

ELWOOD HIGH PERFORMANCE MOTORS
1326AB-B4xxx MOTOR DATA



MOTOR MODEL		1326AB-B410G	1326AB-B410J	1326AB-B420E	1326AB-B420H	1326AB-B430E	1326AB-B430G
MECHANICAL DATA (1)							
Rated Torque, Cont (Stall)	Nm	2.7	2.7	5.0	5.1	6.6	6.4
	lb-in	24	24	44	45	58	57
Peak Torque (Stall)	Nm	8.1	8.1	14.9	14	19.7	17.2
	lb-in	72	72	132	124	174	152
Rated Current	A _{0-PK}	3.5	4.9	4.0	7.7	5.5	7.9
Rated Power	kW	1.0	1.4	1.1	2.2	1.5	2.3
	hp	1.3	1.9	1.5	3.0	2.0	3.1
Rated Voltage (Drive Supply)	V _{rms}	460	460	460	460	460	460
Rotor Moment of Inertia	kg-m ²	0.000433	0.000433	0.0008	0.0008	0.0010	0.0010
	lb-in-s ²	0.00383	0.00383	0.0071	0.0071	0.0089	0.0089
Rotor Moment of Inertia Brake Motors	kg-m ²	0.00054	0.00054	0.00091	0.00091	0.00111	0.00111
	lb-in-s ²	0.00481	0.00481	0.0081	0.0081	0.0098	0.0098
Motor Shipping Weight	kg	10.0	10.0	12.7	12.7	16.8	16.8
	lb	22.0	22.0	27.9	27.9	37.0	37.0
Motor Shipping Weight Brake Motors	kg	11.4	11.4	14.1	14.1	18.2	18.2
	lb	25.0	25.0	30.9	30.9	40.0	40.0
Max. Operating Speed	rpm	5000	7250	3000	6000	3000	5000
WINDING DATA (1)							
Poles		4	4	4	4	4	4
K _T , Sine Wave Torque Constant (2)	Nm/A _{0-PK}	0.94	0.62	1.43	0.71	1.41	0.95
	lb-in/A _{0-PK}	8.3	5.5	12.7	6.3	12.5	8.4
K _E , Voltage Constant (4)	V _{0-PK} /kRPM	113.8	74.7	172.8	85.6	171.1	115.3
Winding Resistance Phase to Phase at 25±5°C	Ohms ±15%	12.6	5.8	12.6	3.1	7.1	3.4
Winding Inductance Phase to Phase	mH	73.0	28.6	69.8	17.2	40.2	18.2
Thermal Constant (R _{th})	°C/W	1.4	1.4	2.0	2.0	2.3	2.3
Thermal Constant (C _{th})	W-s/°C	1000	1000	1000	1000	1000	1000
Dielectric Rating	Power Leads (R,S,T) to Ground:1500 VAC 50/60 Hz for 1 minute.						
(1) Specifications are at 25°C unless noted. (3) Peak value of per phase square wave Amperes							
(2) Peak value of per phase sine wave Amperes (4) Volts 0-peak Line-Line / kRPM							

STORAGE AND OPERATING CONDITIONS	
Ambient Temperature	Operating: 0° to 40°C (32° to 104°F) Storage: -30° to 70°C (-25° to 158°F)
Relative Humidity	5% to 95% non-condensing

THERMOSTAT RATINGS	
Rated Voltage	0-250 Volts DC or 50/60 Hz AC*
Rated Current	2.5 Amps @ Power Factor of 1.0
	1.6 Amps @ Power Factor of 0.6
Maximum Switching Current	5 Amps
Contact Resistance	<0.10 Ohms maximum
Contacts	Normally closed
Insulation Dielectric	Mylar Nomex capable of withstanding 1500 VAC RMS 50/60 Hz for 1 minute
Opening Temperature (+/- 5°C)	140°C
*The thermostat is normally used as a switch for a 15VDC logic signal.	

ELWOOD HIGH PERFORMANCE MOTORS
1326AB-B5xxx MOTOR DATA



MOTOR MODEL		1326AB- B515E	1326AB- B515G	1326AB- B520E	1326AB- B520F	1326AB- B530E	
MECHANICAL DATA (1)							
Rated Torque, Cont (Stall)	Nm	10.4	10.4	13.0	13.1	18.0	
	lb-in	92	92	115	116	159	
Peak Torque (Stall)	Nm	31.2	31.2	39	39.3	54.2	
	lb-in	276	276	345	348	480	
Rated Current	A _{0-PK}	8.6	13.4	9.5	12.4	13.4	
Rated Power	kW	2.3	2.9	2.9	2.9	4.2	
	hp	3.1	3.9	3.9	3.9	5.6	
Rated Voltage (Drive Supply)	V _{rms}	460	460	460	460	460	
Rotor Moment of Inertia	kg-m ²	0.0043	0.0043	0.006	0.006	0.009	
	lb-in-s ²	0.03806	0.03806	0.05310	0.05310	0.07966	
Rotor Moment of Inertia Brake Motors	kg-m ²	0.00460	0.0046	0.0063	0.0063	0.0093	
	lb-in-s ²	0.04071	0.04071	0.05576	0.05576	0.08231	
Motor Shipping Weight	kg	21.3	21.3	27.7	27.7	34.5	
	lb	47.0	47.0	61.1	61.1	76.1	
Motor Shipping Weight Brake Motors	kg	25.4	25.4	31.8	31.8	38.6	
	lb	56.0	56.0	70.1	70.1	85.1	
Max. Operating Speed	rpm	3000	5000	3000	3500	3000	
WINDING DATA (1)							
Poles		4	4	4	4	4	
K _T , Sine Wave Torque Constant (2)	Nm/A _{0-PK}	1.45	0.887	1.65	1.24	1.6	
	lb-in/A _{0-PK}	12.8	7.8	14.6	11.0	14.2	
K _E , Voltage Constant (4)	V _{0-PK} /kRPM	174.7	107.3	199	149.3	193.9	
Winding Resistance Phase to Phase at 25±5°C	Ohms ±15%	3.3	2	3	1.7	1.6	
Winding Inductance Phase to Phase	mH	28.6	10.8	27.6	15.2	16.4	
Thermal Constant (R _{th})	°C/W	2.7	2.7	3.4	3.4	4.0	
Thermal Constant (C _{th})	W-s/°C	1000	1000	1000	1000	1000	
Dielectric Rating	Power Leads (R,S,T) to Ground:1500 VAC 50/60 Hz for 1 minute.						
(1) Specifications are at 25°C unless noted. (3) Peak value of per phase square wave Amperes (2) Peak value of per phase sine wave Amperes (4) Volts 0-peak Line-Line / kRPM							

STORAGE AND OPERATING CONDITIONS	
Ambient Temperature	Operating: 0° to 40°C (32° to 104°F) Storage: -30° to 70°C (-25° to 158°F)
Relative Humidity	5% to 95% non-condensing

THERMOSTAT RATINGS	
Rated Voltage	0-250 Volts DC or 50/60 Hz AC*
Rated Current	2.5 Amps @ Power Factor of 1.0
	1.6 Amps @ Power Factor of 0.6
Maximum Switching Current	5 Amps
Contact Resistance	<0.10 Ohms maximum
Contacts	Normally closed
Insulation Dielectric	Mylar Nomex capable of withstanding 1500 VAC RMS 50/60 Hz for 1 minute
Opening Temperature (+/- 5°C)	140°C

*The thermostat is normally used as a switch for a 15VDC logic signal.

ELWOOD HIGH PERFORMANCE MOTORS
1326AB-B7xxx MOTOR DATA



MOTOR MODEL		1326AB-B720E	1326AB-B720F	1326AB-B730E	1326AB-B740C	1326AB-B740E	
MECHANICAL DATA (1)							
Rated Torque, Cont (Stall)	Nm	30.9	31.8	39.0	53.0	50.0	
	lb-in	273	281	345	469	443	
Peak Torque (Stall)	Nm	88.1	56	85.4	126.8	79.4	
	lb-in	780	496	756	1122	703	
Rated Current	A _{0-PK}	24.8	38.9	32.2	29.6	45.3	
Rated Power	kW	6.8	11.7	9.6	8.7	12.7	
	hp	9.1	15.7	12.9	11.7	17.0	
Rated Voltage (Drive Supply)	V _{rms}	460	460	460	460	460	
Rotor Moment of Inertia	kg-m ²	0.0150	0.0173	0.0254	0.0336	0.0336	
	lb-in-s ²	0.13276	0.15312	0.22481	0.29738	0.29738	
Rotor Moment of Inertia Brake Motors	kg-m ²	0.01552	0.0178	0.0259	0.0341	0.0341	
	lb-in-s ²	0.13736	0.15772	0.22941	0.30199	0.30199	
Motor Shipping Weight	kg	46.3	62.6	62.6	77.1	77.1	
	lb	102.1	138.0	138.0	170.0	170.0	
Motor Shipping Weight Brake Motors	kg	52.2	52.2	68.5	83.0	83.0	
	lb	115.1	115.1	151.0	183.0	183.0	
Max. Operating Speed	rpm	3500	5000	3350	2200	3400	
WINDING DATA (1)							
Poles		4	4	4	4	4	
K _T , Sine Wave Torque Constant (2)	Nm/A _{0-PK}	1.47	0.962	1.48	2.26	1.5	
	lb-in/A _{0-PK}	13.0	8.5	13.1	20.0	13.2	
K _E , Voltage Constant (4)	V _{0-PK} /kRPM	177.1	117.1	178.5	273.1	180.3	
Winding Resistance Phase to Phase at 25±5°C	Ohms ±15%	0.7	0.3	0.4	0.6	0.3	
Winding Inductance Phase to Phase	mH	8.7	4.2	6.6	11.4	4.6	
Thermal Constant (R _{th})	°C/W	3.3	3.6	3.6	3.6	3.6	
Thermal Constant (C _{th})	W-s/°C	1000	1000	1000	1000	1000	
Dielectric Rating	Power Leads (R,S,T) to Ground:1500 VAC 50/60 Hz for 1 minute.						
(1) Specifications are at 25°C unless noted. (3) Peak value of per phase square wave Amperes (2) Peak value of per phase sine wave Amperes (4) Volts 0-peak Line-Line / kRPM							

STORAGE AND OPERATING CONDITIONS	
Ambient Temperature	Operating: 0° to 40°C (32° to 104°F) Storage: -30° to 70°C (-25° to 158°F)
Relative Humidity	5% to 95% non-condensing

THERMOSTAT RATINGS	
Rated Voltage	0-250 Volts DC or 50/60 Hz AC*
Rated Current	2.5 Amps @ Power Factor of 1.0
	1.6 Amps @ Power Factor of 0.6
Maximum Switching Current	5 Amps
Contact Resistance	<0.10 Ohms maximum
Contacts	Normally closed
Insulation Dielectric	Mylar Nomex capable of withstanding 1500 VAC RMS 50/60 Hz for 1 minute
Opening Temperature (+/- 5°C)	140°C

*The thermostat is normally used as a switch for a 15VDC logic signal.

ELWOOD HIGH PERFORMANCE MOTORS

MODEL NUMBER (CAT. NO.) IDENTIFICATION



RESOLVER FEEDBACK MOTORS

1326 AB - B 4 20 E - 21 - K4 - L

STANDARD OPTIONS

L = IP67 Environmental rating only for all frame series

Blank = Not equipped

STANDARD OPTIONS

K4 = 8.1 Nm (72 lb-in.) Holding Brake with 24VDC coil for 1326AB-B4 frame

K5 = 13.6 N-m (120 lb in.) Holding Brake with 24VDC coil for 1326AB-B5 frame

K7 = 41 N-m (140 lb in.) Holding Brake with 24VDC coil for 1326AB-B7 frame

Blank = Not equipped

FLANGE AND SHAFT SERIES

21 = IEC metric flange with keyway

MOTOR WINDING DESIGNATOR

Letter designation for rated motor speed (See Motor Data for rated speeds)

MOTOR LENGTH

Sequentially numbered indicating the magnetic stack length within the frame size

FRAME SERIES

4 = 108 mm frame diameter (115 mm bolt center)

5 = 149 mm frame diameter (165 mm bolt center)

7 = 194 mm frame diameter (215 mm bolt center)

VOLTAGE

B = 460V AC

TYPE

AB = Ferrite AC Servo Motor

SERIES DESIGNATOR

1326 = Bulletin Number

ABSOLUTE FEEDBACK MOTORS

1326 AB - B 4 20 E - x2 xx L x

CONNECTOR ORIENTATION

S = Connector exit toward shaft/drive end

Blank = Connector exit toward rear end

ENVIRONMENTAL SEALING

L = Sealing design for IP67 environments (standard)

BRAKE OPTIONS (FRAME SPECIFIC)

K4 = 8.1 Nm (72 lb-in.) Holding Brake with 24VDC coil for 1326AB-B4 frame

K5 = 13.6 N-m (120 lb in.) Holding Brake with 24VDC coil for 1326AB-B5 frame

K7 = 41 N-m (140 lb in.) Holding Brake with 24VDC coil for 1326AB-B7 frame

Blank = Not equipped

FEEDBACK OPTIONS

S = Single-turn high-res. absolute (only available with IP67 rating)

M = Multi-turn high-res. absolute (only available with IP67 rating)

MOTOR WINDING DESIGNATOR

Letter designation for rated motor speed (See Motor Data for rated speeds)

MOTOR LENGTH

Sequentially numbered indicating the magnetic stack length within the frame size

FRAME SERIES

4 = 108 mm frame diameter (115 mm bolt center)

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7 = 194 mm frame diameter (215 mm bolt center)

VOLTAGE

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