

# Kiln Duty MOTORS

Baldor- Reliance Kiln Duty motors are designed and manufactured for long life on fan and conveyor applications within soft and hardwood drying kilns. These demanding applications require robust electrical designs and mechanical construction to provide reliable motor operation when exposed to high ambient temperatures and extreme humidity levels. Motors are available on a custom build to order basis for design flexibility. Customers may choose from 2 different ambient levels (95 °C and 120 °C) along with available 10:1 variable torque speed range at 95 °C.



250T – 320T frames have single drilled mounting holes



360T – 440T frames have dual drilled mounting holes

## PRODUCT LINE

**Horsepower:** 5 to 60 HP

**Speed (RPM):** 1800, 1200, 900

**Voltage:** 460 & 575 Volt

**Ambient:** 95°C or 120°C

**Enclosure:** Cast Iron, Open Drip Proof

**Input Power Options:** Sine wave or inverter

## ELECTRICAL FEATURES

- NEMA Premium efficiency per NEMA Table 12-12
- NEMA Design B Torque characteristics
- Single Voltage; 460V, 575V at 60 Hz, Sine Wave Power (3 leads)
- Class H+ insulation (180°C max temp)
- Inverter ready designs meet NEMA MG1 Part 31.4.4.2
- 10:1 Variable Torque, 1.0 Service Factor on Inverter – available on 95°C design
- Engineering review required for inverter capability above 95°C ambients and for Constant Torque speed ranges

## WARRANTY & AGENCY APPROVALS

- 12 Month warranty
- NEMA Premium® efficiency per NEMA table (12-12)
- UL component recognition

## MECHANICAL FEATURES

- Cast Iron Construction includes - Frame, brackets, bearing retainers, conduit box & cover
- 8-foot leads (Silicone rubber with glass over braid)
- 8-foot Lead Sleeves (insulated coated fiberglass)
- Locked pulley end bearing construction
- Regreasible Open Ball Bearing - Heat Stabilized to 150°C
- High Temperature Grease: Dow Corning 44
- Alemite grease inlet and auto relief fitting on both ends of motor
- Corrosion resistant hardware
- Corrosion resistant 2 Part Epoxy Paint system
- Internal epoxy coating (rotor and internal surfaces)
- Stainless Steel nameplate - Laser etched

# Kiln Duty Motors

HP	# of Poles	Frame	Base Motor List \$
5	4	256T	\$4,573
5	6	256T	4,592
5	8	256T	6,239
7.5	4	256T	4,780
7.5	6	256T	4,810
7.5	8	256T	7,146
10	4	256T	4,962
10	6	256T	5,467
10	8	286T	9,041
15	4	256T	5,221
15	6	284T	6,454
15	8	326T	10,613
20	4	256T	5,886
20	6	286T	7,284
20	8	364T/5T	12,182
25	4	286T	6,599
25	6	326T	9,046
25	8	364T/5T	13,554
30	4	326T	9,086
30	6	364T/5T	10,191
30	8	364T/5T	14,082
40	4	364T/5T	9,815
40	6	364T/5T	11,188
40	8	404T/5T	18,407
50	4	364T/5T	10,601
50	6	404T/5T	15,122
50	8	404T/5T	19,949
60	4	364T/5T	11,388
60	6	404T/5T	16,300
60	8	444T/5T	26,217

Figure 1

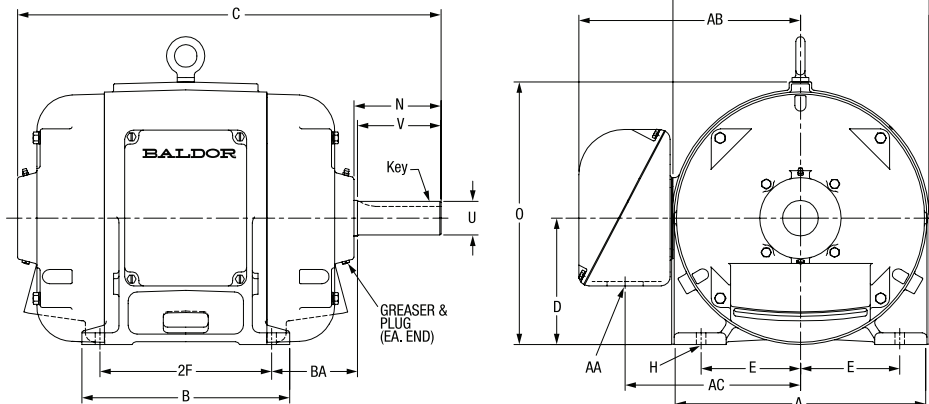
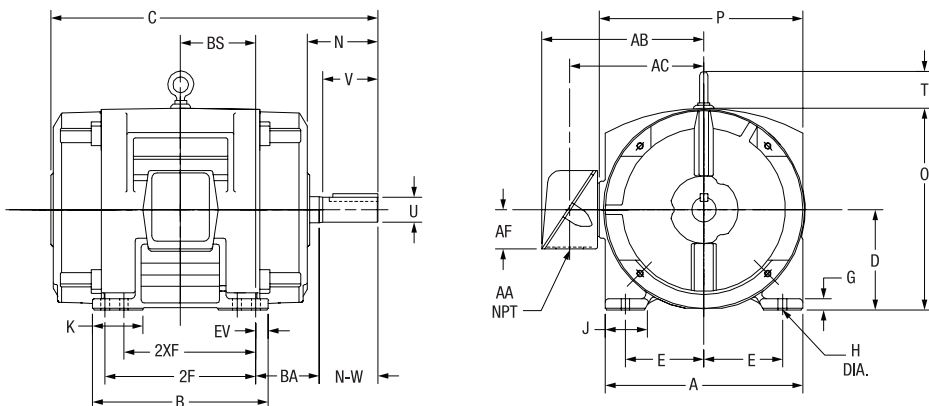


Figure 2



Dimensions in Inches

Frame	Figure #	Mounting				A	B	BA	C	D	P
		E	2F	2XF	H						
254T	1	5.00	8.25	-	0.53	12.63	9.75	4.25	20.63	6.25	12.63
256T	1	5.00	10.00	-	0.53	12.63	11.50	4.25	22.38	6.25	12.88
284T	1	5.50	9.50	-	0.53	13.68	11.50	4.75	23.44	7.00	14.06
286T	1	5.50	11.00	-	0.53	13.68	13.00	4.75	24.94	7.00	14.06
324T	1	6.25	10.50	-	0.66	15.88	12.88	5.25	26.13	8.00	16.21
326T	1	6.25	12.00	-	0.66	15.88	14.50	5.25	27.63	8.00	16.21
364T/5T	2	7.00	12.25	11.25	0.69	17.00	14.25	5.88	29.70	9.00	19.56
404T/5T	2	8.00	13.75	12.25	0.81	19.00	16.00	6.62	34.00	10.00	21.81
444T/5T	2	9.00	16.50	14.50	0.81	21.00	19.00	7.50	39.56	11.00	23.62

Frame	Figure #	EV	N	Shaft & Key				Terminal Box			O+T
				U	V	Square	Length	AA	AB	AC	
254T	1	5.00	8.25	-	0.53	12.63	9.75	4.25	20.63	6.25	12.63
256T	1	5.00	10.00	-	0.53	12.63	11.50	4.25	22.38	6.25	12.88
284T	1	5.50	9.50	-	0.53	13.68	11.50	4.75	23.44	7.00	14.06
286T	1	5.50	11.00	-	0.53	13.68	13.00	4.75	24.94	7.00	14.06
324T	1	6.25	10.50	-	0.66	15.88	12.88	5.25	26.13	8.00	16.21
326T	1	6.25	12.00	-	0.66	15.88	14.50	5.25	27.63	8.00	16.21
364T/5T	2	7.00	12.25	11.25	0.69	17.00	14.25	5.88	29.70	9.00	19.56
404T/5T	2	8.00	13.75	12.25	0.81	19.00	16.00	6.62	34.00	10.00	21.81
444T/5T	2	9.00	16.50	14.50	0.81	21.00	19.00	7.50	39.56	11.00	23.62

**BALDOR**

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**Baldor Electric Company**

P.O. Box 2400 • Fort Smith, AR 72902-2400 U.S.A.

Phone (479) 646-4711 • Fax (479) 648-5792

[www.baldor.com](http://www.baldor.com)