



Beaver Electrical Machinery Ltd.

Date: July 25, 2022



Technical Documentation

APH0252-841

Advantage Plus IEEE 841 | AEHH8B

Beaver Electrical Machinery Ltd.

Date: July 25, 2022



Dimensional Drawing

Catalogue	Type	HP	RPM	Voltage	Hz	Frame Size
APH0252-841	AEHH8B	25	3600	460	60	284TS

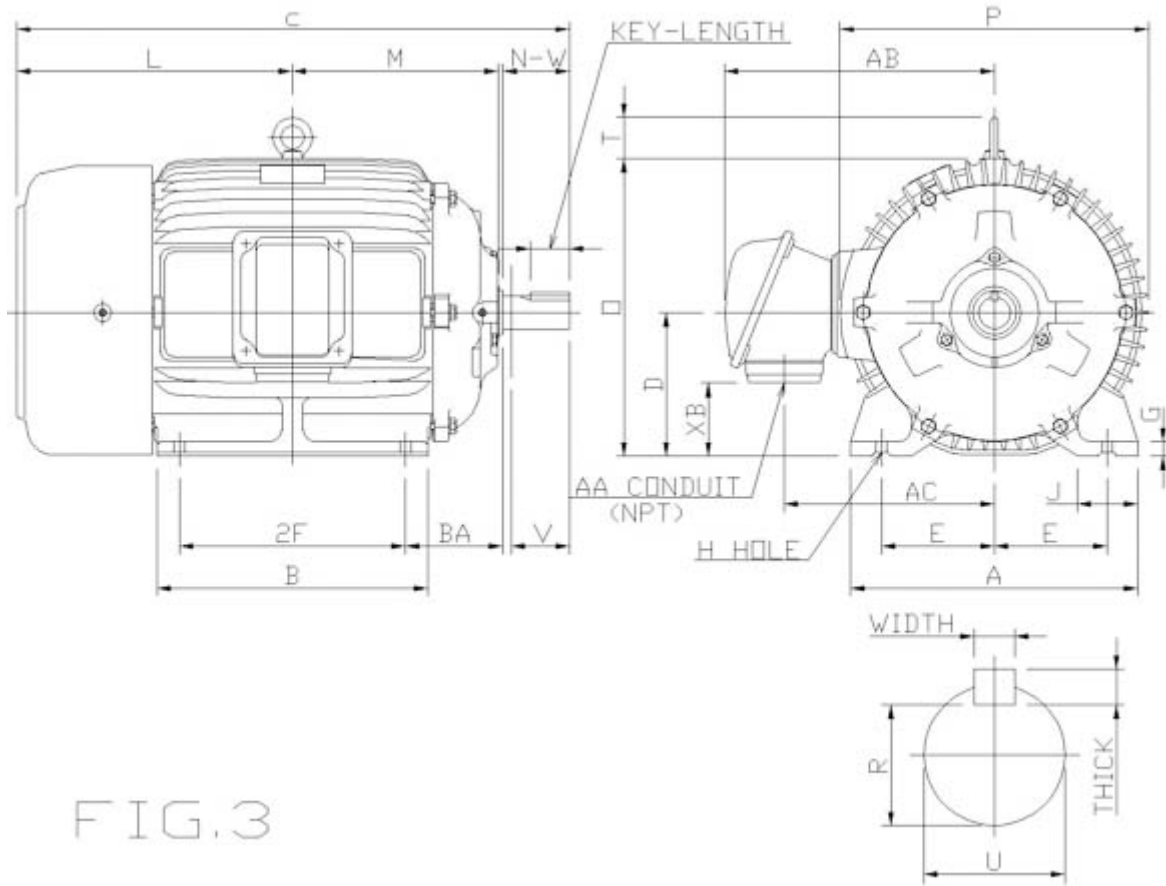


FIG. 3



Mounting					A	B	C	CL1	CL2	D	G
E	2F1	2F2	H	BA							
5.5	9.5		0.53	4.75	13.98	11.69	25.43			7	0.7

J	K	L	M	O	P	T
2.95		12.68	9.23	14.5	15.05	2.36

Terminal Housing			
AA	AB	AC	XB
NPT11/2"	13.27	10.35	3.54

Shaft Extension			Key			Keyseat
N-W	U	V	Width	Thick	Length	R
3.25	1.625	3.2	0.375	0.375	1.93	1.416

Bearings		Weight Lbs	Drive Method	Dimensions
DE	NDE			
6311ZC3	6310ZC3	440	Direct Coupling	Inches

	Beaver Electrical Machinery Ltd.	
	Date: July 25, 2022	

Technical Data Sheet

Motor Type: AEHH8B	Catalogue No: APH0252-841
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Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
25	2	3545	284TS	460	60	3
Enclosure	Ins. Class	Service Factor	Time Rating	NEMA Design	Rated Amb.	Rated Altitude
TEFC	F	1.15	Continuous	B	-40 to 40 °C	<1000 m

Typical Performance

Efficiency (%)				Power Factor (%)		
Full Load		3/4 Load	1/2 Load	Full Load	3/4 Load	1/2 Load
Nom.	Min.					
92.4	91	93	92.4	91	90.5	86.5
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
37.03	175	135	250	5.5	27.8	183
NEMA KVA Code	Inertia (WR ²)			Safe Stall Time (s)		Noise Level Sound Press. dB(A)
	Rotor (lb-ft ²)	NEMA Load (lb-ft ²)	Max. Allowable (lb-ft ²)	Cold	Hot	
G	2.507	26	75	32	22	76

VFD Duty Information

Max HP	Current (A)	Speed Range		VFD		S.F.
		Constant Torque	Variable Torque	Carrier Hz	Type	
25	27.84	6-60Hz	3-60Hz	3-6kHz	VPWM or CPWM	1

Hazardous Locations Information



CSA Certified
Class I, Div 2, Groups B, C & D Class I, Zone 2, Groups IIB+H2, IIB & IIA
Temp Code (Sinewave / VFD)
T3C / T3B

Additional Certifications

Other Certification

Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6311ZC3	6310ZC3	440

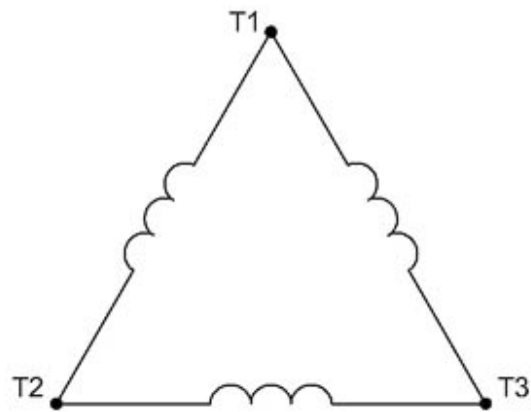
	Beaver Electrical Machinery Ltd.	
	Date: July 25, 2022	

Nameplate Drawing

Advantage Plus IEEE 841					
TYPE	AEHH8B		CAT. NO.	APH0252-841	
OUTPUT	25 HP 18.65 kW		FRAME	284TS	TEFC
R.P.M.	3545		POLE	2	INS. F
VOLTS	460		PHASE	3	Hz 60
AMPS	27.8		CODE	G	S.F. 1.15
AMBIENT	40 °C		NOM. EFF. 92.4		MIN. EFF. 91
BEARINGS	6311ZC3 / 6310ZC3				RATING Cont.
SER. NO.	TBD		DESIGN	B	WT. 440 LBS
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-90Hz	1	



Connection Diagram



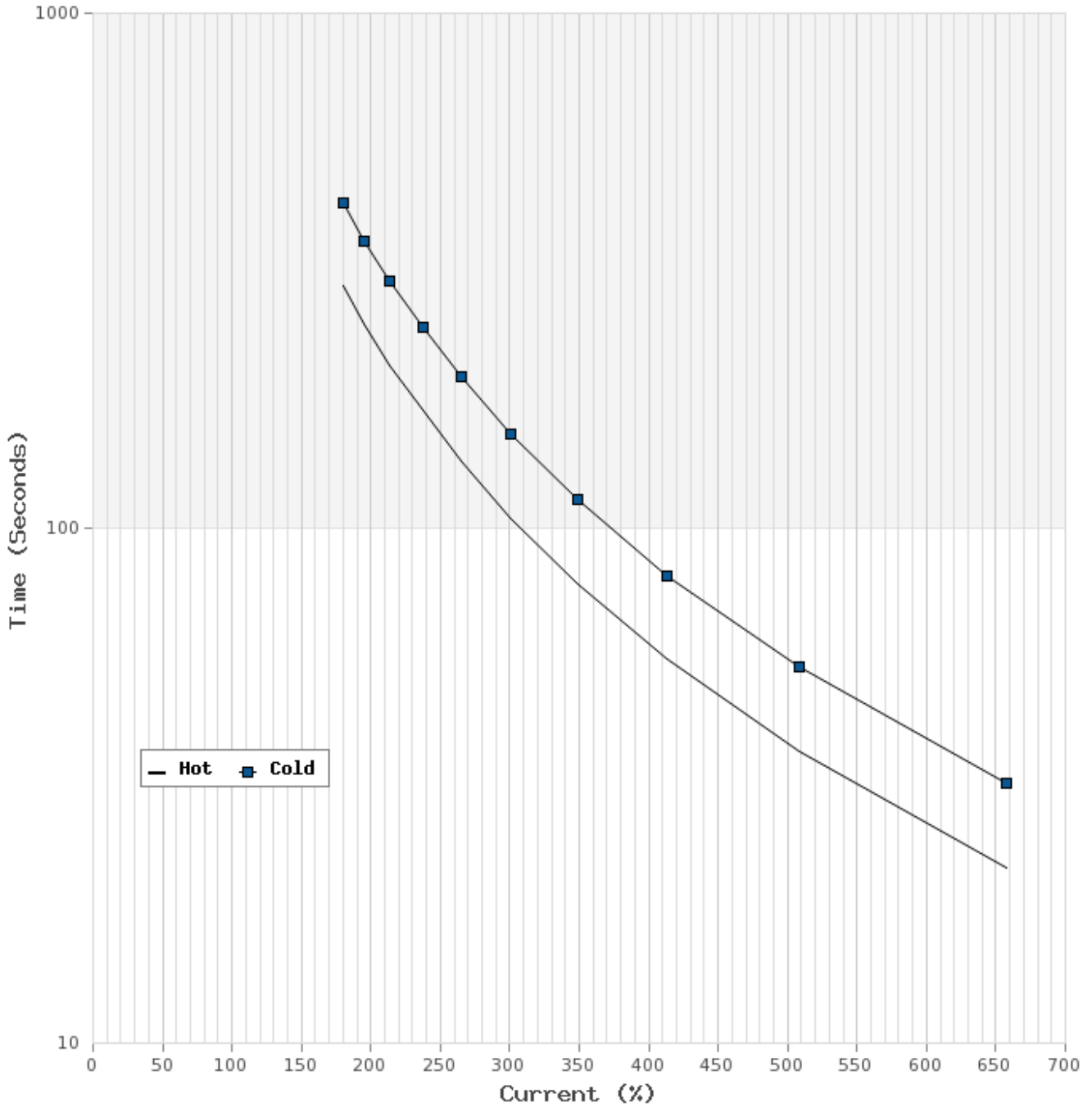
3 LEAD SINGLE VOLTAGE DELTA					
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD_3D



Thermal Limit Curves

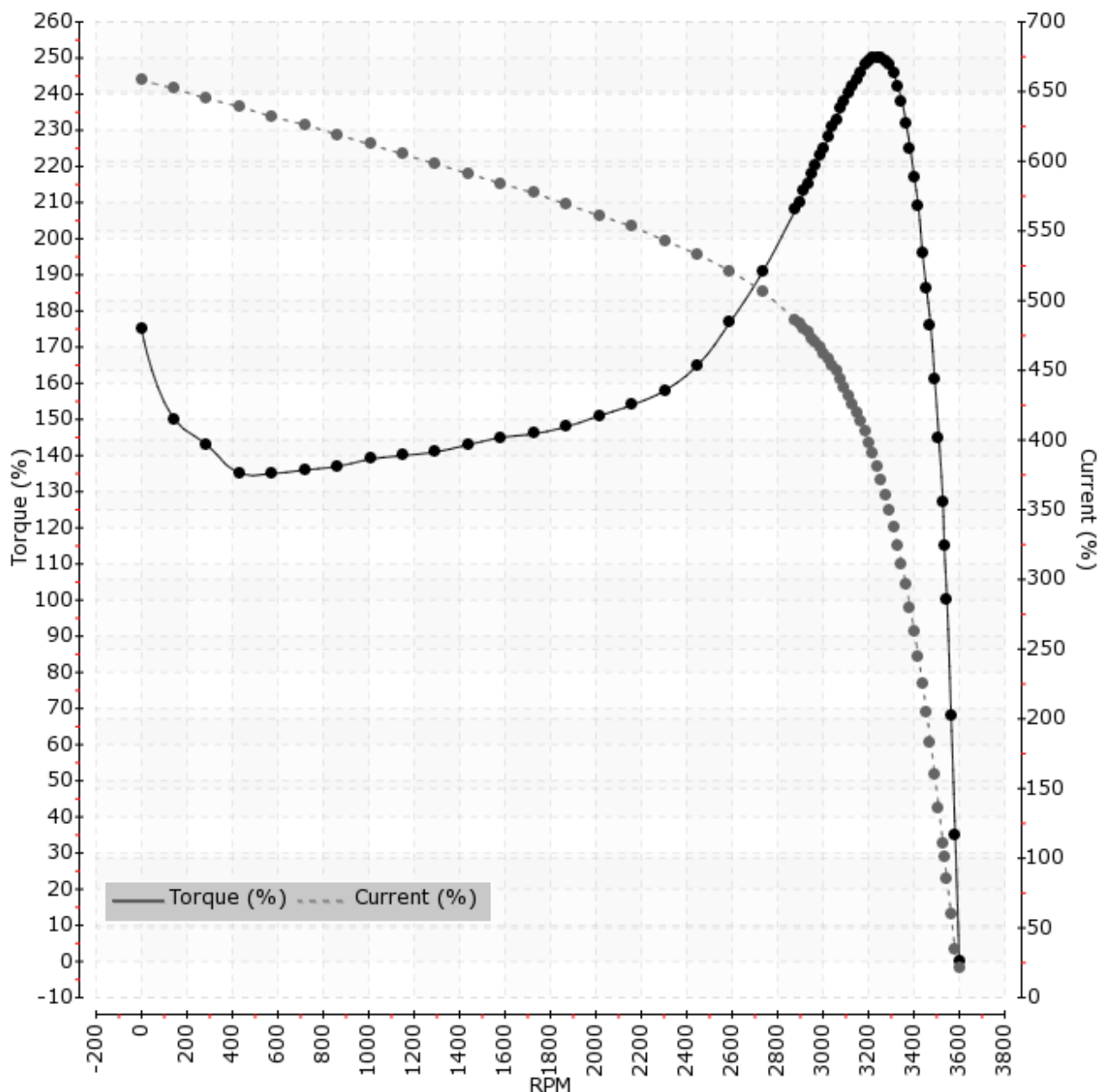
Motor Type: AEHH8B		Catalogue No: APH0252-841		Family: Advantage Plus IEEE 841	
HP	25	Safe Stall Time		Full Load A	27.8 A
Voltage	460V 60Hz	Hot	22 s	% Inrush	657 %
RPM	3600	Cold	32 s	Locked Rotor A	183 A





T-N and I-N Curves

Motor Type: AEHH8B		Catalogue No: APH0252-841		Family: Advantage Plus IEEE 841	
HP	25	Full Load T	37.03 lb-ft	Full Load A	27.8 A
Voltage	460V 60Hz	Locked Rotor T	175 %	Locked Rotor A	183.0 A
RPM	3600	Pull Up T	135 %	Break Down T	250 %





Dimensional Drawing (50 Hz)

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
APH0252-841	AEHH8B	25	2	18.65	Continuous	380	50	

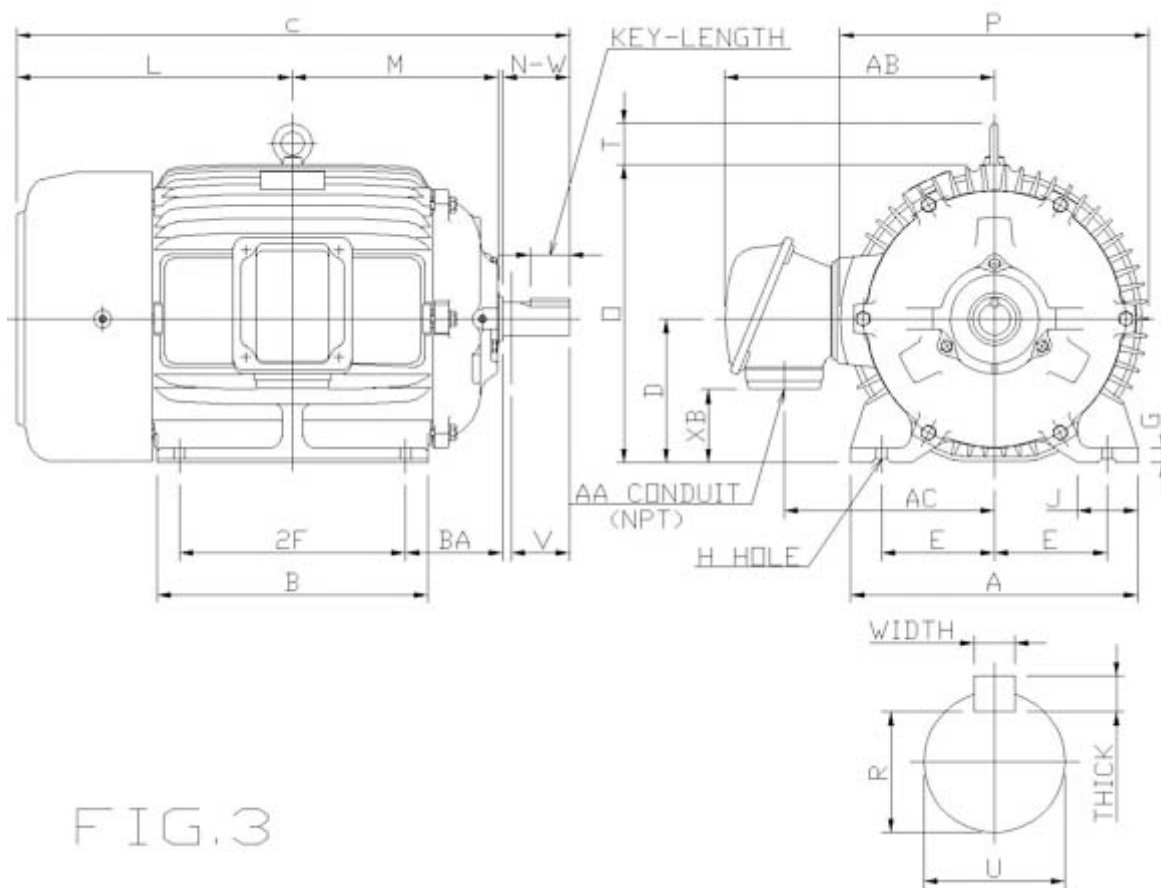




FIG.3

Frame Size	Mounting					A	B	C	CD	D
	E	2F	2F2	H	BA					
284TS	5.5			0.53	4.75	13.98	11.69	25.43		7

G	J	K	L	M	O	P	T	Key			Keyseat R
								Width	Thick	Length	
0.7	2.95		12.68	9.23	14.5	15.05	2.36	0.375	0.375	1.93	1.416

Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
NPT11/2"	13.27	10.35	3.54								

Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions
N-W	U	V	DE	NDE						
3.25	1.625	3.2	6311ZC3	6310ZC3	440	76	F	1	Direct Coupling	Inches

	Beaver Electrical Machinery Ltd.	
	Date: July 25, 2022	

Technical Data Sheet (50 Hz)

Motor Type: AEHH8B	Catalogue No: APH0252-841
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Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
25	2		284TS	380	50	3
Enclosure	Ins. Class	Service Factor	Time Rating	NEMA Design	Rated Amb.	Rated Altitude
TEFC	F	1	Continuous	B	-40 to 40 °C	<1000 m

Typical Performance

Efficiency (%)				Power Factor (%)		
Full Load		3/4 Load	1/2 Load	Full Load	3/4 Load	1/2 Load
Nom.	Min.					
91	89.5	91	90.2	90	90.50	89.00
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
45	130	105	205	5.7	34.6	243
NEMA KVA Code	Inertia (WR ²)			Safe Stall Time (s)		Noise Level Sound Press. dB(A)
	Rotor (lb-ft ²)	NEMA Load (lb-ft ²)	Max. Allowable (lb-ft ²)	Cold	Hot	
H	2.507	40	84.29	32	22	76

VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
6-50Hz	3-50Hz	50-75Hz	3-6kHz	VPWM or CPWM	1

Hazardous Locations Information

CSA Certified
Class I, Div 2, Groups B, C & D Class I, Zone 2, Groups IIB+H2, IIB & IIA
Temp Code (Sinewave / VFD) T3C / T3B

Additional Certification

Other Certification

Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6311ZC3	6310ZC3	440