



- New line of system matched inverter duty motors and gearmotors
- Permanent split capacitor motors are reliable, easy to install and ideal for fixed speed applications
- Designed to provide long life and leak free operation
- Torque motors for tensioning and holding

AC Products

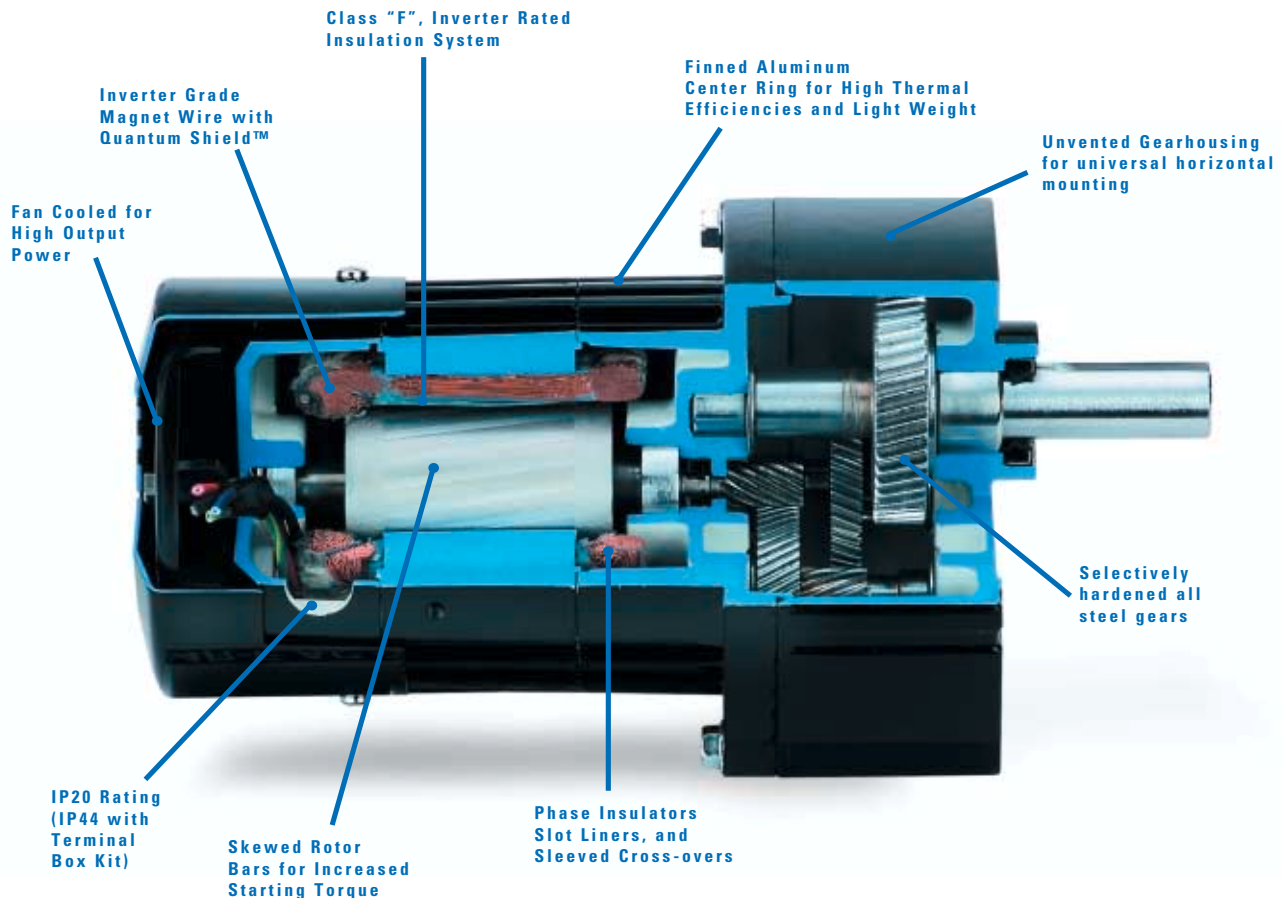


Bodine Electric’s new line of stock 230VAC, 60 Hz, 3-phase, inverter duty, induction motors and gearmotors was designed with your application needs in mind. Bodine offers the widest selection of inverter duty, fractional horsepower (FHP) motors and gearmotors in the industry.

For over 95 years, optimized performance and highest output per frame size have been top priorities for the Bodine Electric design engineering team. The compact designs of our integral gearmotors can meet most of your tightest space requirements. The Bodine “Total System Approach” offers you superior motor and gearmotor products that are matched to reliable, high-performance inverter drives. Pacesetter™ inverter duty motors are reliable and cost effective alternatives to DC motor and control systems. They are more efficient and compact and don’t require time-consuming brush replacement or brush dust clean-up maintenance.

PRODUCT FEATURES:

- Quintsulation™, 5-stage insulation system designed to meet NEMA MG 1-1993, Section IV, Part 31
- 230VAC, 60 Hz, 3-phase and/or 230/460VAC, 60Hz, 3-phase for operation with a wide range of inverter products
- Inverter-Grade magnet wire and Class “F” insulation system for increased protection against spikes and corona damage caused by the inverter
- All new optimized motor and gearhead combinations for maximum output power in the smallest package
- UL recognized for construction, CSA certified, and in compliance with the Low Voltage Directive “CE”



Quantum Shield is a Trademark of the Phelps Dodge Magnet Wire Co.

Pacesetter AC Inverter Duty Motor

1/25 - 1/17 HP



30R Motor

Inverter Duty Features

- Quinsulation™, 5-stage insulation system designed to meet NEMA MG 1-1993, Section IV, Part 31
- 230VAC, 60 Hz, 3-phase for operation with a wide range of inverter products
- Inverter-Grade magnet wire and Class "F" insulation system for increased protection against spikes and corona damage caused by the inverter
- UL recognized for construction, CSA certified, and in compliance with the Low Voltage Directive "CE"

Standard Features

- Totally enclosed, non-ventilated IP-20 rating
- Class "F" insulation system for long life
- Aluminum endshields for high thermal efficiency and light weight
- Permanently lubricated, noise tested ball bearings
- Locked bearing design minimizes shaft endplay

Application Information

- See page 64 for connection diagram
- Face mounting is standard

Optional Accessories

- Die cast terminal box kit model 5982 achieves IP-44 rating, see page 62
- "L" bracket kit model 5968 permits base, ceiling, and sidewall mounting, see page 62

Matching Controls

- Bodine stocks a full line of speed controls for Pacesetter motors. See pages 37-42

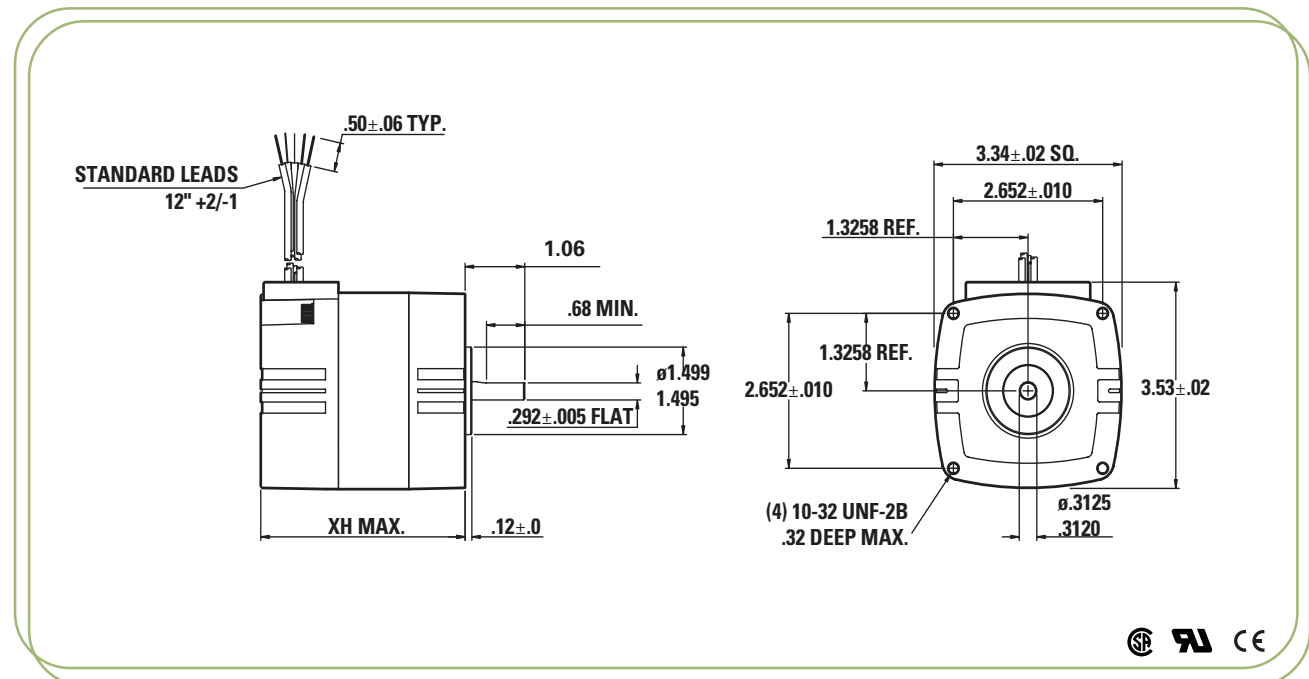


Fixed Speed Ratings				Variable Speed (SOA) Ratings ²						XH (inch)	Wt. (lbs.)	Connection Diagram	Order Information	
Speed (rpm)	Torque (oz-in.)	Motor HP	V	Speed Range (rpm)	Frequ. (Hz)	Torque Type	Torque @						Product Type	Model No. ¹
							10 Hz (oz-in.)	60 Hz (oz-in.)	140 Hz (oz-in.)					
Three-Phase, Inverter Duty, Non-Synchronous Motor (TENV)														
1700	24	1/25	230	220-3150	10-140	variable	20	56	27	3.7	4.5	074 10007	30R2BEPP	N2200
1700	35	1/17	230	133-3240	10-140	variable	45	66	35	4.2	6.2	074 10007	30R4BEPP	2201

¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

² SOA: Contact the factory for detailed speed/torque information (Safe Operating Area).

30R Motor



MADE IN U.S.A.

Pacesetter AC Inverter Duty Motor

1/8 - 1/4 HP



34R Motor

Inverter Duty Features

- Quinsulation™, 5-stage insulation system designed to meet NEMA MG 1-1993, Section IV, Part 31
- 230VAC, 60 Hz, 3-phase for operation with a wide range of inverter products
- Inverter-Grade magnet wire and Class "F" insulation system for increased protection against spikes and corona damage caused by the inverter
- UL recognized for construction, CSA certified, and in compliance with the Low Voltage Directive "CE"

Standard Features

- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Permanently lubricated, noise tested ball bearings
- Locked bearing design minimizes shaft endplay

Application Information

- See page 64 for connection diagram
- Face mounting is standard

Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62
- "L" bracket kit model 0979 permits base, ceiling, and sidewall mounting, see page 62
- Base kit model 0994 available, see page 62

Matching Controls

- Bodine stocks a full line of speed controls for Pacesetter motors. See pages 37-42

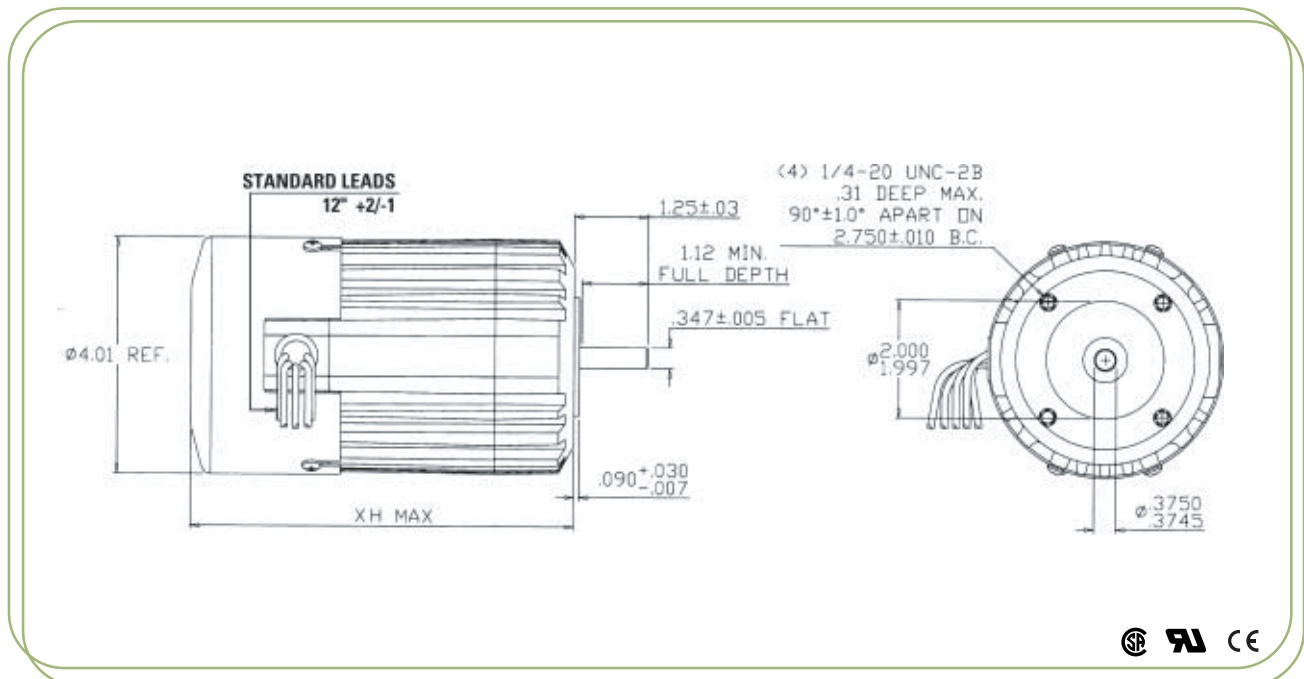


Fixed Speed Ratings				Variable Speed (SOA) Ratings ²						XH (inch)	Wt. (lbs.)	Connection Diagram	Order Information	
Speed (rpm)	Torque (oz-in.)	Motor HP	V	Speed Range (rpm)	Frequ. (Hz)	Torque Type	Torque @						Product Type	Model No. ¹
							10 Hz (oz-in.)	60 Hz (oz-in.)	Max Hz (oz-in.)					
Three-Phase, Inverter Duty, Non-Synchronous Motor (TEFC)														
1700	148	1/4	230	120-3650	10-140	variable	120	247	90	6.7	9	074 10007	34R6BFPP	2295
Three-Phase, Inverter Duty, Synchronous Motor (TEFC)														
1800	70	1/8	230	300-2400	10-80	variable	54	103	48	6.7	9	074 10007	34R6BFYP	2299

¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

² SOA: Contact the factory for detailed speed/torque information (Safe Operating Area).

34R Motor



Pacesetter AC Inverter Duty Motor

3/8 HP



Inverter Duty Features

- Quintsulation™, 5-stage insulation system designed to meet NEMA MG 1-1993, Section IV, Part 31
- 230VAC, 60 Hz, 3-phase for operation with a wide range of inverter products
- Inverter-Grade magnet wire and Class “F” insulation system for increased protection against spikes and corona damage caused by the inverter
- UL recognized for construction, CSA certified, and in compliance with the Low Voltage Directive “CE”

Standard Features

- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Permanently lubricated, noise tested ball bearings
- Locked bearing design minimizes shaft endplay

Application Information

- See page 64 for connection diagram
- Base mounting is standard
- For lower cost, high volume applications, see 44C motors on page 18

Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62
- Steel terminal box kit model 0982 shown on page 62

Matching Controls

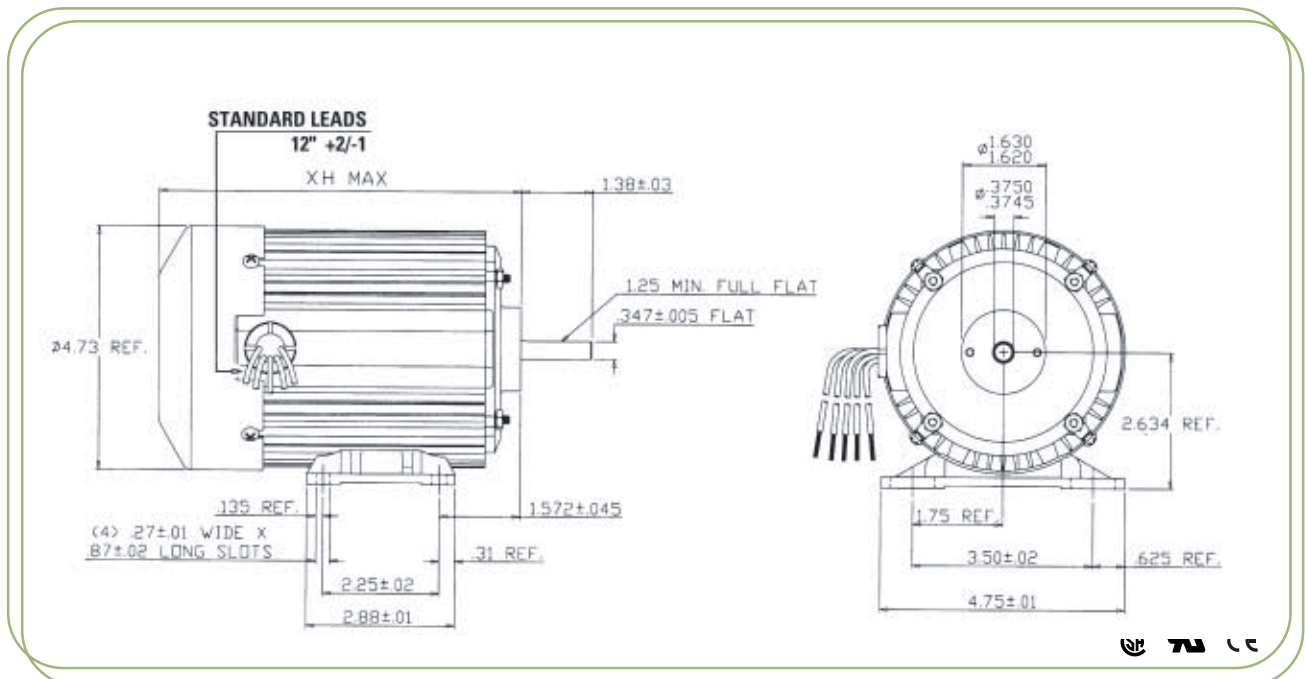
- Bodine stocks a full line of speed controls for Pacesetter motors. See pages 37-42



Fixed Speed Ratings				Variable Speed (SOA) Ratings ¹						XH (inch)	Wt. (lbs.)	Connection Diagram	Order Information	
Speed (rpm)	Torque (oz-in.)	Motor HP	V	Speed Range (rpm)	Frequ. (Hz)	Torque Type	Torque @						Product Type	Model No.
							10 Hz (oz-in.)	60 Hz (oz-in.)	140 Hz (oz-in.)					
Three-Phase, Inverter Duty, Non-Synchronous Motor (TEFC)														
1700	222	3/8	230	177-3500	10-140	variable	170	281	137	7.2	13	074 10007	42R6BFPP	2235

¹ SOA: Contact the factory for detailed speed/torque information (Safe Operating Area).

42R Motor



INTEGRAMotor™
 e-TORQ™
 Custom
 Pacesetter™ Inverter Duty
 AC Induction
 Permanent Magnet DC
 Brushless DC
 Index

Pacesetter AC Inverter Duty Motor

1/3 - 3/4 HP



48R Motor

Inverter Duty Features

- Quinsulation™, 5-stage insulation system designed to meet NEMA MG 1-1993, Section IV, Part 31
- 230/460VAC, 60 Hz, 3-phase for operation with a wide range of inverter products
- Inverter-Grade magnet wire and Class "F" insulation system for increased protection against spikes and corona damage caused by the inverter
- UL recognized for construction, CSA certified, and in compliance with the Low Voltage Directive "CE"

Application Information

- See page 64 for connection diagram
- Base mounting and NEMA 56C face are standard

Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62
- Steel terminal box kit model 0982 shown on page 62

Matching Controls

- Bodine stocks a full line of speed controls for Pacesetter motors. See pages 37-42



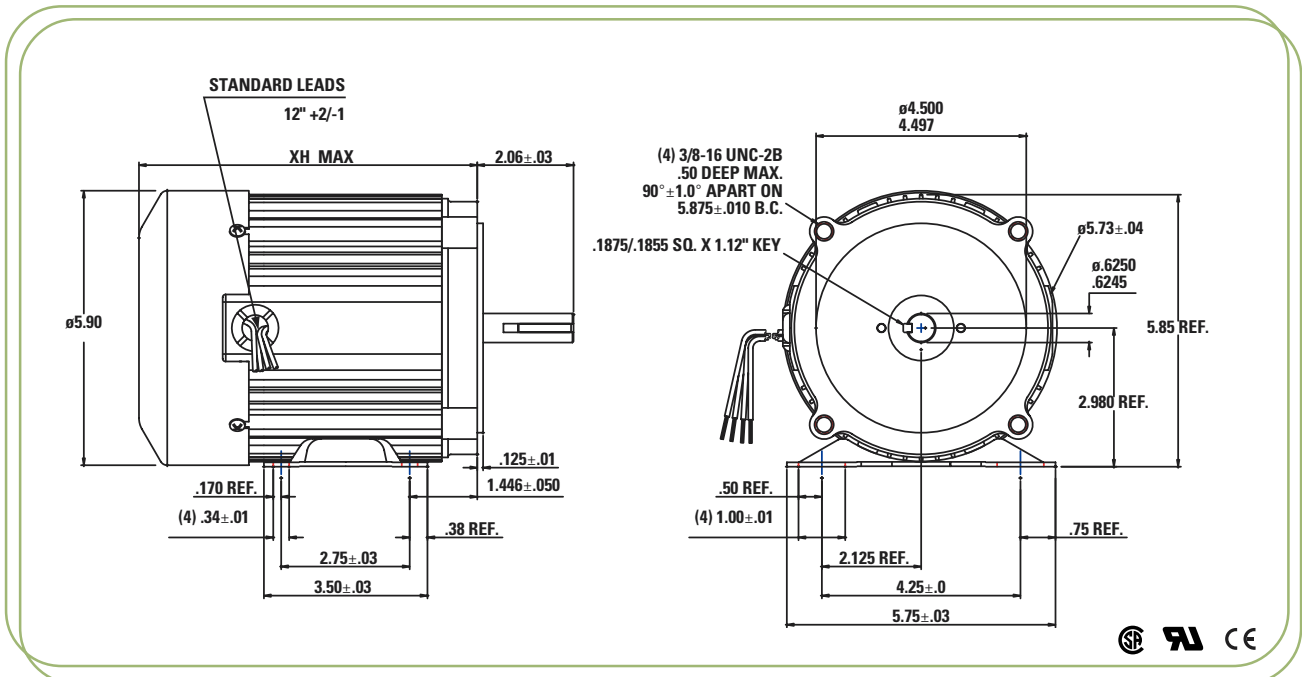
Standard Features

- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Permanently lubricated, noise tested ball bearings
- Locked bearing design minimizes shaft endplay

Fixed Speed Ratings				Variable Speed (SOA) Ratings ¹							XH (inch)	Wt. (lbs.)	Connection Diagram	Order Information	
Speed (rpm)	Torque (oz-in.)	Motor HP	V	Speed Range (rpm)	Frequ. (Hz)	Torque Type	Torque @			Product Type				Model No.	
							10 Hz (oz-in.)	60 Hz (oz-in.)	Max Hz (oz-in.)						
Three-Phase, Inverter Duty, Non-Synchronous Motor (TEFC)															
1700	445	3/4	230/460	160-3600	10-140	variable	412	675	220	7.8	20.5	074 10012	48R6BFPP	2240	
Three-Phase, Inverter Duty, Synchronous Motor (TEFC)															
1800	185	1/3	230/460	300-2400	10-80	variable	220	262	125	7.31	17	074 10012	48R5BFYP	2244	

¹ SOA: Contact the factory for detailed speed/torque information (Safe Operating Area).

48R Motor



Pacesetter Parallel Shaft AC Inverter Duty Gearmotor

Up to 40 lb.-in. continuous



30R-D

Inverter Duty Features

- Quinsulation™, 5-stage insulation system designed to meet NEMA MG 1-1993, Section IV, Part 31
- 230VAC, 60 Hz, 3-phase for operation with a wide range of inverter products
- Inverter-Grade magnet wire and Class "F" insulation system for increased protection against spikes and corona damage caused by the inverter
- UL recognized for construction, CSA certified, and in compliance with the Low Voltage Directive "CE"

Standard Features

- Totally Enclosed, Non-Ventilated IP-20 rating
- Class "F" insulation system
- Aluminum endshields for high thermal efficiency and light weight
- Unvented gearhousing for universal horizontal mounting
- Industrial lip type seals on motor and output shafts
- Needle bearings on output shaft for increased radial load capacity and long life
- All steel gears

- Permanently lubricated with high-performance lubricant
- Helical pinion accurately cut on motor shaft for maximum strength and minimum noise

Application Information

- See page 64 for connection diagram
- Face mounting is standard

Optional Accessories

- Die cast terminal box kit model 5982, see page 62
- "L" bracket kit model 5968 permits base, ceiling and sidewall mounting, see page 62

Matching Controls

- Bodine stocks a full line of speed controls for Pacesetter motors. See pages 37-42



INTEGRAmotor™

e-TORQ™

Custom

Pacesetter™ Inverter Duty

AC Induction

Permanent Magnet DC

Brushless DC

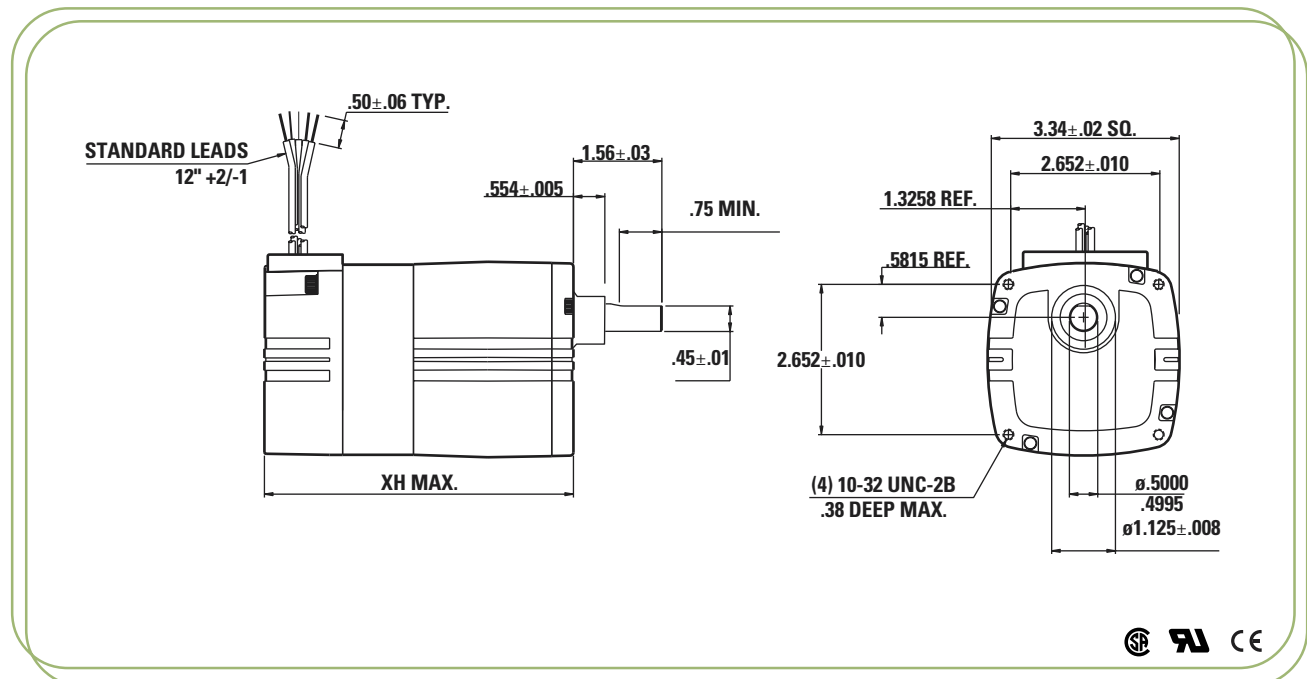
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Fixed Speed Ratings					Variable Speed (SOA) Ratings ²						XH (inch)	Wt. (lbs.)	Connection Diagram	Order Information	
Speed (rpm)	Torque (lb-in.)	Motor HP	V	Gear Ratio	Speed Range (rpm)	Frequ. (Hz)	Torque Type	Torque @						Product Type	Model No. ¹
								10 Hz (lb-in.)	60 Hz (lb-in.)	90 Hz (lb-in.)					
Three-Phase, Inverter Duty, Non-Synchronous (TENV)															
9	40	1/25	230	180	1.2-11.65	10-90	constant	40	40	40	5.5	6.3	074 10007	30R2BEPP-D4	2210
19	40	1/25	230	90	2.5-23	10-90	constant	40	40	40	5.5	6.3	074 10007	30R2BEPP-D4	N2212
28	40	1/25	230	60	3.7-35	10-90	constant	40	40	40	5.5	6.3	074 10007	30R2BEPP-D3	N2214
142	19	1/17	230	12	19-175	10-90	constant	19	19	19	6	7.5	074 10007	30R4BEPP-D3	2216

¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

² SOA: Contact the factory for detailed speed/torque information (Safe Operating Area).

30R-D Gearmotor



Pacesetter Parallel Shaft AC Inverter Duty Gearmotor

Up to 120 lb.-in. continuous



34R-Z



Inverter Duty Features

- Quinsulation™, 5-stage insulation system designed to meet NEMA MG 1-1993, Section IV, Part 31
- 230VAC, 60 Hz, 3-phase for operation with a wide range of inverter products
- Inverter-Grade magnet wire and Class "F" insulation system for increased protection against spikes and corona damage caused by the inverter
- UL recognized for construction, CSA certified, and in compliance with the Low Voltage Directive "CE"

Standard Features

- Totally enclosed IP-20 rating
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Unvented gearhousing for universal horizontal mounting
- Industrial lip type seals on motor and output shafts
- Needle bearings on output shaft for increased radial load capacity and long life
- Permanently lubricated with high-performance lubricant

- All steel gears
- Helical pinion accurately cut on motor shaft for maximum strength and minimum noise

Application Information

- See page 64 for connection diagram
- Face mounting is standard

Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62
- "L" bracket kit model 0980 permits base, ceiling, and sidewall mounting, see page 62

Matching Controls

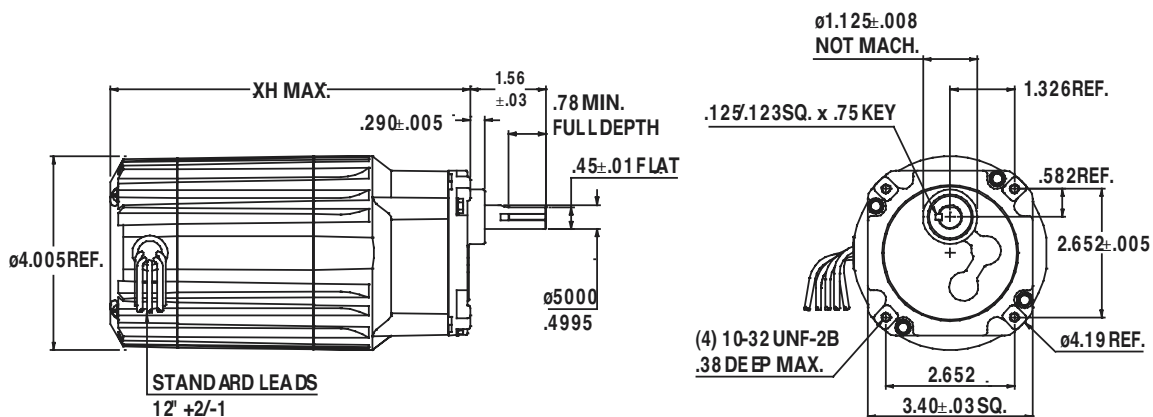
- Bodine stocks a full line of speed controls for Pacesetter motors. See pages 37-42

Fixed Speed Ratings					Variable Speed (SOA) Ratings ²						XH (inch)	Wt. (lbs.)	Connection Diagram	Order Information	
Speed (rpm)	Torque (lb-in.)	Motor HP	V	Gear Ratio	Speed Range (rpm)	Frequ. (Hz)	Torque Type	Torque @						Product Type	Model No. ¹
								10 Hz (lb-in.)	60 Hz (lb-in.)	90 Hz (lb-in.)					
Three-Phase, Inverter Duty, Non-Synchronous (TENV)															
9	120	1/6	230	180	0.9-13	10-90	constant	120	120	120	8.4	10.5	074 10007	34R6BEPP-Z4	2220
19	120	1/6	230	90	1.8-26	10-90	constant	120	120	120	8.4	10.5	074 10007	34R6BEPP-Z4	N2222
57	96	1/6	230	30	5.5-78	10-90	constant	96	96	96	8.4	10.5	074 10007	34R6BEPP-Z3	2226
283	21	1/6	230	6	28-391	10-90	constant	21	21	21	7.5	10.5	074 10007	34R6BEPP-Z2	N2228

¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

² SOA: Contact the factory for detailed speed/torque information (Safe Operating Area).

34R-Z Gearmotor



Pacesetter Parallel Shaft AC Inverter Duty Gearmotor

Up to 341 lb.-in. continuous

Inverter Duty Features

- Quinsulation™, 5-stage insulation system designed to meet NEMA MG 1-1993, Section IV, Part 31
- 230VAC, 60 Hz, 3-phase for operation with a wide range of inverter products
- Inverter-Grade magnet wire and Class “F” insulation system for increased protection against spikes and corona damage caused by the inverter
- All new optimized motor and gearhead combinations for maximum output power in the smallest package
- UL recognized for construction, CSA certified, and in compliance with the Low Voltage Directive “CE”

Standard Features

- Unvented gearhousing for universal horizontal mounting
- Permanently lubricated with high-performance lubricant
- All steel gearing

Application Information

- See page 64 for connection diagram
- Face mounting is standard

Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62
- Stamped terminal box kit model 0982 see page 62
- “L” bracket kit model 0969 permits base, ceiling, and sidewall mounting, see page 62
- Adapter plate kit model 0995 provides for drop-in replacement of competitive gearmotors, see page 62

Matching Controls

- Bodine stocks a full line of speed controls for Pacesetter motors. See pages 37-42



INTEGRAmotor™

e-TORQ™

Custom

Pacesetter™ Inverter Duty

AC Induction

Permanent Magnet DC

Brushless DC

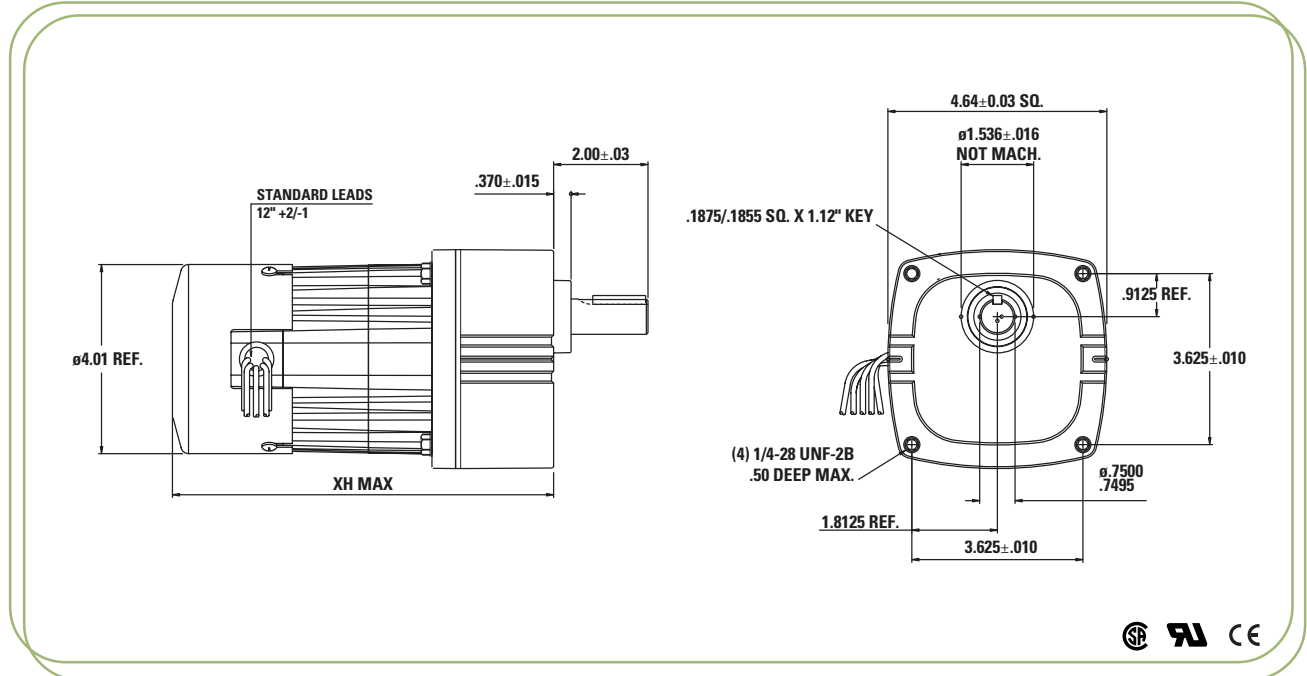
Index

Fixed Speed Ratings					Variable Speed (SOA) Ratings ²						XH (inch)	Wt. (lbs.)	Connection Diagram	Order Information	
Speed (rpm)	Torque (lb.-in.)	Motor HP	V	Gear Ratio	Speed Range (rpm)	Frequ. (Hz)	Torque Type	Torque @						Product Type	Model No. ¹
								10 Hz (lb.-in.)	60 Hz (lb.-in.)	90 Hz (lb.-in.)					
Three-Phase, Inverter Duty, Non-Synchronous (TEFC)															
9.4	341	1/6	230	180	0.7-12	10-90	constant	341	341	341	8.8	11	074 10007	34R4BFPP-E4	2250
19	250	1/6	230	90	1.3-24	10-90	constant	250	250	250	8.8	11	074 10007	34R4BFPP-E4	2251
28	270	1/6	230	60	2.0-36	10-90	variable	250	270	270	8.8	11	074 10007	34R4BFPP-E3	2252
57	135	1/6	230	30	4.0-73	10-90	variable	124	135	135	8.8	11	074 10007	34R4BFPP-E3	N2253
170	45	1/6	230	10	12-218	10-90	variable	42	45	45	8.8	11	074 10007	34R4BFPP-E2	N2254
340	25	1/6	230	5	24-436	10-90	variable	22	25	25	8.8	11	074 10007	34R4BFPP-E1	N2255

¹ NOTE: Model numbers shown in bold type are in stock. “N” model numbers require lead time and minimum quantities.

² SOA: Contact the factory for detailed speed/torque information (Safe Operating Area).

34R-E Gearmotor



MADE IN U.S.A.



Pacesetter Parallel Shaft AC Inverter Duty Gearmotor

Up to 250 lb.-in. continuous

Inverter Duty Features

- Quinsulation™, 5-stage insulation system designed to meet NEMA MG 1-1993, Section IV, Part 31
- 230VAC, 60 Hz, 3-phase for operation with a wide range of inverter products
- Inverter-Grade magnet wire and Class "F" insulation system for increased protection against spikes and corona damage caused by the inverter
- All new optimized motor and gearhead combinations for maximum output power in the smallest package
- UL recognized for construction, CSA certified, and in compliance with the Low Voltage Directive "CE"

Standard Features

- Unvented gearhousing for universal horizontal mounting
- Industrial lip type seals on motor and output shafts
- Needle bearings throughout for increased radial load capacity and long life

- Permanently lubricated with high-performance lubricant
- Hardened helical gearing for quietness and high output to size ratio

Application Information

- See page 64 for connection diagram
- Face mounting is standard

Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62
- Stamped terminal box kit model 0982 see page 62
- "L" bracket kit model 0969 permits base, ceiling, and sidewall mounting, see page 62
- Adapter plate kit model 0995 provides for drop-in replacement of competitive gearmotors, see page 62

Matching Controls

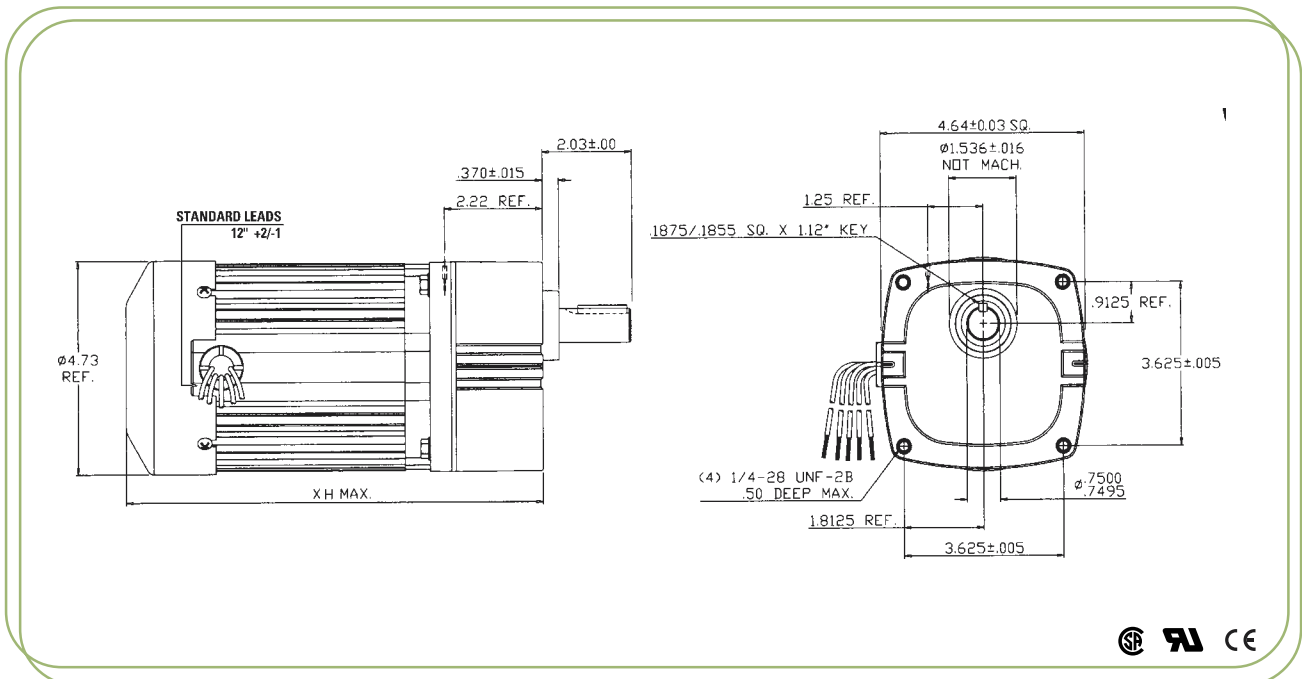
- Bodine stocks a full line of speed controls for Pacesetter motors. See pages 37-42



Fixed Speed Ratings					Variable Speed (SOA) Ratings ¹						XH (inch)	Wt. (lbs.)	Connection Diagram	Order Information	
Speed (rpm)	Torque (lb-in.)	Motor HP	V	Gear Ratio	Speed Range (rpm)	Frequ. (Hz)	Torque Type	Torque @						Product Type	Model No.
								10 Hz (lb-in.)	60 Hz (lb-in.)	90 Hz (lb-in.)					
Three-Phase, Inverter Duty, Non-Synchronous (TEFC)															
57	250	3/8	230	30	5.9-77	10-90	constant	250	250	250	9.58	16.5	074 10007	42R6BFPP-F3	2260
85	167	3/8	230	20	8.8-115	10-90	constant	167	167	167	9.58	16.5	074 10007	42R6BFPP-F3	2261
170	115	3/8	230	10	18-229	10-90	variable	92	115	115	9.58	16.5	074 10007	42R6BFPP-F2	2262
340	58	3/8	230	5	35-459	10-90	variable	48	58	58	9.58	16.5	074 10007	42R6BFPP-F1	2263

¹ SOA: Contact the factory for detailed speed/torque information (Safe Operating Area).

42R-F Gearmotor



Pacesetter Right Angle AC Inverter Duty Gearmotor

Up to 37 lb.-in. continuous



30R-3N

Inverter Duty Features

- Quinsulation™, 5-stage insulation system designed to meet NEMA MG 1-1993, Section IV, Part 31
- 230VAC, 60 Hz, 3-phase for operation with a wide range of inverter products
- Inverter-Grade magnet wire and Class "F" insulation system for increased protection against spikes and corona damage caused by the inverter
- All new optimized motor and gearhead combinations for maximum output power in the smallest package
- UL recognized for construction, CSA certified, and in compliance with the Low Voltage Directive "CE"

Standard Features

- Industrial lip seals on motor and output shafts
- Needle bearings on output shaft for increased radial load capacity and long life

- Permanently lubricated with high-performance lubricant
- Bronze gear for high shock load capability
- Hardened and ground worm for high strength and long life

Application Information

- Mounting holes are on gearhousing
- See page 64 for connection diagram
- Hollow shaft configurations are available. See Web site for mounting and shaft details. These models require lead time and minimum quantities.

Optional Accessories

- Baseplate kit model 0967, see page 62
- Die cast terminal box kit model 5982, see page 62

Matching Controls

- Bodine stocks a full line of speed controls for Pacesetter motors. See pages 37-42

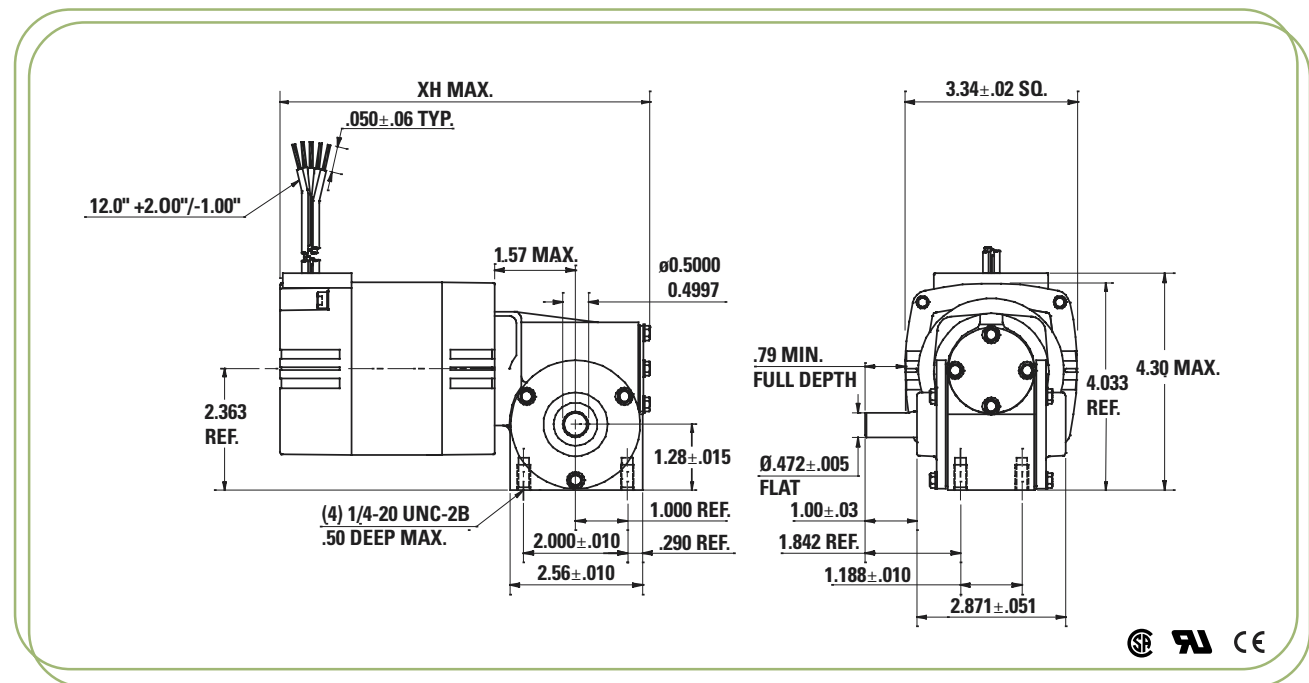


Fixed Speed Ratings					Variable Speed (SOA) Ratings ¹						XH (inch)	Wt. (lbs.)	Connection Diagram	Order Information	
Speed (rpm)	Torque (lb.-in.)	Motor HP	V	Gear Ratio	Speed Range (rpm)	Frequ. (Hz)	Torque Type	Torque @						Product Type	Model No.
								10 Hz (lb.-in.)	60 Hz (lb.-in.)	90 Hz (lb.-in.)					
Three-Phase, Inverter Duty, Non-Synchronous (TENV)															
28	37	1/17	230	60	2.2-36	10-90	constant	37	37	37	7.24	TBA	074 10007	30R4BEPP-3N	N2290
34	36	1/17	230	50	2.7-43	10-90	variable	33	37	37	7.24	7.5	074 10007	30R4BEPP-3N	N2292
43	37	1/17	230	40	3.3-54	10-90	constant	37	37	37	7.24	7.5	074 10007	30R4BEPP-3N	N2293
85	25	1/17	230	20	6.6-108	10-90	variable	24	36	36	7.24	7.5	074 10007	30R4BEPP-3N	N2294
170	14	1/17	230	10	13-216	10-90	variable	16	28	22	7.24	7.5	074 10007	30R4BEPP-3N	N2296
340	8	1/17	230	5	27-431	10-90	variable	9.0	15	12	7.24	7.5	074 10007	30R4BEPP-3N	N2297

¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

² SOA: Contact the factory for detailed speed/torque information (Safe Operating Area).

30R-3N Gearmotor



MADE IN U.S.A.



42R-5N

Pacesetter Right Angle AC Inverter Duty Gearmotor

Up to 121 lb.-in. continuous

Inverter Duty Features

- Quinsulation™, 5-stage insulation system designed to meet NEMA MG 1-1993, Section IV, Part 31
- 230VAC, 60 Hz, 3-phase for operation with a wide range of inverter products
- Inverter-Grade magnet wire and Class "F" insulation system for increased protection against spikes and corona damage caused by the inverter
- All new optimized motor and gearhead combinations for maximum output power in the smallest package
- UL recognized for construction, CSA certified, and in compliance with the Low Voltage Directive "CE"

- Needle bearings throughout for increased radial load capacity and long life
- Permanently lubricated with high-performance lubricant
- Bronze worm gear for high shock load capability
- Hardened and ground worm for strength and long life

Application Information

- See page 64 for connection diagram
- Mounting feet are on the gearhead
- Hollow shaft configurations are available. See Web site for mounting and shaft details. These models require lead time and minimum quantities.

Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62
- Stamped terminal box kit model 0982 shown on page 62

Matching Controls

- Bodine stocks a full line of speed controls for Pacemaker motors. See pages 37-42

Standard Features

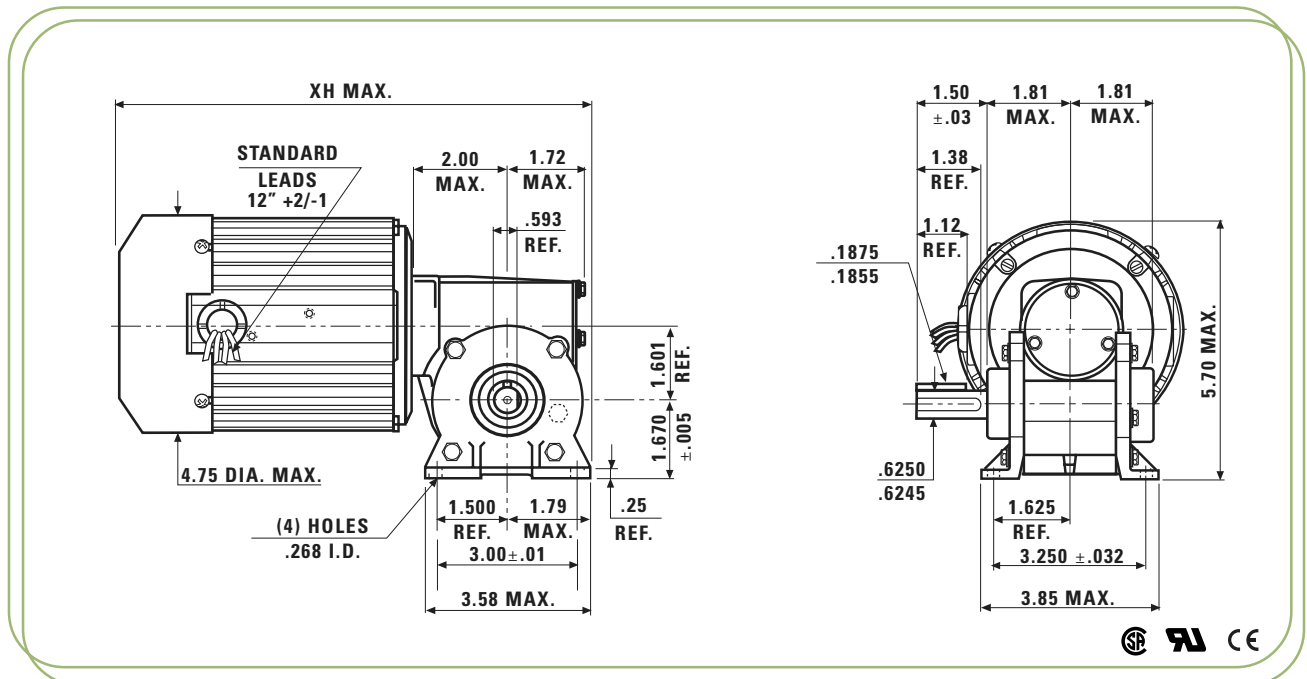
- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Unvented gearhousing for universal horizontal mounting
- Industrial lip type seals on motor and output shafts



Fixed Speed Ratings					Variable Speed (SOA) Ratings ²						XH (inch)	Wt. (lbs.)	Connection Diagram	Order Information	
Speed (rpm)	Torque (lb.-in.)	Motor HP	V	Gear Ratio	Speed Range (rpm)	Frequ. (Hz)	Torque Type	Torque @ 10 Hz (lb.-in.)	Torque @ 60 Hz (lb.-in.)	Torque @ 90 Hz (lb.-in.)				Product Type	Model No. ¹
Three-Phase, Inverter Duty, Non-Synchronous (TEFC)															
23	121	3/8	230	75	2.4-31	10-90	variable	121	121	116	10.75	17.5	074 10007	42R6BFPP-5N	2270
43	113	3/8	230	40	4.4-57	10-90	constant	109	109	109	10.75	17.5	074 10007	42R6BFPP-5N	2271
57	109	3/8	230	30	5.9-77	10-90	constant	104	104	104	10.75	17.5	074 10007	42R6BFPP-5N	N2275
85	103	3/8	230	20	8.9-115	10-90	constant	98	98	98	10.75	17.5	074 10007	42R6BFPP-5N	2272
170	101	3/8	230	10	18-229	10-90	variable	66	105	101	10.75	17.5	074 10007	42R6BFPP-5N	2273
340	54	3/8	230	5	35-458	10-90	variable	38	68	59	10.75	17.5	074 10007	42R6BFPP-5N	2274

¹ SOA: Contact the factory for detailed speed/torque information (Safe Operating Area).

42R-5N Gearmotor



Pacesetter Right Angle AC Inverter Duty Gearmotor

Up to 380 lb.-in. continuous



42R-GB

Inverter Duty Features

- Quinsulation™, 5-stage insulation system designed to meet NEMA MG 1-1993, Section IV, Part 31
- 230VAC, 60 Hz, 3-phase for operation with a wide range of inverter products
- Inverter-Grade magnet wire and Class "F" insulation system for increased protection against spikes and corona damage caused by the inverter
- All new optimized motor and gearhead combinations for maximum output power in the smallest package
- UL recognized for construction, CSA certified, and in compliance with the Low Voltage Directive "CE"

Standard Features

- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Unvented gearhousing for universal horizontal mounting
- Industrial lip type seals on motor and output shafts
- Ball bearings throughout for increased radial load capacity and long life

- Permanently lubricated with high-performance lubricant
- Hardened helical output gearing for quietness and high output torque
- Bronze worm gear for high shock load capability
- Hardened and ground worm hobbled on the motor shaft for high strength and long life

Application Information

- See page 64 for connection diagram
- Mounting is via four tapped holes under the gearhead or three tapped holes in the face of the gearhead
- Hollow shaft configurations are available. See Website for mounting and shaft details. These models require lead time and minimum quantities.

Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating see page 62
- Stamped terminal box kit model 0982 shown on page 62

Matching Controls

- Bodine stocks a full line of speed controls for Pacesetter motors. See pages 37-42

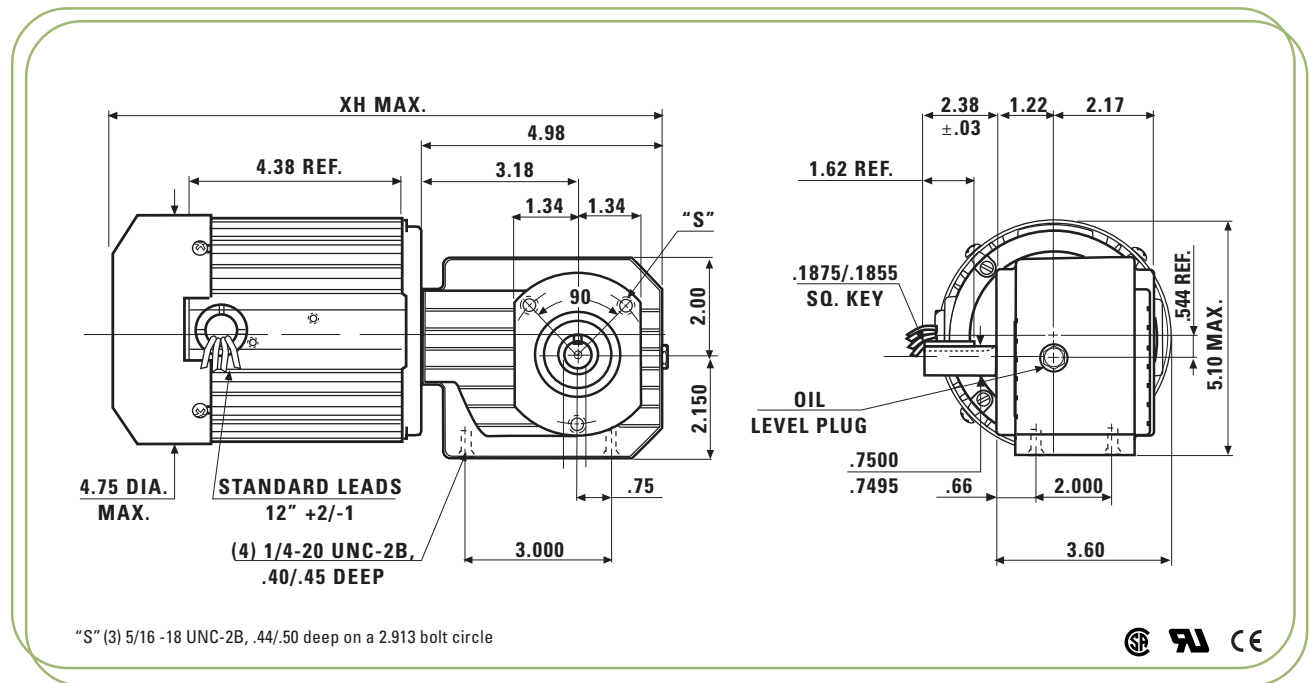


Fixed Speed Ratings					Variable Speed (SOA) Ratings ²						XH (inch)	Wt. (lbs.)	Connection Diagram	Order Information	
Speed (rpm)	Torque (lb-in.)	Motor HP	V	Gear Ratio	Speed Range (rpm)	Frequ. (Hz)	Torque Type	Torque @						Product Type	Model No. ¹
								10 Hz (lb-in.)	60 Hz (lb-in.)	90 Hz (lb-in.)					
Three-Phase, Inverter Duty, Non-Synchronous (TEFC)															
6	380	3/8	230	280	0.6-8.2	10-90	constant	380	380	380	12.1	19.5	074 10007	42R6BFPP-GB N2236	
14	290	3/8	230	120	1.5-19	10-90	constant	290	290	290	12.1	19.5	074 10007	42R6BFPP-GB 2237	
28	230	3/8	230	60	3.0-38	10-90	constant	230	230	230	12.1	19.5	074 10007	42R6BFPP-GB N2238	

¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

² SOA: Contact the factory for detailed speed/torque information (Safe Operating Area).

42R-GB Gearmotor



MADE IN U.S.A.

INTEGRAmotor™

e-TORQ™

Custom

Pacesetter™ Inverter Duty

AC Induction

Permanent Magnet DC

Brushless DC

Index



48R-5H

Pacesetter Right Angle AC Inverter Duty Gearmotor

Up to 296 lb.-in. continuous

Inverter Duty Features

- Quinsulation™, 5-stage insulation system designed to meet NEMA MG 1-1993, Section IV, Part 31
- 230/460VAC, 60Hz, 3-phase for operation with a wide range of inverter products
- Inverter-Grade magnet wire and Class "F" insulation system for increased protection against spikes and corona damage caused by the inverter
- All new optimized motor and gearhead combinations for maximum output power in the smallest package
- UL recognized for construction, CSA certified, and in compliance with the Low Voltage Directive "CE"

Standard Features

- Rugged gearhead designed for heavy continuous loads with ample strength for shock loads
- Industrial lip type seals on motor and output shaft
- Ball bearing on output shaft for high radial and axial load capacity

- Permanently lubricated with high-performance lubricant
- Bronze gear for high shock load capability
- Hardened and ground worm for strength and long life

Application Information

- See page 64 for connection diagram
- Mounting feet are located on gearhead

Optional Accessories

- Die cast terminal box kit model 0984, 1984 achieves IP-44 rating, see page 62

Matching Controls

- Bodine stocks a full line of speed controls for Pacesetter motors. See pages 37-42

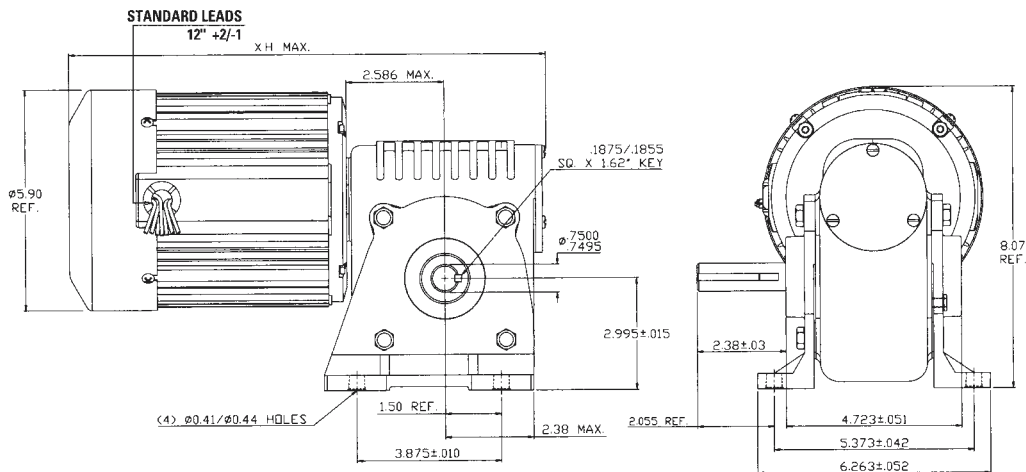


Fixed Speed Ratings					Variable Speed (SOA) Ratings ²						XH (inch)	Wt. (lbs.)	Connection Diagram	Order Information	
Speed (rpm)	Torque (lb.-in.)	Motor HP	V	Gear Ratio	Speed Range (rpm)	Frequ. (Hz)	Torque Type	Torque @ 10 Hz (lb.-in.)	Torque @ 60 Hz (lb.-in.)	Torque @ 90 Hz (lb.-in.)				Product Type	Model No. ¹
Three-Phase, Inverter Duty, Non-Synchronous (TEFC)															
35	296	3/4	230/460	48	3.3-48	10-90	constant	272	272	272	13.4	40	074 10012	48R6BFPP-5H	N2280
47	285	3/4	230/460	36	4.4-63	10-90	constant	262	262	262	13.4	40	074 10012	48R6BFPP-5H	2281
94	256	3/4	230/460	18	8.9-127	10-90	constant	234	234	234	13.4	40	074 10012	48R6BFPP-5H	N2282
170	178	3/4	230/460	10	16-228	10-90	variable	152	210	180	13.4	40	074 10012	48R6BFPP-5H	N2283

¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

² SOA: Contact the factory for detailed speed/torque information (Safe Operating Area).

48R-5H Gearmotor



A variety of
products
 to fit
 a variety of
applications



Open Chassis Controls

See page 38

Pacesetter OEM

For lowest cost and when an enclosure is already available



NEMA 4 Enclosures

See page 40

Pacesetter NEMA4

For superior environmental protection against spraying water and windblown dust



Advanced Interface Options

See page 39

Pacesetter NANO

Isolated inputs for remote speed and direction control



NEMA 1 or IP-20 Enclosures

With a convenient user interface and basic environmental protection



Pacesetter NANO – see page 39



Pacesetter NEMA1 – see page 41

AC Motor Controls

3 Phase AC Motor Speed Control

OEM "Bare & Basic"



Open Chassis

1/2 HP Model Shown

Application Information

- Open chassis construction for installation into OEM machinery
- Speed control via external speed pot or external 0 - 5 VDC analog signal (isolation required)
- Trim pots for adjusting current limit, max. speed, min. speed, decel. time, accel. time, and slip compensation.
- Output frequency range selectable between 0 - 60 Hz and 0 - 120 Hz.
- Connector for remote direction control
- Connector for remote momentary start switch
- Protection against overload, overvoltage, undervoltage, and short circuit
- UL Listed, CE

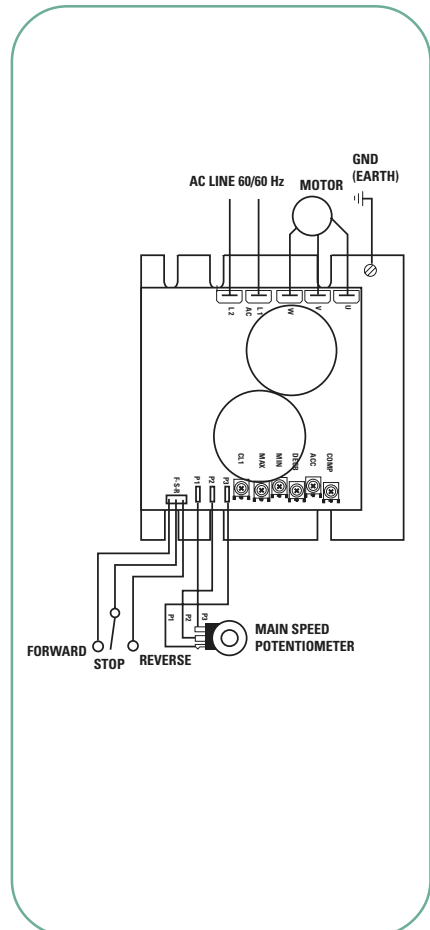
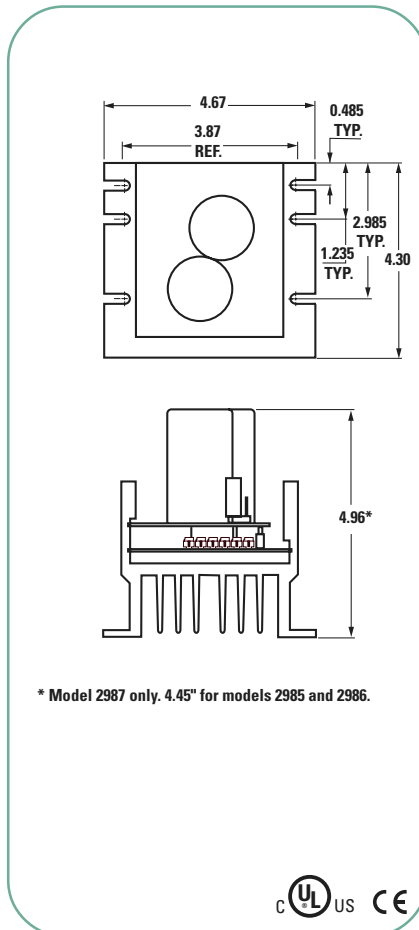
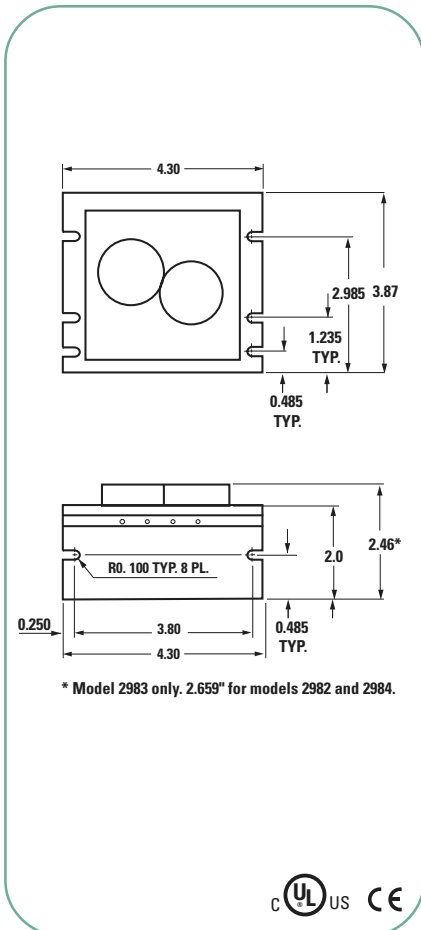


Three Phase AC Output Power				Single Phase AC Input Power		Model Number
Motor HP	Motor Voltage	Motor Amps	Hz	Volts	Hz	
1/2	230	2.4	0 - 120	115	50 / 60	2982
1/2	230	2.4	0 - 120	230	50 / 60	2983
1/2	230	2.4	0 - 120	115 / 230	50 / 60	2984
1	230	4.0	0 - 120	115	50 / 60	2985
1	230	4.0	0 - 120	230	50 / 60	2986
1	230	4.0	0 - 120	115 / 230	50 / 60	2987

Models 2982, 2983, 2984

Models 2985, 2986, 2987

Connection Diagram



3 Phase AC Motor Speed Control

NANO "Small & Smart"

Application Information

- Protected chassis (IP 20) for clean environments or installation into OEM machinery
- Speed control via keypad, external speed pot, or external analog signal
- 25 functions programmable via keypad
- 3 selectable Volts/Hz patterns for each input frequency
- Built-in isolation on inputs
- 3 dedicated and 2 multi-function logic inputs
- 1 dedicated and 1 multi-function logic output
- Adjustable dynamic braking
- Protection against overload, over voltage, under voltage, overheating, and motor short circuit
- Dimensions only 2.83" x 5.20" x 4.64"
- DIN Rail mountable
- UL Listed, CE Mark on models 2728, 2729, and 2732



IP-20 Enclosure, Programmable



Three Phase AC Output Power				Single Phase AC Input Power		Model Number
Motor HP	Motor Voltage	Motor Amps	Hz	Volts	Hz	
1/4	230	1.4	0 – 200	115	50 / 60	2701
1/4	230	1.4	0 – 200	230	50 / 60	2728*
1/2	230	2.3	0 – 200	115	50 / 60	2703
1/2	230	2.3	0 – 200	230	50 / 60	2729*
1	230	4.2	0 – 200	115	50 / 60	2706
1	230	4.2	0 – 200	230	50 / 60	2732*

* These models have a built-in line filter and have a CE Mark.

Dimensions

Dimensions	MM	Inches
A	132	5.20
B	116	4.57
C	130	5.12
D	8.2	0.32
E	118	4.64
F	61	2.40
G	72	2.83

UL CE

Connection Diagram

1	Tripp Relay
2	
3	FORWARD Run Switch
4	REVERSE Run Switch
5	+12V Terminals 3, 4, 6, 7
6	SET SPEED 1 Run Switch
7	RESET Switch
8	+10V Power for Speed Pot
9	Analog Input or Wiper for Speed Pot
10	0V Common for Analog Input, Speed Pot, and Analog Output
11	Analog Output

T3	200V Three Phase
T2	Motor Connections
T1	
L2	Single Phase Input
L1	Power Connections
	Ground Screw

3 Phase AC Motor Speed Control

NEMA 4 "Rough & Ready"



Application Information

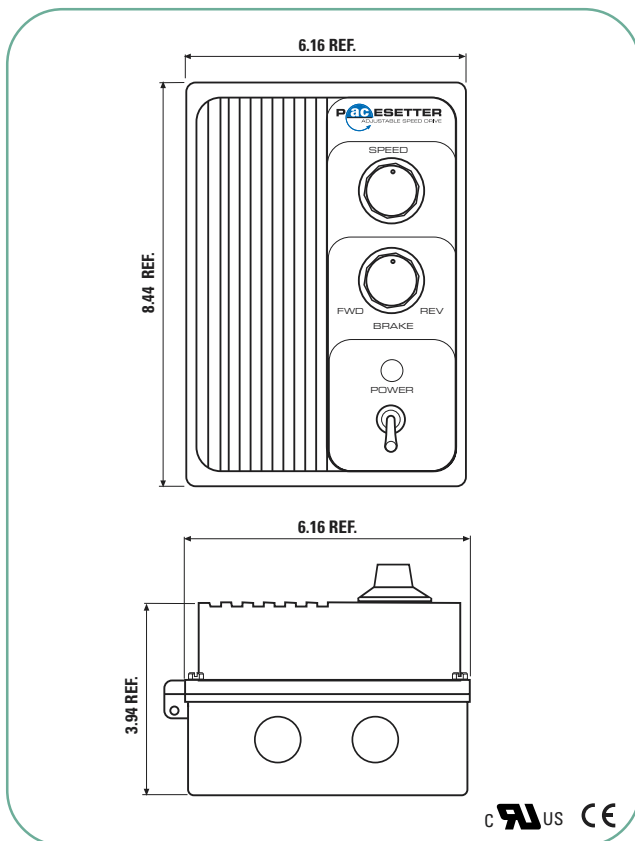
- Type 4 enclosure for protection against windblown dust and spraying water
- Speed control via speed pot on front panel
- 11 functions adjustable via trim pots or dip switches inside enclosure
- 2 selectable Volts/Hz patterns for each input frequency (50/60 Hz)
- Forward-Stop-Reverse switch on front panel
- 1 dedicated logic output
- Dynamic braking
- Protection against overload, over voltage, under voltage, overheating, and motor short circuit
- Dimensions only 6.16" x 8.44" x 3.94"
- UL, cUL, CE

Waterproof Enclosure

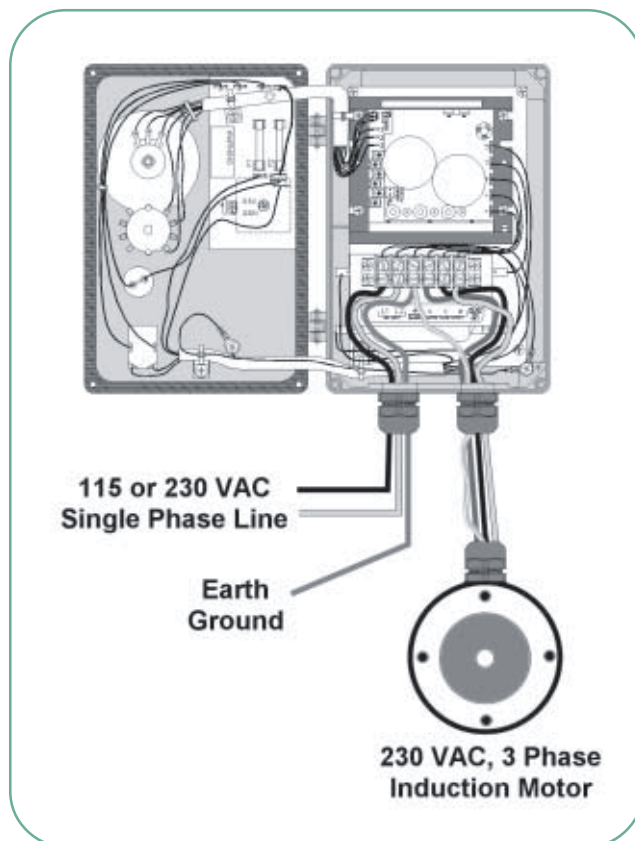


Three Phase AC Output Power				Single Phase AC Input Power		Model Number
Motor HP	Motor Voltage	Motor Amps	Hz	Volts	Hz	
1/2	230	2.4	0 – 120	115 / 230	50 / 60	2995

Dimensions



Connection Diagram



3 Phase AC Motor Speed Control

NEMA 1

Standard Features

- Operates from 115 Volt AC line with plug-in cord
- NEMA 1 enclosure to protect from bumps, drips, and falling objects
- Trim pots on PC board to adjust current limit, minimum speed limit, maximum speed limit, acceleration time, and deceleration time
- Speed can be adjusted manually using speed pot on front of enclosure
- Line fuse holder accessible from outside enclosure
- Toggle switch on front panel to turn AC power on/off
- Lamp on enclosure indicates when power is on
- Model 2996 has a direction switch

Application Information

- Rated for continuous operation in 40° C ambient
- Drives Bodine 230 Volt 3 Phase Induction Motors, or similar motors made by other manufacturers

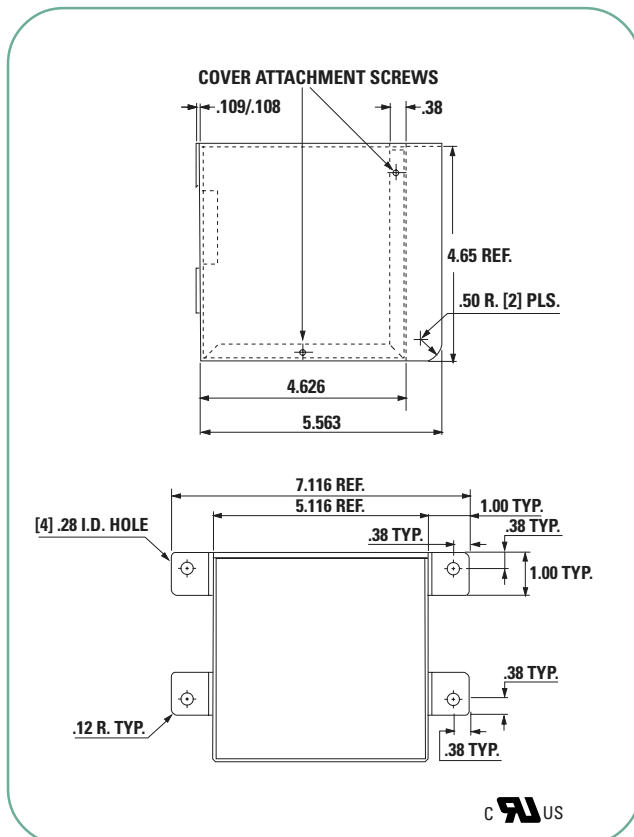


IP-20 Enclosure

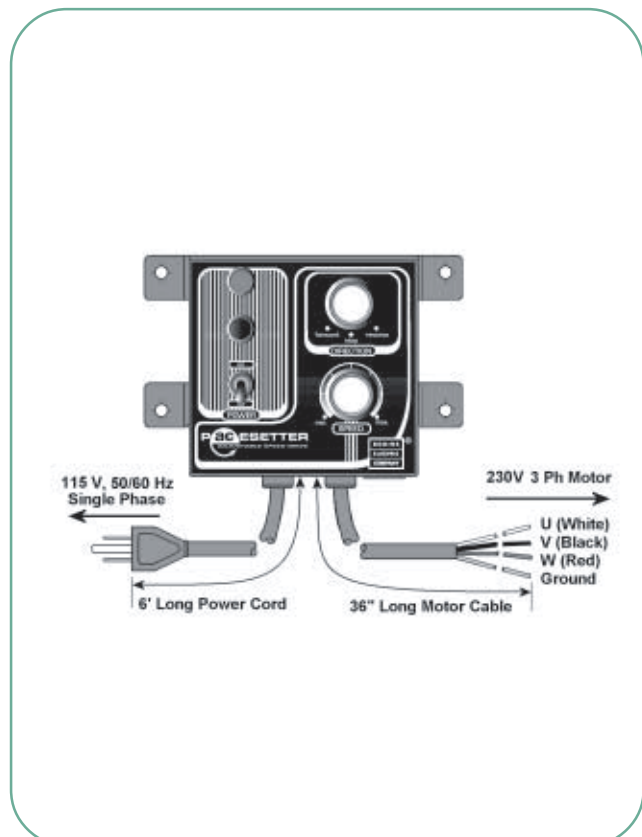


Three Phase AC Output Power				Single Phase AC Input Power		Model Number
Motor HP	Motor Voltage	Motor Amps	Hz	Volts	Hz	
1/2	230	2.4	0 – 120	115	50 / 60	2996

Dimensions



Connection Diagram



MADE IN U.S.A.

3 Phase AC Motor Speed Controls

Selection Table

Motor Model No. ¹	Bodine Motor Type	Rated HP	Rated Current (RMS Amps)	Variable Speed (SOA) Ratings					Matching Control Models ^{1,2}						
				Speed (Rpm)	Freq. (Hz)	Torque @			OEM (New)			NANO		NEMA1	NEMA4
						10 Hz	60 Hz	Max Hz	115 V,CE	230 V,CE	115/230 V,CE	115 V	230 V,CE	115 V	115/230 V,CE
						Motor Torque In Oz-in.									
Non-Synchronous Motors															
N2200	30R2BEPP	1/25	0.38	220-3400	10-140	20	56	27	2982	2983	2984	2701	2728	2996	2995
2201	30R4BEPP	1/17	0.48	133-3240	10-140	45	66	35	2982	2983	2984	2701	2728	2996	2995
2295	34R6BFPP	1/4	1.2	120-3650	10-140	120	247	90	2982	2983	2984	2701	2728	2996	2995
2235	42R6BFPP	3/8	1.9	177-3500	10-140	170	281	137	2982	2983	2984	2703	2729	2996	2995
2240	48R6BFPP	3/4	2.7 (@ 230V)	160-3600	10-140	412	675	220	2985	2986	2987	2706	2732	-	-
Synchronous Motors															
2299	34R6BFYP	1/8	1.4	300-2400	10-80	54	103	48	2982	2983	2984	2701	2728	2996	2995
2244	48R5BFYP	1/3	2.4 (@ 230V)	300-2400	10-80	220	262	125	2982	2983	2984	2703	2729	2996	2995
Gearmotor Torque In Lb-in.															
Non-Synchronous Parallel Shaft Gearmotors															
2210	30R2BEPP-D4	1/25	0.38	1.6-14.7	10-90	40	40	40	2982	2983	2984	2701	2728	2996	2995
N2212	30R2BEPP-D4	1/25	0.38	2.6-28.7	10-90	40	40	40	2982	2983	2984	2701	2728	2996	2995
N2214	30R2BEPP-D3	1/25	0.38	3.1-41.6	10-90	40	40	40	2982	2983	2984	2701	2728	2996	2995
2216	30R4BEPP-D3	1/17	0.38	24-198	10-90	19	19	19	2982	2983	2984	2701	2728	2996	2995
2220	34R6BEPP-Z4	1/6	0.73	1.7-14.9	10-90	120	120	120	2982	2983	2984	2701	2728	2996	2995
N2222	34R6BEPP-Z4	1/6	0.73	2.6-28.7	10-90	120	120	120	2982	2983	2984	2701	2728	2996	2995
2226	34R6BEPP-Z3	1/6	0.73	9.9-89.3	10-90	96	96	96	2982	2983	2984	2701	2728	2996	2995
N2228	34R6BEPP-Z2	1/6	0.73	33-433	10-90	21	21	21	2982	2983	2984	2701	2728	2996	2995
2250	34R4BFPP-E4	1/6	1.0	1.4-14.5	10-90	341	341	341	2982	2983	2984	2701	2728	2996	2995
2251	34R4BFPP-E4	1/6	1.0	2.6-28.7	10-90	250	250	250	2982	2983	2984	2701	2728	2996	2995
2252	34R4BFPP-E3	1/6	1.0	3.1-41.6	10-90	250	270	270	2982	2983	2984	2701	2728	2996	2995
N2253	34R4BFPP-E3	1/6	1.0	7.4 - 84	10-90	-	-	-	2982	2983	2984	2701	2728	2996	2995
N2254	34R4BFPP-E2	1/6	1.0	30-260	10-90	-	-	-	2982	2983	2984	2701	2728	2996	2995
N2255	34R4BFPP-E1	1/6	1.0	35-493	10-90	-	-	-	2982	2983	2984	2701	2728	2996	2995
2260	42R6BFPP-F3	3/8	1.9	7.4-84	10-90	250	250	250	2982	2983	2984	2703	2729	2996	2995
2261	42R6BFPP-F3	3/8	1.9	11-127	10-90	167	167	167	2982	2983	2984	2703	2729	2996	2995
2262	42R6BFPP-F2	3/8	1.9	17-246	10-90	92	115	115	2982	2983	2984	2703	2729	2996	2995
2263	42R6BFPP-F1	3/8	1.9	35-493	10-90	48	58	58	2982	2983	2984	2703	2729	2996	2995
Non-Synchronous Right Angle Gearmotors															
N2236	42R6BFPP-GB	3/8	1.9	0.7-9.3	-	-	-	-	2982	2983	2984	2703	2729	2996	2995
2237	42R6BFPP-GB	3/8	1.9	2.2-22	10-90	290	290	290	2982	2983	2984	2703	2729	2996	2995
N2238	42R6BFPP-GB	3/8	1.9	3.1-41.6	-	-	-	-	2982	2983	2984	2703	2729	2996	2995
2270	42R6BFPP-5N	3/8	1.9	3.4-35.1	10-90	121	121	116	2982	2983	2984	2703	2729	2996	2995
2271	42R6BFPP-5N	3/8	1.9	6.3-65	10-90	109	109	109	2982	2983	2984	2703	2729	2996	2995
2272	42R6BFPP-5N	3/8	1.9	11.8-130	10-90	98	98	98	2982	2983	2984	2703	2729	2996	2995
2273	42R6BFPP-5N	3/8	1.9	17.7-248	10-90	66	105	101	2982	2983	2984	2703	2729	2996	2995
2274	42R6BFPP-5N	3/8	1.9	35.4-458	10-90	38	68	59	2982	2983	2984	2703	2729	2996	2995
N2275	42R6BFPP-5N	3/8	1.9	5.9-77	10-90	104	104	104	2982	2983	2984	2703	2729	2996	2995
N2280	48R6BFPP-5H	3/4	2.7 (@ 230V)	4-54	-	-	-	-	2985	2986	2987	2706	2732	-	-
2281	48R6BFPP-5H	3/4	2.7 (@ 230V)	5.9-69	10-90	285	285	262	2985	2986	2987	2706	2732	-	-
N2282	48R6BFPP-5H	3/4	2.7 (@ 230V)	11-144	-	-	-	-	2985	2986	2987	2706	2732	-	-
N2283	48R6BFPP-5H	3/4	2.7 (@ 230V)	17-246	-	-	-	-	2985	2986	2987	2706	2732	-	-
N2290	30R4BEPP-3N	1/17	0.48	3-40	10-90	-	-	-	2982	2983	2984	2701	2728	2996	2995
N2292	30R4BEPP-3N	1/17	0.48	6-51	10-90	-	-	-	2982	2983	2984	2701	2728	2996	2995
N2293	30R4BEPP-3N	1/17	0.48	7-64	10-90	-	-	-	2982	2983	2984	2701	2728	2996	2995
N2294	30R4BEPP-3N	1/17	0.48	11-125	10-90	-	-	-	2982	2983	2984	2701	2728	2996	2995
N2296	30R4BEPP-3N	1/17	0.48	20-250	10-90	-	-	-	2982	2983	2984	2701	2728	2996	2995
N2297	30R4BEPP-3N	1/17	0.48	35-460	10-90	-	-	-	2982	2983	2984	2701	2728	2996	2995

¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

² Matching control model ratings are for single phase AC input voltages, 230V three phase AC output.

AC Technical Information

Permanent Split Capacitor Motors

Permanent Split Capacitor motors, Bodine types "CI" and "YC", are designed for single speed applications using single phase power. They are recommended for continuous duty applications or start-stop applications with up to 10 starts per minute. Bodine types "CI" and "YC" motors feature high efficiency and reliable service. These motors require continuous duty, motor-run capacitors connected in the auxiliary winding circuit to produce starting torque.

Non-Synchronous designs provide the highest output power of permanent split capacitor motors. Speed change will be less than 6% from No-Load to Full Load. Available starting torque is approximately the same as rated torque.

Synchronous designs provide exact speed from No-Load to Full Load. Power output is lower than non-synchronous motors of the same size. Available starting torque is approximately the same as rated torque.

Split Phase Motors

Split Phase motors, Bodine types "SI" and "SY", are designed for single speed applications using single phase power. They are recommended for continuous duty applications or start-stop

applications with up to 6 starts per hour. The specially designed auxiliary winding produces starting torque and is then disconnected by an internal, mechanical, centrifugal starting switch. Because of this switch 60 Hz motors cannot be operated at 50 Hz. No start or run capacitor is required. However, an electrolytic start capacitor may be connected in series with the auxiliary winding to increase starting torque and reduce starting current. Suggested values for these capacitors are shown in the table at the top of page 63.

Non-Synchronous designs provide the highest output power of split phase motors. Speed change will be less than 6% from No-Load to Full Load. Available starting torque is typically 1.5 to 3 times rated torque.

Synchronous designs provide exact speed from No-Load to Full Load. Power output is lower than non-synchronous motors of the same size. Available starting torque is typically somewhat higher than rated torque.

Three-Phase Motors

Standard three-phase motors, Bodine types "PP" (non-synchronous), and "YP" (synchronous), are designed for single speed applications using three-phase power. For variable speed applications, refer to our line of

PACESETTER™ inverter duty motors, gearmotors, and AC drives.

Bodine fixed speed three-phase motors and gearmotors are recommended for continuous duty applications of start-stop applications with up to 10 starts per minute. Bodine types "PP" and "YP" motors feature high efficiency and reliable performance in a compact package. Non-synchronous designs provide the highest output power of all AC induction motor. Speed change will be less than 6% from No-Load to Full Load. Available starting torque is typically 1.5 to 3 times the rated torque.

Synchronous designs provide exact speed from No-Load to Full Load. Horsepower rating is lower than non-synchronous motors of the same size. Available starting torque is typically somewhat higher than rated torque.

Please contact the factory or your local Bodine representative with PACESETTER™ inverter duty application requirements and for technical support.

CE Certification

Most Bodine motors and gearmotors meet CE standards. See page 2 for more information.

R Frame AC motor Information IP 44 Construction

With a properly installed die cast terminal box (model no. 0984 or model no. 5982), Bodine "R" Frame motors and gearmotors meet IP 44 construction as specified in IEC standard 34-5. The IP 44 designation means that a motor is designed to protect against solid bodies greater than 1 mm and water splashed from any direction.

Electrolytic Capacitors with 42R and 48R Split Phase 115/230 Volt Motors

Starting current for split phase motors is significantly higher than running current. The insertion of an electrolytic capacitor in the starting winding circuit (white leads) of nine wire split phase motors can reduce starting current by approximately 50%. Suggested electrolytic capacitor values are listed below. Bodine does not supply these capacitors.

Motor/Gearmotor Model No.	Voltage Connection	
	115 Volt	230 Volt
0284	180 mfd.	64 mfd.
0285	145 mfd.	43 mfd.
0661, 0662, 0663, 0664	180 mfd.	64 mfd.
0251	140 mfd.	—
0253, 0254	300 mfd.	—
0255	220 mfd.	—

48R Frame Motors and NEMA Standards

Stocked 48R motors are 48 frame diameter motors with NEMA 56 frame face mounting shield and shaft. With the motor base removed, the mounting face and shaft configuration meet NEMA 56 standard dimensions, enabling these stocked motors to be used in conjunction with many separable gearheads available.

Because Bodine 48R frame motors are shorter than typical competitive 48 frame motors of equivalent horsepower rating, the dimension from the face to the first base mounting hole (designated "BA" by NEMA) is shorter than 48 NEMA standard for these motors.

AC Induction Torque Motors

Technical Information

Bodine AC torque motors are designed to run at stall or produce reverse torque intermittently at rated voltage. They may be used at stall or to produce reverse torque continuously at the reduced voltage shown in the specification table. AC torque motors are specially designed permanent split capacitor motors. They are often used in winding applications on the take-up reel. When the reel is empty, it rotates at its highest speed, but does not require much torque. When the reel is full, it rotates at a low speed and requires more torque. Torque motors can also be used in tensioning or holding applications. They can safely produce reverse torque while being backdriven at any normal operating speed. Reverse torque will be approximately equal to stall torque. They have high

slip rotors that produce near linear speed torque characteristics (see figure 1). Maximum torque is produced at stall with less torque available as the motor speeds up in the forward direction.

Standard Features

- Will operate satisfactorily on 50 or 60 Hz
- Special rotor provides excellent performance for holding, winding and tensioning applications
- Special windings can provide locked rotor or reverse torque intermittently at rated voltage or continuously at reduced voltage
- Totally enclosed non-ventilated IP-20 rating
- Permanently lubricated, noise tested ball bearings
- Locked bearing design on 30R, 42R, and 48R minimizes shaft endplay

Application Information

- See page 64 for connection diagram 074 10021
- K-2 motors include capacitors
- 30R, 42R, and 48R motors do not include capacitors, See page 63
- Face mounting is standard
- 42R and 48R motors also include base mount.

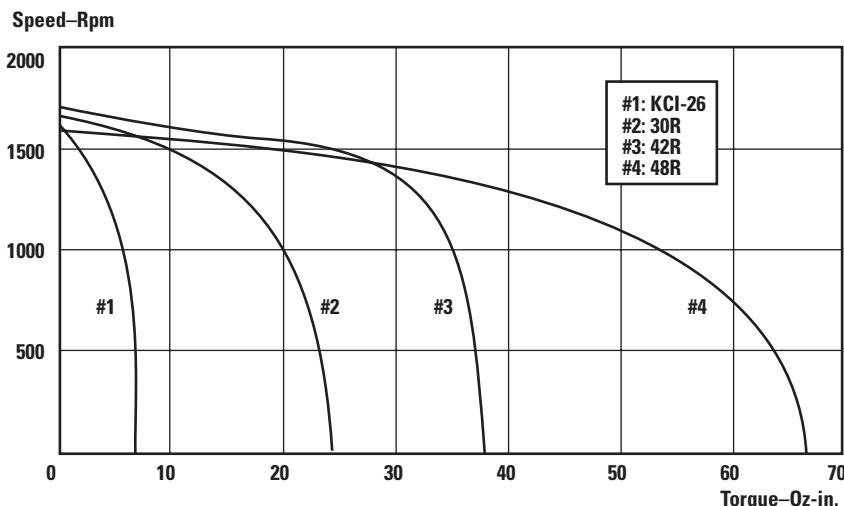
Optional Accessories

- 30R die cast terminal box kit model 5982 achieves IP-44 rating, see page 62
- For 42R, 48R die cast terminal box kit model 0984 achieves IP-44 rating, see page 62

rpm @ No Load	Locked Rotor				V	Hz	Weight (lbs.)	Capacitor Part No.	Product Type	Model Number
	Torque (oz-in.)	Watts	Max. On Time (min.)	% Duty Cycle						
1580	7.0	22	5	40	115	60	2.25	494 01047*	KCI-26	0621
1570	3.5	12	—	100	83	60	2.25	494 01047*	KCI-26	0621
1310	6.0	19	5	40	115	50	2.25	494 01047*	KCI-26	0621
1300	4.0	13	—	100	92	50	2.25	494 01047*	KCI-26	0621
1660	25	52	30	50	115	60	4.75	494 01015	30R2FECI	5625
1645	19	40	—	100	100	60	4.75	494 01015	30R2FECI	5625
1425	25	47	30	50	115	50	4.75	494 01015	30R2FECI	5625
1420	19	36	—	100	100	50	4.75	494 01015	30R2FECI	5625
1690	38	85	28	40	115	60	12.5	494 00031	42R6FECI	2628
1680	22	49	—	100	87	60	12.5	494 00031	42R6FECI	2628
1445	38	82	28	40	115	50	12.5	494 00031	42R6FECI	2628
1435	22	47	—	100	87	50	12.5	494 00031	42R6FECI	2628
1560	65	120	15	40	115	60	20	494 00033	48R6FECI	0632
1560	32	60	—	100	80	60	20	494 00033	48R6FECI	0632
1370	68	96	15	40	115	50	20	494 00033	48R6FECI	0632
1360	34	58	—	100	80	50	20	494 00033	48R6FECI	0632

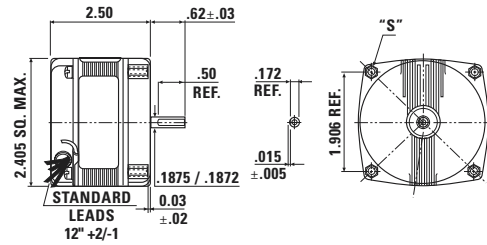
*Capacitor part number 494 01047 is supplied with model number 0621.

Figure 1 Typical performance curves at 115 V, 60 Hz



AC Induction Torque Motors

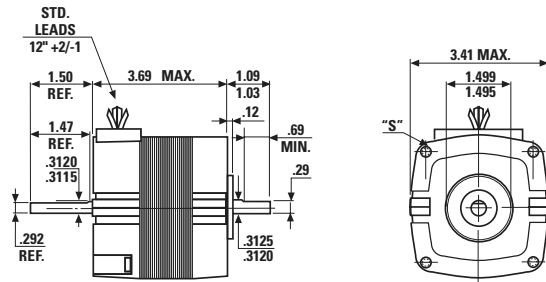
K-2 Torque Motor (model 0621)



"S" (4) .164-32, .14 in. min. deep on 2.68±.01 in. bolt circle



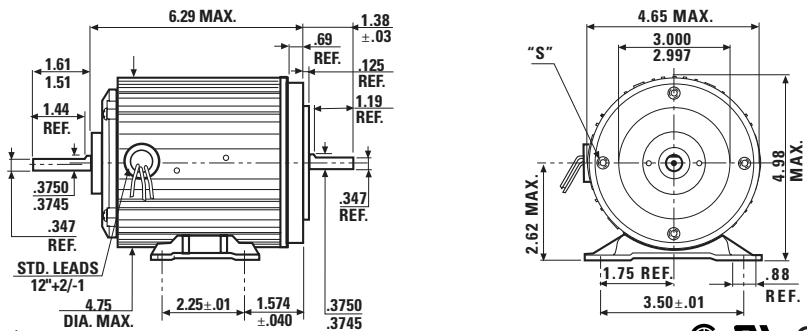
30R Torque Motor (model 5625)



"S" (4) #10-32, .32±.06/-0.00 in. deep on 3.75 in. bolt circle



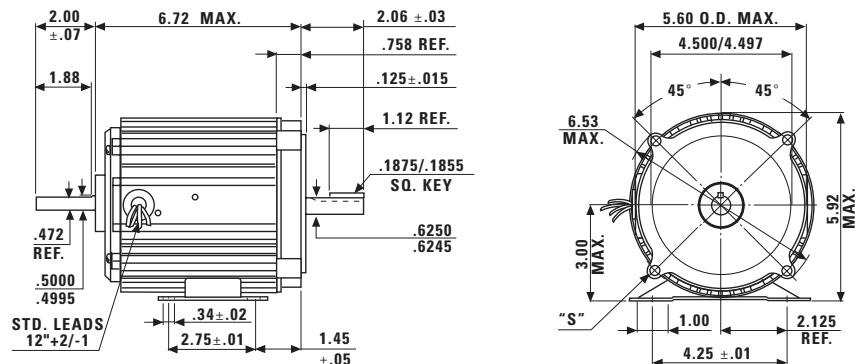
42R Torque Motor (model 2628)



"S" (4) 1/4-20, UNC-2B, .31 in. min. deep on 3.750 in. bolt circle



48R Torque Motor (model 0632 shown with optional terminal box, model 0984)



"S" (4) 3/8-16, UNC-2B, .50 in. min. deep on 5.875 in. bolt circle



AC Induction Motors

1/1600 - 1/200 HP



K-2

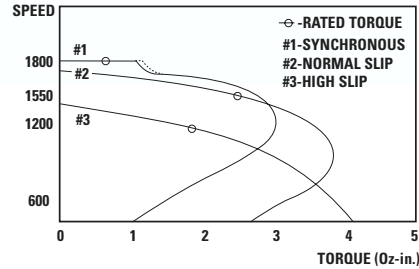
Standard features

- Totally enclosed, non-ventilated IP-20 rating
- Permanently lubricated, noise tested ball bearings
- Three-wire winding simplifies reversing circuitry
- Impedance protected to prevent current overload (motor can be stalled indefinitely without overheating)

Application Information

- See page 64 for connection diagrams
- Capacitor is included with motor
- Face mounting is standard

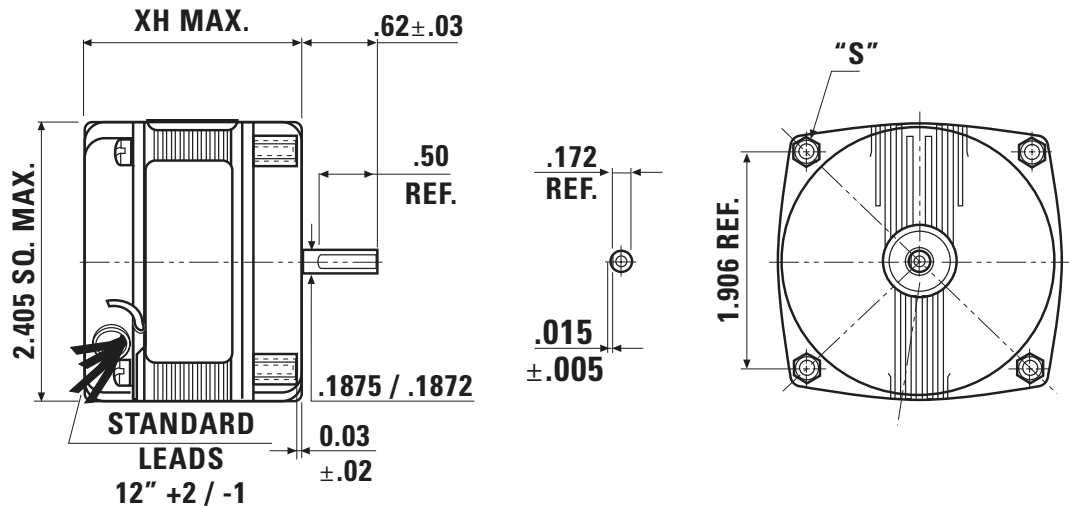
Typical Performance Curves



Speed (rpm)	Rated Torque (oz-in.)	HP	V	Hz	Ph	A	Radial Load (lbs.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No.	Product Type	Model Number ¹
Permanent Split Capacitor normal slip, Non-Synchronous													
1550	1.4	1/450	115	60	1	.080	5.7	1.84	1.6	074 10019	494 00046	KCI-23	0705
1550	2.2	1/300	115	60	1	.104	5.7	2.20	1.9	074 10019	494 00048	KCI-24	0712
1550	3.2	1/200	115	60	1	.124	5.7	2.50	2.2	074 10019	494 00051	KCI-26	0713
1250	3.0	-	230	50	1	.060	5.7	2.50	2.2	074 10021	494 01049	KCI-26	N1713
Permanent Split Capacitor High Slip, Non-Synchronous													
1200	1.1	1/800	115	60	1	.082	5.7	1.84	1.6	074 10019	494 00046	KCI-23	0707
1200	1.8	1/450	115	60	1	.098	5.7	2.20	1.9	074 10019	494 00047	KCI-24	0714
Permanent Split Capacitor, Synchronous													
1800	.35	1/1600	115	60	1	.077	5.7	1.84	1.6	074 10019	494 00046	KYC-23	0701
1800	.62	1/900	115	60	1	.091	5.7	2.20	1.9	074 10019	494 00048	KYC-24	0709
3600	.31	1/900	115	60	1	.102	5.7	2.20	1.9	074 10019	494 00051	KYC-24	0710

¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

K-2 AC Motor



"S" (4) .164-32, .14" deep minimum on a 2.68 in. bolt circle



AC Induction Motors

1/40 - 1/30 HP

Standard features

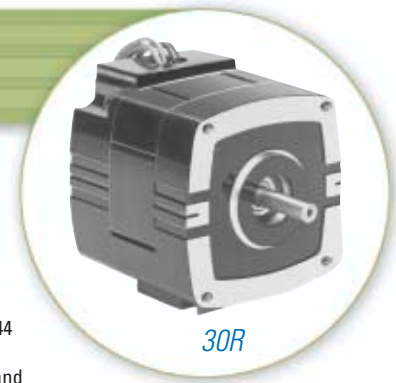
- Totally enclosed, non-ventilated IP-20 rating
- Class "B" insulation system for long life
- Aluminum endshields for high thermal efficiency and light weight
- Permanently lubricated, noise tested ball bearings
- Locked bearing design minimizes shaft endplay

Application Information

- See page 64 for connection diagrams
- Capacitor is not included. Order with motor, see page 63
- Face mounting is standard

Optional Accessories

- Die cast terminal box kit model 5982 achieves IP-44 rating, see page 62
- "L" bracket kit model 5968 permits base, ceiling, and sidewall mounting, see page 62



30R

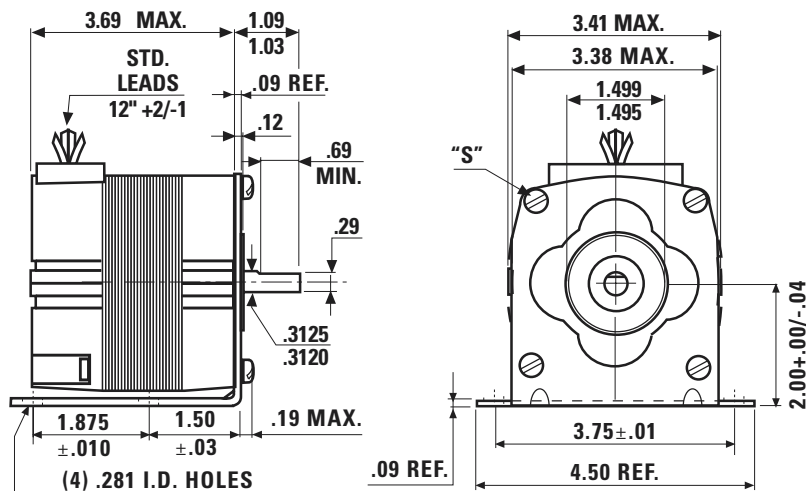
FOR INVERTER DUTY MODELS



SEE PAGES 24-42

Speed (rpm)	Rated Torque (oz-in.)	HP	V	Hz	Ph	A	Radial Load (lbs.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No.	Product Type	Model Number
Permanent Split Capacitor, Non-Synchronous													
1700	20	1/30	115	60	1	.45	18	3.69	4.75	074 10296	494 01015	30R2BECI	5240
3400	10	1/30	115	60	1	.47	18	3.69	4.75	074 10296	494 01015	30R2BECI	5219
Permanent Split Capacitor, Synchronous													
1800	14	1/40	115	60	1	.52	18	3.69	4.75	074 10296	494 01015	30R2BEYC	5246

30R Motor shown with optional "L" bracket (model 5968)



"S" (4) 10-32 UNC-2B x .32" deep on a 3.75 in. bolt circle





34R

AC Induction Motors

1/15 - 1/5 HP

Standard Features

- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Class "B" insulation system operated within Class "A" limits to prolong winding and lubricant life
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Permanently lubricated, noise tested ball bearings
- Locked bearing design minimizes shaft endplay

Application Information

- See page 64 for connection diagrams
- Capacitor is not included. Order with motor, see page 63
- Face mounting is standard
- Motors operate satisfactorily on 50 Hz

Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62
- "L" bracket kit model 0979 permits base, ceiling, and sidewall mounting, see page 62
- Base plate model 0994 available, see page 62

FOR INVERTER DUTY MODELS

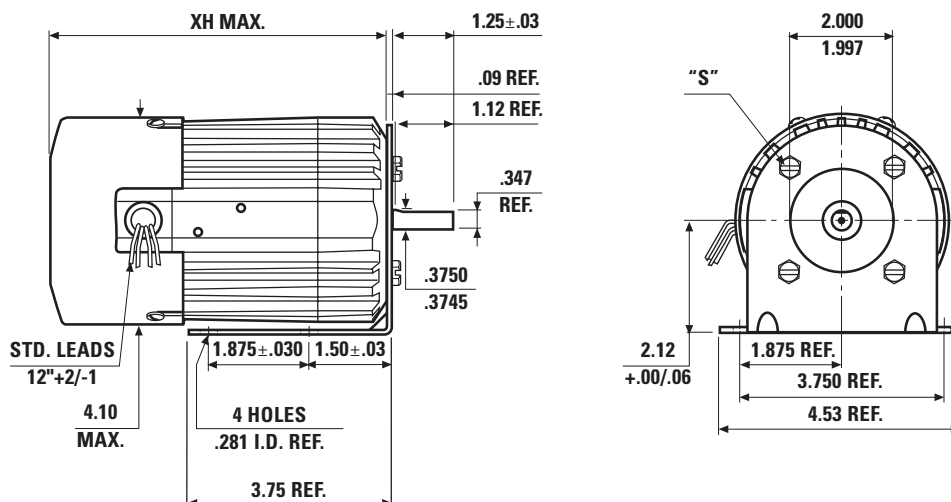


SEE PAGES 24-42

Speed (rpm)	Rated Torque (oz-in.)	HP	V	Hz	Ph	A	Radial Load (lbs.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No.	Product Type	Model Number ¹
Permanent Split Capacitor, Non-Synchronous													
1700	39	1/15	115	60	1	1.0	50	5.69	7	074 10296	494 01054	34R4BFCI	0290
1700	65	1/9	115	60	1	1.4	50	6.69	9	074 10296	494 01006	34R6BFCI	0291
3400	42	1/7	115	60	1	1.75	50	6.69	9	074 10296	494 01016	34R6BFCI	0293
Permanent Split Capacitor, Synchronous													
1800	38	1/15	115	60	1	1.5	50	6.69	9	074 10296	494 01016	34R6BFYC	N0297
Three phase, Non-Synchronous													
1700	119	1/5	230	60	3	1.2	50	6.69	9	074 10102	—	34R6BFPP	0295
Three phase, Synchronous													
1800	70	1/8	230	60	3	1.4	50	6.69	9	074 10102	—	34R6BFYP	0299

¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

34R Motor with NEMA C face mount and optional "L" bracket (model 0979)



"S" (4) 1/4-20, UNF-2B, .31/.38 in. deep minimum on a 2.75 in. bolt circle



AC Induction Motors

1/12 - 1/4 hp



Standard Features

- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Class "B" insulation system operated within Class "A" limits to prolong winding and lubricant life
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Permanently lubricated, noise tested ball bearings
- Locked bearing design minimizes shaft endplay

Application Information

- See page 64 for connection diagrams
- Capacitor is not included. Order with motor, see page 63
- Face or base mounting is standard
- For lower cost, high volume applications, see 44C motors on page 18

Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62
- Steel terminal box kit model 0982 shown on page 62

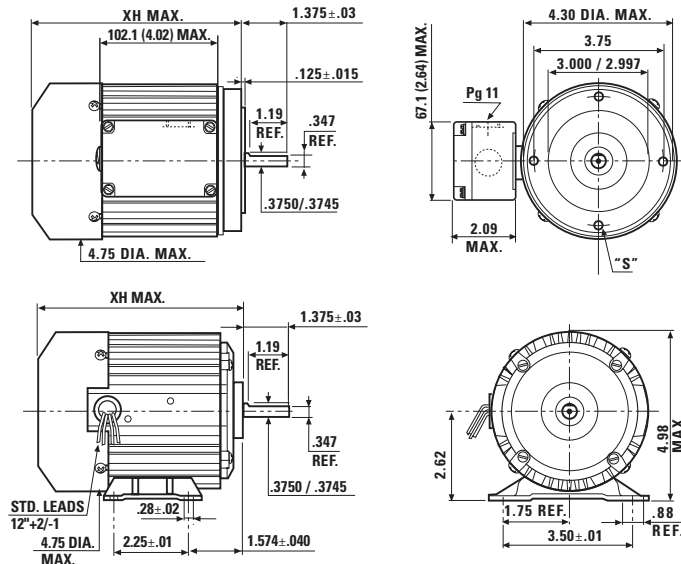
FOR INVERTER DUTY MODELS



SEE PAGES 24-42

Speed (rpm)	Rated Torque (oz-in.)	HP	V	Hz	Ph	A	Radial Load (lbs.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No.	Product Type	Model Number	
													NEMA C	Base Mount
Permanent Split Capacitor, Non-Synchronous														
1700	101	1/6	115	60	1	1.9	50	6.70	11	074 10296	494 00034	42R5BFCI	0260	0258
Split phase (with centrifugal switch), Non-Synchronous														
1700	48	1/12	115	60	1	2.4	50	5.64	7.75	074 10292	-	42R3BFSI	-	0251
1700	101	1/6	115	60	1	3.6	50	6.70	11	074 10292	-	42R5BFSI	0254	0253
3450	50	1/6	115	60	1	3.3	50	6.70	11	074 10292	-	42R5BFSI	-	0255
Three phase, Non-Synchronous														
1700	148	1/4	230	60	3	1.2	50	6.70	11	074 10102	-	42R5BFPP	-	0273
1700	148	1/4	230/460	60	3	1.2/0.6	50	6.70	11	074 10103	-	42R5BFPP	-	0274

42R Motor Top: with NEMA C face mount and optional die cast terminal box (model 0984). Bottom: with base mount

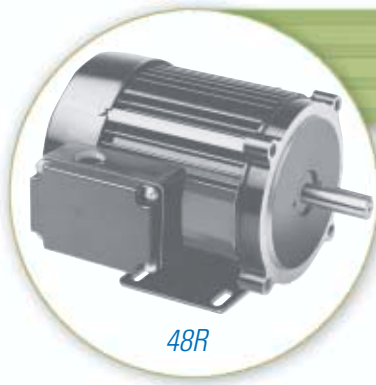


"S" (4) 1/4-20, UNF-2B, .31 in. deep minimum on a 3.75 in. bolt circle



AC Induction Motors

1/5 - 1/2 hp



48R

Standard Features

- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Class "B" insulation system operated within Class "A" limits to prolong winding and lubricant life
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Permanently lubricated, noise tested ball bearings
- Locked bearing design minimizes shaft endplay

Application Information

- See page 64 for connection diagrams
- Capacitor is not included. Order with motor, see page 63
- Base mounting and NEMA 56C face are standard

Optional Accessories

- Die cast terminal box kit model 0984, 1984 achieves IP-44 rating, see page 62
- Steel terminal box kit model 0982 shown on page 62

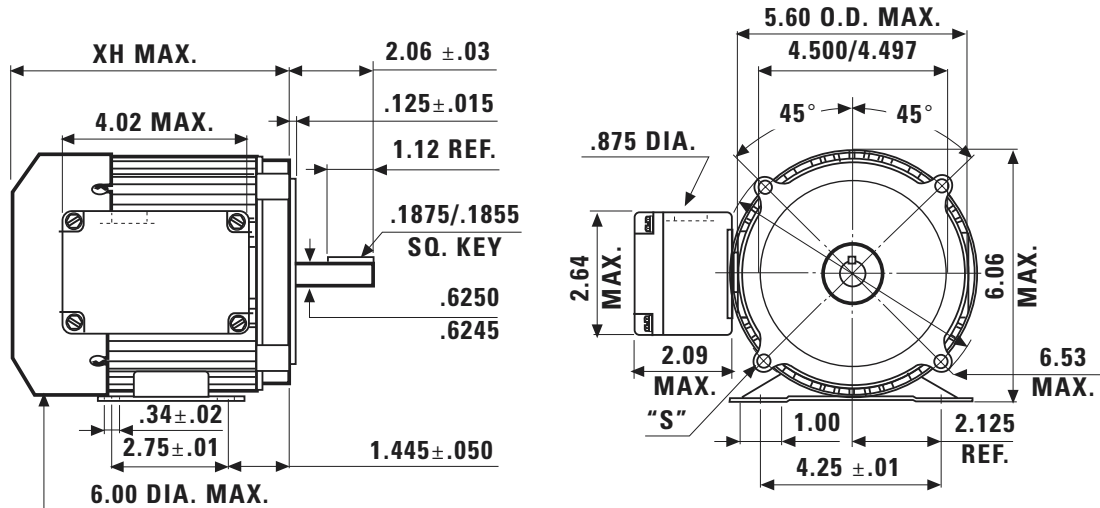
FOR INVERTER DUTY MODELS



SEE PAGES 24-42

Speed (rpm)	Rated Torque (oz-in.)	HP	V	Hz	Ph	A	Radial Load (lbs.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No.	Product Type	Model Number
Permanent Split Capacitor, Non-Synchronous													
1700	196	1/3	115	60	1	4.0	205	7.78	20.5	074 10294	494 00035	48R6BFCI	0283
1700	196	1/3	230	60	1	2.0	205	7.78	20.5	074 10294	494 00033	48R6BFCI	0283
Split phase non-Synchronous (with centrifugal switch)													
1700	196	1/3	115/230	60	1	4.8/2.4	205	7.78	20.5	074 10298	—	48R6BFSI	0284
Split phase Synchronous (with centrifugal switch)													
1800	112	1/5	115/230	60	1	6.0/3.0	205	7.78	20.5	074 10298	—	48R6BFSY	0285
Three phase, Non-Synchronous													
1400	296	1/3	230	50	3	2.2	205	7.78	20.5	074 10103	—	48R6BFPP	0286
1700	296	1/2	230	60	3	1.8	205	7.78	20.5	074 10103	—	48R6BFPP	0286
1400	296	1/3	460	50	3	1.1	205	7.78	20.5	074 10103	—	48R6BFPP	0286
1700	296	1/2	460	60	3	0.9	205	7.78	20.5	074 10103	—	48R6BFPP	0286
Three phase, Synchronous													
1800	185	1/3	230/460	60	3	2.1/1.1	205	7.31	17	074 10103	—	48R5BFYP	0281

48R Motor shown with optional terminal box (model 0984)



"S" (4) .375-16, UNC-2B, .50 in. deep minimum on a 5.875 in. bolt circle



Parallel Shaft AC Gearmotors

up to 120 oz-in. continuous



K-2

Standard Features

- Totally enclosed, non-ventilated IP-20 rating
- Permanently lubricated, noise tested ball bearings
- Three-wire winding simplifies reversing circuitry
- Impedance protected to prevent current overload (garmotor should not be stalled when powered up)
- Three winding types are available, see page 14 for typical performance curves
- Bronze sleeve bearings on output shaft for quietness
- Permanently lubricated gearing utilizing grease

- Helical pinion accurately cut on motor shaft for maximum strength and minimum noise
- Non-metallic helical primary gear for quietness
- Steel helical gearing on subsequent stages for quietness and high strength

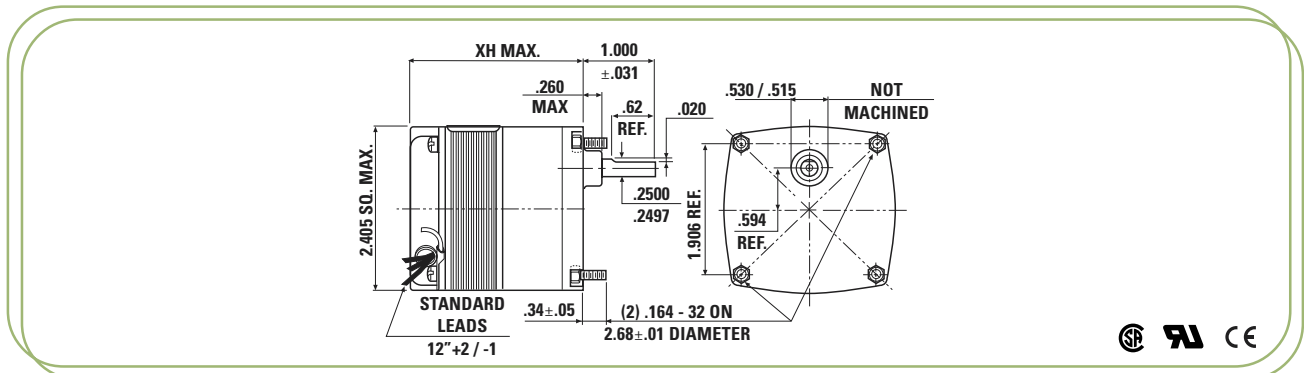
Application Information

- See page 64 for connection diagrams
- Capacitor is included with motor
- Face mounting is standard

Speed (rpm)	Rated Torque (oz-in.)	Motor HP	V	Hz	Ph	A	Gear Ratio	Radial Load (oz.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No.	Product Type	Model Number ¹
Permanent Split Capacitor normal slip, Non-Synchronous														
0.9	120	1/700	115	60	1	.070	1800	20	2.54	2.2	074 10019	494 00045	KCI-22T5	N0727
1.9	100	1/700	115	60	1	.070	900	20	2.54	2.2	074 10019	494 00045	KCI-22T5	0726
5.6	95	1/700	115	60	1	.070	300	20	2.54	2.2	074 10019	494 00045	KCI-22T4	0724
9.0	95	1/700	115	60	1	.070	180	20	2.54	2.2	074 10019	494 00045	KCI-22T4	0723
13	95	1/450	115	60	1	.083	120	20	2.67	2.4	074 10019	494 00046	KCI-23T4	0722
22	95	1/300	115	60	1	.110	72	20	3.02	2.7	074 10019	494 00048	KCI-24T4	0733
26	80	1/300	115	60	1	.110	60	20	3.02	2.7	074 10019	494 00048	KCI-24T3	0732
52	34	1/450	115	60	1	.083	30	20	2.51	2.3	074 10019	494 00046	KCI-23A2	0719
52	59	1/300	115	60	1	.110	30	20	2.87	2.6	074 10019	494 00048	KCI-24A2	0731
86	21	1/450	115	60	1	.083	18	20	2.51	2.3	074 10019	494 00046	KCI-23A2	0718
86	35	1/300	115	60	1	.110	18	20	2.87	2.6	074 10019	494 00048	KCI-24A2	0730
130	24	1/300	115	60	1	.110	12	20	2.87	2.6	074 10019	494 00048	KCI-24A2	0729
260	12	1/300	115	60	1	.110	6	20	2.87	2.6	074 10019	494 00048	KCI-24A2	0728
Permanent Split Capacitor High Slip, Non-Synchronous														
0.9	120	1/1000	115	60	1	.072	1800	20	2.54	2.2	074 10019	494 00045	KCI-22T5	N0746
2.3	95	1/1000	115	60	1	.072	600	20	2.54	2.2	074 10019	494 00045	KCI-22T5	0744
4.9	95	1/1000	115	60	1	.072	300	20	2.54	2.2	074 10019	494 00045	KCI-22T4	0743
10	88	1/800	115	60	1	.083	120	20	2.67	2.4	074 10019	494 00046	KCI-23T4	0741
20	80	1/450	115	60	1	.100	60	20	3.02	2.7	074 10019	494 00047	KCI-24T3	0750
40	44	1/450	115	60	1	.100	30	20	2.87	2.6	074 10019	494 00047	KCI-24A2	0749
67	16	1/800	115	60	1	.083	18	20	2.51	2.3	074 10019	494 00046	KCI-23A2	0737
67	27	1/450	115	60	1	.100	18	20	2.51	2.3	074 10019	494 00047	KCI-24A2	0748
200	8.9	1/450	115	60	1	.100	6	20	2.51	2.3	074 10019	494 00047	KCI-24A2	0747
Permanent Split Capacitor, Synchronous														
1.0	120	1/2000	115	60	1	.069	1800	20	2.54	2.2	074 10019	494 00045	KYC-22T5	N0767
3.0	88	1/2000	115	60	1	.069	600	20	2.54	2.2	074 10019	494 00045	KYC-22T5	0765
10.0	72	1/900	115	60	1	.093	180	20	3.02	2.7	074 10019	494 00048	KYC-24T4	0776
15.0	20	1/2000	115	60	1	.069	120	20	2.54	2.2	074 10019	494 00045	KYC-22T4	N0762
15.0	48	1/900	115	60	1	.093	120	20	3.02	2.7	074 10019	494 00048	KYC-24T4	N0775
25.0	29	1/900	115	60	1	.093	72	20	3.02	2.7	074 10019	494 00048	KYC-24T4	0774
60.0	15	1/900	115	60	1	.093	30	20	2.87	2.6	074 10019	494 00048	KYC-24A2	0772
100	8.9	1/900	115	60	1	.093	18	20	2.87	2.6	074 10019	494 00048	KYC-24A2	0771

¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

K-2 AC Gearmotor



MADE IN U.S.A.

Parallel Shaft AC Gearmotors

up to 40 lb-in. continuous



30R-D

FOR INVERTER DUTY MODELS



SEE PAGES 24-42

Standard Features

- Totally Enclosed, Non-Ventilated IP-20 rating
- Class "B" insulation system
- Aluminum endshields for high thermal efficiency and light weight
- Unvented gearhousing for universal horizontal mounting
- Industrial lip type seals on motor and output shafts
- Needle bearings on output shaft for increased radial load capacity and long life
- Permanently lubricated with high-performance lubricant
- Reinforced thermoplastic helical primary gear for quietness and hardened steel spur gearing on subsequent stages for high output torque and long life
- Helical pinion accurately cut on motor shaft for maximum strength and minimum noise

Application Information

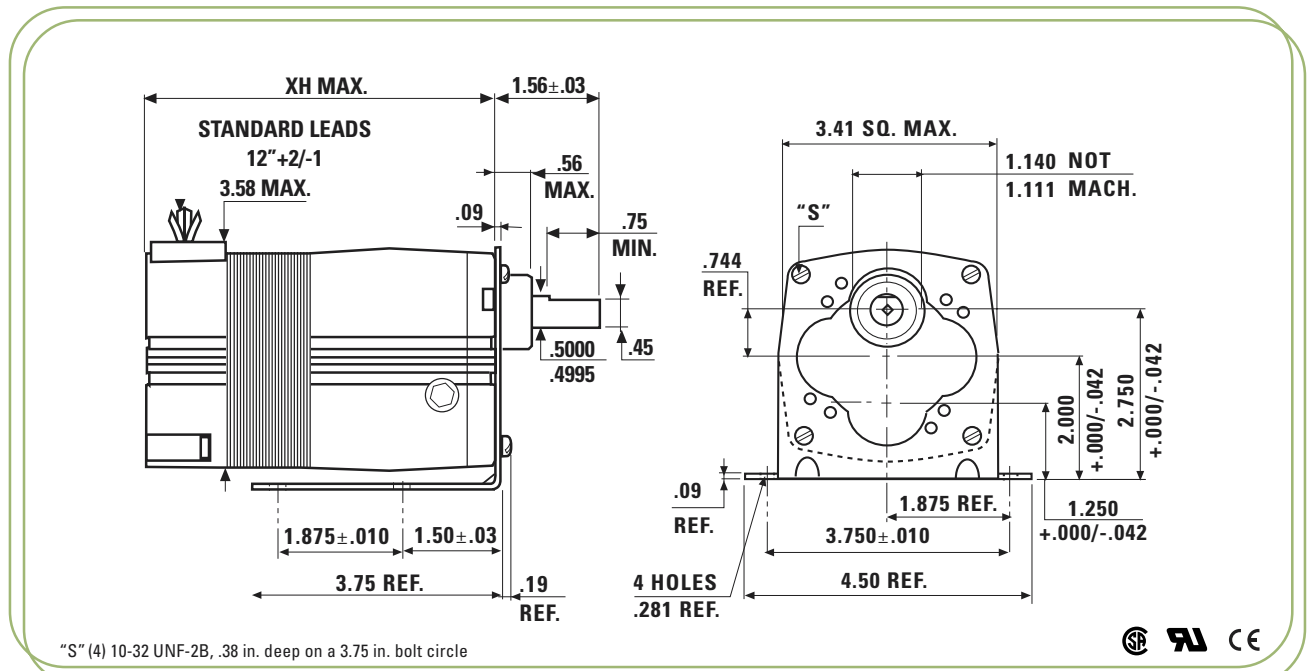
- See page 64 for connection diagrams
- Capacitor is not included. Order with motor, see page 63
- Face mounting is standard

Optional Accessories

- Die cast terminal box kit model 5982, achieves IP-44 rating, see page 62
- "L" bracket kit model 5968 permits base, ceiling and sidewall mounting, see page 62

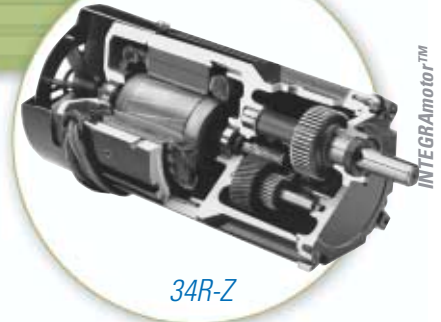
Speed (rpm)	Rated Torque (lb-in.)	Motor HP	V	Hz	Ph	A	Gear Ratio	Radial Load (lbs.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No.	Product Type	Model Number
Permanent Split Capacitor, Non-Synchronous														
3.8	40	1/50	115	60	1	.33	450	65	5.23	5.8	074 10297	494 26812	30R1BECI-D5	5463
9.4	40	1/50	115	60	1	.33	180	65	5.23	5.8	074 10296	494 26812	30R1BECI-D4	5462
19	40	1/50	115	60	1	.33	90	65	5.23	5.8	074 10296	494 26812	30R1BECI-D4	5461
28	40	1/30	115	60	1	.45	60	65	5.48	6.3	074 10297	494 01015	30R2BECI-D3	5474
57	27	1/30	115	60	1	.45	30	65	5.48	6.3	074 10297	494 01015	30R2BECI-D3	5473
94	16	1/30	115	60	1	.45	18	65	5.48	6.3	074 10297	494 01015	30R2BECI-D3	5472
140	11	1/30	115	60	1	.45	12	65	5.48	6.3	074 10297	494 01015	30R2BECI-D3	5471
285	5	1/30	115	60	1	.45	6	65	5.48	6.3	074 10297	494 01015	30R2BECI-D3	5470

30R-D Gearmotor shown with optional "L" bracket (model 5968)



Parallel Shaft AC Gearmotors

up to 100 lb-in. continuous



34R-Z

Standard Features

- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Class "B" insulation system operated within Class "A" limits to prolong winding and lubricant life
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Unvented gearhousing for universal horizontal mounting
- Industrial lip type seals on motor and output shafts
- Needle bearings on output shaft for increased radial load capacity and long life
- Permanently lubricated with high-performance lubricant
- Wide reinforced thermoplastic helical primary gear for quietness and hardened steel spur gearing on subsequent stages for high output torque and long life

- Helical pinion accurately cut on motor shaft for maximum strength and minimum noise

Application Information

- See page 64 for connection diagrams
- Capacitor is not included. Order with motor, see page 63
- Face mounting is standard
- Motors operate satisfactorily on 115 V, 50 Hz

Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62
- "L" bracket kit model 0980 permits base, ceiling, and sidewall mounting, see page 62

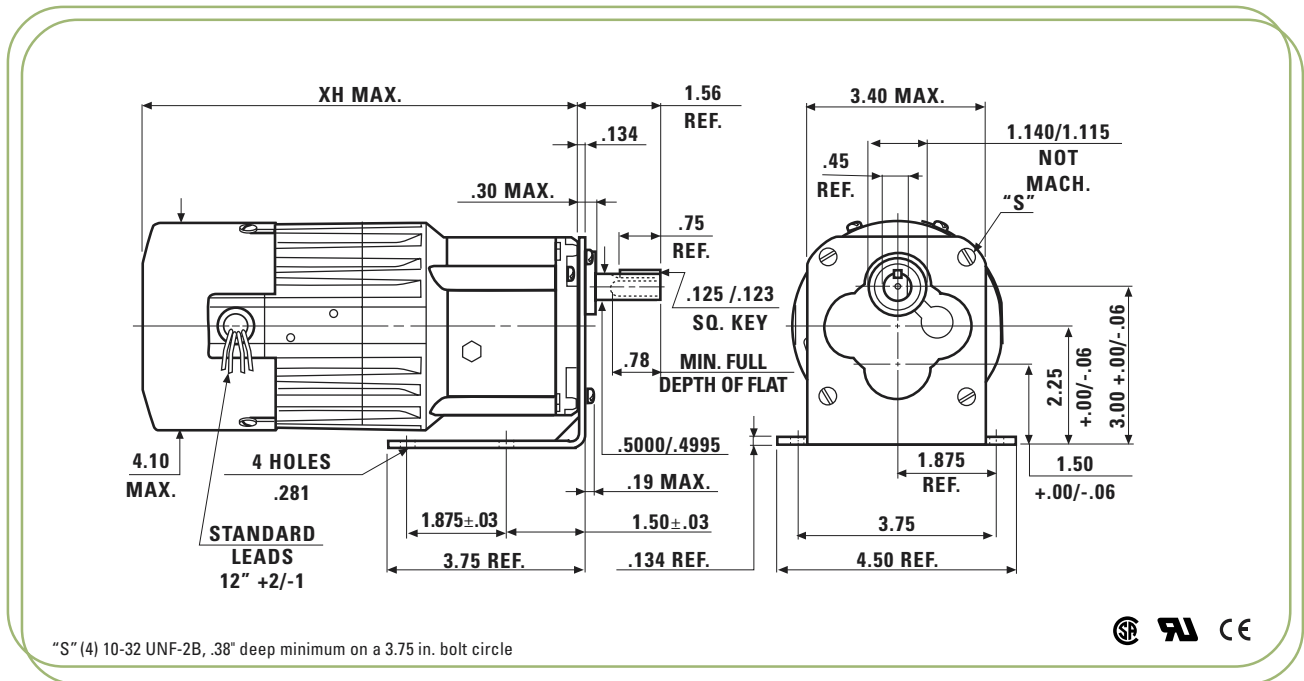
FOR INVERTER DUTY MODELS



SEE PAGES 24-42

Speed (rpm)	Rated Torque (lb-in.)	Motor HP	V	Hz	Ph	A	Gear Ratio	Radial Load (lbs.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No.	Product Type	Model Number
Permanent Split Capacitor, Non-Synchronous														
9.4	100	1/15	115	60	1	1.0	180	125	8.54	9.3	074 10296	494 01054	34R4BFCI-Z4	0449
19	100	1/15	115	60	1	1.0	90	125	8.54	9.3	074 10296	494 01054	34R4BFCI-Z4	0448
28	100	1/15	115	60	1	1.0	60	125	8.54	9.3	074 10297	494 01054	34R4BFCI-Z3	0455
57	56	1/15	115	60	1	1.0	30	125	8.54	9.3	074 10297	494 01054	34R4BFCI-Z3	0454
94	36	1/15	115	60	1	1.0	18	100	7.64	9.3	074 10296	494 01054	34R4BFCI-Z2	0453
142	24	1/15	115	60	1	1.0	12	100	7.64	9.3	074 10296	494 01054	34R4BFCI-Z2	0452
283	12	1/15	115	60	1	1.0	6	100	7.64	9.3	074 10296	494 01054	34R4BFCI-Z2	0451

34R-Z Gearmotor shown with optional "L" bracket (model 0980)



MADE IN U.S.A.

Parallel Shaft AC Gearmotors

up to 175 lb-in. continuous



Standard Features

- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Class "B" insulation system operated within Class "A" limits to prolong winding and lubricant life
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Unvented gearhousing for universal horizontal mounting
- Industrial lip type seals on motor and output shafts
- Needle bearings on output shaft for increased radial load capacity and long life
- Permanently lubricated with high-performance lubricant
- Wide reinforced thermoplastic helical primary gear for quietness and hardened steel spur gearing on subsequent stages for high output torque and long life
- Helical pinion accurately cut on motor shaft for maximum strength and minimum noise

Application Information

- See page 64 for connection diagrams
- Capacitor is not included. Order with motor, see page 63
- Face mounting is standard
- Motors operate satisfactorily on 115 V, 50 Hz

Optional Accessories

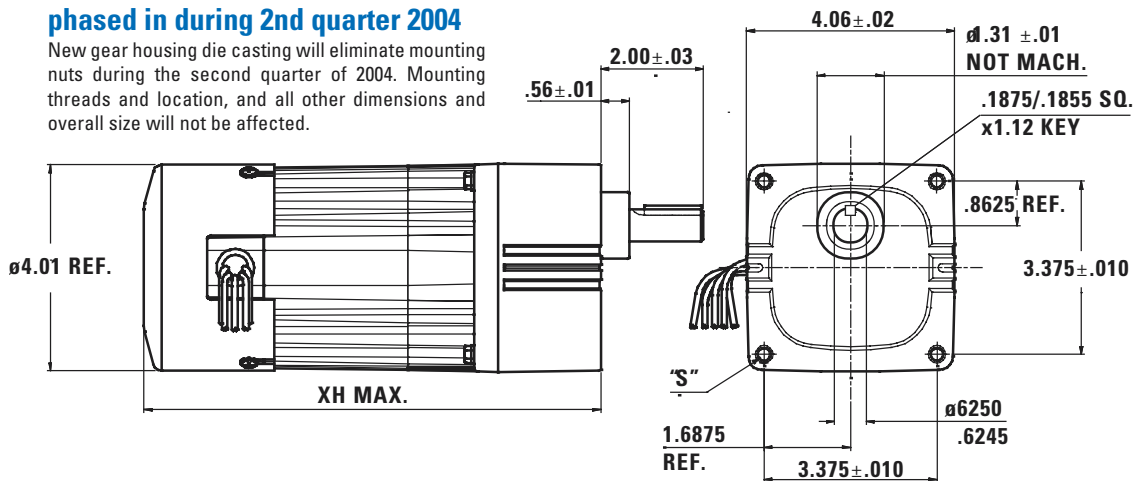
- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62
- "L" bracket kit model 0970 permits base, ceiling, and sidewall mounting, see page 62
- Adapter plate kit model 0995 provides for drop-in replacement of competitive gearmotors, see page 62

Speed (rpm)	Rated Torque (lb-in.)	Motor HP	V	Hz	Ph	A	Gear Ratio	Radial Load (lbs.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No.	Product Type	Model Number
Permanent Split Capacitor, Non-Synchronous														
5.4	175	1/15	115	60	1	1.0	312.4	130	8.20	10	074 10296	494 01054	34R4BFCI-W4	0477
9.9	166	1/15	115	60	1	1.0	172.1	130	8.20	10	074 10296	494 01054	34R4BFCI-W4	0476
17	154	1/9	115	60	1	1.4	97.5	130	9.20	12	074 10296	494 01006	34R6BFCI-W4	0485
26	146	1/9	115	60	1	1.4	65.5	130	9.20	12	074 10297	494 01006	34R6BFCI-W3	0484
39	108	1/9	115	60	1	1.4	43.9	130	9.20	12	074 10297	494 01006	34R6BFCI-W3	0483
57	73	1/9	115	60	1	1.4	29.7	130	9.20	12	074 10297	494 01006	34R6BFCI-W3	0482
83	53	1/9	115	60	1	1.4	20.4	65	9.20	12	074 10296	494 01006	34R6BFCI-W2	0481
123	36	1/9	115	60	1	1.4	13.8	65	9.20	12	074 10296	494 01006	34R6BFCI-W2	0480
181	24	1/9	115	60	1	1.4	9.4	65	9.20	12	074 10296	494 01006	34R6BFCI-W2	0479
310	14	1/9	115	60	1	1.4	5.5	65	9.20	12	074 10296	494 01006	34R6BFCI-W2	0478

34R-W Gearmotor shown with optional "L" bracket (model 0970)

New gear housing design will be phased in during 2nd quarter 2004

New gear housing die casting will eliminate mounting nuts during the second quarter of 2004. Mounting threads and location, and all other dimensions and overall size will not be affected.



"S" (4) 1/4-28 UNF-2B .50" deep minimum on 4.78 in. bolt circle



Parallel Shaft AC Gearmotors

up to 175 lb-in. continuous



34R-W

Standard Features

- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Class "B" insulation system operated within Class "A" limits to prolong winding and lubricant life
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Unvented gearhousing for universal horizontal mounting
- Industrial lip type seals on motor and output shafts
- Needle bearings on output shaft for increased radial load capacity and long life
- Permanently lubricated with high-performance lubricant
- Wide reinforced thermoplastic helical primary gear for quietness and hardened steel spur gearing on subsequent stages for high output torque and long life
- Helical pinion accurately cut on motor shaft for maximum strength and minimum noise

Application Information

- See page 64 for connection diagrams
- Capacitor is not included. Order with motor, see page 63
- Face mounting is standard
- Motors operate satisfactorily on 115 V, 50 Hz

Optional Accessories

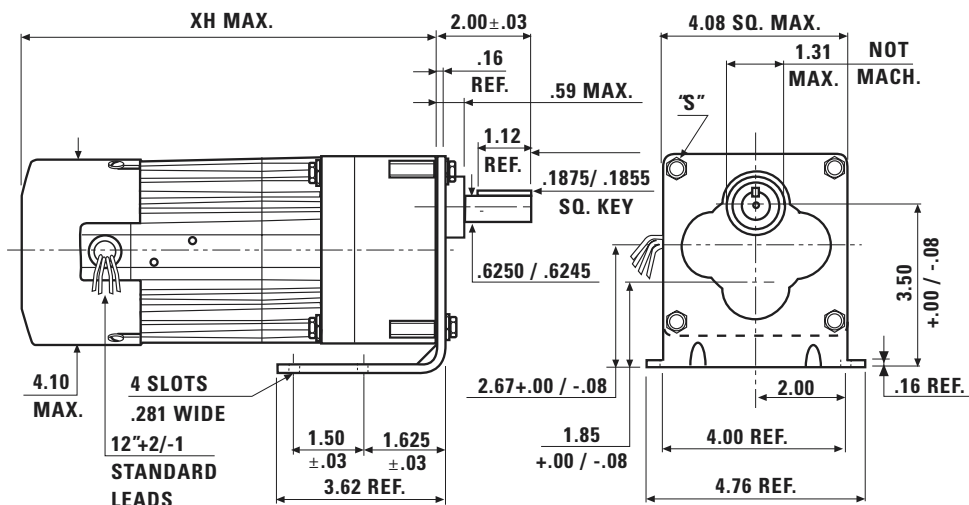
- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62
- "L" bracket kit model 0970 permits base, ceiling, and sidewall mounting, see page 62
- Adapter plate kit model 0995 provides for drop-in replacement of competitive gearmotors, see page 62

Speed (rpm)	Rated Torque (lb-in.)	Motor HP	V	Hz	Ph	A	Gear Ratio	Radial Load (lbs.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No.	Product Type	Model Number
Permanent Split Capacitor, Non-Synchronous														
5.4	175	1/15	115	60	1	1.0	312.4	130	8.20	10	074 10296	494 01054	34R4BFCI-W4	0477
9.9	166	1/15	115	60	1	1.0	172.1	130	8.20	10	074 10296	494 01054	34R4BFCI-W4	0476
17	154	1/9	115	60	1	1.4	97.5	130	9.20	12	074 10296	494 01006	34R6BFCI-W4	0485
26	146	1/9	115	60	1	1.4	65.5	130	9.20	12	074 10297	494 01006	34R6BFCI-W3	0484
39	108	1/9	115	60	1	1.4	43.9	130	9.20	12	074 10297	494 01006	34R6BFCI-W3	0483
57	73	1/9	115	60	1	1.4	29.7	130	9.20	12	074 10297	494 01006	34R6BFCI-W3	0482
83	53	1/9	115	60	1	1.4	20.4	65	9.20	12	074 10296	494 01006	34R6BFCI-W2	0481
123	36	1/9	115	60	1	1.4	13.8	65	9.20	12	074 10296	494 01006	34R6BFCI-W2	0480
181	24	1/9	115	60	1	1.4	9.4	65	9.20	12	074 10296	494 01006	34R6BFCI-W2	0479
310	14	1/9	115	60	1	1.4	5.5	65	9.20	12	074 10296	494 01006	34R6BFCI-W2	0478

34R-W Gearmotor shown with optional "L" bracket (model 0970)

Current design – will be phased out during 2nd quarter 2004

New gear housing die casting will eliminate mounting nuts during the second quarter of 2004. Mounting threads and location, and all other dimensions and overall size will not be affected.



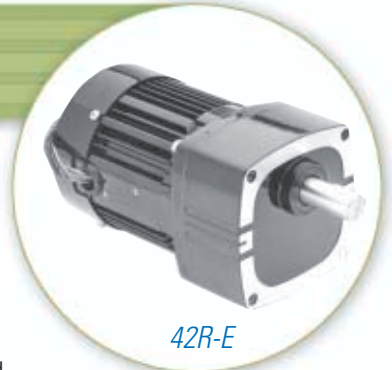
"S" (4) 1/4-28 UNF-2B .50" deep minimum on 4.78 in. bolt circle



BODINE
ELECTRIC
COMPANY

Parallel Shaft AC Gearmotors

up to 341 lb-in. continuous



42R-E



Standard Features

- See page 47 for 42R motor information
- Unvented gearhousing for universal horizontal mounting
- Industrial lip type seals on motor and output shafts
- Needle bearings throughout for increased radial load capacity and long life
- Permanently lubricated with high-performance lubricant
- Selectively hardened helical gearing for quietness and high output to size ratio

Application Information

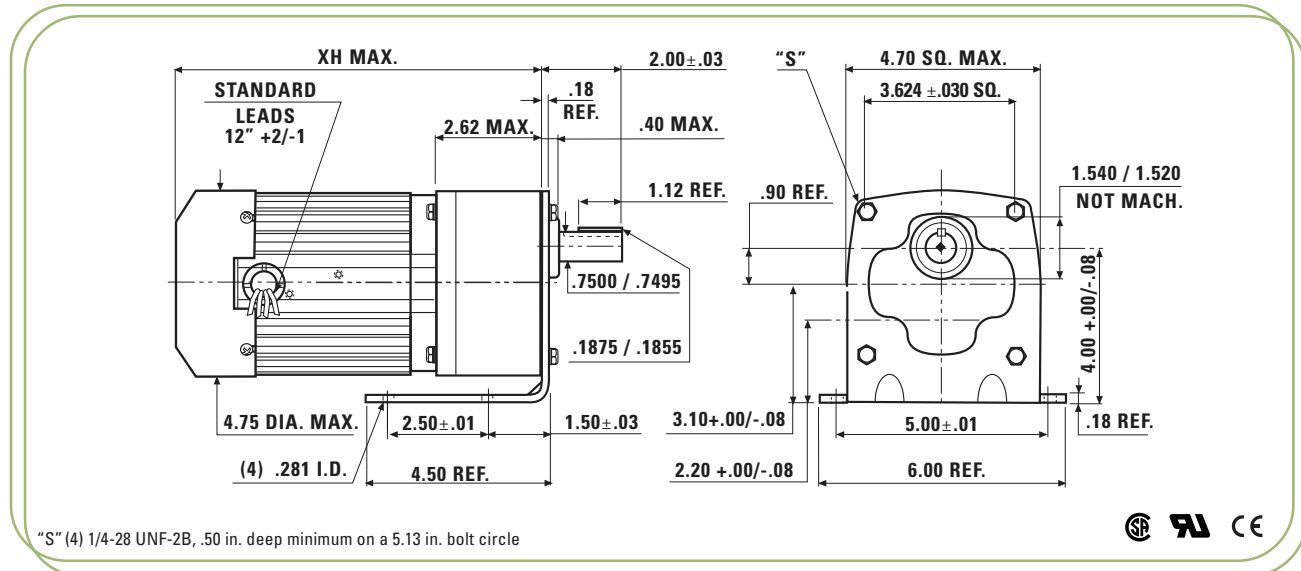
- See page 64 for connection diagrams
- Capacitor is not included. Order with motor, see p. 61
- Face mounting is standard

Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62
- Stamped terminal box kit model 0982 see page 62
- "L" bracket kit model 0969 permits base, ceiling, and sidewall mounting, see page 62
- Adapter plate kit model 0995 provides for drop-in replacement of competitive gearmotors, see page 62

Speed (rpm)	Rated Torque (lb-in.)	Motor HP	V	Hz	Ph	A	Gear Ratio	Radial Load (lbs.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No.	Product Type	Model Number
Permanent Split Capacitor, Non-Synchronous														
5.7	310	1/12	115	60	1	1.2	300	200	8.02	12.0	074 10296	494 00031	42R3BFCI-E4	0671
9.4	341	1/12	115	60	1	1.2	180	200	8.02	12.0	074 10296	494 00031	42R3BFCI-E4	0669
28	270	1/6	115	60	1	1.9	60	200	9.08	14.5	074 10297	494 00034	42R5BFCI-E3	0685
57	135	1/6	115	60	1	1.9	30	300	9.08	14.5	074 10297	494 00034	42R5BFCI-E3	0683
85	90	1/6	115	60	1	1.9	20	300	9.08	14.5	074 10297	494 00034	42R5BFCI-E3	0681
170	45	1/6	115	60	1	1.9	10	300	9.08	14.5	074 10296	494 00034	42R5BFCI-E2	0680
340	25	1/6	115	60	1	1.9	5	300	9.08	14.5	074 10297	494 00034	42R5BFCI-E1	0679
Split Phase (with centrifugal switch), Non-Synchronous														
5.7	310	1/12	115	60	1	2.4	300	200	8.02	12	074 10292	-	42R3BFSI-E4	0639
9.4	341	1/12	115	60	1	2.4	180	200	8.02	12	074 10292	-	42R3BFSI-E4	0637
14	277	1/12	115	60	1	2.4	120	200	8.02	12	074 10292	-	42R3BFSI-E4	0636
19	208	1/12	115	60	1	2.4	90	200	8.02	12	074 10292	-	42R3BFSI-E4	0635
28	270	1/6	115	60	1	3.6	60	200	9.08	14.5	074 10293	-	42R5BFSI-E3	0655
42	180	1/6	115	60	1	3.6	40	200	9.08	14.5	074 10293	-	42R5BFSI-E3	0654
57	135	1/6	115	60	1	3.6	30	300	9.08	14.5	074 10293	-	42R5BFSI-E3	0653
85	90	1/6	115	60	1	3.6	20	300	9.08	14.5	074 10293	-	42R5BFSI-E3	0652
115	68	1/6	115	60	1	3.6	15	300	9.08	14.5	074 10292	-	42R5BFSI-E2	0651
170	45	1/6	115	60	1	3.6	10	300	9.08	14.5	074 10292	-	42R5BFSI-E2	0650
340	25	1/6	115	60	1	3.6	5	300	9.08	14.5	074 10293	-	42R5BFSI-E1	0649
Three Phase, Non-Synchronous														
28	270	1/4	230	60	3	1.2	60	200	9.08	14.5	074 10007	-	42R5BFPP-E3	0667
57	135	1/4	230	60	3	1.2	30	300	9.08	14.5	074 10007	-	42R5BFPP-E3	0666
170	45	1/4	230	60	3	1.2	10	300	9.08	14.5	074 10007	-	42R5BFPP-E2	0665

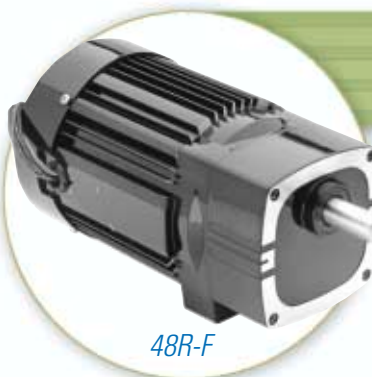
42R-E Gearmotor shown with optional "L" bracket (model 0969)



MADE IN U.S.A.

Parallel Shaft AC Gearmotors

up to 250 lb-in. continuous



48R-F

FOR INVERTER DUTY MODELS



SEE PAGES 24-42

Standard Features

- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Class "B" insulation system operated within Class "A" limits to prolong winding and lubricant life
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Unvented gearhousing for universal horizontal mounting
- Industrial lip type seals on motor and output shafts
- Needle bearings throughout for increased radial load capacity and long life
- Permanently lubricated with high-performance lubricant
- Hardened helical gearing for quietness and high output to size ratio

Application Information

- See page 64 for connection diagrams
- Capacitor is not included. Order with motor, see page 63
- Face mounting is standard

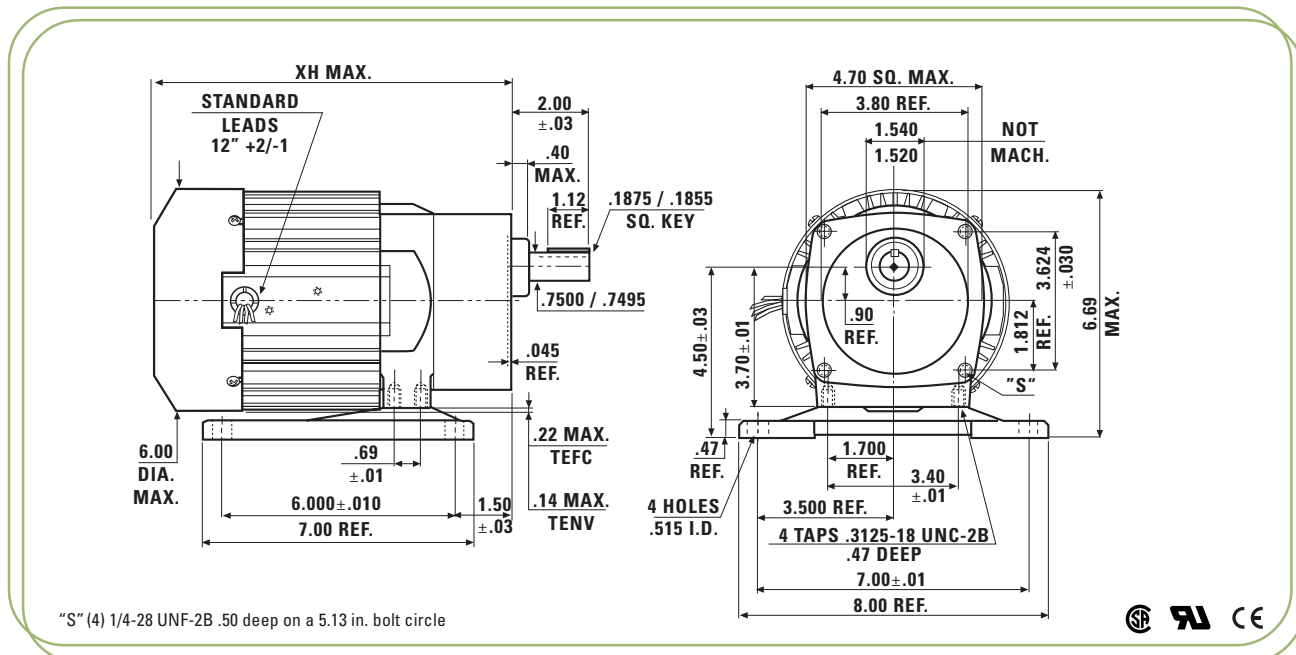
Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62
- Steel terminal box kit model 0982 see page 62
- Rigid base kit model 0989 permits base mounting, see page 62
- Adapter plate kit model 0995 provides for drop-in replacement of competitive gearmotors, see page 62

Speed (rpm)	Rated Torque (lb-in.)	Motor HP	V	Hz	Ph	A	Gear Ratio	Radial Load (lbs.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No. 115V/230V	Product Type	Model Number ¹
Permanent Split Capacitor, Non-Synchronous														
57	250	1/3	115/230	60	1	4.0/2.0	30	300	10.47	26	074 10295	494 00035/ 494 00033	48R6BFCl-F3	0694
85	167	1/3	115/230	60	1	4.0/2.0	20	300	10.47	26	074 10295	494 00035/ 494 00033	48R6BFCl-F3	0693
113	162	1/3	115/230	60	1	4.0/2.0	15	300	10.47	26	074 10294	494 00035/ 494 00033	48R6BFCl-F2	N0695
170	108	1/3	115/230	60	1	4.0/2.0	10	300	10.47	26	074 10294	494 00035/ 494 00033	48R6BFCl-F2	0692
340	56	1/3	115/230	60	1	4.0/2.0	5	300	10.47	26	074 10295	494 00035/ 494 00033	48R6BFCl-F1	0691
Split Phase (with centrifugal switch), Non-Synchronous														
57	250	1/3	115/230	60	1	4.8/2.4	30	300	10.47	26	074 10299	-	48R6BFSl-F3	0664
85	167	1/3	115/230	60	1	4.8/2.4	20	300	10.47	26	074 10299	-	48R6BFSl-F3	0663
170	108	1/3	115/230	60	1	4.8/2.4	10	300	10.47	26	074 10298	-	48R6BFSl-F2	0662
340	56	1/3	115/230	60	1	4.8/2.4	5	300	10.47	26	074 10299	-	48R6BFSl-F1	0661
Three Phase, Non-Synchronous														
47/57	250	1/2	230/460	50/60	3	1.9/1.4/.95/.7	30	300	10.47	26	074 10103	-	48R6BFPP-F3	0643
70/85	167	1/2	230/460	50/60	3	1.9/1.4/.95/.7	20	300	10.47	26	074 10103	-	48R6BFPP-F3	0642
140/170	115	1/2	230/460	50/60	3	1.9/1.4/.95/.7	10	300	10.47	26	074 10103	-	48R6BFPP-F2	0641
280/340	58	1/2	230/460	50/60	3	1.9/1.4/.95/.7	5	300	10.47	26	074 10103	-	48R6BFPP-F1	N0640

¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

48R-F Gearmotor shown with optional rigid base (model 0989)



Right Angle AC Gearmotors

up to 37 lb-in. continuous



34R-3F

FOR INVERTER DUTY MODELS



SEE PAGES 24-42

Standard Features

- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Class "B" insulation system operated within Class "A" limits to prolong winding and lubricant life
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Industrial lip type seals on motor and output shafts
- Bronze sleeve bearings on output shaft oiled by felt wicks and reservoir for quietness
- Permanently lubricated with high-performance lubricant
- Bronze worm gear for high shock load capability
- Hardened and ground worm for strength and long life

Application Information

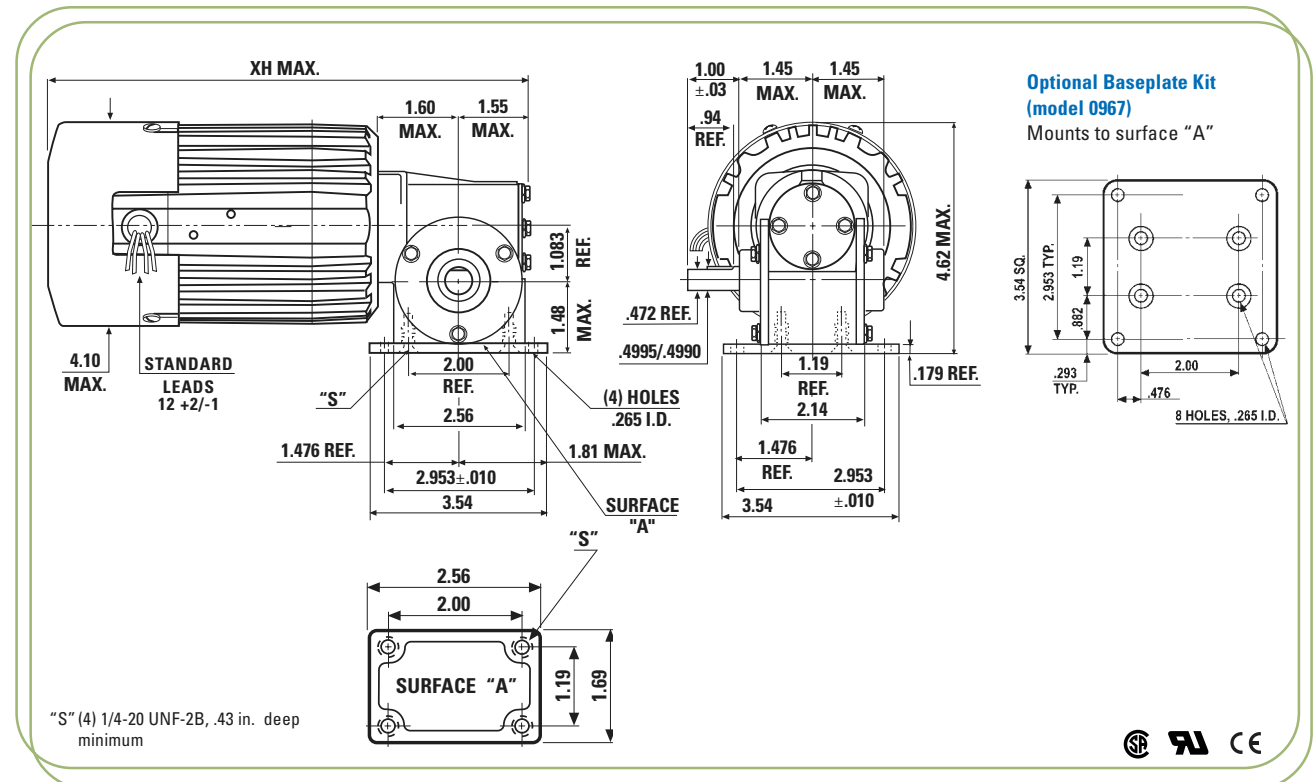
- See page 64 for connection diagrams
- Capacitor is not included. Order with motor, see page 63
- Mounting is via four tapped holes in the bottom of the gearhead
- Motors operate satisfactorily on 115 V, 50 Hz
- Hollow shaft configurations are available. See Web site for mounting and shaft details. These models require lead time and minimum quantities.

Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62
- Gearhead baseplate kit model 0967 shown on page 62

Speed (rpm)	Rated Torque (lb-in.)	Motor HP	V	Hz	Ph	A	Gear Ratio	Radial Load (lbs.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No.	Product Type	Model Number
Permanent Split Capacitor, Non-Synchronous														
28	37	1/15	115	60	1	1.0	60	40	8.69	9.3	074 10296	494 01054	34R4BFCI-3F	0492
43	37	1/15	115	60	1	1.0	40	40	8.69	9.3	074 10296	494 01054	34R4BFCI-3F	0491
57	30	1/15	115	60	1	1.0	30	40	8.69	9.3	074 10296	494 01054	34R4BFCI-3F	0487
85	27	1/15	115	60	1	1.0	20	40	8.69	9.3	074 10296	494 01054	34R4BFCI-3F	0490
113	20	1/15	115	60	1	1.0	15	5	8.69	9.3	074 10296	494 01054	34R4BFCI-3F	0489
170	16	1/15	115	60	1	1.0	10	5	8.69	9.3	074 10296	494 01054	34R4BFCI-3F	0488

34R-3F Gearmotor shown with optional baseplate kit (model 0967)



Right Angle AC Gearmotors

up to 121 LB-IN. continuous



34R-5F

Standard Features

- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Class "B" insulation system operated within Class "A" limits to prolong winding and lubricant life
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Unvented gearhousing for universal horizontal mounting
- Industrial lip type seals on motor and output shafts
- Bronze sleeve bearings on output shaft oiled by felt wicks and reservoir for quietness
- Permanently lubricated with high-performance lubricant
- Bronze worm gear for high shock load capability
- Hardened and ground worm for strength and long life

Application Information

- See page 64 for connection diagrams
- Capacitor is not included. Order with motor, see page 63
- Mounting is via four feet on the gearhead
- Hollow shaft configurations are available. See Web site for mounting and shaft details. These models require lead time and minimum quantities.

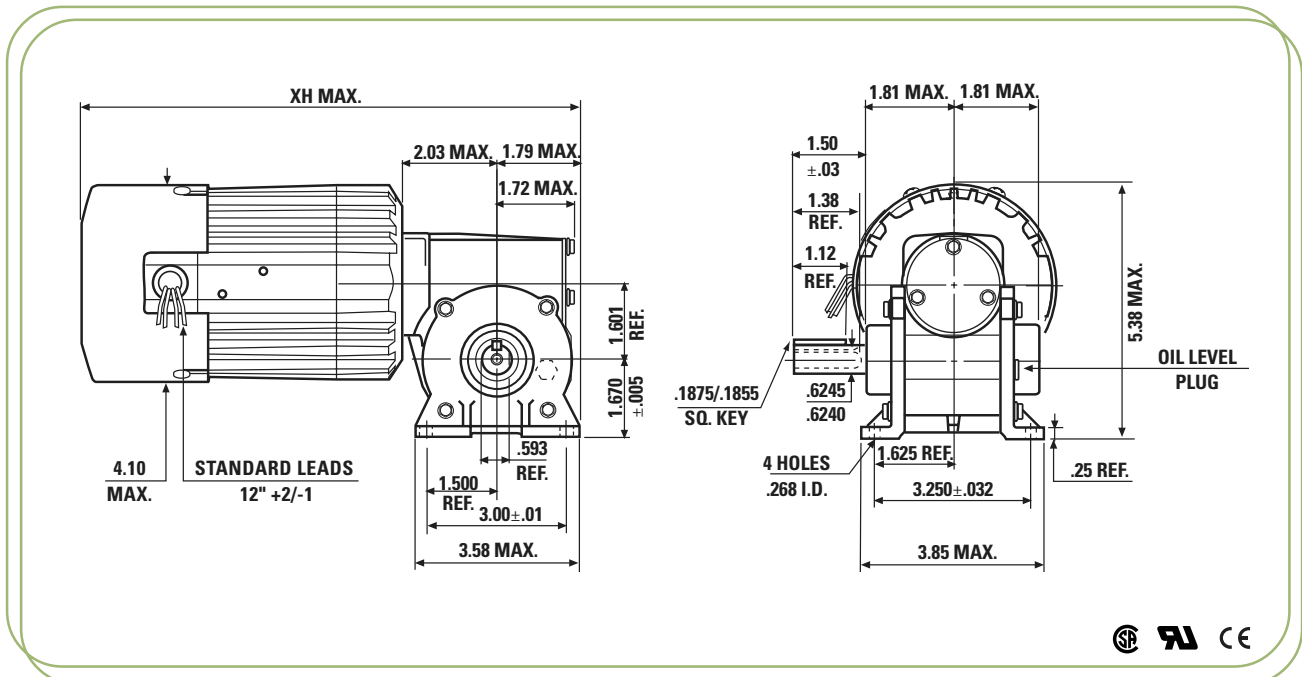
Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62

Speed 50/60 Hz (rpm)	Rated Torque 50/60 Hz (lb-in.)	Motor HP	V	Hz	Ph	A 50/60 Hz	Gear Ratio	Radial Load (lbs.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No.	Product Type	Model Number ¹
Permanent Split Capacitor, Non-Synchronous														
19/23	121/102	1/9	115	50/60	1	1.8/1.4	75	80	10.38	12.0	074 10296	494 01006	34R6BFCl-5F	0524
23/28	111/93	1/9	115	50/60	1	1.8/1.4	60	80	10.38	12.0	074 10296	494 01006	34R6BFCl-5F	N0523
28/34	104/87	1/9	115	50/60	1	1.8/1.4	50	80	10.38	12.0	074 10296	494 01006	34R6BFCl-5F	N0522
35/43	93/78	1/9	115	50/60	1	1.8/1.4	40	80	10.38	12.0	074 10296	494 01006	34R6BFCl-5F	0521
47/57	83/70	1/9	115	50/60	1	1.8/1.4	30	80	10.38	12.0	074 10296	494 01006	34R6BFCl-5F	N0519
70/85	60/50	1/9	115	50/60	1	1.8/1.4	20	80	10.38	12.0	074 10296	494 01006	34R6BFCl-5F	0518
93/113	45/37	1/9	115	50/60	1	1.8/1.4	15	80	10.38	12.0	074 10296	494 01006	34R6BFCl-5F	N0514
140/170	35/29	1/9	115	50/60	1	1.8/1.4	10	80	10.38	12.0	074 10296	494 01006	34R6BFCl-5F	0513
280/340	19/16	1/9	115	50/60	1	1.8/1.4	5	80	10.38	12.0	074 10296	494 01006	34R6BFCl-5F	N0511

¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

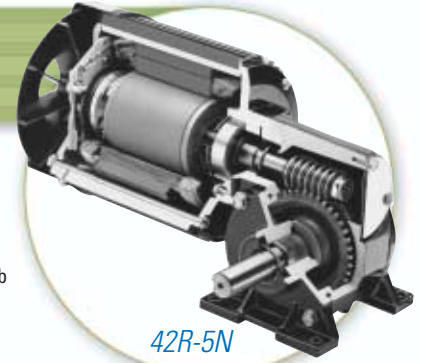
34R-5F Gearmotor



BODINE[®]
ELECTRIC
COMPANY

Right Angle AC Gearmotors

up to 113 lb-in. continuous



42R-5N

FOR INVERTER DUTY MODELS



SEE PAGES 24-42

Standard Features

- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Class "B" insulation system operated within Class "A" limits to prolong winding and lubricant life
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Unvented gearhousing for universal horizontal mounting
- Industrial lip type seals on motor and output shafts
- Needle bearings throughout for increased radial load capacity and long life
- Permanently lubricated with high-performance lubricant
- Bronze worm gear for high shock load capability
- Hardened and ground worm for strength and long life

Application Information

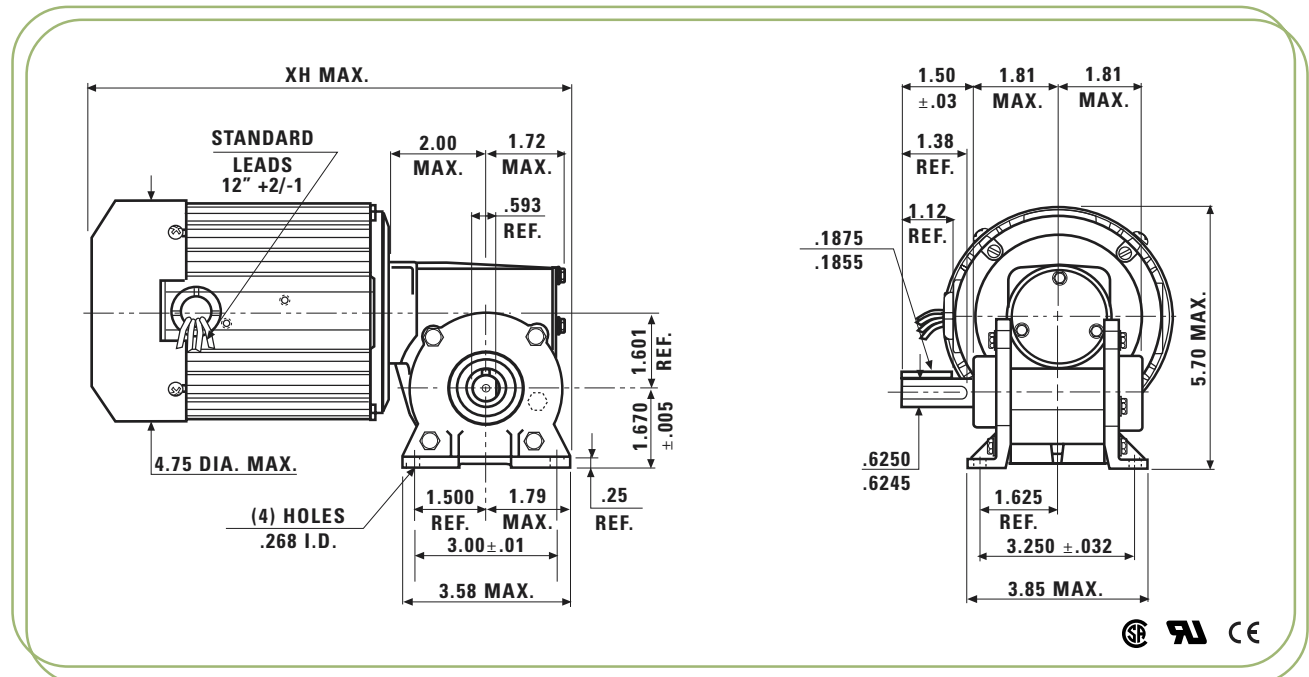
- See page 64 for connection diagrams.
- Capacitor is not included. Order with motor, see page 63
- Mounting is via four feet on the gearhead
- Hollow shaft configurations are available. See Web site for mounting and shaft details. These models require lead time and minimum quantities.

Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating, see page 62
- Stamped terminal box kit model 0982 shown on page 62

Speed (rpm)	Rated Torque (lb-in.)	Motor HP	V	Hz	Ph	A	Gear Ratio	Radial Load (lbs.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No.	Product Type	Model Number
Permanent Split Capacitor, Non-Synchronous														
38	113	1/6	115	60	1	2.1	40	180	10.25	15.5	074 10296	494 00034	42R5BFCI-5N	0678
75	81	1/6	115	60	1	2.1	20	180	10.25	15.5	074 10296	494 00034	42R5BFCI-5N	0677
150	47	1/6	115	60	1	2.1	10	180	10.25	15.5	074 10296	494 00034	42R5BFCI-5N	0672
250	23	1/6	115	60	1	2.1	5	180	10.25	15.5	074 10296	494 00034	42R5BFCI-5N	0670
Split Phase (with centrifugal switch), Non-Synchronous														
43	113	1/6	115	60	1	3.6	40	180	10.25	15.5	074 10292	—	42R5BF5I-5N	0648
85	75	1/6	115	60	1	3.6	20	180	10.25	15.5	074 10292	—	42R5BF5I-5N	0647
170	43	1/6	115	60	1	3.6	10	180	10.25	15.5	074 10292	—	42R5BF5I-5N	0646
340	23	1/6	115	60	1	3.6	5	180	10.25	15.5	074 10292	—	42R5BF5I-5N	0645
Three Phase, Non-Synchronous														
43	113	1/4	230	60	3	1.2	40	180	10.25	15.5	074 10007	—	42R5BFPP-5N	0634
85	75	1/4	230	60	3	1.2	20	180	10.25	15.5	074 10007	—	42R5BFPP-5N	0633
170	67	1/4	230	60	3	1.2	10	180	10.25	15.5	074 10007	—	42R5BFPP-5N	0630
340	36	1/4	230	60	3	1.2	5	180	10.25	15.5	074 10007	—	42R5BFPP-5N	0629

42R-5N Gearmotor



Right Angle AC Gearmotors

up to 77 lb-in. continuous



34R-5R and
42R-5L

Product Description

Based on our "5R" gearhead, these sturdy single reduction worm gearmotors are designed for transmitting relatively substantial torque. The separable, hardened and ground, steel worm is key-slot and tongue driven. This gearhead is oil lubricated for life, and equipped with a bronze worm gear for quiet operation.

Standard Features

- Designed as bolt-in replacements for N-Type gearmotors
- Die cast shield and gear housing
- Shielded ball bearings on motor shaft
- Separable worm
- Unvented gearhousing for universal horizontal mounting
- Permanently lubricated with high-performance lubricant
- Supplied with base mounted to motor

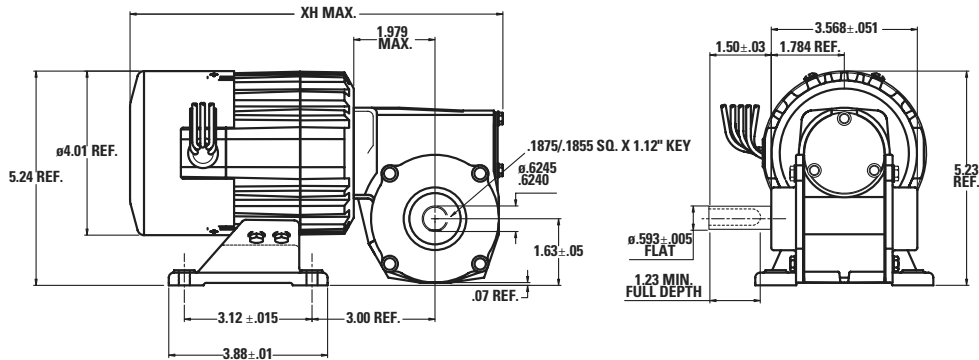
Speed (rpm)	Rated Torque (lb-in.)	Motor HP	V	Hz	Ph	A	Gear Ratio	Radial Load (lbs.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No.	Product Type	Model Number ¹
34R4-5R, Permanent Split Capacitor, Non-Synchronous, 115VAC, 50/60Hz, 1-Phase, Class B (TEFC)														
29	33	1/15	115	60	1	1.0	60	50	9.29	11.5	074 10005*	494 01054	34R4BFCL-5R	0469
43	49	1/15	115	60	1	1.0	40	50	9.29	11.5	074 10005*	494 01054	34R4BFCL-5R	0468
86	32	1/15	115	60	1	1.0	20	50	9.29	11.5	074 10005*	494 01054	34R4BFCL-5R	0466
170	18	1/15	115	60	1	1.0	10	30	9.29	11.5	074 10005*	494 01054	34R4BFCL-5R	0465
42R4-5L, Permanent Split Capacitor, Non-Synchronous, 115VAC, 60Hz, 1-Phase, Class B (TEFC)														
43	77	1/8	115	60	1	1.7	40	80	9.69	13.5	074 10005*	494 01006	42R4BFCL-5L	0627
57	75	1/8	115	60	1	1.7	30	80	9.69	13.5	074 10005*	494 01006	42R4BFCL-5L	0626
85	54	1/8	115	60	1	1.7	20	80	9.69	13.5	074 10005*	494 01006	42R4BFCL-5L	0624
170	31	1/8	115	60	1	1.7	10	10	9.69	13.5	074 10005*	494 01006	42R4BFCL-5L	0623
42R4-5L, Split Phase, Non-Synchronous, 115VAC, 60Hz, 1-Phase, Class B (TEFC)														
43	77	1/8	115	60	1	3.0	40	80	9.69	13.5	074 10004	NONE	42R4BFSL-5L	0620
57	75	1/8	115	60	1	3.0	30	80	9.69	13.5	074 10004	NONE	42R4BFSL-5L	0619
85	54	1/8	115	60	1	3.0	20	80	9.69	13.5	074 10004	NONE	42R4BFSL-5L	0618
170	31	1/8	115	60	1	3.0	10	10	9.69	13.5	074 10004	NONE	42R4BFSL-5L	0617

¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

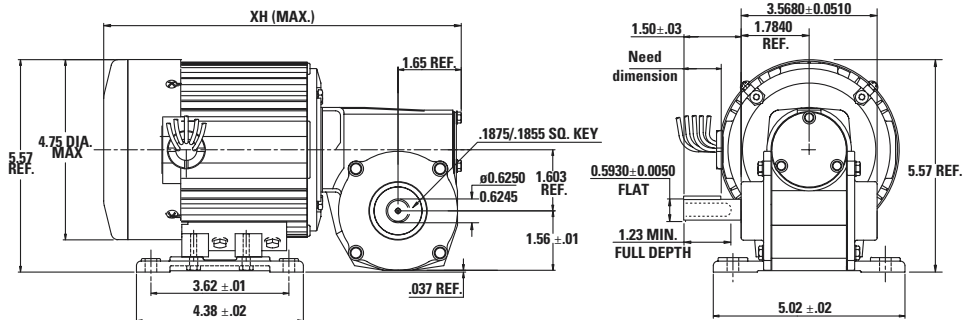
* Alternate connection diagram 074 10296

34R-5R and 42R-5L Gearmotors

34R-5R Gearmotor

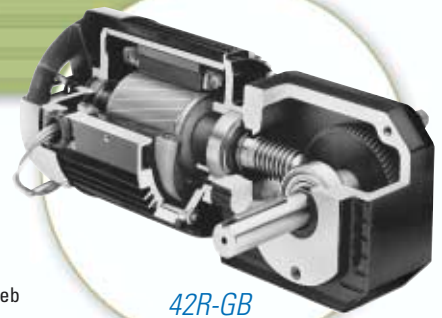


42R-5L Gearmotor



Right Angle AC Gearmotors

up to 380 lb-in. continuous



42R-GB

Standard Features

- Totally enclosed IP-20 rating
- Fan cooled for high output power
- Class "B" insulation system operated within Class "A" limits to prolong winding and lubricant life
- Aluminum center ring and endshields for high thermal efficiency and light weight
- Unvented gearhousing for universal horizontal mounting
- Industrial lip type seals on motor and output shafts
- Ball bearings throughout for increased radial load capacity and long life
- Permanently lubricated with high-performance lubricant
- Hardened helical output gearing for quietness and high output torque
- Bronze worm gear for high shock load capability
- Hardened and ground worm hobbled on the motor shaft for high strength and long life

Application Information

- See page 64 for connection diagrams
- Capacitor is not included. Order with motor, see page 63
- Mounting is via four tapped holes under the gearhead or three tapped holes in the face of the gearhead
- Hollow shaft configurations are available. See Web site for mounting and shaft details. These models require lead time and minimum quantities.

Optional Accessories

- Die cast terminal box kit model 0984,1984 achieves IP-44 rating see page 62
- Stamped terminal box kit model 0982 shown on page 62

FOR INVERTER DUTY MODELS

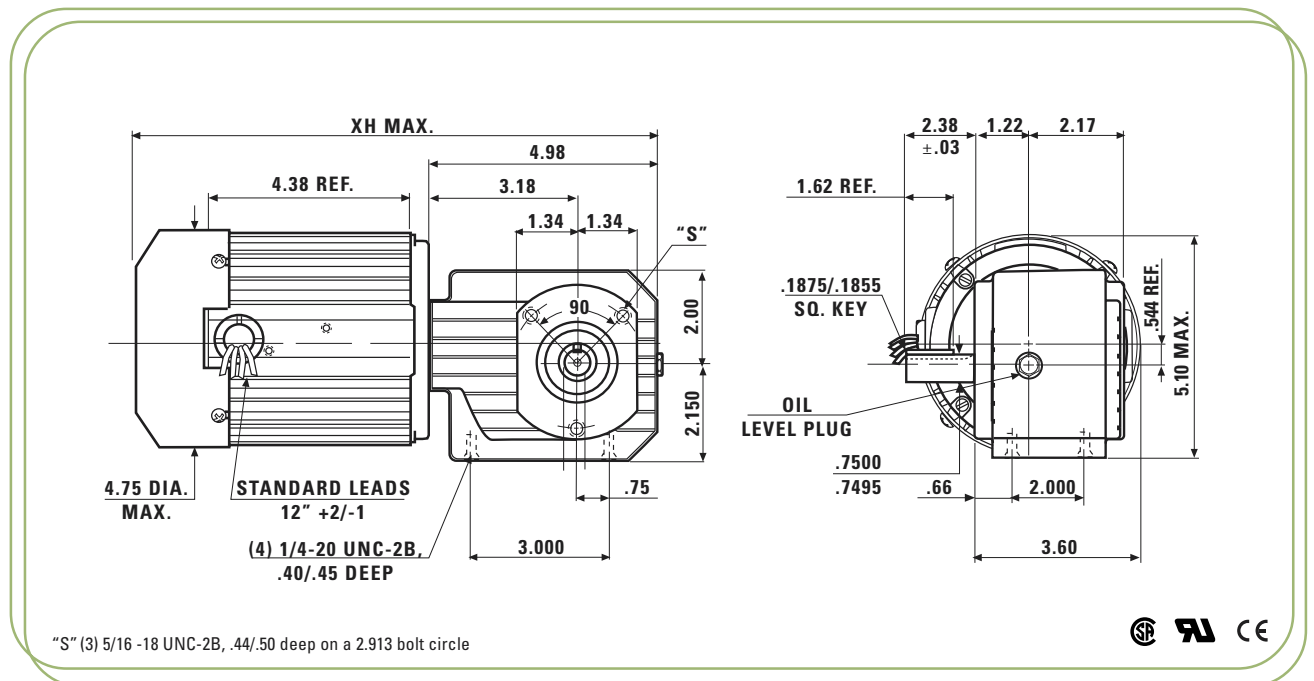


SEE PAGES 24-42

Speed (rpm)	Rated Torque (lb-in.)	Motor HP	V	Hz	Ph	A	Gear Ratio	Radial Load (lbs.)	Length XH (inch)	Weight (lbs.)	Connection Diagram	Capacitor Part No.	Product Type	Model Number ¹
Permanent Split Capacitor, Non-Synchronous														
5.9	380	1/6	115	60	1	1.9	280	200	11.57	17.5	074 10297	494 28281	42R5BFCI-GB	5266
8.9	375	1/6	115	60	1	1.9	190	200	11.57	17.5	074 10297	494 28281	42R5BFCI-GB	N5264
14	290	1/6	115	60	1	1.9	120	200	11.57	17.5	074 10297	494 28281	42R5BFCI-GB	5262
21	278	1/6	115	60	1	1.9	80	200	11.57	17.5	074 10297	494 28281	42R5BFCI-GB	N5261
28	209	1/6	115	60	1	1.9	60	200	11.57	17.5	074 10297	494 28281	42R5BFCI-GB	5260
Three Phase, Non-Synchronous														
5.9	380	1/4	230/460	60	3	1.2/0.6	280	200	11.57	17.5	074 10103	—	42R5BFPP-GB	N5276
8.9	375	1/4	230/460	60	3	1.2/0.6	190	200	11.57	17.5	074 10103	—	42R5BFPP-GB	N5274
14	290	1/4	230/460	60	3	1.2/0.6	120	200	11.57	17.5	074 10103	—	42R5BFPP-GB	N5272
21	307	1/4	230/460	60	3	1.2/0.6	80	200	11.57	17.5	074 10103	—	42R5BFPP-GB	N5271
28	230	1/4	230/460	60	3	1.2/0.6	60	200	11.57	17.5	074 10103	—	42R5BFPP-GB	N5270

¹ NOTE: Model numbers shown in bold type are in stock. "N" model numbers require lead time and minimum quantities.

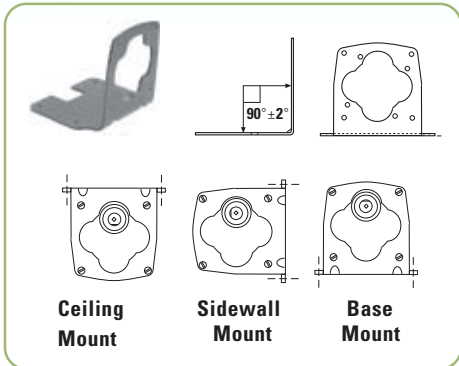
42R-GB Gearmotor



MADE IN U.S.A.

Accessories

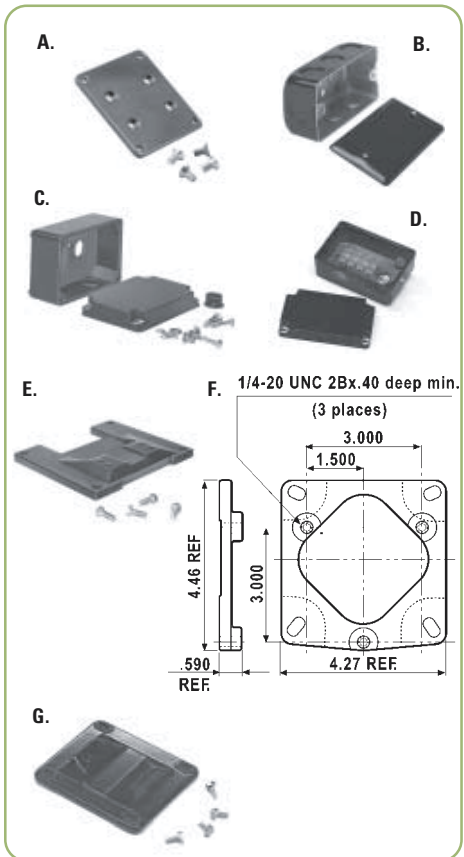
For Induction AC Motors and Gearmotors



Motor and Gearmotor "L" Brackets

Model No.	Description	Ibs.	Dimensions	Deflection lbs.
0969	Kit for "E" and "F" gearmotors	2.5	Page 55	200
0970	Kit for "W" gearmotors	1.75	Page 54	125
0979	Kit for 34R motors	1	Page 48	25
0980	Kit for 34R-Z gearmotors	1.5	Page 53	100
5968	Kit for 30R motors, 30R-D gearmotors	1.25	Page 47, 52	50

Parallel shaft stock gearmotors are designed for universal horizontal mounting only. See "Mounting Positions" on page 2.

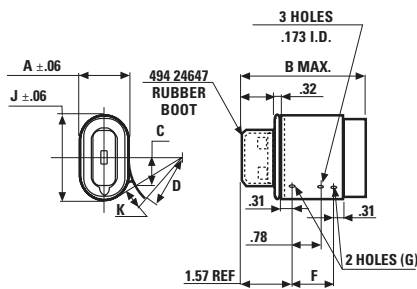
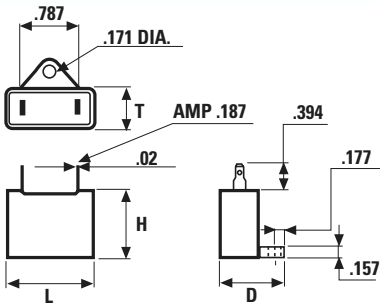


Other Motor and Gearmotor Kits

Item	Model No.	Description	Ibs.	Dimensions
A	0967	Base plate kit for 3F gearmotors	.5	Page 57
B	0982	Steel terminal box kit for 42R and 48R motors and gearmotors	2	—
C	0984	Die cast terminal box kit for 34R, 42R, and 48R motors and gearmotors	1	Page 45, 49, 50
—	5982	Die cast terminal box for 30R motors and gearmotors	1	—
—	1982	Die cast terminal box with terminal block for 30R motors and gearmotors	1	—
D	1984	Die cast terminal box kit with terminal block for 34R, 42R, and 48R motors and gearmotors	1	Page 45, 49, 50
E	0989	Die cast rigid base for 48R-F gearmotors	2.5	Page 56
F	0995	Adaptor plate kit for E and W gearheads provides drop-in replacement of competitive gearmotors.	.5	—
G	0994	Base kit for 34R motor	.5	—

Run Capacitors

For AC Induction Motors and Gearmotors



Metalized Mylar Capacitor Dimensions

Part No.	Mfd. and Volts AC	L	H	T	D
494 00045	0.85-250	1.28	0.87	0.51	0.98
494 00046	1.00-250	1.28	0.87	0.51	0.98
494 00047	1.20-250	1.28	0.87	0.51	0.98
494 00048	1.30-250	1.28	0.87	0.51	0.98
494 00050	1.50-250	1.28	0.87	0.51	0.98
494 00051	1.60-250	1.28	0.87	0.51	0.98
494 01047	2.30-250	1.28	0.87	0.51	0.98
494 01049	0.40-440	1.31	1.03	0.58	1.04
494 01046	1.3-440	1.51	1.07	0.64	1.11
494 26812*	4.0-250	1.48	1.04	0.61	1.11
494 01015*	5.0-250	1.48	1.04	0.61	1.11
494 01054*	10.00-250	1.54	1.30	0.87	1.37
494 01006*	12.50-250	1.97	1.20	0.81	1.28
494 01016*	15.00-250	2.05	1.40	0.89	1.39

* Instead of AMP blade type terminals these part numbers have 20 GA (stranded) black PVC wire, 3.5 in. long. These capacitors can fit inside Bodine model no. 0984 terminal kit.

Oil Filled Capacitor Dimensions (inches)

Part No.	Mfd. and Volts AC	A	B	C	D	F	G	J	K
494 00098	2.5-370	1.31	3.18	0.88	1.62	1.12	.173	2.16	0.34
494 00028	3.75-370	1.31	3.18	0.88	1.62	1.12	.173	2.16	0.34
494 00029	5.0-370	1.31	3.68	0.88	1.62	1.12	.173	2.16	0.34
494 00031	7.5-370	1.31	4.56	0.88	1.62	1.12	.173	2.16	0.34
494 00032	10.0-370	1.91	3.51	1.08	2.50	1.50	.196	2.91	0.31
494 00033	12.5-370	1.91	3.51	1.08	2.50	1.50	.196	2.91	0.31
494 00034	15.0-370	1.91	3.51	1.08	2.50	1.50	.196	2.91	0.31
494 00035	20.0-370	1.91	4.01	1.08	2.50	1.50	.196	2.91	0.31
494 28281	25.0-370	1.91	3.875	1.08	2.50	1.50	.196	2.91	0.31

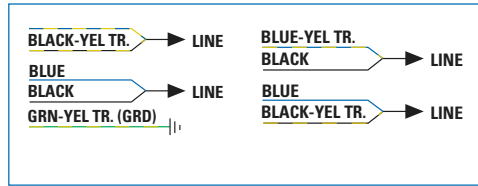
Capacitor Cross Reference

Obsolete Part Number	New (Replacement) Part Number
494 00027	494 00098
494 00054	494 01047
494 00059	494 01049
494 00081	494 01054
494 00082	494 01006
494 00091	494 01046
494 00097	494 01016
494 29449	494 01015

AC Technical Information

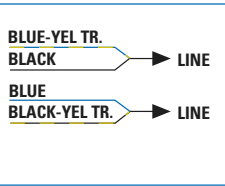
Connection Diagrams

074 10292

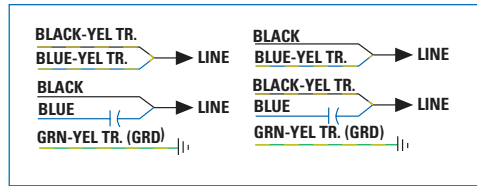


Connect as shown above for clockwise rotation while viewing the output shaft. To reverse direction transpose the black and black-yel. tr. leads.

074 10293

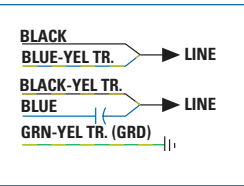


074 10296

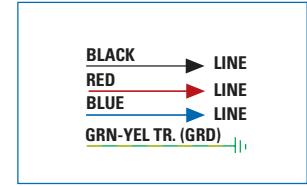


Connect as shown above for clockwise rotation while viewing the output shaft. To reverse direction transpose the black and black-yel. tr. leads.

074 10297

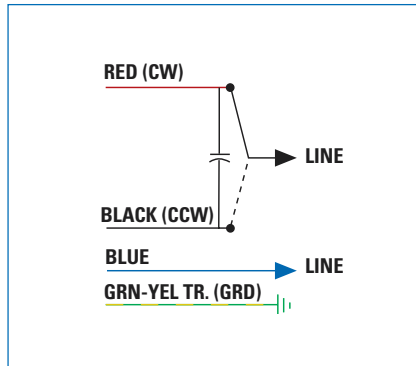


074 10007 or 074 10102



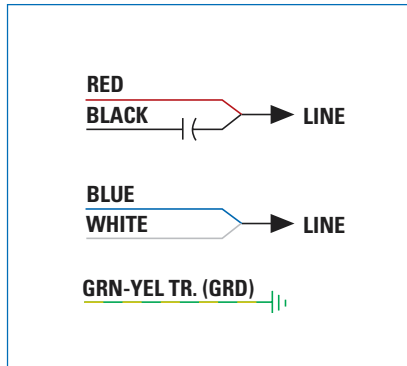
To reverse direction transpose any two leads.

074 10019



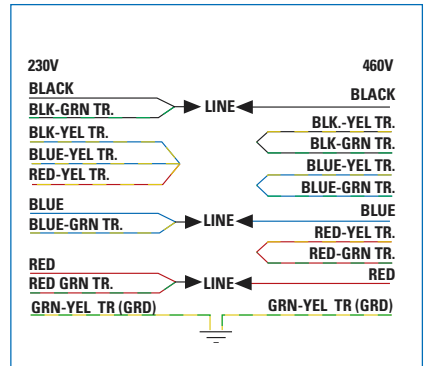
To reverse direction transpose red and black leads.

074 10021



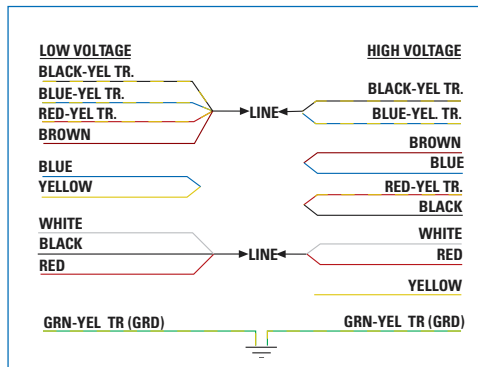
To reverse direction transpose red and blue leads.

074 10012 or 074 10103
(9 leadS, 230/460 V)



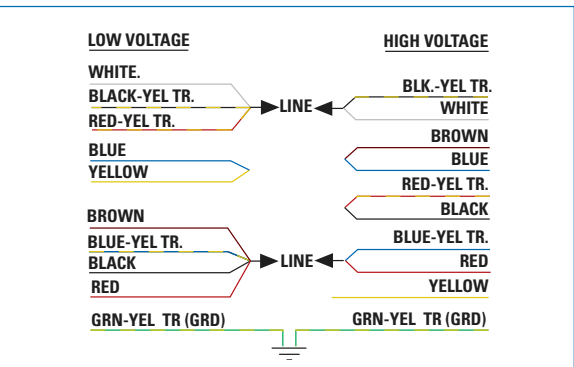
To reverse direction transpose any two leads or combinations.

074 10298 (9 leadS, 115/230 V)

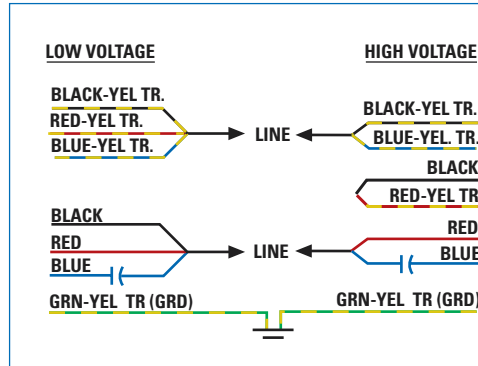


Connect as shown above for clockwise rotation while viewing the output shaft. To reverse direction with 115 V connection, transpose blue -yel. tr. and brown leads with white. To reverse direction with 230 V connection, transpose blue yel. tr with white lead.

074 10299 (9 leadS, 115/230 V)



074 10294



To reverse direction transpose blue and blue-yel. tr. leads.

074 10295

