



**ELWOOD HIGH PERFORMANCE MOTORS
SX-SERIES MOTOR DATA**

http://www.elwood.com/dSX_Mtr_Data.pdf

230V Windings

MOTOR MODEL		M431-N	M432-N	M433-F	M433-H	M433-J	M433-M
MECHANICAL DATA (1)							
Rated Torque, Cont (Stall)	Nm	1.17	2.35	3.16	3.16	3.16	3.16
	lb-in	10.4	20.8	28.0	28.0	28.0	28.0
Peak Torque (Stall)	Nm	3.51	7.05	9.48	9.48	9.48	9.48
	lb-in	31.2	62.3	83.9	83.9	83.9	83.9
Rated Current	A _{0-PK}	4.0	7.4	5.8	6.4	7.2	10.5
Rated Power	kW	0.5	0.7	0.8	0.8	0.9	1.0
	hp	0.6	0.9	1.0	1.1	1.2	1.3
Rated Voltage (Drive Supply)	V _{rms}	230	230	230	230	230	230
Rotor Moment of Inertia	kg-m ²	0.000070	0.000124	0.000169	0.000169	0.000169	0.000169
	lb-in-s ²	0.000620	0.001100	0.001500	0.001500	0.001500	0.001500
Rotor Moment of Inertia Brake Motors	kg-m ²	0.000087	0.000143	0.000183	0.000183	0.000183	0.000183
	lb-in-s ²	0.000770	0.001270	0.001620	0.001620	0.001620	0.001620
Motor Shipping Weight	kg	5.0	6.4	8.0	8.0	8.0	8.0
	lb	11.0	14.0	17.5	17.5	17.5	17.5
Motor Shipping Weight Brake Motors	kg	6.8	8.0	9.5	9.5	9.5	9.5
	lb	15.0	17.5	21.0	21.0	21.0	21.0
Friction Torque	Nm	0.06	0.06	0.06	0.06	0.06	0.06
	lb-in	0.5	0.5	0.5	0.5	0.5	0.5
Max. Operating Speed	rpm	6500	6500	3000	3500	4500	6500
WINDING DATA (1)							
Poles		6	6	6	6	6	6
K _T , Sine Wave Torque Constant (2)	Nm/A _{0-PK}	0.39	0.39	0.75	0.68	0.53	0.35
	lb-in/A _{0-PK}	3.5	3.5	6.6	6.0	4.7	3.1
Square Wave K _T Torque Constant (3)	Nm/A _{0-PK}	0.42	0.42	0.81	0.73	0.57	0.38
	lb-in/A _{0-PK}	3.8	3.8	7.2	6.5	5.1	3.4
K _E , Voltage Constant (4)	V(0-pk L-L)/kRPM	49	49	105	86	72	49
Winding Resistance Phase to Phase at 25±5°C	Ohms ±10%	5.5	2	4.4	3.5	2.5	1.1
Winding Inductance Phase to Phase	mH	7.6	3.5	9.9	10.4	4.2	2.5
Thermal Resistance	°C/Watt	0.91	0.82	0.68	0.68	0.68	0.68
Dielectric Rating		Power Leads (R,S,T) to Ground:1500 VACrms 50/60 Hz for 1 minute.					

(1) Specifications are at 25°C unless otherwise noted.

(2) Peak value of per phase sine wave Amperes

(3) Peak value of per phase square wave Amperes

(4) Volts peak-peak Line-Line / kRPM

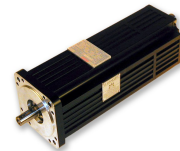
STORAGE AND OPERATING CONDITIONS

Ambient Temperature	Operating: -20° to 40°C (-4° 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.



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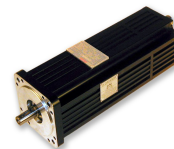
MOTOR MODEL		M431-N	M432-N	M433-F	M433-H	M433-J	M433-M
MECHANICAL DATA (1)							
Rated Torque, Cont (Stall)	Nm	1.10	2.21	2.97	2.97	2.97	2.97
	lb-in	9.8	19.5	26.3	26.3	26.3	26.3
Peak Torque (Stall)	Nm	3.30	6.63	8.91	8.91	8.91	8.91
	lb-in	29.4	58.5	78.9	78.9	78.9	78.9
Rated Current	A _{0-PK}	1.8	3.5	2.7	3.0	3.5	5.1
Rated Power	kW	0.5	0.7	0.7	0.8	0.9	0.9
	hp	0.6	0.9	1.0	1.0	1.2	1.2
Rated Voltage (Drive Supply)	V _{rms}	460	460	460	460	460	460
Rotor Moment of Inertia	kg-m ²	0.000070	0.000124	0.000169	0.000169	0.000169	0.000169
	lb-in-s ²	0.000620	0.001100	0.001500	0.001500	0.001500	0.001500
Rotor Moment of Inertia Brake Motors	kg-m ²	0.000087	0.000143	0.000183	0.000183	0.000183	0.000183
	lb-in-s ²	0.000770	0.001270	0.001620	0.001620	0.001620	0.001620
Motor Shipping Weight	kg	5.0	6.4	8.0	8.0	8.0	8.0
	lb	11.0	14.0	17.5	17.5	17.5	17.5
Motor Shipping Weight Brake Motors	kg	6.8	8.0	9.5	9.5	9.5	9.5
	lb	15.0	17.5	21.0	21.0	21.0	21.0
Friction Torque	Nm	0.06	0.06	0.06	0.06	0.06	0.06
	lb-in	0.5	0.5	0.5	0.5	0.5	0.5
Max. Operating Speed	rpm	6500	6500	3000	3500	4500	6500
WINDING DATA (1)							
Poles		6	6	6	6	6	6
K _t , Sine Wave Torque Constant (2)	Nm/A _{0-PK}	0.72	0.72	1.63	1.35	1.07	0.70
	lb-in/A _{0-PK}	6.4	6.4	14.5	11.9	9.4	6.2
Square Wave K _T Torque Constant (3)	Nm/A _{0-PK}	0.78	0.78	1.76	1.46	1.16	0.76
	lb-in/A _{0-PK}	7.0	7.0	15.8	13.0	10.2	6.8
K _E , Voltage Constant (4)	V(0-pk L-L)/kRPM	96	98	205	173	139	98
Winding Resistance Phase to Phase at 25±5°C	Ohms ±10%	27.2	9.9	22.8	18.4	12	4.7
Winding Inductance Phase to Phase	mH	30.4	14.0	61.5	41.7	30.7	13.6
Thermal Resistance	°C/Watt	0.91	0.82	0.68	0.68	0.68	0.68
Dielectric Rating		Power Leads (R,S,T) to Ground:1500 VACrms 50/60 Hz for 1 minute.					

(1) Specifications are at 25°C unless otherwise noted. (2) Peak value of per phase sine wave Amperes
(3) Peak value of per phase square wave Amperes (4) Volts peak-peak Line-Line / kRPM

STORAGE AND OPERATING CONDITIONS	
Ambient Temperature	Operating: -20° to 40°C (-4° 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.



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MOTOR MODEL		M442-E	M442-K	M443-E	M-443-K	M444-E	M444-H
MECHANICAL DATA (1)							
Rated Torque, Cont (Stall)	Nm	3.52	3.52	4.69	4.69	6.59	6.59
	lb-in	31.2	31.2	41.5	41.5	58.3	58.3
Peak Torque (Stall)	Nm	10.56	10.56	14.07	14.07	19.77	19.77
	lb-in	93.5	93.5	124.7	124.7	180.0	180.0
Rated Current	A _{0-PK}	5.0	8.9	6.9	13.6	9.9	13.2
Rated Power	kW	0.8	1.2	0.9	1.4	1.3	1.7
	hp	1.0	1.6	1.3	1.9	1.8	2.2
Rated Voltage (Drive Supply)	V _{rms}	230	230	230	230	230	230
Rotor Moment of Inertia	kg-m ²	0.000406	0.000406	0.000508	0.000508	0.000632	0.000632
	lb-in-s ²	0.003600	0.003600	0.004500	0.004500	0.005600	0.005600
Rotor Moment of Inertia Brake Motors	kg-m ²	0.000423	0.000423	0.000525	0.000525	0.000649	0.000649
	lb-in-s ²	0.003750	0.003750	0.004650	0.004650	0.005750	0.005750
Motor Shipping Weight	kg	9.5	9.5	10.9	10.9	13.2	13.2
	lb	21	21	24	24	29	29
Motor Shipping Weight Brake Motors	kg	9.5	9.5	10.9	10.9	13.2	13.2
	lb	21	21	24	24	29	29
Friction Torque	Nm	0.15	0.15	0.15	0.15	0.15	0.15
	lb-in	1.3	1.3	1.3	1.3	1.3	1.3
Max. Operating Speed	rpm	3000	5500	3000	5500	3000	4500
WINDING DATA (1)							
Poles		6	6	6	6	6	6
K _T , Sine Wave Torque Constant (2)	Nm/A _{0-PK}	0.81	0.42	0.83	0.42	0.81	0.58
	lb-in/A _{0-PK}	7.2	3.8	7.3	3.7	7.1	5.1
Square Wave K _T Torque Constant (3)	Nm/A _{0-PK}	0.87	0.45	0.90	0.45	0.87	0.63
	lb-in/A _{0-PK}	7.8	4.1	8.0	4.0	7.7	5.6
K _E , Voltage Constant (4)	V(0-pk L-L)/kRPM	99	52	100	51	98	70
Winding Resistance Phase to Phase at 25±5°C	Ohms ±10%	4.3	1.1	2.6	0.6	1.3	0.8
Winding Inductance Phase to Phase	mH	16.0	3.4	8.7	2.0	8.0	3.0
Thermal Resistance	°C/Watt	0.55	0.55	0.62	0.62	0.55	0.55
Dielectric Rating	Power Leads (R,S,T) to Ground:1500 VACrms 50/60 Hz for 1 minute.						

(1) Specifications are at 25°C unless otherwise noted.
(2) Peak value of per phase sine wave Amperes

(3) Peak value of per phase square wave Amperes
(4) Volts peak-peak Line-Line / kRPM

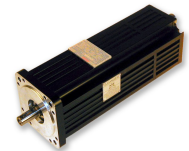
STORAGE AND OPERATING CONDITIONS

Ambient Temperature	Operating: -20° to 40°C (-4° 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.



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MOTOR MODEL		M442-E	M422-K	M443-E	M-443-K	M444-E	M444-H
MECHANICAL DATA (1)							
Rated Torque, Cont (Stall)	Nm	3.31	3.31	4.41	4.41	6.13	6.13
	lb-in	29.3	29.3	39.1	39.1	54.2	54.2
Peak Torque (Stall)	Nm	9.93	9.93	13.23	13.23	18.39	18.39
	lb-in	87.9	87.9	117.3	117.3	162.6	162.6
Rated Current	A _{0-PK}	2.3	4.1	3.3	6.5	4.7	6.2
Rated Power	kW	0.7	1.1	0.9	1.3	1.2	1.5
	hp	1.0	1.5	1.2	1.8	1.6	2.1
Rated Voltage (Drive Supply)	V _{rms}	460	460	460	460	460	460
Rotor Moment of Inertia	kg-m ²	0.000406	0.000406	0.000508	0.000508	0.000632	0.000632
	lb-in-s ²	0.003600	0.003600	0.004500	0.004500	0.005600	0.005600
Rotor Moment of Inertia Brake Motors	kg-m ²	0.000423	0.000423	0.000525	0.000525	0.000649	0.000649
	lb-in-s ²	0.003750	0.003750	0.004650	0.004650	0.005750	0.005750
Motor Shipping Weight	kg	9.5	9.5	10.9	10.9	13.2	13.2
	lb	21	21	24	24	29	29
Motor Shipping Weight Brake Motors	kg	9.5	9.5	10.9	10.9	13.2	13.2
	lb	21	21	24	24	29	29
Friction Torque	Nm	0.15	0.15	0.15	0.15	0.15	0.15
	lb-in	1.3	1.3	1.3	1.3	1.3	1.3
Max. Operating Speed	rpm	3000	5500	3000	5500	3000	4500
WINDING DATA (1)							
Poles		6	6	6	6	6	6
K _T , Sine Wave Torque Constant (2)	Nm/A _{0-PK}	1.63	1.04	1.65	0.83	1.57	1.16
	lb-in/A _{0-PK}	14.4	9.2	14.6	7.4	13.9	10.3
Square Wave K _T Torque Constant (3)	Nm/A _{0-PK}	1.76	1.12	1.78	0.90	1.70	1.25
	lb-in/A _{0-PK}	15.7	10.0	15.9	8.1	15.2	11.2
K _E , Voltage Constant (4)	V(0-pk L-L)/kRPM	197	126	200	101	190	140
Winding Resistance Phase to Phase at 25±5°C	Ohms ±10%	18.2	7.3	10.9	2.7	6.5	3.8
Winding Inductance Phase to Phase	mH	64.0	13.6	34.8	8.0	31.8	12
Thermal Resistance	°C/Watt	0.55	0.55	0.62	0.62	0.55	0.55
Dielectric Rating		Power Leads (R,S,T) to Ground:1500 VACrms 50/60 Hz for 1 minute.					
(1) Specifications are at 25°C unless otherwise noted.				(3) Peak value of per phase square wave Amperes			
(2) Peak value of per phase sine wave Amperes				(4) Volts peak-peak Line-Line / kRPM			

STORAGE AND OPERATING CONDITIONS	
Ambient Temperature	Operating: -20° to 40°C (-4° 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.



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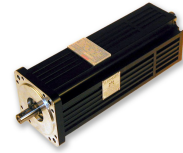
230V Windings

MOTOR MODEL		M461-G	M462-C	M462-G	M463-K	M464-G	M465-G
MECHANICAL DATA (1)							
Rated Torque, Cont (Stall)	Nm	4.88	10.38	10.38	14.81	18.60	21.13
	lb-in	43.1	91.9	91.9	131	164.6	187
Peak Torque (Stall)	Nm	14.64	31.14	31.14	44.43	55.8	63.39
	lb-in	129.5	275.7	275.7	393.1	493.8	560.9
Rated Current	A _{0-PK}	9.7	8.9	19.1	36.9	34.6	36.8
Rated Power	kW	1.4	1.3	2.2	2.5	2.9	3.8
	hp	1.9	1.7	2.9	3.4	3.9	5.1
Rated Voltage (Drive Supply)	V _{rms}	230	230	230	230	230	230
Rotor Moment of Inertia	kg-m ²	0.00124	0.00203	0.00203	0.00282	0.00361	0.00440
	lb-in-s ²	0.01100	0.01800	0.01800	0.02500	0.03200	0.03900
Rotor Moment of Inertia Brake Motors	kg-m ²	0.00203	0.00282	0.00282	0.00361	0.00440	0.00542
	lb-in-s ²	0.01800	0.02500	0.02500	0.03200	0.03900	0.04800
Motor Shipping Weight	kg	15.9	20.0	20.0	23.2	27.3	30.5
	lb	35.0	44.0	44.0	51.0	60.0	67.0
Motor Shipping Weight Brake Motors	kg	18.6	22.7	22.7	26.4	30.0	33.6
	lb	41.0	50.0	50.0	58.0	66.0	74.0
Friction Torque	Nm	0.56	0.56	0.56	0.56	0.56	0.56
	lb-in	5	5	5	5	5	5
Max. Operating Speed	rpm	4000	2000	4000	5500	4000	4000
WINDING DATA (1)							
Poles		6	6	6	6	6	6
K _T , Sine Wave Torque Constant (2)	Nm/A _{0-PK}	0.62	1.16	0.61	0.45	0.60	0.64
	lb-in/A _{0-PK}	5.4	10.3	5.4	4.0	5.4	5.7
Square Wave K _T Torque Constant (3)	Nm/A _{0-PK}	0.67	1.25	0.66	0.49	0.65	0.69
	lb-in/A _{0-PK}	5.9	11.2	5.9	4.4	5.9	6.2
K _E , Voltage Constant (4)	V(0-pk L-L)/kRPM	74	140	74	55	74	78
Winding Resistance Phase to Phase at 25±5°C	Ohms ±10%	1.9	2.7	0.7	0.2	0.2	0.2
Winding Inductance Phase to Phase	mH	14.9	27.0	6.8	2.8	3.0	3.2
Thermal Resistance	°C/Watt	0.46	0.43	0.43	0.37	0.36	0.36
Dielectric Rating		Power Leads (R,S,T) to Ground:1500 VACrms 50/60 Hz for 1 minute.					
(1) Specifications are at 25°C unless otherwise noted.		(3) Peak value of per phase square wave Amperes					
(2) Peak value of per phase sine wave Amperes		(4) Volts peak-peak Line-Line / kRPM					

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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

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MECHANICAL DATA (1)						
Rated Torque, Cont (Stall)	Nm	4.44	9.45	13.47	16.92	19.22
	lb-in	39.3	83.6	119.2	149.8	170.1
Peak Torque (Stall)	Nm	13.32	28.4	40.1	50.8	57.07
	lb-in	117.9	251	357.6	449	510
Rated Current	A _{0-PK}	4.4	8.1	16.8	15.7	16.7
Rated Power	kW	1.3	2.0	2.3	2.6	3.5
	hp	1.7	2.7	3.1	3.5	4.7
Rated Voltage (Drive Supply)	V _{rms}	460	460	460	460	460
Rotor Moment of Inertia	kg-m ²	0.00124	0.00203	0.00282	0.00361	0.00440
	lb-in-s ²	0.01100	0.01800	0.02500	0.03200	0.03900
Rotor Moment of Inertia Brake Motors	kg-m ²	0.00203	0.00282	0.00361	0.00440	0.00542
	lb-in-s ²	0.01800	0.02500	0.03200	0.03900	0.04800
Motor Shipping Weight	kg	15.9	20.0	23.2	27.3	30.5
	lb	35.0	44.0	51.0	60.0	67.0
Motor Shipping Weight Brake Motors	kg	18.6	22.7	26.4	30.0	33.6
	lb	41.0	50.0	58.0	66.0	74.0
Friction Torque	Nm	0.56	0.56	0.56	0.56	0.56
	lb-in	5	5	5	5	5
Max. Operating Speed	rpm	4000	4000	5500	4000	4000
WINDING DATA (1)						
Poles		6	6	6	6	6
K _T , Sine Wave Torque Constant (2)	Nm/A _{0-PK}	1.23	1.16	0.88	1.21	1.29
	lb-in/A _{0-PK}	10.9	10.3	7.8	10.7	11.5
Square Wave K _T Torque Constant (3)	Nm/A _{0-PK}	1.33	1.25	0.95	1.31	1.39
	lb-in/A _{0-PK}	11.9	11.2	8.5	11.7	12.5
K _E , Voltage Constant (4)	V(0-pk L-L)/kRPM	149	140	107	146	156
Winding Resistance Phase to Phase at 25±5°C	Ohms ±10%	8.2	2.7	1.0	1.0	1.0
Winding Inductance Phase to Phase	mH	59.60	27.00	11.10	12.20	13.00
Thermal Resistance	°C/Watt	0.46	0.43	0.37	0.36	0.36
Dielectric Rating	Power Leads (R,S,T) to Ground:1500 VACrms 50/60 Hz for 1 minute.					
(1) Specifications are at 25°C unless otherwise noted.		(3) Peak value of per phase square wave Amperes				
(2) Peak value of per phase sine wave Amperes		(4) Volts peak-peak Line-Line / kRPM				

STORAGE AND OPERATING CONDITIONS	
Ambient Temperature	Operating: -20° to 40°C (-4° 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
SX-SERIES MOTOR DATA**

http://www.elwood.com/dSX_Mtr_Data.pdf

230V Windings

MOTOR MODEL		M471-H	M473-C	M474-C	M476-C	M477-C
MECHANICAL DATA (1)						
Rated Torque, Cont (Stall)	Nm	6.72	16.07	20.40	31.51	35.75
	lb-in	59.5	142.2	180.6	278.9	316.4
Peak Torque (Stall)	Nm	20.16	48.21	61.2	94.53	107.25
	lb-in	178.5	426.7	541.7	836.6	949.2
Rated Current	A _{0-PK}	12.4	16.0	21.4	32.7	36.9
Rated Power	kW	1.7	2.2	3.0	3.7	4.3
	hp	2.3	3.0	4.0	4.9	5.7
Rated Voltage (Drive Supply)	V _{rms}	230	230	230	230	230
Rotor Moment of Inertia	kg-m ²	0.00171	0.00513	0.00744	0.01026	0.01197
	lb-in-s ²	0.01515	0.04544	0.0659	0.09088	0.10603
Rotor Moment of Inertia Brake Motors	kg-m ²	0.001800	0.006560	0.008240	0.011630	0.012870
	lb-in-s ²	0.015900	0.058100	0.073000	0.103000	0.114000
Motor Shipping Weight	kg	12.5	30.5	35.0	40.0	50.0
	lb	27.5	67.0	77.0	88.0	110.0
Motor Shipping Weight Brake Motors	kg	15.7	34.1	39.1	43.2	53.2
	lb	34.5	75.0	86.0	95.0	117.0
Friction Torque	Nm	1.13	1.13	1.13	1.13	1.13
	lb-in	10	10	10	10	10
Max. Operating Speed	rpm	4000	2000	2000	2000	2000
WINDING DATA (1)						
Poles		8	8	8	8	8
K _T , Sine Wave Torque Constant (2)	Nm/A _{0-PK}	0.69	1.12	1.10	1.09	1.10
	lb-in/A _{0-PK}	6.1	10.0	9.8	9.6	9.7
Square Wave K _T Torque Constant (3)	Nm/A _{0-PK}	0.75	1.21	1.19	1.18	1.19
	lb-in/A _{0-PK}	6.6	10.9	10.7	10.5	10.6
K _E , Voltage Constant (4)	V(0-pk L-L)/kRPM	83	136	134	132	132
Winding Resistance Phase to Phase at 25±5°C	Ohms ±10%	1.8	0.8	0.6	0.4	0.3
Winding Inductance Phase to Phase	mH	6.5	4.4	3.1	2.0	1.6
Thermal Resistance	°C/Watt	0.50	0.48	0.47	0.46	0.44
Dielectric Rating		Power Leads (R,S,T) to Ground:1500 VACrms 50/60 Hz for 1 minute.				

(1) Specifications are at 25°C unless otherwise noted.

(2) Peak value of per phase sine wave Amperes

STORAGE AND OPERATING CONDITIONS

Ambient Temperature	Operating: -20° to 40°C (-4° 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
SX-SERIES MOTOR DATA**

http://www.elwood.com/dSX_Mtr_Data.pdf

460V Windings

MOTOR MODEL		M471-H	M473-C	M474-C	M476-C	M477-C
MECHANICAL DATA (1)						
Rated Torque, Cont (Stall)	Nm	6.72	16.07	20.40	31.51	35.75
	lb-in	59.5	142.2	180.6	278.9	316.4
Peak Torque (Stall)	Nm	20.16	48.21	61.2	94.53	107.25
	lb-in	178.5	426.7	541.7	836.6	949.2
Rated Current	A _{0-PK}	5.7	7.4	9.8	14.9	18.5
Rated Power	kW	1.7	2.2	3.0	3.7	4.3
	hp	2.3	3.0	4.0	4.9	5.7
Rated Voltage (Drive Supply)	V _{rms}	460	460	460	460	460
Rotor Moment of Inertia	kg-m ²	0.00171	0.00513	0.00744	0.01026	0.01197
	lb-in-s ²	0.01515	0.04544	0.0659	0.09088	0.10603
Rotor Moment of Inertia Brake Motors	kg-m ²	0.001800	0.006560	0.008240	0.011630	0.012870
	lb-in-s ²	0.015900	0.058100	0.073000	0.103000	0.114000
Motor Shipping Weight	kg	12.5	30.5	35.0	40.0	50.0
	lb	27.5	67.0	77.0	88.0	110.0
Motor Shipping Weight Brake Motors	kg	15.7	34.1	39.1	43.2	53.2
	lb	34.5	75.0	86.0	95.0	117.0
Friction Torque	Nm	1.13	1.13	1.13	1.13	1.13
	lb-in	10	10	10	10	10
Max. Operating Speed	rpm	4000	2000	2000	2000	2000
WINDING DATA (1)						
Poles		8	8	8	8	8
K _T , Sine Wave Torque Constant (2)	Nm/A _{0-PK}	1.37	2.25	2.21	2.18	2.19
	lb-in/A _{0-PK}	12.2	19.9	19.6	19.2	19.4
Square Wave K _T Torque Constant (3)	Nm/A _{0-PK}	1.48	2.43	2.39	2.35	2.37
	lb-in/A _{0-PK}	13.3	21.7	21.4	20.9	21.1
K _E , Voltage Constant (4)	V(0-pk L-L)/kRPM	166	272	267	263	265
Winding Resistance Phase to Phase at 25±5°C	Ohms ±10%	7.82	3.68	2.64	1.54	1.1
Winding Inductance Phase to Phase	mH	26	17.5	12.4	8.2	6.6
Thermal Resistance	°C/Watt	0.50	0.48	0.47	0.46	0.44
Dielectric Rating		Power Leads (R,S,T) to Ground:1500 VACrms 50/60 Hz for 1 minute.				

(1) Specifications are at 25°C unless otherwise noted.
(2) Peak value of per phase sine wave Amperes

STORAGE AND OPERATING CONDITIONS	
Ambient Temperature	Operating: -20° to 40°C (-4° 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
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Opening Temperature (+/- 5°C)	140°C

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