



Bulletin 1329L Allen-Bradley “Power-Matched” High Performance AC Variable Speed Motor



Product Description

The Allen-Bradley 1329L High Performance AC Variable Speed Motors are “Power Matched” for use with Allen-Bradley Drives. The 1329L motors are specifically designed for optimum performance on adjustable frequency controllers, utilizing square laminated frame construction to reduce physical size, improve power density, reduce rotor inertia, and maximize dynamic response. NEMA standards for DC motors, including mounting dimensions, insulation class, and base speeds, were referenced for design and features. The 1329L can be a virtual direct replacement for DC variable speed motors.

Each Allen-Bradley “Power Matched” motor includes the premium inverter grade insulation system which meets and exceeds NEMA MG1, Part 31.40.4.2. The Allen-Bradley 1329L High Performance AC Variable Speed Motor is an extension of the RPM AC product line manufactured by Reliance Electric, a Rockwell Automation company.

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IMPORTANT: Information shown in this publication is subject to change without prior notice, and IS NOT TO BE USED FOR INSTALLATION PURPOSES.

1329L High Performance Product

Catalog Number Explanation

(Refer to price page for product selection)

1329L -	L	B	025	17	FV	H	- S - RL - FL
Bulletin	Type	Voltage	Horsepower	RPM	Enclosure	Mounting	Modifications
1329L	L= High Performance	A=230/460 B=460	005= 5HP 7F5= 7.5HP 010= 10HP 015= 15HP * * *	35= 3500rpm base 17= 1750rpm base 11= 1150rpm base 08= 850rpm base 06= 650rpm base	AO= TEAO-BC FV= DPFV NV= TENV N6= TENV 60 min	H= Foot mounted	Bearing Seals Belted Duty C/B Location Encoders End Shields Filter Addition Terminal Block Severe Duty Space Heater

1329L Programs

The **1329L - High Performance Product** program features standard and modifiable AC variable speed motors from 2-600hp in a variety of enclosures. Modification options include bearing seals, C-face and D-flanges, encoders, space heaters, to name a few. Many of the 1329L products are available for short cycle delivery.

The **1329L - Custom Program** provides a broad range of variable speed motor ratings and modifications which exceed the offering published in Bulletin 1329L. Consult your local Allen-Bradley office with any special requirements.

QuickShip Program

Several ratings are available on short cycle delivery. The column labeled "QS" in each table indicates ratings available for QuickShip. Ratings listed with a "Y" in the QS column will usually ship within 10 working days as sensorless or with encoder modifications. Other modifications may extend delivery. All QuickShip deliveries are subject to stock availability.

Standard Features

Optimized Four Pole Designs

The ratings in this catalog are based on the use of four pole laminations optimized for adjustable frequency service. By designing the motor for maximum voltage at the desired base speed, motor current and therefore controller size can be minimized. The base speed is obtained by adjusting the controller frequency as required. For example, a base speed of 1750 RPM at 460 volts would require a 60 Hz nominal controller output frequency at 460 volts, and a base speed of 850 RPM would require a 30 Hz frequency setting at 460 volts output. Using this approach, motors of the same horsepower with different base speeds will have the same nominal full load current even though frame sizes will change.

Adjustable Speed Capability

As standard, all 1329L motors are designed for high performance adjustable speed service for both open loop and closed loop controllers and limited only by type of controller for maximum speed range capability.

Controller	Speed Range		
	Below Base Speed		Above Base Speed
	Constant Torque		Constant Horsepower
	Open Loop	Closed Loop	All
ENCLOSURE:			
TEAO-BC	(1)	Infinity ⁽²⁾	2:1 ⁽³⁾
TENV	(1)	Infinity ⁽²⁾	2:1 ⁽³⁾
TEFC	2:1	2:1	2:1 ⁽³⁾
DPFV	(1)	Infinity ⁽²⁾	AS PUBLISHED

(1) Consult AC Drive Specifications for sensorless regulation range.

(2) Suitable for Full Torque down to zero speed on flux regulated drives.

(3) See specific Price Book page for exceptions.

Canadian Standards Association (CSA) Approval And Underwriter's Laboratories Component Recognition

Both CSA approval and U/L component recognition are available on 1329L. Nameplates must have CSA monogram and U/L file number shown on the nameplate. This listing must be requested on order write up.

IMPORTANT: Motors with modifications or auxiliary devices not approved by CSA can not have the CSA monogram or U/L recognition on the nameplate.

Conduit Box

Steel conduit boxes are standard; boxes are diagonally split, gasketed and rotatable in 90 degree increments. Standard location for totally enclosed is top mounted for F-1/F-2 flexibility and for drip-proof force ventilated location is F-1. For severe duty, cast iron boxes are standard.

Enclosures

The basic price pages contain pricing for totally enclosed and drip-proof guarded force ventilated motors. See Application Data for enclosure definition.

Grounding

Motors powered from adjustable frequency controllers will have voltages induced on inactive components, such as the motor frame, as a result of capacitive coupling of the switched voltage wavefronts from the controllers. **PROPER GROUNDING OF THE MOTOR FRAME IS ESSENTIAL.** All 1329L motors have a ground lead provided in the motor conduit box as standard for grounding.

Insulation System

The standard insulation system for 1329L is thermally rated for NEMA Class F (DC). Allen-Bradley motors meet NEMA MG1 Part 31.40.4.2 peak voltage of 1600v with 0.1 microsecond rise time. The insulation is rated for a minimum of 1600v peak CIV (Rockwell Automation test method) at rated operating temperature.

Overloads

Momentary Overloads — all 1329L motors have been designed for an overload capability of 150% of the base speed full load current for 1 minute at all speeds within the constant torque speed range.

Encoder Mounting

All 1329L motors have as a standard feature a provision for mounting an integral encoder.

Thermal Protection

All 1329L motors include three normally closed thermostats (1 per phase) connected in series, as standard.

Pricing

Dripproof Force Ventilated - Foot Mounted

Energy Efficient, Continuous Duty, 40 deg C ambient, 1.0 Service Factor on Inverter, Sensorless, Provisions for Encoder, (3) NC Thermostats, Ball Bearing, F-1 Mounting, with mounted blower

15 to 600 HP

HP	RPM Base	CHP	VOLTAGE	FRAME	ENCL.	QS	LIST PRICE	CATALOG NO.	DIMENSION SHEET
15	3550	4000	460	L2153	DPFV		\$2,761	LB01535FVH	609999-1
15	2500	3600	460	L2153	DPFV		\$2,721	LB01525FVH	609999-1
15	1750	2300	460	L2153	DPFV		\$2,681	LB01517FVH	609999-1
15	1150	1300	460	L2153	DPFV		\$3,041	LB01511FVH	609999-1
15	850	1050	460	L2158	DPFV		\$4,682	LB01508FVH	609999-1
15	650	850	460	L2162	DPFV		\$5,202	LB01506FVH	609999-1
20	3550	4000	460	L2153	DPFV		\$2,861	LB02035FVH	609999-1
20	2500	3600	460	L2153	DPFV		\$2,821	LB02025FVH	609999-1
20	1750	2300	460	L2153	DPFV		\$2,781	LB02017FVH	609999-1
20	1150	1300	460	L2162	DPFV		\$3,641	LB02011FVH	609999-1
20	850	1050	460	L2564	DPFV		\$5,586	LB02008FVH	609999-1
20	650	850	460	L2570	DPFV		\$6,802	LB02006FVH	609999-1
25	3550	4000	460	L2153	DPFV		\$3,441	LB02535FVH	609999-1
25	2500	3600	460	L2153	DPFV		\$3,301	LB02525FVH	609999-1
25	1750	2300	460	L2158	DPFV	Y	\$3,201	LB02517FVH	609999-1
25	1150	1300	460	L2162	DPFV		\$4,502	LB02511FVH	609999-1
25	850	1050	460	L2564	DPFV		\$7,002	LB02508FVH	609999-1
25	650	850	460	L2570	DPFV		\$7,803	LB02506FVH	609999-1
30	3550	4000	460	L2158	DPFV		\$3,521	LB03035FVH	609999-1
30	2500	3000	460	L2158	DPFV		\$3,337	LB03025FVH	609999-1
30	1750	2200	460	L2158	DPFV	Y	\$3,303	LB03017FVH	609999-1
30	1150	1350	460	L2564	DPFV		\$5,052	LB03011FVH	609999-1
30	850	1050	460	L2570	DPFV		\$7,283	LB03008FVH	609999-1
30	650	850	460	L2869	DPFV		\$9,203	LB03006FVH	609999-1
40	3550	4000	460	L2162	DPFV		\$4,302	LB04035FVH	609999-1
40	2500	3000	460	L2158	DPFV		\$4,229	LB04025FVH	609999-1
40	1750	2000	460	L2162	DPFV	Y	\$4,125	LB04017FVH	609999-1
40	1150	1300	460	L2564	DPFV		\$6,202	LB04011FVH	609999-1
40	850	1300	460	L2869	DPFV		\$8,889	LB04008FVH	609999-1
40	650	850	460	L2875	DPFV		\$12,804	LB04006FVH	609999-1
50	3550	4000	460	L2162	DPFV		\$5,202	LB05035FVH	609999-1
50	2500	3600	460	L2564	DPFV		\$5,122	LB05025FVH	609999-1
50	1750	2000	460	L2564	DPFV	Y	\$4,966	LB05017FVH	609999-1
50	1150	1300	460	L2570	DPFV		\$6,658	LB05011FVH	609999-1
50	850	950	460	L2875	DPFV		\$10,460	LB05008FVH	609999-1
50	650	850	460	L2882	DPFV		\$15,305	LB05006FVH	609999-1
60	3550	4000	460	L2564	DPFV		\$6,402	LB06035FVH	609999-1
60	2500	3000	460	L2564	DPFV		\$6,322	LB06025FVH	609999-1
60	1750	2000	460	L2564	DPFV	Y	\$6,202	LB06017FVH	609999-1
60	1150	1300	460	L2869	DPFV		\$8,203	LB06011FVH	609999-1
60	850	1050	460	L2882	DPFV		\$11,810	LB06008FVH	609999-1
60	650	900	460	L3292	DPFV		\$17,706	LB06006FVH	609998-1

Dripproof Force Ventilated - Foot Mounted (continued)

Energy Efficient, Continuous Duty, 40 deg C ambient, 1.0 Service Factor on Inverter, Sensorless, Provisions for Encoder, (3) NC Thermostats, Ball Bearing, F-1 Mounting, with mounted blower

15 to 600 HP

HP	RPM Base	CHP	VOLTAGE	FRAME	ENCL.	QS	LIST PRICE	CATALOG NO.	DIMENSION SHEET
75	3550	4000	460	L2564	DPFV		\$7,803	LB07535FVH	609999-1
75	2500	3000	460	L2570	DPFV		\$7,703	LB07525FVH	609999-1
75	1750	2000	460	L2570	DPFV	Y	\$7,303	LB07517FVH	609999-1
75	1150	1300	460	L2875	DPFV		\$9,203	LB07511FVH	609999-1
75	850	1050	460	L2882	DPFV		\$15,485	LB07508FVH	609999-1
75	650	850	460	L3292	DPFV		\$19,607	LB07506FVH	609998-1
100	3550	4000	460	L2570	DPFV		\$10,564	LB10035FVH	609999-1
100	2500	3000	460	L2869	DPFV		\$10,386	LB10025FVH	609999-1
100	1750	2000	460	L2869	DPFV	Y	\$9,303	LB10017FVH	609999-1
100	1150	1300	460	L2882	DPFV		\$12,004	LB10011FVH	609999-1
100	850	1050	460	L3292	DPFV		\$18,889	LB10008FVH	609998-1
100	650	850	460	L3698	DPFV		\$22,008	LB10006FVH	609998-1
125	3550	4000	460	L2869	DPFV		\$12,604	LB12535FVH	609999-1
125	2500	3000	460	L2875	DPFV		\$12,404	LB12525FVH	609999-1
125	1750	2000	460	L2875	DPFV	Y	\$11,804	LB12517FVH	609999-1
125	1150	2000	460	L3292	DPFV		\$14,405	LB12511FVH	609998-1
125	850	1300	460	L3203	DPFV		\$19,497	LB12508FVH	609998-1
125	650	950	460	L3614	DPFV		\$27,610	LB12506FVH	609998-1
150	3550	4000	460	L2875	DPFV		\$14,805	LB15035FVH	609999-1
150	2500	3000	460	L2882	DPFV		\$14,405	LB15025FVH	609999-1
150	1750	2000	460	L2882	DPFV	Y	\$13,205	LB15017FVH	609999-1
150	1150	1600	460	L3203	DPFV		\$15,806	LB15011FVH	609998-1
150	850	1050	460	L3698	DPFV		\$24,561	LB15008FVH	609998-1
150	650	850	460	L3614	DPFV		\$29,610	LB15006FVH	609998-1
200	3550	4000	460	L3292S	DPFV		\$16,806	LB20035FVH	609998-1
200	2500	3000	460	L3292S	DPFV		\$16,406	LB20025FVH	609998-1
200	1750	2300	460	L3292	DPFV	Y	\$15,605	LB20017FVH	609998-1
200	1150	1400	460	L3698	DPFV		\$18,406	LB20011FVH	609998-1
200	850	1050	460	L3614	DPFV		\$28,692	LB20008FVH	609998-1
200	650	850	460	L4046	DPFV		\$37,013	LB20006FVH	609998-1
250	3550	4000	460	L3292S	DPFV		\$20,207	LB25035FVH	609998-1
250	2500	3000	460	L3292S	DPFV		\$19,607	LB25025FVH	609998-1
250	1750	2200	460	L3203	DPFV	Y	\$18,807	LB25017FVH	609998-1
250	1150	1500	460	L3614	DPFV		\$21,808	LB25011FVH	609998-1
250	850	1350	460	L4034	DPFV		\$32,411	LB25008FVH	609998-1
300	3550	4000	460	L3203S	DPFV		\$22,808	LB30035FVH	609998-1
300	2500	3000	460	3698S	DPFV		\$22,408	LB30025FVH	609998-1
300	1750	2500	460	L3698	DPFV	Y	\$20,607	LB30017FVH	609998-1
300	1150	2000	460	L4034	DPFV		\$29,610	LB30011FVH	609998-1
300	850	1050	460	L4046	DPFV		\$36,813	LB30008FVH	609998-1
350	3550	4000	460	L3698S	DPFV		\$29,610	LB35035FVH	609998-1
350	2500	3000	460	L3698S	DPFV		\$29,010	LB35025FVH	609998-1
350	1750	2200	460	L3614	DPFV		\$28,010	LB35017FVH	609998-1

Dripproof Force Ventilated - Foot Mounted (continued)

Energy Efficient, Continuous Duty, 40 deg C ambient, 1.0 Service Factor on Inverter, Sensorless, Provisions for Encoder, (3) NC Thermostats, Ball Bearing, F-1 Mounting, with mounted blower.

15 to 600 HP

HP	RPM Base	CHP	VOLTAGE	FRAME	ENCL.	QS	LIST PRICE	CATALOG NO.	DIMENSION SHEET
400	3550	4000	460	L3698S	DPFV		\$32,011	LB40035FVH	609998-1
400	2500	3000	460	L3614S	DPFV		\$31,611	LB40025FVH	609998-1
400	1750	2500	460	L3614	DPFV		\$30,811	LB40017FVH	609998-1
400	1150	1700	460	L4046	DPFV		\$38,013	LB40011FVH	609998-1
450	3550	4000	460	L3614S	DPFV		\$37,013	LB45035FVH	609998-1
450	2500	3000	460	L4034S	DPFV		\$36,013	LB45025FVH	609998-1
450	1750	2500	460	L4034	DPFV		\$36,013	LB45017FVH	609998-1
500	3550	4000	460	L3614S	DPFV		\$41,414	LB50035FVH	609998-1
500	2500	3000	460	L4034S	DPFV		\$40,654	LB50025FVH	609998-1
500	1750	2400	460	L4034	DPFV		\$37,813	LB50017FVH	609998-1
600	1750	2200	460	L4046	DPFV		\$42,415	LB60017FVH	609998-1

"Y" - Available on QuickShip as sensorless or with encoder modification. Other modifications may extend delivery. All QuickShip deliveries are subject to stock availability.

Totally Enclosed Air Over/Blower Cooled - Foot Mounted

Energy Efficient, Continuous Duty, 40 deg C ambient, 1.0 Service Factor on Inverter, Sensorless, Provisions for Encoder, (3) NC Thermostats, Ball Bearing, F-1 Mounting, with mounted blower

5 to 300HP

HP	RPM BASE	CHP	VOLTAGE	FRAME	ENCL.	QS	LIST PRICE	CATALOG NO.	DIMENSION SHEET
5	1750	3500	230/460	L2153	TENV	Y	\$2,151	LA00517NVH	609992-1
5	1150	2300	460	L2158	TENV		\$2,501	LB00511NVH	609992-1
5	850	1700	460	L2153	TEBC		\$3,201	LB00508AOH	609991-1
5	650	1000	460	L2153	TEBC		\$3,301	LB00506AOH	609991-1
7.5	1750	3500	230/460	L2158	TENV	Y	\$2,551	LA7F517NVH	609992-1
7.5	1150	2300	460	L2153	TEBC		\$2,801	LB7F511AOH	609991-1
7.5	850	1700	460	L2153	TEBC		\$3,401	LB7F508AOH	609991-1
7.5	650	1000	460	L2158	TEBC		\$3,601	LB7F506AOH	609991-1
10	1750	3500	230/460	L2162	TENV	Y	\$2,701	LA01017NVH	609992-1
10	1150	2300	460	L2158	TEBC		\$3,071	LB01011AOH	609991-1
10	850	1700	460	L2158	TEBC		\$4,001	LB01008AOH	609991-1
10	650	1000	460	L2564	TEBC		\$4,802	LB01006AOH	609991-1
15	3550	4000	460	L2153	TEBC		\$2,801	LB01535AOH	609991-1
15	2500	5000	460	L2153	TEBC		\$3,509	LB01525AOH	609991-1
15	1750	3500	460	L2153	TEBC	Y	\$2,663	LB01517AOH	609991-1
15	1150	2300	460	L2162	TEBC		\$3,911	LB01511AOH	609991-1
15	850	1700	460	L2564	TEBC		\$5,852	LB01508AOH	609991-1
15	650	1000	460	L2570	TEBC		\$6,402	LB01506AOH	609991-1
20	3550	4000	460	L2153	TEBC		\$3,201	LB02035AOH	609991-1
20	2500	5000	460	L2158	TEBC		\$4,083	LB02025AOH	609991-1
20	1750	3500	460	L2158	TEBC	Y	\$3,109	LB02017AOH	609991-1
20	1150	2300	460	L2564	TEBC		\$4,602	LB02011AOH	609991-1
20	850	1700	460	L2570	TEBC		\$6,802	LB02008AOH	609991-1
20	650	1000	460	L2875	TEBC		\$8,403	LB02006AOH	609991-1
25	3550	4000	460	L2158	TEBC		\$3,801	LB02535AOH	609991-1
25	2500	5000	460	L2158	TEBC		\$4,602	LB02525AOH	609991-1
25	1750	3500	460	L2162	TEBC	Y	\$3,517	LB02517AOH	609991-1
25	1150	2300	460	L2570	TEBC		\$5,552	LB02511AOH	609991-1
25	850	1700	460	L2869	TEBC		\$8,069	LB02508AOH	609991-1
25	650	1000	460	L3281	TEBC		\$9,803	LB02506AOH	609991-1
30	3550	4000	460	L2162	TEBC		\$4,302	LB03035AOH	609991-1
30	2500	5000	460	L2162	TEBC		\$5,208	LB03025AOH	609991-1
30	1750	3500	460	L2564	TEBC	Y	\$4,081	LB03017AOH	609991-1
30	1150	2300	460	L2869	TEBC		\$6,302	LB03011AOH	609991-1
30	850	1700	460	L2875	TEBC		\$9,095	LB03008AOH	609991-1
30	650	1000	460	L3292	TEBC		\$11,404	LB03006AOH	609991-1
40	3550		460	L2564	TEBC		\$4,402	LB04035AOH	609991-1
40	2500	5000	460	L2570	TEBC		\$6,612	LB04025AOH	609991-1
40	1750	3500	460	L2570	TEBC	Y	\$5,150	LB04017AOH	609991-1
40	1150	2300	460	L2875	TEBC		\$7,523	LB04011AOH	609991-1
40	850	1700	460	L3281	TEBC		\$11,084	LB04008AOH	609991-1
40	650	1000	460	L3699	TEBC		\$16,006	LB04006AOH	609994-1

**Totally Enclosed Air Over/Blower Cooled - Foot Mounted
(continued)**

Energy Efficient, Continuous Duty, 40 deg C ambient, 1.0 Service Factor on Inverter, Sensorless, Provisions for Encoder, (3) NC Thermostats, Ball Bearing, F-1 Mounting, with mounted blower

5 to 300HP

HP	RPM BASE	CHP	VOLTAGE	FRAME	ENCL.	QS	LIST PRICE	CATALOG NO.	DIMENSION SHEET
50	3550	4000	460	L2570	TEBC		\$6,202	LB05035AOH	609991-1
50	2500	5000	460	L2570	TEBC		\$8,361	LB05025AOH	609991-1
50	1750	3500	460	L2869	TEBC	Y	\$6,102	LB05017AOH	609991-1
50	1150	2300	460	L3281	TEBC		\$8,203	LB05011AOH	609991-1
50	850	1700	460	L3292	TEBC		\$13,071	LB05008AOH	609991-1
50	650	1000	460	L3607	TEBC		\$17,006	LB05006AOH	609994-1
60	3550	4000	460	L2869	TEBC		\$7,603	LB06035AOH	609991-1
60	2500	5000	460	L2869	TEBC		\$10,820	LB06025AOH	609991-1
60	1750	3500	460	L2875	TEBC	Y	\$7,603	LB06017AOH	609991-1
60	1150	2300	460	L3292	TEBC		\$10,164	LB06011AOH	609991-1
60	850	1700	460	L3699	TEBC		\$14,767	LB06008AOH	609994-1
60	650	1000	460	L4022	TEBC		\$22,408	LB06006AOH	609994-1
75	3550	4000	460	L2875	TEBC		\$9,603	LB07535AOH	609991-1
75	2500	5000	460	L2875	TEBC		\$12,706	LB07525AOH	609991-1
75	1750	3500	460	L3281	TEBC	Y	\$9,003	LB07517AOH	609991-1
75	1150	2300	460	L3699	TEBC		\$11,404	LB07511AOH	609994-1
75	850	1700	460	L3607	TEBC		\$19,361	LB07508AOH	609994-1
75	650	1000	460	L4034	TEBC		\$25,009	LB07506AOH	609994-1
100	3550	4000	460	L3292	TEBC		\$12,004	LB10035AOH	609991-1
100	2500	3500	460	L3292	TEBC		\$12,024	LB10025AOH	609991-1
100	1750	3500	460	L3292	TEBC	Y	\$11,444	LB10017AOH	609991-1
100	1150	2300	460	L3607	TEBC		\$14,805	LB10011AOH	609994-1
100	850	1700	460	L4022	TEBC		\$23,608	LB10008AOH	609994-1
100	650	1000	460	L4046	TEBC		\$27,210	LB10006AOH	609994-1
125	3550	4000	460	L3292	TEBC		\$15,405	LB12535AOH	609991-1
125	2500	3500	460	L3699S	TEBC		\$15,405	LB12525AOH	609994-1
125	1750	3500	460	L3699S	TEBC	Y	\$14,605	LB12517AOH	609994-1
125	1150	2300	460	L4022	TEBC		\$17,406	LB12511AOH	609994-1
125	850	1700	460	L4034	TEBC		\$24,363	LB12508AOH	609994-1
150	3550	4000	460	L3699S	TEBC		\$16,406	LB15035AOH	609994-1
150	2500	3500	460	L3607S	TEBC		\$16,406	LB15025AOH	609994-1
150	1750	3500	460	L3607	TEBC	Y	\$16,406	LB15017AOH	609994-1
150	1150	2300	460	L4034	TEBC		\$19,407	LB15011AOH	609994-1
150	850	1700	460	L4046	TEBC		\$30,779	LB15008AOH	609994-1
200	3550	4000	460	L3607S	TEBC		\$19,807	LB20035AOH	609994-1
200	2500	3500	460	L4022S	TEBC		\$19,807	LB20025AOH	609994-1
200	1750	3500	460	L4022	TEBC	Y	\$19,027	LB20017AOH	609994-1
200	1150	2300	460	L4046	TEBC		\$22,808	LB20011AOH	609994-1
250	3550		460	L4034S	TEBC		\$23,608	LB25035AOH	609994-1
250	2500	3500	460	L4034S	TEBC		\$23,608	LB25025AOH	609994-1
250	1750	3500	460	L4034	TEBC	Y	\$23,408	LB25017AOH	609994-1
300	2500	3500	460	L4046S	TEBC		\$27,210	LB30035AOH	609994-1
300	1750	3500	460	L4046	TEBC	Y	\$26,209	LB30025AOH	609994-1

"Y" - Available on QuickShip as sensorless or with encoder modification. Other modifications may extend delivery. All QuickShip deliveries are subject to stock availability.

Totally Enclosed Non-Ventilated - Foot Mounted

Energy Efficient, Continuous Duty, 40 deg C ambient, 1.0 Service Factor on Inverter, Sensorless, Provisions for Encoder, (3) NC Thermostats, Ball Bearing, F-1 Mounting

2 to 100HP

HP	RPM BASE	CHP	VOLTAGE	FRAME	ENCL.	QS	LIST PRICE	CATALOG NO.	DIMENSION SHEET
2	850	1700	460	L2153	TENV		\$2,435	LB00208NVH	609992-1
2	650	1300	460	L2158	TENV		\$2,659	LB00206NVH	609992-1
3	1150	2300	460	L2153	TENV		\$2,539	LB00311NVH	609992-1
3	850	1700	460	L2158	TENV		\$2,696	LB00308NVH	609992-1
3	650	1300	460	L2162	TENV		\$2,890	LB00306NVH	609992-1
5	3500	4000	460	L2153	TENV		\$2,188	LB00535NVH	609992-1
5	2500	5000	460	L2153	TENV		\$2,801	LB00525NVH	609992-1
5	1750	3500	230/460	L2153	TENV	Y	\$2,151	LA00517NVH	609992-1
5	1150	2300	460	L2158	TENV		\$2,501	LB00511NVH	609992-1
5	850	1700	460	L2162	TENV		\$3,043	LB00508NVH	609992-1
5	650	1300	460	L2570	TENV		\$4,781	LB00506NVH	609992-1
7.5	3500	4000	460	L2153	TENV		\$2,530	LB7F535NVH	609992-1
7.5	2500	5000	460	L2158	TENV		\$3,202	LB7F525NVH	609992-1
7.5	1750	3500	230/460	L2158	TENV	Y	\$2,551	LA7F517NVH	609992-1
7.5	1150	2300	460	L2162	TENV		\$3,079	LB7F511NVH	609992-1
7.5	850	1700	460	L2570	TENV		\$4,907	LB7F508NVH	609992-1
7.5	650	1300	460	L2875	TENV		\$7,152	LB7F506NVH	609992-1
10	3550	4000	460	L2158	TENV		\$2,782	LB01035NVH	609992-1
10	2500	5000	460	L2158	TENV		\$3,525	LB01025NVH	609992-1
10	1750	3500	230/460	L2162	TENV	Y	\$2,701	LA01017NVH	609992-1
10	1150	2300	460	L2570	TENV		\$4,691	LB01011NVH	609992-1
10	850	1700	460	L2875	TENV		\$7,230	LB01008NVH	609992-1
10	650	1300	460	L2875	TENV		\$7,329	LB01006NVH	609992-1
15	3550	4000	460	L2564	TENV		\$4,007	LB01535NVH	609992-1
15	2500	5000	460	L2564	TENV		\$4,291	LB01525NVH	609992-1
15	1750	3500	460	L2570	TENV		\$3,790	LB01517NVH	609992-1
15	1150	2300	460	L2875	TENV		\$7,386	LB01511NVH	609992-1
15	850	1700	460	L3281	TENV		\$8,400	LB01508NVH	609995-1
15	650	1300	460	L3292	TENV		\$10,300	LB01506NVH	609995-1
20	3550	4000	460	L2570	TENV		\$5,060	LB02035NVH	609992-1
20	2500	5000	460	L2570	TENV		\$6,114	LB02025NVH	609992-1
20	1750	3500	460	L2875	TENV		\$7,130	LB02017NVH	609992-1
20	1150	2300	460	L3281	TENV		\$8,400	LB02011NVH	609995-1
20	850	1700	460	L3292	TENV		\$10,444	LB02008NVH	609995-1
20	650	1300	460	L3699	TENV		\$12,136	LB02006NVH	609995-1
25	3550	4000	460	L2875	TENV		\$7,662	LB02535NVH	609992-1
25	2500	5000	460	L2875	TENV		\$8,004	LB02525NVH	609992-1
25	1750	3500	460	L3281	TENV		\$8,526	LB02517NVH	609995-1
25	1150	2300	460	L3292	TENV		\$10,453	LB02511NVH	609995-1
25	850	1700	460	L3699	TENV		\$12,136	LB02508NVH	609995-1
25	650	1000	460	L3607	TENV		\$14,175	LB02506NVH	609995-1

Totally Enclosed Non-Ventilated - Foot Mounted (continued)

Energy Efficient, Continuous Duty, 40 deg C ambient, 1.0 Service Factor on Inverter, Sensorless, Provisions for Encoder, (3) NC Thermostats, Ball Bearing, F-1 Mounting

2 to 100HP

HP	RPM BASE	CHP	VOLTAGE	FRAME	ENCL.	QS	LIST PRICE	CATALOG NO.	DIMENSION SHEET
30	3550	4000	460	L3281	TENV		\$9,651	LB03035NVH	609995-1
30	2500	3500	460	L3281	TENV		\$9,894	LB03025NVH	609995-1
30	1750	3500	460	L3292	TENV		\$10,714	LB03017NVH	609995-1
30	1150	2300	460	L3699	TENV		\$12,199	LB03011NVH	609995-1
30	850	1700	460	L3607	TENV		\$14,297	LB03008NVH	609995-1
30	650	1300	460	L4022	TENV		\$17,016	LB03006NVH	609995-1
40	3550	4000	460	L3292	TENV		\$11,164	LB04035NVH	609995-1
40	2500	3500	460	L3292	TENV		\$11,074	LB04025NVH	609995-1
40	1750	3500	460	L3699	TENV		\$12,424	LB04017NVH	609995-1
40	1150	2300	460	L3607	TENV		\$14,315	LB04011NVH	609995-1
40	850	1700	460	L4022	TENV		\$17,286	LB04008NVH	609995-1
40	650	1300	460	L4034	TENV		\$19,042	LB04006NVH	609995-1
50	3550	4000	460	L3292	TENV		\$12,091	LB05035NVH	609995-1
50	2500	3500	460	L3699S	TENV		\$12,694	LB05025NVH	609995-1
50	1750	3500	460	L3607	TENV		\$13,946	LB05017NVH	609995-1
50	1150	2300	460	L4022	TENV		\$17,376	LB05011NVH	609995-1
50	850	1700	460	L4034	TENV		\$19,231	LB05008NVH	609995-1
50	650	1300	460	L4046	TENV		\$22,310	LB05006NVH	609995-1
60	3550	4000	460	L3699S	TENV		\$13,127	LB06035NVH	609995-1
60	2500	3500	460	L4022S	TENV		\$18,176	LB06025NVH	609995-1
60	1750	3500	460	L4022	TENV		\$18,231	LB06017NVH	609995-1
60	1150	2300	460	L4034	TENV		\$19,501	LB06011NVH	609995-1
60	850	1700	460	L4046	TENV		\$22,805	LB06008NVH	609995-1
75	3550	4000	460	L3699S	TENV		\$13,685	LB07535NVH	609995-1
75	2500	3500	460	L4022S	TENV		\$18,312	LB07525NVH	609995-1
75	1750	3500	460	L4034	TENV		\$19,609	LB07517NVH	609995-1
75	1150	2300	460	L4046	TENV		\$23,228	LB07511NVH	609995-1
100	2500	3500	460	L4034S	TENV		\$20,428	LB10025NVH	609995-1
100	1750	3500	460	L4046S	TENV		\$23,327	LB10017NVH	609995-1

"Y" - Available on QuickShip as sensorless or with encoder modification. Other modifications may extend delivery. All QuickShip deliveries are subject to stock availability.

Modifications

Bearing Seals

Inpro Seal - Bearing Isolator

This is a non-contact bronze compound-labyrinth seal suitable in washdown and high dust atmospheres. The standard Inpro Seal is not recommended for high vibration applications. If a bearing isolator is needed for such an application, contact Allen-Bradley.

Frame Size	MOD	L210	L250	L280	L320	L360	L400
Inpro Seals	S	\$400	\$462	\$483	\$504	\$588	\$714

Belted Duty

Frame sizes L210 through L320 are suitable for use on coupled or belted applications per NEMA minimum sheave diameters. L360 and L400 frames require roller bearings to comply with NEMA belt loads. Belt applications not meeting the NEMA minimum sheave diameters require special pricing. Consult Allen-Bradley.

List Price	MOD	L360	L400
NEMA belted duty	BL	\$522	\$866

Conduit Box Location

Top mount and F-1 location are standard locations, depending upon frame size and enclosure. Consult Dimension Sheet. F-2 location is also available. Please specify desired location on order or leave blank for default standard.

C/B Location	MOD	All Frames
Top Mounted	TP	NC
F2	F2	NC
F1	F1	NC

Encoders

Mounted devices

The following list price include feedback device, all provisions for mounting, and mounting hardware. The following devices mount to a C-face on the opposite drive end of the motor.

List Price	MOD	All Frames
Lakeshore RL67 (SL56)	RL	\$1,600

Engineering Data	PPR	Mounting	Flange	Type
Lakeshore RL67 (SL56)	1024	Modular	4.5" 56C	Mag. Res.

End Shields

Single End C-Face or D-Flange

Dripproof or totally enclosed end shield on the drive end can be replaced with a C-Face or D-Flange end shield

NEMA Size	MOD	L210	L250	L280	L320	L360	L400
C-Face Footed	CC	\$108	\$162	\$251	\$418	\$527	na
D-Flange Footed	DD	\$460	\$520	\$865	\$1,244	\$1,372	\$1,644

IMPORTANT: Motor C-Face is intended for mounting auxiliary equipment such as pumps, gears, etc. When mounted horizontally, frames L280C through L360 should be supported by the feet and not by the C-Face. Installations requiring a horizontally mounted motor without foot support should use a D-Flange bracket.

Filter Addition

Filter addition for DPFV motor with motor mounted blower. Filter is washable type. Recommended when filterable contaminants are present. Totally enclosed construction is recommended for extremely dusty and dirty environments.

Frame Size	MOD	L210	L250-L320	L360	L400
List Price	FL	\$220	\$375	\$480	\$666

Terminal Block - Main Power Leads

Provides terminal block in main conduit box for connection of motor power leads. Thermostat leads will not be connected to the terminal block.

List Price	All Frames
MOD - TB	\$750

Severe Duty

Severe Duty features are design for operation in harsh environments. This modification can be provided on DPFV, DPSV, or totally enclosed motors. Construction features include:

- Interior and exterior surface of frame painted with epoxy enamel
- Shaft (in-board of bearing caps) painted with epoxy enamel.
- Stainless steel or neoprene slinger mounted on external shaft extensions.
- External fan on TEFC motors is plastic or epoxy coated cast iron.
- Fan cover on TEFC motors is finished with epoxy enamel.
- Automatic breather drains provided for positive drain.
- Assembled motor with mounted accessories painted with epoxy enamel
- Cast iron terminal box with neoprene gaskets on cover and box frame
- Bracket to frame rabbet fit is sealed with special sealing compound
- All hardware is corrosion resistant
- Stainless steel nameplate
- All external bolts sealed
- Unused lifting eye bolts sealed
- Splashproof covers included for DPFV and DPSV enclosures

Space heaters are recommended for motors operating in damp, moist environments to protect against condensation forming when the motor is not operating. See Space Heater modification.

Frame Size	MOD	L210	L250	L280	L320	L360	L400
List Price	SD	\$270	\$450	\$580	\$850	\$1,410	\$1,850

Slide Base

Heavy duty base with two adjusting bolts for adjusting belt tension.

Frame Size	MOD	L210	L250	L280	L320	L360	L400
List Price	SB	\$220	\$315	\$608	\$750	\$1,080	\$1,430

Space Heater

Mounted inside the motor. Recommended to protect against condensation forming when the motor is not operating.

The heater voltage will be 120v single phase.

List Price	All Frames
MOD - NX	\$291

Custom Modifications

A wide variety of modifications are available as 1329L Custom motors. Consult your local Allen-Bradley office with any special requirements.

Motor Selection and Application

Safety

AC motors have characteristics which can cause serious or fatal injury unless they are selected, installed, maintained and operated by qualified personnel familiar with special requirements of AC machines. Allen-Bradley motors manufactured by Reliance Electric are designed and built in accordance with Safety Standard for Construction and Guide for Selection, Installation and Use of Electric Motors and Generators, National Electric Manufacturers Association (NEMA) publication MG 2. Reliance Electric recommends that this publication be referred to whenever you select or install any motor. Copies can be obtained from NEMA, 2101 L Street, N.W., Washington, D.C., 20037. In addition, all motors must be installed in accordance with the National Electric Code and applicable local codes.

Primary consideration in selecting and applying AC motors must be given to protection of personnel from mechanical and electrical hazards. Additional considerations are given in the instruction manual for a specific motor rating which must be observed by the personnel installing, operating and maintaining the equipment.

Enclosures

The selection of the proper enclosure is vital to the successful safe operation of AC motors. Safety, machine performance and life can be materially reduced by using an enclosure inappropriate for the application. The customer must recognize the specific environmental conditions and specify the correct enclosure. Allen-Bradley can provide application assistance but must depend on the customer to provide accurate information on the operating conditions.

Allen-Bradley offers motors in the following enclosures:

- Drip-proof (force ventilated, separately ventilated)
- Totally enclosed (non-ventilated, fan cooled, blower cooled)

Drip-Proof

Drip-Proof Guarded as defined by NEMA MG1-1.25.5 to prevent accidental exposure to live metal or rotating parts. The drip-proof construction permits successful operation when drops of liquid or solid particles strike or enter the enclosure at any angle from 0 to 15 degrees downward from the vertical.

Drip-Proof Guarded Force Ventilated (DPFV). Motor cooling is provided by motor-mounted blower driven by an integrally mounted three-phase blower motor. A filter may be added to the blower when filterable contaminants are present in amounts not sufficient to rapidly clog the filter. A DPFV enclosure is not recommended in extremely dusty, dirty locations.

Drip-Proof Guarded Separately Ventilated (DPSV). For applications where cooling air is ducted to the motor from an external source provided by the customer.

Totally Enclosed

For dusty, dirty environments, a totally enclosed machine is required to prevent the free exchange of air between the inside and outside of the enclosure but not sufficiently enclosed to be termed air-tight.

Totally Enclosed Air Over-Blower Cooled (TEAO-BC). 1329L in-line blower cooled motors incorporate unique integral air ducts in the stator frame, external to the windings, to provide maximum cooling effectiveness. The integrally mounted, independently powered three-phase blowers result in low noise levels over wide speed ranges. TEAO-Piggyback blower is available as an option.

Totally Enclosed Non-Ventilated (TENV). Does not require any external air flow for cooling.

Totally Enclosed Fan Cooled (TEFC). Exterior surface cooled by external fan mounted on motor shaft, therefore making motor cooling dependent on motor speed.

Severe Duty Features. Provides protection against corrosive, moist and dirt laden environments as encountered in paper, chemical and similar industries. Applicable to totally enclosed motors only.

Hazardous Locations

Explosion-Proof or Dust-Ignition Proof Motors. 1329L motors are not available in explosion-proof or dust-ignition proof enclosures. If a U/L Listed explosion-proof motor is required for operation on any adjustable frequency power supply, contact Allen-Bradley.

Air Supply

Separately ventilated motors must have the following volume of air to adequately cool the motor unless the nameplate specifies a different value. Cooling air temperature must not exceed the maximum ambient temperature indicated on the nameplate (standard 40° C). This data applied to all base speeds for the frame size shown:

Frame Size	RPM AC Air Flow	
	DPSV Sata	
	CFM	Static Pressure (inches of water)
L210	225	3
L250	400	3.5
L280	500	3.75
L320	650	4.5
L360	800	5.25
L400	1100	6.5

Power Supply

Motors are designed for three-phase variable speed operation as indicated on the price pages.

IMPORTANT: 1329L motors are not suitable for use for bypass, sine wave operation. Operation of a three-phase motor on a single-phase supply will result in motor damage.

Insulation System

Since 1329L motors are definite purpose, adjustable speed motors, the insulation system thermal rating and temperature rise are based on the same class F system which has been proven successful for many years on adjustable speed DC motors. The insulation system total temperature rating is 180° C. Like DC class F, the temperature rise by resistance will not exceed 130° C at the highest temperature, worst-case point within the speed/load range, based on AC controller power supply and a 40° C ambient. This approach helps assure that optimum insulation system life will be achieved.

Allen-Bradley motors meet NEMA MG1 Part 31.40.4.2 peak voltage of 1600v with 0.1 microsecond use time. The insulation is rated for a minimum of 1600v peak CIV (Rockwell Automation test method) at rated operating temperature.

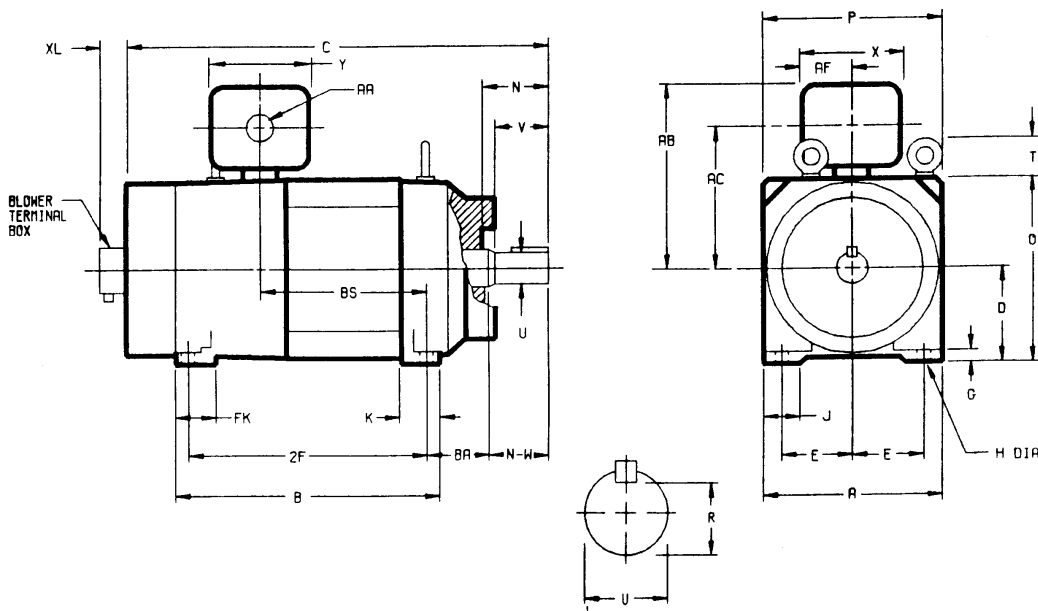
Engineering Data

Typical Dimensions Variable Speed Alternating Current Motors RPM AC

ENCLOSURE: TOTALLY ENCLOSED

**COOLING: FAN COOLED
BLOWER COOLED
AIR-OVER INLINE**

**MOUNTING: FOOT
METHOD OF DRIVE: COUPLED OR BELTED**



DIMENSIONS ARE IN INCHES

FRAME	A	D(1)	E	G	H	J	O	P	T	BA	K	FK	AB	AC	AF	AA	X	Y
L2153 THRU L2162	10.25	5.25	4.25	.56	.44	2.00	10.44	10.31	1.77	3.50	2.38	5.44	9.50	7.50	2.50	1-1/4 x 1-1/2	5.50	6.12
L2564 THRU L2570	12.31	6.25	5.00	.56	.56	2.38	12.50	12.44	2.09	4.25	2.56	6.00	10.56	8.56	2.50	1-1/4 x 1-1/2	5.50	6.12
L2869 THRU L2875	13.78	7.00	5.50	.56	.56	2.75	14.00	13.94	2.44	4.75	2.56	6.88	12.50	9.75	3.19	2 x 2-1/2	7.00	7.62
L3281 THRU L3292	15.50	8.00	6.25	.88	.69	3.00	15.81	15.62	2.44	5.25	3.25	8.00	14.31	10.81	4.25	2	8.44	7.25

FRAME	C	B	BS	2F	(4) XL	DRIVE END SHAFT AND KEY							WT. LBS.
						N	N-W	U(2)	V	R(3)	SQ.	LGTH.	
L2153	23.19	14.69	9.69	13.25	1.69	4.00	3.75	1.875	3.50	1.591	.500	2.50	230
L2158	24.44	15.94	10.94	14.50	1.69	4.00	3.75	1.875	3.50	1.591	.500	2.50	260
L2162	25.44	16.94	11.94	15.50	1.69	4.00	3.75	1.875	3.50	1.591	.500	2.50	285
L2564	27.88	17.69	12.50	16.00	1.69	4.50	4.25	2.125	4.00	1.845	.500	3.00	345
L2570	29.38	19.19	14.00	17.50	1.69	4.50	4.25	2.125	4.00	1.845	.500	3.00	395
L2869	30.44	19.25	13.31	17.25	1.69	5.00	4.75	2.375	4.50	2.021	.625	3.50	555
L2875	31.94	20.75	14.81	18.75	1.69	5.00	4.75	2.375	4.50	2.021	.625	3.50	620
L3281	37.50	22.25	15.12	20.25	1.69	5.50	5.25	2.625	5.00	2.275	.625	4.00	700
L3292	40.25	25.00	17.88	23.00	1.69	5.50	5.25	2.625	5.00	2.275	.625	4.00	850

- (1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) "U" VARIES -- +.000 -.001
- (3) "R" VARIES -- +.000 -.015
- (4) TERMINAL BOX FOR BLOWER COOLING ONLY. WALLS OR OBSTRUCTIONS MUST NOT ENCRDACH ON AIR INLET SPACE "XL" FOR BLOWER OR FAN COOLING.

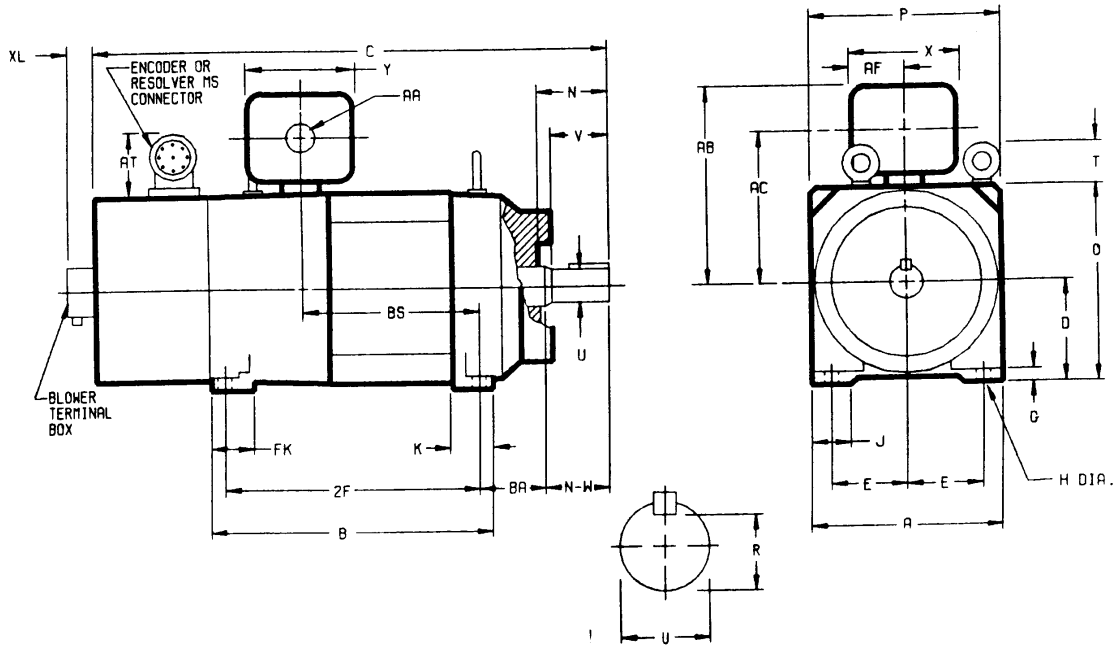
TERMINAL BOX CAN BE ROTATED IN 90 DEG. INCREMENTS.
 TERMINAL BOX MOUNTED ON TOP AS STANDARD.
 TERMINAL BOX CAN BE LOCATED ON SIDE IN F1 OR F2 POSITION WHEN SPECIFIED.
 MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES.
 IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

Variable Speed Alternating Current Motors RPM AC

ENCLOSURE: TOTALLY ENCLOSED

MOUNTING: FOOT
METHOD OF DRIVE: COUPLED OR BELTED

COOLING: BLOWER COOLED
AIR-OVER INLINE
ACCESSORIES: FLANGE MOUNTED
ENCODER OR RESOLVER



DIMENSIONS ARE IN INCHES

FRAME	A	D(1)	E	G	H	J	K	N	P	T	BA	K	FK	AB	AC	AF	AA	X	Y	AT
L2153 THRU L2162	10.25	5.25	4.25	.56	.44	2.00	10.44	10.31	1.77	3.50	2.38	5.44	9.50	7.50	2.50	1-1/4 # 1-1/2	5.50	6.12	3.25	
L2564 THRU L2570	12.31	6.25	5.00	.56	.56	2.38	12.50	12.44	2.09	4.25	2.56	6.00	10.56	8.56	2.50	1-1/4 # 1-1/2	5.50	6.12	3.25	
L2869 THRU L2875	13.78	7.00	5.50	.56	.56	2.75	14.00	13.94	2.44	4.75	2.56	6.88	12.50	9.75	3.19	2 # 2-1/2	7.00	7.62	3.25	
L3281 THRU L3292	15.50	8.00	6.25	.88	.69	3.00	15.81	15.62	2.44	5.25	3.25	8.00	14.31	10.81	4.25	2	8.44	7.25	3.25	

FRAME	C	B	BS	2F	(4) XL	DRIVE END SHAFT AND KEY										WT. LBS.
						N	N-W	U(2)	V	R(3)	SQ.	LGTH.				
L2153	27.31	14.69	9.69	13.25	1.69	4.00	3.75	1.875	3.50	1.591	.500	2.50	235			
L2158	28.56	15.94	10.94	14.50	1.69	4.00	3.75	1.875	3.50	1.591	.500	2.50	265			
L2162	29.56	16.94	11.94	15.50	1.69	4.00	3.75	1.875	3.50	1.591	.500	2.50	290			
L2564	31.00	17.69	12.50	16.00	1.69	4.50	4.25	2.125	4.00	1.845	.500	3.00	350			
L2570	32.50	19.19	14.00	17.50	1.69	4.50	4.25	2.125	4.00	1.845	.500	3.00	400			
L2869	33.56	19.25	13.31	17.25	1.69	5.00	4.75	2.375	4.50	2.021	.625	3.50	560			
L2875	35.06	20.75	14.81	18.75	1.69	5.00	4.75	2.375	4.50	2.021	.625	3.50	625			
L3281	37.50	22.25	15.12	20.25	1.69	5.50	5.25	2.625	5.00	2.275	.625	4.00	700			
L3292	40.25	25.00	17.88	23.00	1.69	5.50	5.25	2.625	5.00	2.275	.625	4.00	850			

- (1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) "U" VARIES -- +.000 -.001
- (3) "R" VARIES -- +.000 -.015
- (4) TERMINAL BOX FOR BLOWER COOLING ONLY. WALLS OR OBSTRUCTIONS MUST NOT ENCRDACH ON AIR INLET SPACE "XL" FOR BLOWER OR FAN COOLING.

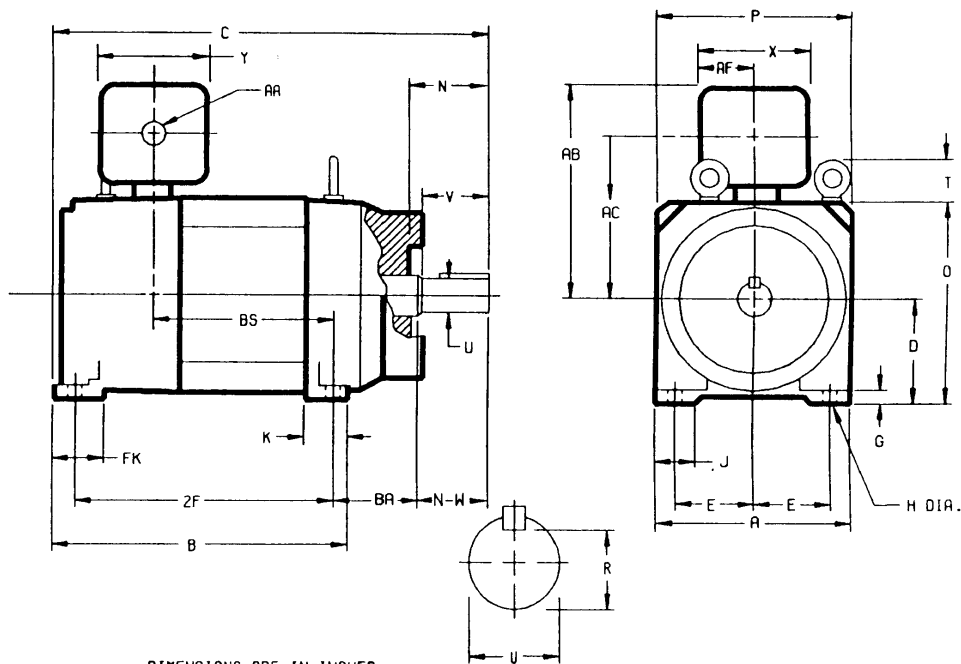
TERMINAL BOX CAN BE ROTATED IN 90 DEG. INCREMENTS.
 TERMINAL BOX MOUNTED ON TOP AS STANDARD.
 TERMINAL BOX CAN BE LOCATED ON SIDE IN F1 OR F2 POSITION WHEN SPECIFIED.
 MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES.
 IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

Variable Speed Alternating Current Motors RPM AC

ENCLOSURE: TOTALLY ENCLOSED
 MOUNTING: FOOT
 METHOD OF DRIVE: COUPLED OR BELTED

COOLING: NON-VENTILATED

FRAMES L2153 THRU L2875



DIMENSIONS ARE IN INCHES

FRAME	A	D(1)	E	G	H	J	O	P	T	BA	K	FK	AB	AC	AF	AR	X	Y
L2153 THRU L2162	10.25	5.25	4.25	.56	.44	2.00	10.44	10.31	2.09	3.50	2.38	5.44	9.50	7.50	2.50	1-1/4 # 1-1/2	5.50	6.12
L2564 THRU L2570	12.31	6.25	5.00	.56	.56	2.38	12.50	12.44	2.56	4.25	2.56	6.00	10.56	8.56	2.50	1-1/4 # 1-1/2	5.50	6.12
L2869 THRU L2875	13.78	7.00	5.50	.56	.56	2.75	14.00	13.94	3.06	4.75	2.56	6.88	12.50	9.75	3.19	2 # 2-1/2	7.00	7.62

FRAME	C	B	BS	2F	DRIVE END SHAFT AND KEY								WT. LBS.
					N	N-W	U(2)	V	R(3)	SO.	LGTH.		
L2153	21.19	14.69	9.69	13.25	4.00	3.75	1.875	3.50	1.591	.500	2.50	220	
L2158	22.44	15.94	10.94	14.50	4.00	3.75	1.875	3.50	1.591	.500	2.50	250	
L2162	23.44	16.94	11.94	15.50	4.00	3.75	1.875	3.50	1.591	.500	2.50	275	
L2564	25.31	17.69	12.50	16.00	4.50	4.25	2.125	4.00	1.845	.500	3.00	335	
L2570	26.81	19.19	14.00	17.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	385	
L2869	27.81	19.25	13.31	17.25	5.00	4.75	2.375	4.50	2.021	.625	3.50	545	
L2875	29.31	20.75	14.81	18.75	5.00	4.75	2.375	4.50	2.021	.625	3.50	610	

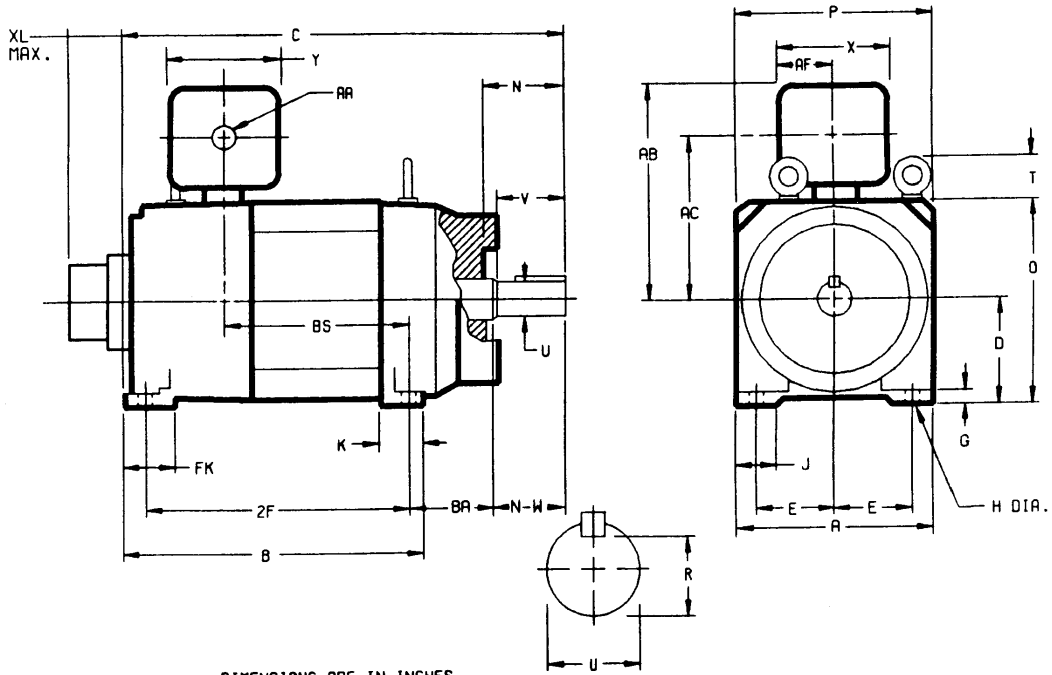
- (1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) "U" VARIES -- +.000 -.001
- (3) "R" VARIES -- +.000 -.015

TERMINAL BOX CAN BE ROTATED IN 90 DEG. INCREMENTS.
 TERMINAL BOX MOUNTED ON TOP AS STANDARD.
 TERMINAL BOX CAN BE LOCATED ON SIDE IN F1 OR F2 POSITION WHEN SPECIFIED.
 MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES.
 IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

Variable Speed Alternating Current Motors RPM AC

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT
METHOD OF DRIVE: COUPLED OR BELTED

COOLING: NON-VENTILATED
ACCESSORIES: FLANGE MOUNTED TACHOMETER



DIMENSIONS ARE IN INCHES

FRAME	A	D(1)	E	G	H	J	O	P	T	BA	K	FK	AB	AC	AF	AA	X	Y
L2153 THRU L2162	10.25	5.25	4.25	.56	.44	2.00	10.44	10.31	2.09	3.50	2.38	5.44	9.50	7.50	2.50	1-1/4 x 1-1/2	5.50	6.12
L2564 THRU L2570	12.31	6.25	5.00	.56	.56	2.38	12.50	12.44	2.56	4.25	2.56	6.00	10.56	8.56	2.50	1-1/4 x 1-1/2	5.50	6.12
L2869 THRU L2875	13.78	7.00	5.50	.56	.56	2.75	14.00	13.94	3.06	4.75	2.56	6.88	12.50	9.75	3.19	2 x 2-1/2	7.00	7.62

FRAME	C	B	BS	2F	DRIVE END SHAFT AND KEY							SQ.	LGTH.	WT. LBS.
					N	N-W	U(2)	V	R(3)					
L2153	21.19	14.69	9.69	13.25	4.00	3.75	1.875	3.50	1.591	.500	2.50	230		
L2158	22.44	15.94	10.94	14.50	4.00	3.75	1.875	3.50	1.591	.500	2.50	260		
L2162	23.44	16.94	11.94	15.50	4.00	3.75	1.875	3.50	1.591	.500	2.50	285		
L2564	25.31	17.69	12.50	16.00	4.50	4.25	2.125	4.00	1.845	.500	3.00	345		
L2570	26.81	19.19	14.00	17.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	395		
L2869	27.81	19.25	13.31	17.25	5.00	4.75	2.375	4.50	2.021	.625	3.50	555		
L2875	29.31	20.75	14.81	18.75	5.00	4.75	2.375	4.50	2.021	.625	3.50	620		

TACH MODEL	XL MAX.
TS-5008N TS-5013N TS-5016N TS-5035N	2.56
TS-2228N	2.25
TS-2014N	4.31
TS-2087N	8.62
RE-045	1.38
RD-120	.38
625	6.50

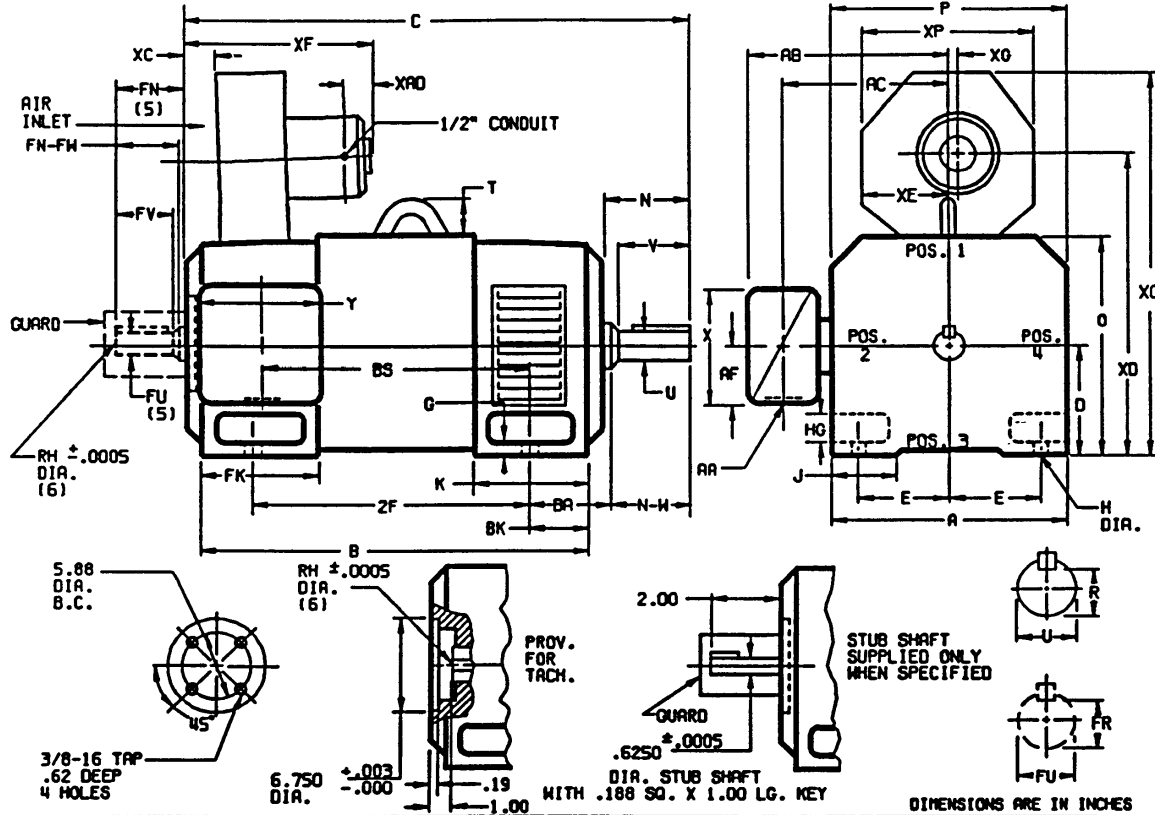
- (1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) "U" VARIES -- +.000 -.001
- (3) "R" VARIES -- +.000 -.015

TERMINAL BOX CAN BE ROTATED IN 90 DEG. INCREMENTS.
 TERMINAL BOX MOUNTED ON TOP AS STANDARD.
 TERMINAL BOX CAN BE LOCATED ON SIDE IN F1 OR F2 POSITION WHEN SPECIFIED.
 MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES.
 IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

Variable Speed Alternating Current Motors RPM AC

ENCLOSURE: DRIP-PROOF FULLY-GUARDED.
MOUNTING: FOOT
METHOD OF DRIVE: COUPLED OR BELTED

COOLING: FORCE VENTILATED WITH INTEGRAL BLOWER AND MOTOR
ACCESSORIES: PROVISION FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED



FRAME	A	OX(1)	E	θ	N	ND	J	O	P	BR	K	FK	BK	T
L2158Z - L2162Z	10.25	5.25	4.25	.44	.44	1.38	1.75	10.44	10.31	3.50	5.19	6.81	2.38	2.38
L2564Z - L2570Z	12.31	6.25	5.00	.50	.56	1.62	2.00	12.50	12.44	4.25	6.06	8.00	3.00	2.38
L2869Z - L2882Z	13.78	7.00	5.50	.62	.56	1.88	2.75	14.00	13.94	4.75	6.75	9.19	3.50	2.38

FRAME	METHOD OF DRIVE	C	B	BS	ZF	DRIVE END SHAFT AND KEY						OPPOSITE DRIVE END SHAFT AND KEY (5)					HT. LBS.			
						N	N-W	U(2)	V	R(3)	SO. LGTH.	FN	FN-FW	FU(2)	FV	FR(3)		SO. LGTH.		
L2158Z	(4)	26.38	20.50	14.12	14.50	4.00	3.75	1.875	3.50	1.591	.500	2.50	3.50	3.25	1.625	3.00	1.416	.375	2.25	300
L2162Z	(4)	27.38	21.50	15.12	15.50	4.00	3.75	1.875	3.50	1.591	.500	2.50	3.50	3.25	1.625	3.00	1.416	.375	2.25	325
L2564Z	(4)	30.19	23.56	16.00	16.00	4.50	4.25	2.125	4.00	1.845	.500	3.00	4.00	3.75	1.875	3.50	1.591	.500	2.50	410
L2570Z	(4)	31.69	25.06	17.50	17.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	4.00	3.75	1.875	3.50	1.591	.500	2.50	460
L2869Z	(4)	33.50	26.06	17.18	17.25	5.00	4.75	2.375	4.50	2.021	.625	3.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	615
L2875Z	(4)	35.00	27.56	18.68	18.75	5.00	4.75	2.375	4.50	2.021	.625	3.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	690
L2882Z	(4)	36.75	29.31	20.43	20.50	5.00	4.75	2.375	4.50	2.021	.625	3.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	745

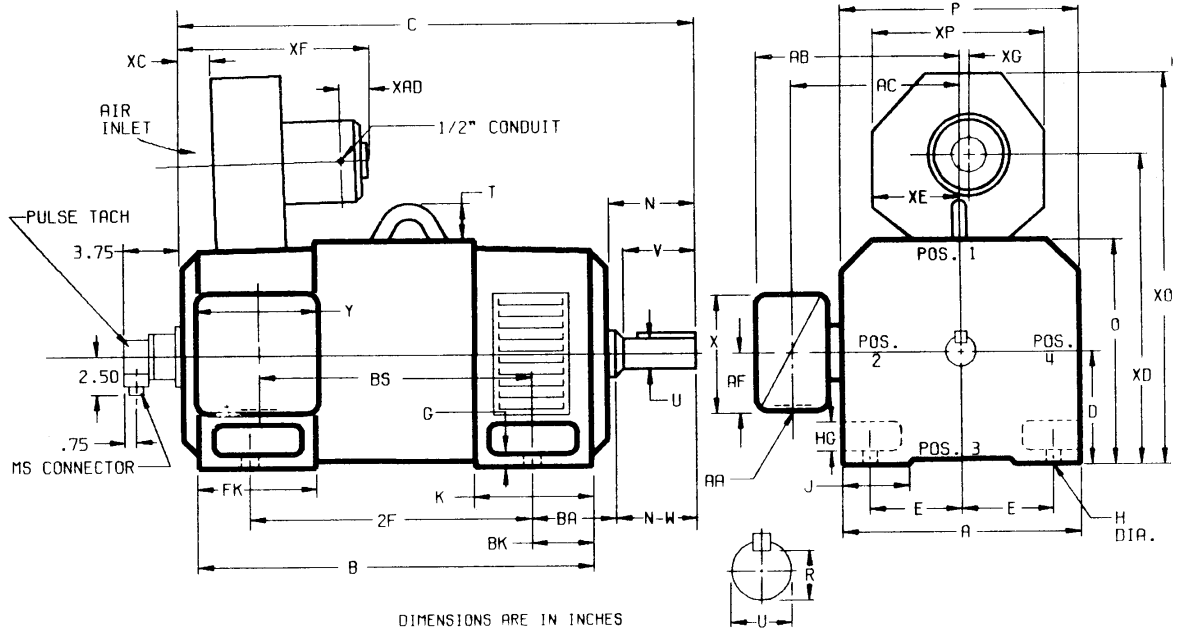
FRAME	XC	XO	XE	XF	XD	XO	XP	XPD	RA	RB	RC	RF	X	Y
L2158Z - L2162Z	2.75	15.56	5.12	14.38	.38	20.69	10.25	1.00	1-1/4	4 1-1/2	9.50	7.50	2.50	6.12
L2564Z - L2570Z	3.38	17.62	5.12	15.12	.38	22.75	10.25	1.00	1-1/4	4 1-1/2	10.56	8.56	2.50	6.12
L2869Z - L2882Z	3.75	19.12	5.12	18.12	.38	24.25	10.25	3.00	2 4	2-1/2	12.62	9.88	3.19	7.00

- (1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
 - (2) "U" AND "FU" VARY .000 - .001
 - (3) "R" AND "FR" VARY .000 - .015
 - (4) METHOD OF DRIVE: COUPLED OR BELTED
 - (5) OPPOSITE DRIVE END SHAFT SUPPLIED ONLY WHEN SPECIFIED.
 - (6) REAMED HOLE DIA. FOR STUB SHAFT—1.25 DEEP.
 - (7) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF OPP. DRIVE END. ADD .25 TO "C" DIA. FOR BRACKET COVER.
- TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM. TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, N-1, N-4, N-5, N-7, OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED. BLOWER ASSEMBLY CAN BE LOCATED AT POSITIONS 1, 2, OR 4, EXCEPT BLOWER ASSEMBLY AND TERMINAL BOX CAN NOT BE LOCATED AT THE SAME POSITION. MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES. IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

Variable Speed Alternating Current Motors RPM AC

ENCLOSURE: DRIP-PROOF FULLY-GUARDED.
MOUNTING: FOOT
METHOD OF DRIVE: COUPLED OR BELTED

COOLING: FORCE VENTILATED WITH INTEGRAL BLOWER AND MOTOR
ACCESSORIES: FLANGE MOUNTED PULSE TACHOMETER



DIMENSIONS ARE IN INCHES

FRAME	A	D(1)	E	G	H	HG	J	O	P	BA	K	FK	BK	T
L2158Z - L2162Z	10.25	5.25	4.25	.44	.44	1.38	1.75	10.44	10.31	3.50	5.19	6.81	2.38	2.38
L2564Z - L2570Z	12.31	6.25	5.00	.50	.56	1.62	2.00	12.50	12.44	4.25	6.06	8.00	3.00	2.38
L2869Z - L2882Z	13.78	7.00	5.50	.62	.56	1.88	2.75	14.00	13.94	4.75	6.75	9.19	3.50	2.38

FRAME	METHOD OF DRIVE	C	B	BS	2F	DRIVE END SHAFT AND KEY							WT. LBS.
						N	N-W	U(2)	V	R(3)	SO.	LGTH.	
L2158Z	(4)	26.38	20.50	14.12	14.50	4.00	3.75	1.875	3.50	1.591	.500	2.50	300
L2162Z	(4)	27.38	21.50	15.12	15.50	4.00	3.75	1.875	3.50	1.591	.500	2.50	325
L2564Z	(4)	30.19	23.56	16.00	16.00	4.50	4.25	2.125	4.00	1.845	.500	3.00	410
L2570Z	(4)	31.69	25.06	17.50	17.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	460
L2869Z	(4)	33.50	26.06	17.18	17.25	5.00	4.75	2.375	4.50	2.021	.625	3.50	615
L2875Z	(4)	35.00	27.56	18.68	18.75	5.00	4.75	2.375	4.50	2.021	.625	3.50	680
L2882Z	(4)	36.75	29.31	20.43	20.50	5.00	4.75	2.375	4.50	2.021	.625	3.50	745

FRAME	XC	XD	XE	XF	XG	XO	XP	XAD	AA	AB	AC	AF	X	Y
L2158Z - L2162Z	2.75	15.56	5.12	14.38	.38	20.69	10.25	1.00	1-1/4 x 1-1/2	9.50	7.50	2.50	5.50	6.12
L2564Z - L2570Z	3.38	17.62	5.12	15.12	.38	22.75	10.25	1.00	1-1/4 x 1-1/2	10.56	8.56	2.50	5.50	6.12
L2869Z - L2882Z	3.75	19.12	5.12	18.12	.38	24.25	10.25	3.00	2 x 2-1/2	12.62	9.86	3.19	7.00	7.62

- (1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) "U" VARIES-----+.000 -.001
- (3) "R" VARIES-----+.000 -.015
- (4) METHOD OF DRIVE: COUPLED OR BELTED

TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM. TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, W-4, W-5, W-7, OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED. BLOWER ASSEMBLY CAN BE LOCATED AT POSITIONS 1, 2, OR 4, EXCEPT BLOWER ASSEMBLY AND TERMINAL BOX CAN NOT BE LOCATED AT THE SAME POSITION. MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES. IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

Engineering Estimations

Bearing and Shaft Data

Frame	Opposite End Drive			Drive End			Remarks
	Shaft ⁽¹⁾		Bearing	Shaft ⁽¹⁾		Bearing	
	"FU" Std.	"FU" Max.		"U" Std.	"U" Max.		
L210	1.625	1.750	209	1.875	1.875	310	Coupled or belted drive
L250	1.875	1.875	210	2.125	2.250	312	Coupled or belted drive
L280	2.125	2.125	211	2.375	2.500	313	Coupled or belted drive
L320	2.375	2.500	313	2.625	2.750	314	Coupled or belted drive
L360S	2.375	2.500	313	2.375	2.500	313	Coupled duty only
UL360	2.375	3.125	316	3.375 ⁽²⁾	3.625	NU219	Belted duty only
L400S	2.375	2.500	313	2.375	2.500	313	Coupled duty only
UL400	2.375	3.500	318	3.875 ⁽²⁾	4.250	NU222	Belted duty only

(1) Maximum "U" dimension is largest diameter that can be supplied with standard bearing. Price addition must be made to obtain this maximum diameter or any diameter between the standard and the maximum.

(2) For totally enclosed only. See dimension sheet for DPFV.

AFBMA Designation Versus Bearing Size

Ball Bearings - Single Row, Ball-Deep Groove, Open (No Shields)
Std. Cage, ABEC 1, AFBMA 3 Clearance, Slush

Size	AFBMA Designation	Size	AFBMA Designation
209	45BC02J30X	313	65BC03J30X
210	50BC02J30X	314	70BC03J30X
211	55BC02J30X	316	80BC03J30X
310	50BC03J30X	318	90BC03J30X
312	60BC03J30X		

Roller Bearings - Single Row, Cylindrical Roller, Bronze Cage,
ABEC 1, AFBMA 3 Clearance, Slush.

Size	AFBMA Designation
NU219	95RU02M30X
NU222	110RU02M30X26

Axial Thrust Capacity In Pounds For Minimum L-10 Bearing Life Of 10,000 Hrs. With No External Overhung Load

Axial Thrust Capacity In Pounds/Kilograms

Frame		Horizontal Mounting				Vertical Mounting (1)			
		2500 rpm	1750 rpm	1150 rpm	850 rpm	2500 rpm	1750 rpm	1150 rpm	850 rpm
L210	pounds	477	551	662	742	498 ± 61	564 ± 61	676 ± 61	756 ± 61
	kilograms	217	251	301	338	227 ± 28	257 ± 28	308 ± 28	344 ± 28
L250	pounds	509	600	722	828	541 ± 86	629 ± 86	755 ± 86	865 ± 86
	kilograms	231	272	327	376	245 ± 39	285 ± 39	342 ± 39	392 ± 39
L280	pounds	590	700	850	975	644 ± 122	754 ± 122	905 ± 122	1038 ± 122
	kilograms	268	318	386	442	292 ± 56	342 ± 56	411 ± 56	471 ± 56
L320	pounds	705	835	1020	1170	770 ± 175	905 ± 175	1095 ± 175	1250 ± 175
	kilograms	320	379	463	531	349 ± 80	411 ± 80	497 ± 80	567 ± 80
L360	pounds	875	1075	1350	1525	830 ± 293	1020 ± 293	1300 ± 293	1475 ± 293
	kilograms	397	488	612	692	376 ± 133	463 ± 133	590 ± 133	669 ± 133
L400	pounds	1350	1630	2000	2250	1470 ± 352	1820 ± 352	2210 ± 352	2475 ± 352
	kilograms	612	740	908	1021	667 ± 160	826 ± 160	1003 ± 160	1123 ± 160

(1) Thrust capacity for vertical mounting includes a constant whose value is plus or minus depending on the direction of the thrust load. The constant is plus for thrust loads acting upward against the force of gravity and minus for loads acting downward with gravity.

Radial Load Capacity

Frame	Radial Load Capacities at the End of the Shaft in Lbs (1)			
	2500 rpm	1750 rpm	1150 rpm	850 rpm
L210	875	875	875	875
L250	1375	1525	1525	1525
L280	1550	1755	1755	1755
L320	1685	1800	1800	1800
UL360 ⁽²⁾	2550	2875	3300	3310
UL400 ⁽²⁾	3625	4090	4700	5190

(1) **CAUTION:** The use of these radial load capacities requires the accurate calculation of the radial load for the application. Radial loads for gears, sprockets, and flywheel are usually accurately determined but the radial loads due to V-belt drives are subject to miscalculations because they do not include all of the pre-tension load (belt tightening). The calculations of the radial load for a V-belt drive must include the pre-tension for transmitting the horsepower, pre-tension for centrifugal force on the belts, pre-tension for high start torques, rapid acceleration or deceleration, pre-tension for drives with short arc-of-contact between the V-belt and sheave, and low coefficient of friction between belt and sheave caused by moisture, oil or dust.

(2) Data for motors with roller bearings at the drive end (back end). Motors with ball bearings at the drive end are for coupled duty only.

Maximum Safe Speed

The speeds given below are the maximum mechanically safe operating speeds for frames with standard construction, based on coupled duty only. These speeds must not be exceeded under any condition. Motor control must hold the maximum speed under any load condition including no-load within the maximum safe speed. Drive systems whose design characteristics inherently prevent the AC motor from exceeding the Motor Maximum Safe Operating Speed must prevent the motor from exceeding the Maximum Safe Speed if a single component failure should occur.

Maximum Safe Speed

Frame Diameter	Maximum Safe Speed rpm
L210	5000
L250	5000
L280	5000
L320	4000
L360	3750
L400	3750

With special construction maximum safe speed may differ from the above values. In all cases, the maximum safe speed is indicated on the motor nameplate.

NOTE: Normal operating speeds must be limited to those listed on price pages in order to meet nameplate ratings and assure validity of warranty.



ATTENTION: The machinery builder is responsible for ensuring that the driven machinery and all drivetrain mechanisms not supplied by Rockwell Automation and process line material are capable of safe operation at the maximum speeds, as shown in above table. Failure to do so can result in personal injury or destruction of mechanism and material.

Balance

Motors are dynamically balanced to commercial limits unless ordered differently. Balance is done with a full length 1/2 height shaft key. A full shaft key is shipped with motor. Sheave or coupling should be balanced with a 1/2 height shaft key.

Standard Dynamic Balance Limits

Highest Rated Speed, rpm	Max. Amplitude in Inches
3,000 - 4,000	0.0010
1,500 - 2,999	0.0015
1,000 - 1,499	0.0020
Up to 999	0.0025

Rotating Parts

ATTENTION: Hazard of personal injury exists from accidental contact with rotating parts, such as couplings, pulleys, external fans, and unused shaft extensions. All rotating parts must be permanently guarded.

Belted Applications

All V-Belt drives must be designed and applied in accordance with the recommendations in this section.

To avoid excessive bearing loads and shaft stresses, belts should not be tightened more than necessary to transmit the rated torque. The pre-tensioning of the V-belt drive should be based on the total tightening force required to transmit the horsepower divided by the number of belts. This procedure guards against the excessive load caused by tightening individual belts to a prescribed level recommended by belt manufacturers.

Shaft stresses and bearing and belt loads will be reduced if sheave diameters larger than the calculated minimum are used, but the number of belts should be reduced accordingly.

IMPORTANT: The maximum V-belt velocity is 6500 feet per minute at highest motor operating speed.

Mounting

In general, the closer pulleys, sheaves, sprockets or gears are mounted to the bearing on the motor shaft, the less will be the load on the bearing. This will help provide a greater assurance of trouble-free service.

The center point of the belt, or system of V-belts, must not be beyond the end of the motor shaft.

The inner edge of the sheave or pulley rim should not be closer to the bearing than the shoulder on the shaft but should be as close to this point as possible.

The outer edge of a chain sprocket or gear must not extend beyond the end of the motor shaft.

Minimum V-Belt Sheave Diameters

The calculated minimum pitch of the V-belt sheave is based on the following:

1. Belt service factor of approximately 1.6 with belts tightened to the belt manufacturer's recommendations.
2. Speed reduction not exceeding 5:1.
3. Mounting of sheave on motor shaft in accordance with the preceding *Mounting* recommendations.
4. Center-to-center distance between sheaves approximately equal to five times the pitch diameter of the smaller sheave.

NOTE - The value “d” calculated may indicate a minimum sheave diameter which is smaller than is practicable to assemble on the motor shaft extension.

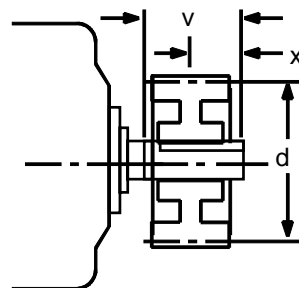
The horsepower ratings for belt drives may be found in ANSI Standard B5512 or in “Specifications for Drives Using Narrow Multiple V-Belts (3V, 5V and 8V Cross Sections)” published by Rubber Manufacturers Association and Mechanical Power Transmission Association or in Dodge Division Engineering Catalog A-591-1.1.

Preferred V-Belt Drives - Sheave Centerline is Toward Motor From End of Shaft.

Minimum pitch diameters of sheaves must not be smaller than the values calculated by the following formula where the sheave centerline is toward the motor from the end of the shaft.

$$d_{\text{inches}} = \frac{hp}{100} (A - Bx);$$

$$d_{\text{millimeter}} = \frac{kwp}{100} (C - Dx);$$



where:

d = minimum pitch diameter of V-belt sheave in inches.

hp = rated horsepower at base speed

x = axial distance of the sheave centerline from the end of the shaft in inches. The distance is measured from the end of the shaft (x is negative if centerline is beyond the end of the shaft and positive if toward the motor). The formula should not be used for negative values of x greater than one half of the V dimension of the shaft extension.

A, B = Constants from Table III corresponding to the base

C, D speed of the motor.

**Minimum Pitch Diameter For Drives
Other Than V-Belt**

To obtain the minimum pitch diameters for flat belt, timing-belt, chain and gear drives, apply the multiplier given in Table II to the minimum sheave diameter calculated for V-belt drives.

IMPORTANT: The maximum V-belt velocity is 6500 feet per minute at highest motor operating speed.

TABLE II - Multipliers For Drives Other Than V-Belt

Drive	Multiplier
Flat Belt (See Note 1)	1.33
Timing Belt (See Note 2)	0.9
Chain Sprocket	0.7
Spur Gear	0.75
Helical Gear	0.85

NOTE 1: The above multiplier is intended for use with conventional single-ply flat belts. When other than single-ply flat belts are used, the use of a larger multiplier is recommended.

NOTE 2: It is often necessary to install belts with a snug fit. However, tension should be no more than that necessary to avoid belt slap or tooth jumping.

TABLE III - Constants For Calculating The Minimum Sheave Diameters For V-Belt Drives

Frame		"V" Dim.	Constant	Base rpm			
				850	1150	1750	2500
L210	inches	3.50	A	40.6	30.0	19.77	14.63
			B	7.26	5.43	3.56	2.09
	millimeters	88.9	C	1384	1022	674	499
			D	9.73	7.28	4.77	2.80
L250	inches	4.00	A	23.33	18.25	12.67	9.47
			B	3.58	2.3	1.17	.57
	millimeters	101.6	C	795	622	432	323
			D	4.80	3.08	1.57	.76
L280	inches	4.50	A	20.28	16.17	11.2	8.32
			B	2.94	1.75	.84	.43
	millimeters	114.3	C	691	551	382	284
			D	3.94	2.35	1.13	.58
L320	inches	5.00	A	18.47	14.25	9.97	-
			B	2.00	1.24	.59	-
	millimeters	127.0	C	630	486	340	-
			D	2.68	1.66	.79	-
UL360	inches	6.25	A	10.42	8.08	5.89	-
			B	.46	.25	.13	-
	millimeters	158.8	C	355	275	201	-
			D	.62	.34	.17	-
UL400	inches	8.00	A	8.9	6.9	4.8	-
			B	.30	.23	.16	-
	millimeters	203.2	C	303	235	163	-
			D	.40	.31	.21	-

Rotor Inertia and Motor Weight

Frame Size	Wk2 (lb - ft ²) ⁽¹⁾	Weight (lbs) ⁽¹⁾	
		TEAO-BC	DPFV
L2153	1.31	230	-
L2158	1.69	260	300
L2162	1.92	285	325
L2564	2.9	345	410
L2570	3.5	395	460
L2869	6.0	555	615
L2875	7.1	620	680
L2882	8.3	-	745
L3281	13.0	840	-
L3292	17.0	990	925
L3203	21.0	-	1000
L3698	28.0	-	1350
L3699	33.0	1175	-
L3607	35.0	1350	-
L3614	45.0	-	1665
L4022	61.0	1750	-
L4034	73.0	2150	2000
L4046	85.0	2450	-

(1) For estimating purposes.

Full Load Current (Typical) Based on Controller Power⁽¹⁾

HP	FL AMPS at 460 V	HP	FL AMPS at 460 V
5	8	100	124
7-1/2	11	125	156
10	13.9	150	180
15	21	200	240
20	27	250	300
25	34	300	360
30	40	350	415
40	52	400	465
50	65	450	520
60	77	500	570
75	96		

Blower Motor Data for Standard TEAO-BC⁽¹⁾

RPM AC Motor		Blower Motor	
Frame	Speed	3-Phase, 60 Hz, 230/460 V	
		F.L. Amps	Locked Rotor Amps
L210	All	.19/.11 (2)	.52/.35 (2)
L250-L320	All	.48/.28 (2)	1.02/.68 (2)
L360	All	1.5/.75	11/5.5
L400	All	3.5/1.75	36/18

Blower Motor Data for Severe Duty TEAO-BC⁽¹⁾

RPM AC Motor			Blower Motor	
Enclosure	Frame	Speed	3-Phase, 60 Hz, 230/460 V	
			F.L. Amps	Locked Rotor Amps
TEAO - In Line	L210-L320	All	1.5/.75	11/5.5
TEAO - Piggyback	L210-L250	All	1.5/.75	11/5.5
TEAO - Piggyback	L280-L320	All	2.6/1.3	18.6/9.3
TEAO - Piggyback	L360	All	1.5/.75	11/5.5
TEAO - Piggyback	L400	All	3.5/1.75	36/18

(1) For estimating only

(2) WYE - Delta

AC Motor Specifications For Blower Motors On Standard Drip-Proof Force-Ventilated Rpm A-C Motors

RPM A-C Motor		Blower Motor 60 Hz						
Frame	Speed rpm	HP	3-Phase, 60 Hz, 240/480 V			3-Phase, 50 Hz, 240/480 V		
			rpm	F.L. Amps	Locked Rotor Amps	rpm	F.L. Amps	Locked Rotor Amps
L210	All	1/2	3450	1.5/1.75	11.0/5.5	2850	1.7/1.85	12/6
L250	All	1/2	3450	1.5/1.75	11.0/5.5	2850	1.7/1.85	12/6
L280	All	3/4	3450	2.2/1.1	18.6/9.3	2850	2.4/1.2	20.6/10.3
L320	All	3/4	3450	2.2/1.1	18.6/9.3	2850	2.4/1.2	20.6/10.3
L360	All	3	3450	7.6/3.8	57/28.5	-	-	-
L400	All	3	3450	7.6/3.8	57/28.5	-	-	-
L360	All	2-1/2	-	-	-	2850	6/3	40/20
L400	All	2-1/2	-	-	-	2850	6/3	40/20

Filter Data For Rpm A-C DPFV

Frame	Quantity	Size - Inches	Type
L210	1	9.12 Dia. X 6.12 Long	Washable Wire Mesh
L250	1	9.12 Dia. X 6.12 Long	
L280	1	9.12 Dia. X 9.62 Long	
L320	1	9.12 Dia. X 9.62 Long	
L360	1	9.12 Dia. X 12.00 Long	
L400	1	9.12 Dia. X 12.00 Long	

Information shown in this publication
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CODE

ALLEN-BRADLEY 1329L SERIES AC VARIABLE SPEED MOTOR							
1329L High Performance Product							
Catalog Number Explanation							
1329L -	L	B	025	17	FV	H	- S - RL - FL
Bulletin	Type	Voltage	Horsepower	RPM	Enclosure	Mounting	Modifications
1329L	L= High Performance	A=230/460 B=460	005= 5HP 7F5= 7.5HP 010= 10HP 015= 15HP * * *	35= 3500rpm base 25= 2500rpm base 17= 1750rpm base 11= 1150rpm base 08= 850rpm base 06= 650rpm base	AO= TEAO-BC FV= DPFV NV= TENV N6= TENV 60 min	H= Foot mounted	Bearing Seals Belted Duty C/B Location Encoders End Shields Filter Addition Terminal Block Severe Duty Slide Base Space Heater