

# High Performance Variable-Speed AC Motors



## Bulletin 1329L Variable-Speed AC Motors, 5 to 800 HP

### Optimized Electrical Designs

Every 1329L High Performance motor design is optimized for adjustable frequency service – not just a re-rated or oversized standard motor.

Rotor slot configuration and stator windings are optimized to provide:

- Reduced KVA/HP for lighter controller loading.
- Lower flux saturation to reduce peak currents and nuisance controller “tripping” induced by peak currents.
- More horsepower per frame size for increased dynamic response – up to three frame diameters smaller than corresponding NEMA frame fixed-speed motors.
- Smoother operation at very low shaft speed.
- Reduced magnetic noise levels due to low flux density designs.



### Premium Insulation System

To help assure superior life in most industrial applications, Bulletin 1329L motors utilize NEMA Class H materials to provide improved mechanical and thermal strength. The insulation system is designed to meet and exceed NEMA standard MG1 Part 31.40.4.2 for resistance to spikes of 1600 volts with a 0.1 microsecond rise time. Furthermore, the insulation system has a minimum CIV (Rockwell Automation test method) rating of 1600 volts at rated operating temperature.

All motors include three thermostats as standard (one per phase) for optimum thermal protection.

*When your variable-speed application demands high performance over wide speed ranges, Bulletin 1329L High Performance motors offer an exceptional solution. Utilizing state-of-the-art laminated frame technology, 1329L motors deliver high performance benefits:*

- 100% torque to zero speed on flux vector and field oriented control drives.
- Wide selection of base speeds and modifications available to support your application requirements.
- Control-Matched with Allen-Bradley drives.



# AB PLCs



Bringing Together Leading Brands in Industrial Automation

# Bulletin 1329L High Performance Motors



*Bulletin 1329L High Performance motors are Control-Matched with Allen-Bradley drives for optimum performance and value.*

## Superior Mechanical Features

- Bulletin 1329L High Performance feet-on-bracket design provides a rigid, vibration-resistant, mechanical assembly with increased bearing support to further improve structural dynamics.
- Laminated frame “monobloc” construction increases power densities (HP/frame size) to allow the motor to fit in a minimal space.
- All motors include as standard a machined mounting surface for quick, easy installation of an optional feedback device.
- Cast iron brackets with concentric bearing and frame fits are machined in a single operation to assure uniform air gap and reduced noise.
- Exclusive PLS® Positive Lubrication System with inner cap and open bearing provides a generous grease supply and extended bearing life.
- Easily modified to splash-proof or totally enclosed separately ventilated.

## Application Versatility

Bulletin 1329L High Performance motors have years of successful field operation in high performance applications:

- Low inertia, cut-to-length
- Paper machines
- Extruders
- Printing presses
- Machine tool
- Test stands
- Drilling rigs



## Commitment to Quality

The Allen-Bradley 1329L High Performance motors are manufactured in an ISO9001 certified facility and are available with UL® component recognition and CSA approval.

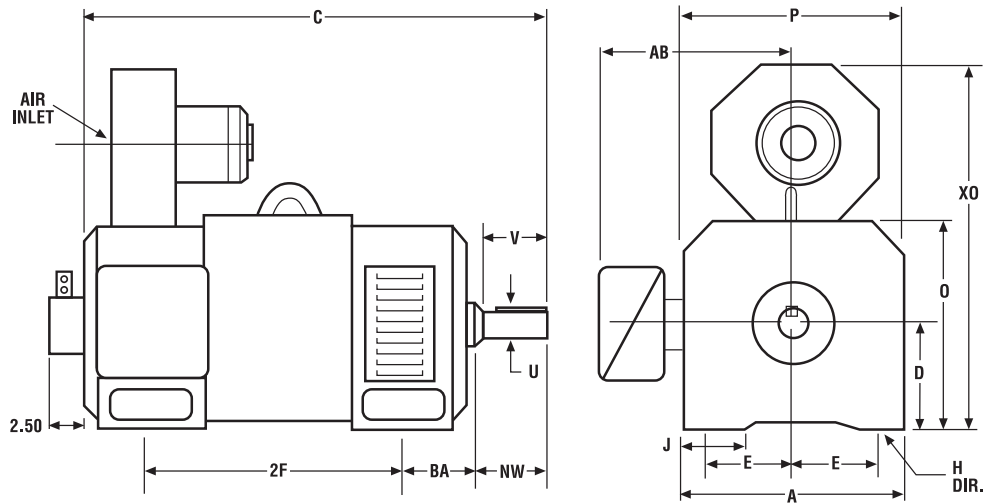
# Performance Data

## Typical Ratings for 1750 RPM Base Speed Motors

HP	15-20	25	30	40	50	60	75	100	125	150	200	250	300	350	400	450	500	600	700	800
Frame	L2153	L2158	L2158	L2162	L2564	L2564	L2570	L2869	L2875	L2882	L3292	L3203	L3698	L3614	L3614	L4034	L4034	L4046	L4429	L4440
Rotor Inertia <sup>(1)</sup>	1.31	1.69	1.69	1.92	2.90	2.90	3.50	6.00	7.10	8.30	17.0	21.0	35	45	45	73	73	85	150	169

<sup>(1)</sup>Lb.-Ft.<sup>2</sup>

## Dimensions



Frame Size	Dimensions are in Inches											
	C	D	E	2F	H	O	P	BA	N-W	U	V	AB
L2153Z	25.12	5.25	4.25	13.25	.44	10.44	10.31	3.50	3.75	1.875	3.50	9.50
L2158Z	26.38	5.25	4.25	14.50	.44	10.44	10.31	3.50	3.75	1.875	3.50	9.50
L2162Z	27.38	5.25	4.25	15.50	.44	10.44	10.31	3.50	3.75	1.875	3.50	9.50
L2564Z	30.19	6.25	5.00	16.00	.56	12.50	12.44	4.25	4.25	2.125	4.00	10.56
L2570Z	31.69	6.25	5.00	17.50	.56	12.50	12.44	4.25	4.25	2.125	4.00	10.56
L2869Z	33.50	7.00	5.50	17.25	.56	14.00	13.94	4.75	4.75	2.375	4.50	12.62
L2875Z	35.00	7.00	5.50	18.75	.56	14.00	13.94	4.75	4.75	2.375	4.50	12.62
L2882Z	36.75	7.00	5.50	20.50	.56	14.00	13.94	4.75	4.75	2.375	4.50	12.62
L3292Z	36.63	8.00	6.25	23.00	.69	15.81	15.62	5.25	5.25	2.625	5.00	14.50
L3203Z	39.38	8.00	6.25	25.75	.69	15.81	15.62	5.25	5.25	2.875	5.00	14.50
L3698Z	41.00	9.00	7.00	24.50	.81	17.81	17.62	5.88	5.75	2.875	5.50	15.50
L3614Z	45.00	9.00	7.00	28.50	.81	17.81	17.62	5.88	5.75	2.875	5.50	15.50
L4034Z	52.00	10.00	8.00	33.50	1.06	19.81	19.56	6.62	7.25	3.625	7.00	23.38
L4429	55.63	11.00	9.00	32.25	1.06	21.93	23.15	7.50	8.75	4.25	8.50	27.07
L4440	58.38	11.00	9.00	35.00	1.06	21.93	23.15	7.50	8.75	4.25	8.50	27.07

AB PLCs

# Allen-Bradley Control-Matched AC Variable-Speed Solutions

## The Clear Choice for Variable-Speed Performance

You can depend on Allen-Bradley to be your single source for a comprehensive line of automation products and services that are designed to deliver integrated performance. These products are backed by comprehensive support services and Automation Investment Life Cycle™ planning. It's a total capability from a single source for savings now and flexibility for the future to ensure optimum value from your investment.



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