	AS-140304-0190 AS-180304-0190 AS-180306-0190
5	1670-0 1115-0	AS-180504-0190 AS-210506-0190
7.5	1670-0 1140-0	AS-210754-0190 AS-250756-0190
10	1650-175 1120-0	AS-211004-0190 AS-251006-0190
15	1660-0 1110-0	AS-251504-0190 AS-271506-0190
20	1660-440 1710-0 1080-100	AS-252004-0190 AS-272004-0190 AS-272006-0190
25	1690-0 1090-320	AS-272504-0190 AS-272506-0190
30	1665-150	AS-273004-0190
40	1665-560	AS-274004-0190

**Catalog Numbering System Shown at Right:

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



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"AS" Ajusto-Spede® Drives

Modifications

Base, Slide - Adjustable slide bases are available for the horizontal mounting of an AS drive.
Part Number - AS-14 - 80907-0100
Part Number - AS-18 - 80907-0200
Part Number - AS-21 - 80907-0300
Part Number - AS-25 - 80907-0400
Part Number - AS-27 - 80907-0500

Brake, Adjustable Torque - An adjustable torque brake is flange mounted to the drive for stopping purposes or for use with the Mutuatrol® controller modification. Brakes require a brake circuit in the controller. Factory mounted on motor end standard.
Part Number - AS-14 - 81278-5045 (45V)/5090 (90V)
Part Number - AS-18 - 82278-5045 (45V)/5090 (90V)
Part Number - AS-21 - 83278-5045 (45V)/5090 (90V)
Part Number - AS-25 - 84278-5045 (45V)/5090 (90V)
Part Number - AS-27 - 91225-5045 (45V)/5090 (90V)

Brake, Friction - An electromagnetic friction brake is flange mounted to the drive for stopping or holding purposes. Brakes require a brake circuit in the controller. Factory mounted on motor end standard.
Part Number - AS-14 - 81130-1100 (45V)/1200 (90V)
Part Number - AS-18 - 82163-1100 (45V)/1200 (90V)
Part Number - AS-21 - 83130-1100 (45V)/1200 (90V)
Part Number - AS-25 - 84130-1100 (45V)/1200 (90V)
Part Number - AS-27 - 91143-1100 (45V)/1200 (90V)

Brake, Friction, with Thru Shaft - For cases where the motor end is already being used, the friction brake is mounted on the clutch end with a "thru" shaft arrangement (NOTE: “thru” shaft arrangement is factory installed only).
Part number - AS-14 - 81367-0100 (45V)
Part number - AS-18 - 82367-0100 (45V)/0200 (90V)
Part number - AS-21 - 83367-0100 (45V)/0200 (90V)
Part number - AS-25 - 84367-0100 (45V)/0200 (90V)
Part number - AS-27 - 91151-0100 (45V)/0200 (90V)

Brake, Spring-Set - A spring engaged, electrically released friction brake is flange mounted to the drive. These brakes are suitable for holding purposes. Brakes require a brake circuit in the controller (not for use with the model 3000 controller). The standard voltage supplied will be 115 VAC; other voltages are available by consulting the factory; with other voltages, the customer must supply relay and interfacing. Factory mounted on motor end standard.
Part Number - AS-14 - 81081-1100 (115V)/1200(230V)
Part Number - AS-18 - 82081-1100 (115V)/1200(230V)
Part Number - AS-21 - 83081-1100 (115V)/1200(230V)
Part Number - AS-25 - 84081-1100 (115V)/1200(230V)
Part Number - AS-27 - 91170-1100 (115V)/1200(230V)

Cover, Vertical Drip - A kit will be installed or provided with a sheet metal drip cover to prevent water from falling into the unit. Available as a ship loose item only.
Part Number - AS-14 - 81282-0100
Part Number - AS-18 - 82282-0100
Part Number - AS-21 - 85656-0100
Part Number - AS-25 - 85656-0100
Part Number - AS-27 - 91187-0100

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"AS" Ajusto-Spede® Drives

Modifications

For the following modifications, please consult factory:

Protection, Food Plant - Includes a TEFC motor, encapsulated tachometer and clutch coil, external epoxy paint, and nickel-plated end bells for chemical washdown duty. Class H insulation may be required for higher ambient. (Constant torque speed range will be reduced at ambient above 104° F).

Protection, Jungle – Includes a TEFC Motor, encapsulated clutch coil, screens over all air openings, and discharge louvers in the "up" position and external epoxy paint.

Protection No.1 - Includes a TEFC motor, epoxy encapsulated tachometer and clutch coil. Class H insulation may also be required for higher ambient. (Constant torque speed range will be reduced at ambient above 104° F).

Protection, Paper Mill - includes all of the features of Protection No. 1 plus external epoxy paint. Class H insulation may also be required for higher ambient. (Constant torque speed range will be reduced at ambient above 104°F).

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 a thermal switch is placed in the air stream. This switch has a NC contact.

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"AS" Ajusto-Spede® Drives

Drive Engineering Data

Adjustable Speed Drive Data

Model	Clutch Torque Lb. Ft. at Slip RPM of❶					Rated Dissipation HP at Input RPM of❷					Inertia Lb. Ft. ² Output Member
	50	75	100	150	1750	900	1000	1200	1500	1800	
AS-14	4.0	5.5	7.0	9.0	25.0	1.0	1.0	1.1	1.6	2.0	.86
AS-18	10.0	14.0	16.0	21.0	46.0	2.5	2.6	3.1	4.1	5.0	1.96
AS-21	19.0	25.0	32.0	40.0	74.0	4.5	4.8	5.8	7.5	9.0	3.59
AS-25	42.0	56.0	68.0	82.0	120.0	7.5	8.0	9.6	12.4	15.0	6.22
AS-27❹	60.0	81.0	102.0	132.0	245.0	13.7	15.2	18.3	22.8	27.4	16.00
AS-27❺❻	75.0	102.0	124.0	155.0	250.0	13.7	15.2	18.3	22.8	27.4	16.00

Adjustable Speed Drive Data

Model	Overhung Load Lbs. at Output RPM of ❸			45V Clutch Coil Current (Hot Amps)	Weight Lbs.
	900	1200	1800		
AS-14	390	390	380	3.40	157
AS-18	600	550	470	3.90	277
AS-21	725	675	560	3.88	412
AS-25	1125	1020	880	4.18	610
AS-27❹	1510	1350	1155	7.20	1080
AS-27❺❻	1465	980	805	7.20	1090

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 above 100° F ambient, to 150° F 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 unless otherwise noted.
❹ AS-27 with 1.875" shaft diameter.
❺ Unit with copper plated clutch drum.
❻ AS-27 with 2.125" shaft diameter.

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"AS" Ajusto-Spede® Drives

Brake Engineering Data

Adjustable Torque (Eddy Current) Brake Data

Model	Brake Torque in Lb. Ft. at Output RPM of			Brake Dissipation HP at Brake RPM of					Brake Inertia Lb. Ft.	Brake Coil 45V Current (Hot Amps)	*Approx. Weight
	900	1200	1800	300	600	900	1200	1800			
AS-14B	5.4	6.0	6.6	.15	.3	.5	.7	1.0	.13	1.84	177
AS-18B	26.0	28.0	30.0	.50	1.0	1.5	2.0	3.0	.60	2.49	322
AS-21B	30.0	32.0	34.0	.50	1.0	1.5	2.0	3.0	.60	2.49	457
AS-25B	40.0	60.0	60.0	.80	1.7	2.5	3.3	5.0	1.96	3.47	690
AS-27B	65.0	70.0	100.0	1.90	3.2	3.7	4.9	7.3	1.75	3.51	1180

Friction Brake Data

Model	Electrically Engaged			*Approx. Weight
	Static Torque Lb. Ft.	Inertia Lb. Ft.	Brake Model	
AS-14F	40	.054	500	177
AS-18F	40	.054	500	322
AS-21F	80	.371	825	457
AS-25F	80	.371	825	690
AS-27F	240	.967	310	1180

Spring Set Brake Data

Model	Spring Set Electrically Released Static Torque Lb. Ft.	*Approx. Weight
AS-14F	15	177
AS-18F	25	322
AS-21F	35	457
AS-25F	70	690
AS-27F	175	1180

Adjustable Torque & Friction Brake Data

Model	Overhung Load in Lbs. At Output RPM of 1800 Std.	*Approx. Weight
AS-14F	235	197
AS-18F	310	367
AS-21F	550	502
AS-25F	565	770
AS-27F	700	1280

*Approximate weight includes the weight of the drive.

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"AS" Ajusto-Spede® Drives

Engineering Data

Induction Type, 3 Phase AC Motors, 4 Pole, Squirrel Cage Nema Design B

The full load motor currents shown in the table below are typical values for AS-14 through AS-27, 4 pole drives. This table is intended for use as an aid in sizing motor branch circuit components.

For full load motor currents of and 208-volt motors, increase the corresponding 230 volt motor full load current by 15% and 10% respectively.

Full Load Currents

HP	Full Load Amperes		
	230 Volt	460 Volt	575 Volt
1	5.4	2.7	2.2
1.5	6.0	3.0	2.5
2	7.0	3.5	2.8
3	9.4	4.7	3.8
5	14.6	7.3	5.8
7.5	20.4	10.2	8.2
10	28.4	14.2	11.7
15	41.0	20.5	16.4
20	55.0	27.5	22.0
25	68.0	34.0	27.2
30	74.0	37.0	29.6

Noise Levels, Ajusto-Spede Drives Model AS Drives

These sound pressure levels are **typical** values given for engineering information only, and it is **not guaranteed** that any particular production unit will not exceed these values. Microphone 3 feet from side of drive, tested in a semi-anechoic chamber above reflecting plane per IEEE-85 spec. 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 8 dB less than 1800-RPM values shown, and for 3600 RPM the noise level will be 15 dB greater.

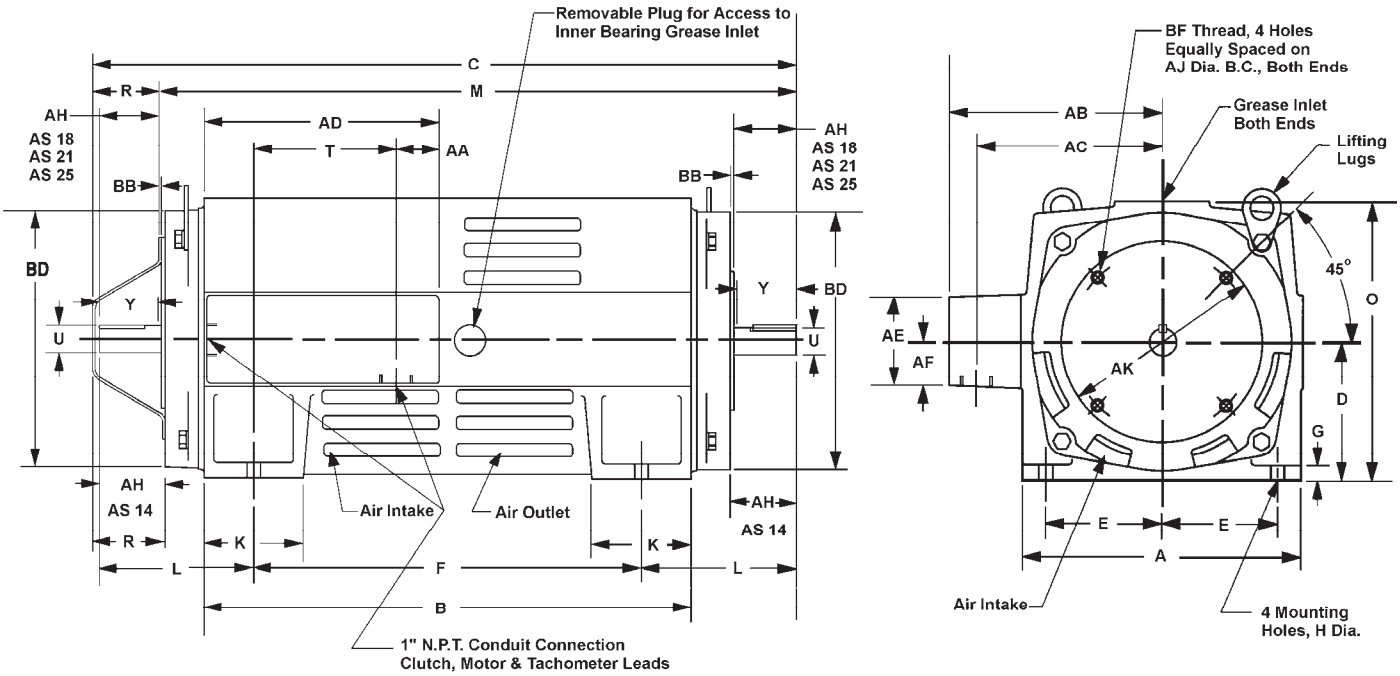
Noise Levels

Model	Sound Pressure dB			
	RPM	A Scale	B Scale	C Scale
AS-14	1800	66.3	-	70.0
AS-18	1800	70.2	-	74.5
AS-21	1800	75.3	-	79.1
AS-25	1800	80.5	-	83.9
AS-27	1800	82.0	-	85.1

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"AS" Ajusto-Spede® Drives

Outline Drawings "C" Flange - AS-14 through AS-25



D-81255

AS	A	B	C	D❶	E	F	G	H	K	L	M	O	R	T
14	9.00 229	15.72 399	22.72 577	4.50 114	3.75 95	12.52 318	.50 13	.50 13	3.20 81	5.00 127	20.38 518	9.06 230	2.34 59	4.67 119
18	10.50 267	17.60 447	27.90 709	5.25 133	4.25 108	13.75 349	.50 13	.50 13	3.75 95	6.25 159	23.60 599	10.75 273	4.05 103	4.43 113
21	12.50 318	18.60 472	30.27 769	6.25 159	5.00 127	14.12 359	.62 16	.62 16	3.56 90	7.62 194	26.22 666	12.62 321	4.05 103	5.58 142
25	14.00 356	17.75 451	32.84 834	7.00 178	5.50 140	15.06 383	.62 16	.62 16	3.30 84	8.75 222	28.79 731	14.38 365	4.05 103	6.20 157

AS	AA	AB	AC	AD	AE	AF	AH	AJ	AK❹	BB	BD	BF	WT
14	1.32 34	7.06 179	6.00 152	7.50 190	2.88 73	1.48 38	2.12 54	5.88 149	4.499 114.3	.12 3	8.38 213	3/8-16 9.52 x 1.58	157 70
18	2.06 52	7.80 198	6.74 171	8.32 211	2.88 73	1.48 38	2.62 67	7.25 184	8.499 215.9	.25 6	10.06 255	1/2-13 12.70x1.95	277 112
21	1.38 35	8.87 225	7.57 192	8.81 224	3.76 96	1.92 49	3.12 79	7.25 184	8.499 215.9	.27 7	11.88 302	1/2-13 12.70x1.95	412 172
25	1.62 41	9.87 251	8.57 218	8.81 224	3.76 96	1.92 49	3.75 95	7.25 184	8.499 215.9	.27 7	13.32 338	1/2-13 12.7x1.95	610 240

AS	Shaft Extensions		
	U❷	Y❸	Key
14	.8750 22.225	1.94 49	.18 Sq. x 1.38 Lg. 4.76 Sq. x 35 Lg.
18	1.1250 28.575	2.50 64	.25 Sq. x 1.75 Lg. 6.35 Sq. x 44 Lg.
21	1.3750 34.925	3.00 76	.31 Sq. x 2.38 Lg. 7.87 Sq. x 60 Lg.
25	1.6250 41.275	3.62 92	.38 Sq. x 2.88 Lg. 9.65 Sq. x 73 Lg.

Overall dimension on units with modifications will be the total of **M** dimension plus **R** dimension. Unit may be operated vertically (prefer motor end output shaft up).

❶ **D** dimension will never be exceeded. When exact dimension is needed shims up to .03 inch (.76 mm) may be required.

❷ **U** shaft diameter tolerance 1.50 inches (38 mm) and smaller: +.0000/-.0005 inch (+.0000/-.0127 mm), over 1.50 inches (38mm): +000/-.001 inch (+.000/-.025 mm).

❸ **Y** dimension is maximum usable shaft length.

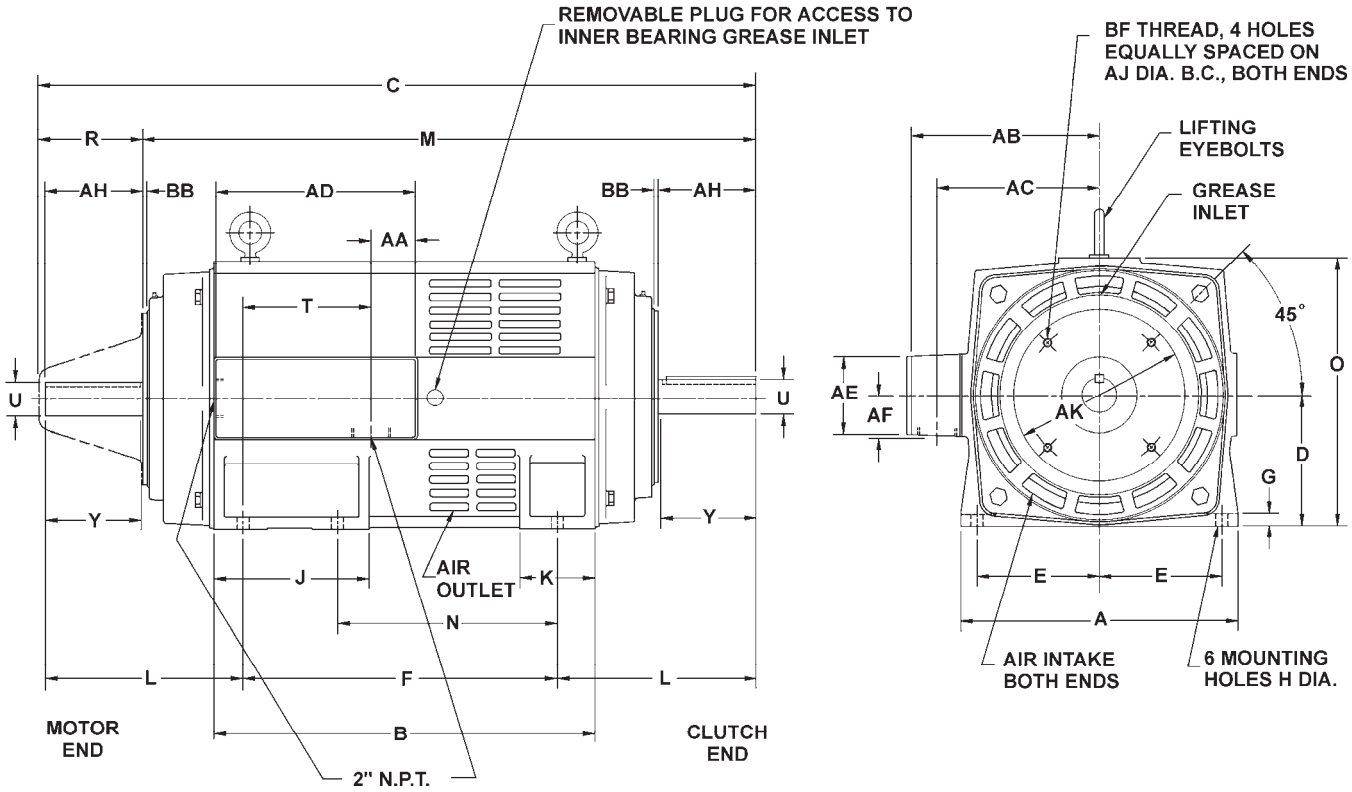
❹ **AK**, pilot diameter tolerance +.000/-.002 inch. (+.000/-.051 mm). **AJ, AK** and **KEY** dimension are the same for both ends.

DIMENSIONS ARE IN INCHES AND MILLIMETERS

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"AS" Ajusto-Spede® Drives

Outline Drawings "C" Flange - AS-27



D-91127

AS	A	B	C	D❶	E	F	G	H	J	K	L	M	N	O	R
27	17.00 432	23.38 594	39.60 1006	8.00 203	7.50 191	19.26 489	.75 19	.75 19	9.50 241	4.63 118	10.00 254	35.43 900	13.50 343	16.41 417	4.17 106
27❺	17.00 432	23.38 594	43.94 1116	8.00 203	7.50 191	19.26 489	.75 19	.75 19	9.50 241	4.63 118	12.17 309	37.60 995	13.50 343	16.41 417	6.34 161

AS	Shaft Extensions			AB	AC	AD	AE	AF	AH	AJ	AK❹	BB	BF	WT
	U❷	Y❸	Key											
27	1.875 47.625	3.83 97	.50 Sq. x 3.50 Lg. 12.7 Sq. x 89 Lg.	12.73 323	10.72 272	12.25 311	4.75 121	2.46 62	3.83 97	9.00 228.6	10.499 266.67	.25 6	½ -13 12.7 x 1.95	1080 479
27❺	2.125 53.975	6.00 152	.50 Sq. x 5.50 Lg. 12.7 Sq. x 140 Lg.	12.73 323	10.72 272	12.25 311	4.75 121	2.46 62	6.00 152	9.00 228.6	10.499 266.67	.25 6	½ -13 12.7 x 1.95	1090 481

Overall dimension on units with modifications will be the total of **M** dimension plus **R** dimension. Unit may be operated vertically (prefer motor end output shaft up).

❶ **D** dimension will never be exceeded. When exact dimension is needed shims up to .03 inch (.76 mm) may be required.
❷ **U** Shaft diameter tolerance +.000/-.001 inch (+.000/-.025 mm).
❸ **Y** dimension is maximum usable shaft length.
❹ **AK**, pilot diameter tolerance +.000/-.002 inch (+.000/-.052 mm).
AJ, AK and **KEY** dimension are the same for both ends.
❺ These dimensions with the large shaft diameter and length are standard only on Model AS-274004-01.
All other AS-27 units will be supplied with the smaller shaft unless specifically ordered.
All units below 40 HP will have 1.875 inch (47.625 mm) diameter shaft extension unless special ordered.
All units 40 HP and above will have 2.125 inch (53.975 mm) diameter shaft extension unless special ordered.

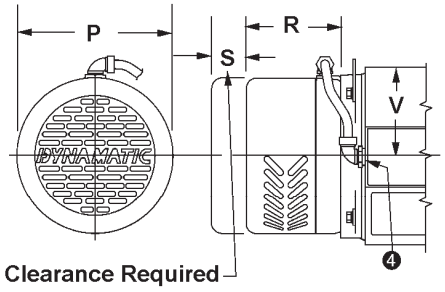
DIMENSIONS ARE IN INCHES AND MILLIMETERS

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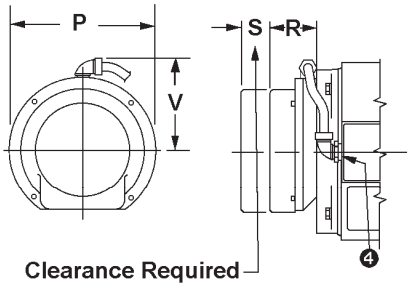
"AS" Ajusto-Spede® Drives

Modification Drawings - AS-14 through AS-27

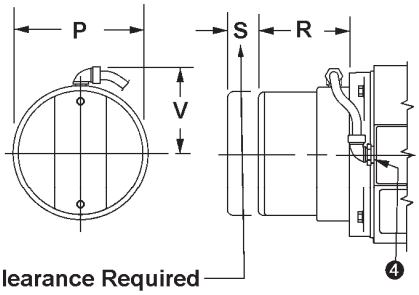
ADJUSTABLE TORQUE BRAKE
(EDDY CURRENT BRAKE)



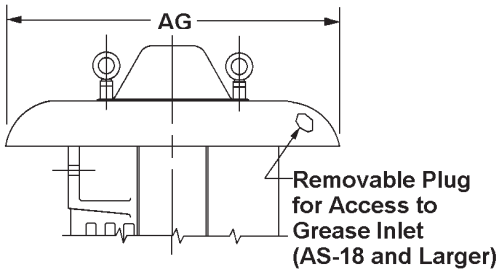
FRICTION BRAKE



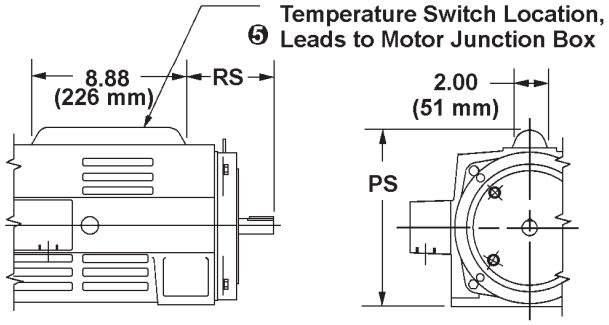
SPRING SET BRAKE
(FAIL-SAFE BRAKE)



DRIP COVER FOR VERTICAL
OPERATION



TEMPERATURE SWITCH



D-81255, D-91127

AS	Brakes												Vert.	Labyr. Seal	Temp. Switch	
	Adjustable Torque				Friction				Spring Set							
	P	R❶	S❷	V	P	R❶	S❷	V	P	R❶	S❷	V	AG	FY❸	PS	RS
14	7.38 187	4.69 119	2.92 74	5.19 132	7.42 188	2.46 62	1.10 .28	4.96 126	6.82 173	4.62 117	3.12 79	4.50 114	15.75 400	1.48 38	10.06 256	5.00 127
18	9.50 241	5.84 148	4.56 116	6.19 157	7.42 188	3.11 79	1.10 .28	4.96 126	9.00 229	6.62 168	4.00 102	5.75 146	18.88 480	2.18 55	11.75 298	7.31 186
21	9.50 241	5.84 148	4.56 116	6.19 157	11.52 293	4.45 113	2.68 68	6.00 152	9.00 229	6.62 168	4.00 102	5.75 146	18.88 480	2.68 68	13.62 346	8.77 223
25	10.88 276	7.31 186	6.06 154	6.88 175	11.52 293	4.45 113	2.68 68	6.00 1.52	9.00 229	7.87 200	4.00 102	5.75 146	18.88 480	3.34 85	15.38 391	9.56 243
27	15.68 398	5.81 148	1.50 38	9.12 232	12.16 309	4.72 120	2.25 57	6.08 155	11.00 279	8.50 216	4.00 102	6.75 171	22.00 559	3.39 86	17.38 441	11.03 280
27⑥	15.68 398	8.00 203	3.67 93	9.12 232	12.16 309	- -	- -	- -	11.00 279	- -	- -	6.75 171	22.00 559	5.56 141	17.38 441	13.20 335

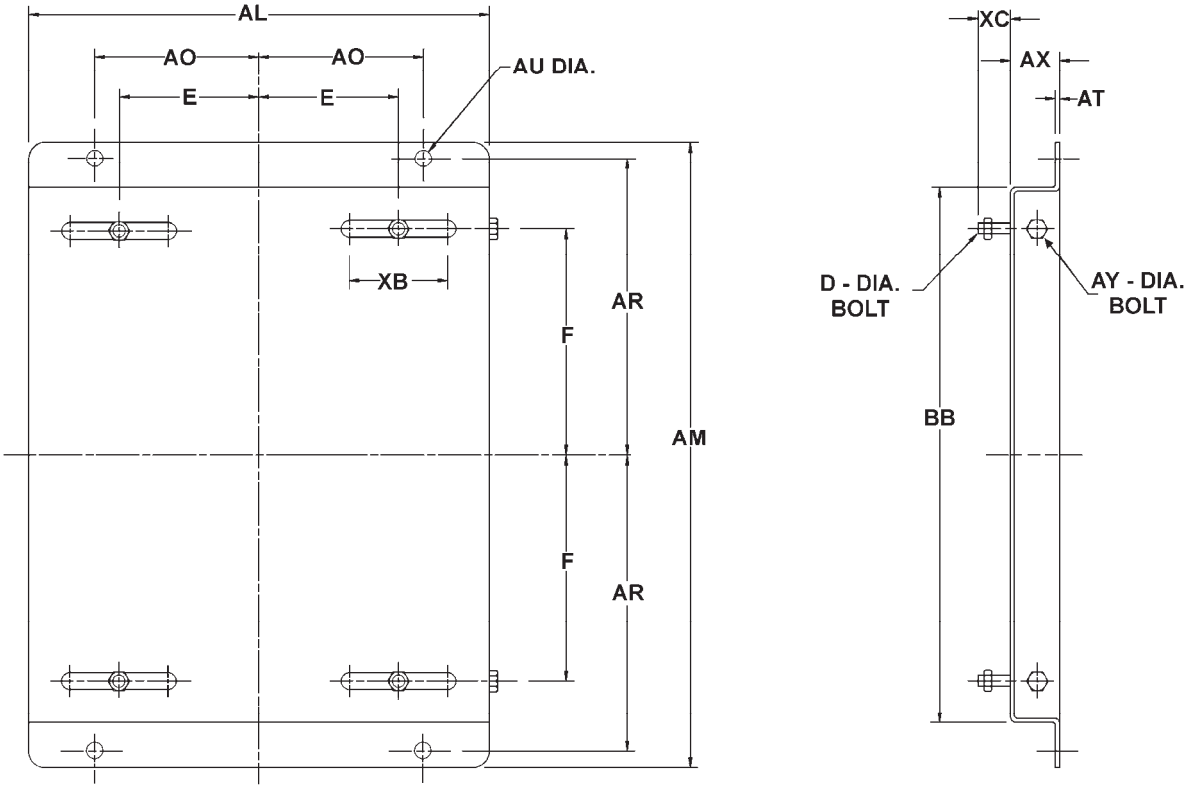
❶Overall dimension with modifications will be the total of **M** dimension plus **R** dimension of the modification.
❷**S** dimension is clearance to remove the cover.
❸**FY** dimension is the maximum usable shaft length. Seal shortens the usable shaft length, **Y**.
❹**1 N.P.T** conduit connection for clutch, motor, brake and tachometer leads at bottom of junction box.
❺Temperature switch: rated 120 to 600 VAC, 345 Volt Amperes, NC contacts, fixed temperature settings.
❻See **NOTE ❺** on AS-27 dimensions, Page 34.

DIMENSIONS ARE IN INCHES AND MILLIMETERS

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"AS" Ajusto-Spede® Drives

Outline Drawings - Adjustable Slide Bases



D-80907

AS	Part No.	AL	AM	AO	AR	AT	AU	AX	BB	E	F
14	80907-0100	12.75	18.00	4.50	8.50	.134	.50	1.50	15.00	3.75	6.26
18	80907-0200	14.00	19.00	5.00	9.00	.134	.50	1.50	16.25	4.25	6.87
21	80907-0300	16.00	20.50	6.00	9.50	.164	.50	1.75	17.12	5.00	7.06
25	80907-0400	18.00	22.75	7.00	10.38	.187	.62	2.00	18.62	5.50	7.53
27	80907-0500	22.00	27.50	9.00	12.75	.250	.75	2.25	23.50	7.50	9.63

AS	Part No.	XB	XC	D-Bolt	AY-Bolt
14	80907-0100	3.00	1.00	3/8 Dia.	1/2 Dia.
18	80907-0200	3.00	1.00	3/8 Dia.	1/2 Dia.
21	80907-0300	3.50	1.25	1/2 Dia.	1/2 Dia.
25	80907-0400	4.00	1.25	1/2 Dia.	5/8 Dia.
27	80907-0500	5.00	1.75	5/8 Dia.	5/8 Dia.

DIMENSIONS ARE IN INCHES

revised 04/12/20188

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Toll Free: 1-800-548-2169
E-Mail: sales@dynamatic.com

DSI - STANDARD TERMS AND CONDITIONS OF SALE

1. PRICE BOOKS
Price books are intended only as sources of general information. They are not to be construed as quotations or as representations that products described therein are available, or will be made available for immediate delivery.

2. QUOTATIONS
Seller may make quotations verbally or in writing. Verbal quotations shall expire automatically unless Seller receives Buyer's purchase order number on the day the quotation is made. Written quotations shall expire automatically unless Seller receives Buyer's written purchase order within 15 days after the date appearing on the quotation. No quotation is to operate as an offer to sell but only as a description of products. Accordingly, even prior to its expiration date, any quotation is subject to change by Seller at any time upon verbal or written notice to Buyer. All quotations are deemed to incorporate Seller's Standard Terms and Conditions of Sale.

3. ACCEPTANCE OF PURCHASE ORDERS.
Notwithstanding any contrary language contained in Buyer's purchase order, each purchase order shall be subject to acceptance by an authorized employee of Seller's plant, and each purchase and sale transaction shall be governed exclusively by these Standard Terms and Conditions of Sale. Seller reserves the right at any time before delivery and payment to correct clerical, stenographic or other errors in quotations, purchase orders or acknowledgments.

4. PRICE POLICY
Regardless of prices set forth in quotations, acknowledgments or elsewhere, Buyer shall pay a purchase price as follows:

(a) For the following products: Fractional Horsepower Ajusto-Spede®, AC Motors, renewal parts and service, Buyer shall pay Seller's published prices in effect on the date when shipment is made or service performed.

(b) For all other products, Buyer shall pay a purchase price equal to the smaller of: (a) Seller's published prices in effect on the date when shipment is made or (b) the prices set forth in Seller's acknowledgment increased by 1% for each month or fraction thereof that elapses between the date when the acknowledgment is mailed from Seller's factory to Buyer (designated as the "Issue Date" on the acknowledgment) and the date when shipment is made or the date for which shipment was originally scheduled (as stated on the acknowledgment) by Seller, whichever occurs sooner. However, in the event that shipment is originally scheduled to occur in excess of 12 months after Issue Date, Buyer shall pay Seller's published prices in effect on the date when shipment is made; and in any case where shipment is delayed beyond Seller's originally scheduled date for shipment by Buyer's actions or at Buyer's request, Buyer shall pay escalation charges based on the revised delivery schedule.

5. MINIMUM BILLING
The minimum billing for each purchase order shall be $100.00 net.

6. TAXES
Any and all sales, use, personal property or other excise taxes which the Seller may be required to pay or collect, including first destination taxes, will be added to each invoice and shall be payable by Buyer on the same terms as the purchase price unless the Buyer has furnished the Seller a tax exemption certificate acceptable to the taxing authority.

7. PAYMENT TERMS
Payment terms shall be net 30 days except for International orders, which will be cash in advance. However, on orders of $100,000.00 or more and having delivery schedule 6 months or longer from date of order, the payment terms shall be as specified by Seller at time of quotation.

8. SHIPPING TERMS
Except as otherwise agreed, Seller shall be entitled to select carrier and make delivery in more than one shipment, in which event Buyer shall pay separately for each partial shipment.

All shipments shall be made F.O.B. point of shipment. Seller shall prepay freight (UPS shipments only), which shall be billed to Buyer as a separate item on the product invoice at Seller's standard rates applicable to the destination, or at Buyer's option, shipment shall be made freight collect. All truck shipments shall be made freight collect, unless otherwise agreed.

9. PACKAGING
At no additional charge, all products shall be packaged for domestic shipment in accordance with Seller's standard specifications. Additional charge shall be made if Buyer specifies special domestic packaging, packaging in accordance with government or military standards, overseas packaging or other special packaging. Refer to Seller's plant, nearest sales office or representative for further information.

10. TITLE AND RISK OF LOSS
Risk of loss in transit shall be borne entirely by Buyer at all times after the products are delivered to the carrier for shipment. However, title to the products and right to stop delivery in transit shall remain with Seller until Seller receives payment in full.

11. DELAYS OR DEFAULT IN DELIVERY
Seller shall have no liability to Buyer, and Buyer shall not be entitled to cancel any purchase order, for Seller's delay or default in delivery due to strikes, secondary boycotts, riots,

wars, accidents, fires, floods, explosions, vandalism, government embargoes, priorities or regulations, shortages of labor, fuel, materials, supplies, power or transportation facilities, or other similar or dissimilar causes beyond Seller's reasonable control. Under no circumstances shall Seller have any liability for penalties or consequential damages of any kind resulting in whole or in part from Seller's delay in delivering, or failure to deliver, any products ordered by Buyer.

12. CHANGES TO ORDERS IN PROCESS

There shall be a charge for any and all changes in specification after an order is in process, based on the status of the order at the time the change is made. The additional charge shall be a minimum of $50 net per item when engineering has not been started or is not required and a minimum of $100 net per item when re-engineering is required. The additional charge shall be in addition to any change in the price of the product resulting from the change in specification. The order "Issue Date" will be moved forward to the date of the change and shipment will be rescheduled in accordance with the then current lead times. Buyer shall pay escalation charges based on the new "Issue Date" and scheduled shipping date as defined in paragraph B.

13. CANCELLATION

After Seller accepts Buyer's purchase order by faxing Seller's written acknowledgment, Buyer's cancellation of any order or portion thereof may be accomplished only upon (i) Seller's receipt of written cancellation notice at Seller's plant (cancellation notice by telephone will be deemed only as authorization for Seller temporarily to suspend performance on Buyer's order pending written confirmation of cancellation) and ii) Buyer's payment of the following cancellation charges:

Notwithstanding anything to the contrary contained herein, the minimum cancellation charges for products shall be 50% per line item or 50% per complete order.

With respect to all costs and expenses described above, Seller shall provide such substantiating documentation as Buyer may reasonably request, and Seller's computations, thus documented, and shall be conclusive and binding between the parties. With respect to all canceled products, materials and supplies described above, Seller shall, upon payment of the applicable cancellation charges, make such disposition as Buyer may specify in writing within 30 calendar days after Seller notifies Buyer of the applicable cancellation charges. Buyer's failure to so specify within said 30-day period shall constitute Buyer's authorization for Seller to make such disposition as Seller chooses with no further obligation to Buyer.

14. PATENT INFRINGEMENT

With respect to all products manufactured to Buyer's design, Buyer shall indemnify and hold Seller harmless from and against any and all loss, cost, expense, claims, demands, suits and judgments resulting from actual or alleged patent infringements. With respect to all other products sold by Seller, Seller shall defend any suit or proceeding brought against Buyer on a claim that such a product, or any part thereof when employed in the manner intended by Seller, infringes any U.S. patent, provided that Seller is notified promptly in writing and given all necessary information, assistance and authority to defend same. Seller shall pay all damages and costs awarded against Buyer as a result thereof. If the court finds such an infringement, and the use of any product, in the manner intended by Seller is enjoined, Seller shall at its sole expense, at Buyer's option (a) procure for Buyer the right to continue using said product, (b) replace said product with a non-infringing product, (c) modify said product so that it becomes non-infringing or (d) remove said product and refund its purchase price and transportation and installation costs. Seller shall have no further liability for actual or alleged patent infringement except as provided herein.

15. PRODUCT WARRANTY AND DISCLAIMER

Seller warrants to Buyer, subject to the limitations, conditions and disclaimers stated herein, that all new products manufactured by Seller shall be free from defect in material and workmanship and shall deliver their rated output as indicated on the nameplates for a period of one (1) year from the date of shipment to the Buyer. Buyer must notify Seller in writing of defect or failure to deliver rated output within the applicable warranty period and give Seller the opportunity to determine that the defect or failure exists. Buyer shall, at Buyer's expense, make each allegedly defective product available for Seller's inspection at Buyer's place of business or, at Seller's option, return each such product to Sellers plant or service center as designated by Seller, freight both ways to be paid by Buyer. No products shall be returned to Seller's plant or service center except in accordance with Seller's prior written instructions. Determination of any defect is made at Seller's sole discretion and Seller's decision is final. To remedy any defect, the Seller may at its option, repair, rebuild or replace the defective component or complete product, using new or re-manufactured components or complete product. In any case the repaired, rebuilt or replaced product shall be warranted hereunder for the then non-expired portion of the original warranty period. Seller's sole obligation to Buyer, and Buyer's sole remedy against Seller, for any breach of this warranty shall be Seller's obligation to repair or replace the product as provided herein or, at Sellers option, to repay, upon return of the defective product, the price paid for such product by Buyer.

Any tampering, misuse, mis-application, and/or improper installation of the product by Buyer or Buyer's representatives may void warranty. Additionally, any service/repair work performed by any personnel not pre-authorized by Seller to perform the service/repair work will void warranty. Products sold by Seller, but not manufactured by Seller, shall be warranted as to defects in material and workmanship consistent with the warranty policy of the original manufacturer of the products. In no event shall Seller have any liability for incidental or consequential damages of any kind resulting from a breach of this warranty. THIS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY FOR MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

16. RETURNS

No products shall be returned to Seller, whether for inspection, repair, replacement or any other reason, without prior written consent from Seller's plant, sales office or

representative

Revised April 12, 2018

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