

	Beaver Electrical Machinery Ltd.	
	Date: July 25, 2022	

Technical Documentation

APH0106-841

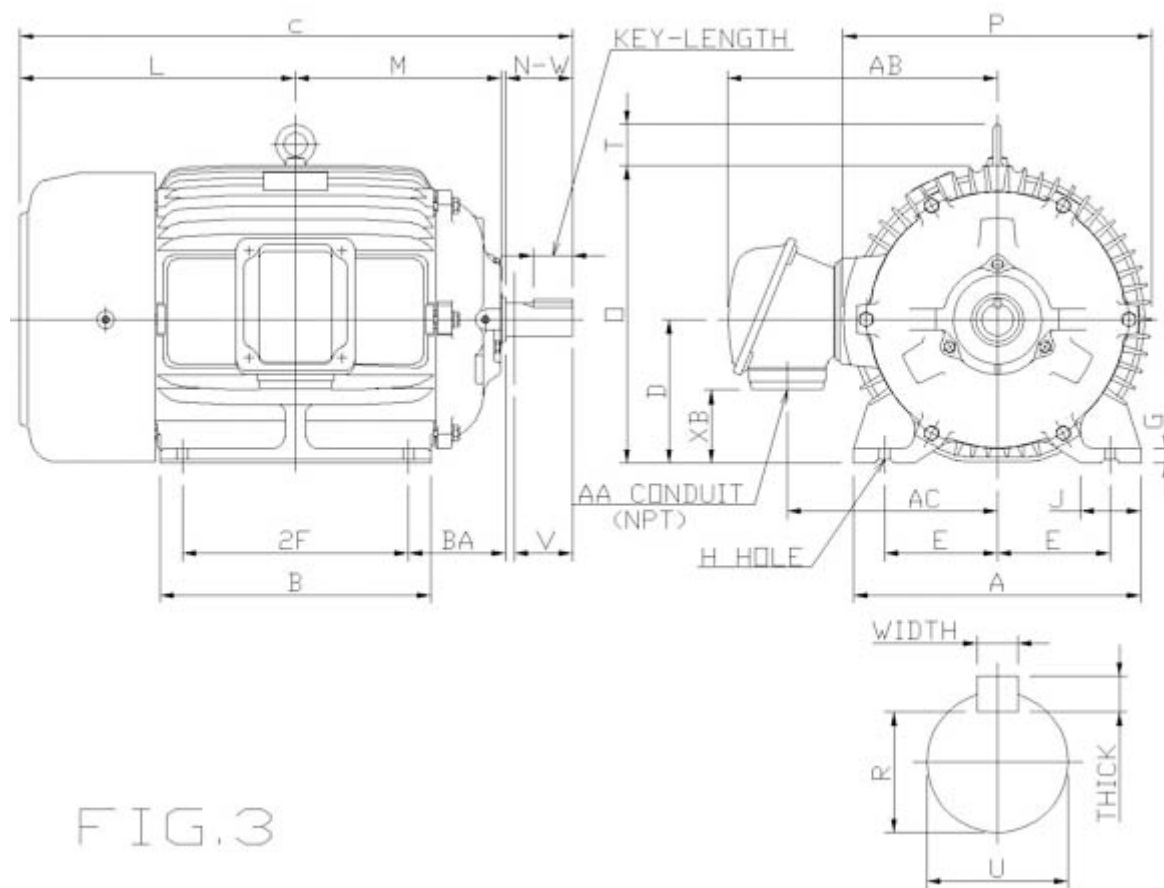
Advantage Plus IEEE 841 | AEHH8B

Beaver Electrical Machinery Ltd.
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Dimensional Drawing

Catalogue	Type	HP	RPM	Voltage	Hz	Frame Size
APH0106-841	AEHH8B	10	1200	460	60	256T



Mounting					A	B	C	CL1	CL2	D	G
E	2F1	2F2	H	BA							
5	10	8.25	0.53	4.25	11.81	11.81	25.52			6.25	0.66

J	K	L	M	O	P	T
1.95		12.27	8.93	12.8	13.15	2.01

Terminal Housing			
AA	AB	AC	XB
NPT11/4"	11.3	8.86	3.22

Shaft Extension			Key			Keyseat
N-W	U	V	Width	Thick	Length	R
4	1.625	3.9	0.375	0.375	2.91	1.416

Bearings		Weight Lbs	Drive Method	Dimensions
DE	NDE			
6309ZC3	6307ZC3	337	Direct Coupling / Belt Drive	Inches

	Beaver Electrical Machinery Ltd.	
	Date: July 25, 2022	

Technical Data Sheet

Motor Type: AEHH8B	Catalogue No: APH0106-841
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Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
10	6	1170	256T	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.					
91	89.5	91.7	90.2	80.5	75	64
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
44.87	225	185	250	5.9	12.8	81
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	2.872	137	362	26	18	60

VFD Duty Information

Max HP	Current (A)	Speed Range		VFD		S.F.
		Constant Torque	Variable Torque	Carrier Hz	Type	
10	12.78	6-60Hz	3-60Hz	3-6kHz	VPWM or CPWM	1

Hazardous Locations Information

Additional Certifications

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

Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6309ZC3	6307ZC3	337

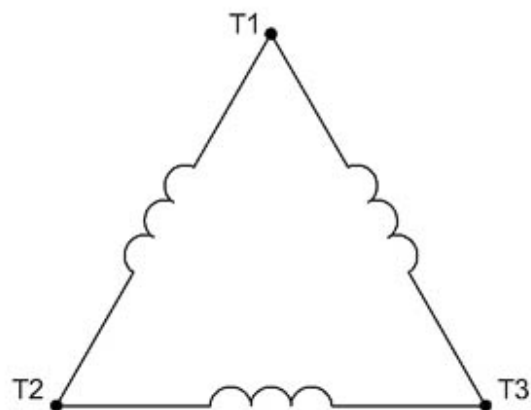
	Beaver Electrical Machinery Ltd.	
	Date: July 25, 2022	

Nameplate Drawing

Advantage Plus IEEE 841

TYPE	AEHH8B		CAT. NO.	APH0106-841		
OUTPUT	10 HP 7.46 kW		FRAME	256T	TEFC	
R.P.M.	1170		POLE	6	INS.	F
VOLTS	460		PHASE	3	Hz	60
AMPS	12.8		CODE	H	S.F.	1.15
AMBIENT	40 °C		NOM. EFF. 91		MIN. EFF. 89.5	
BEARINGS	6309ZC3 / 6307ZC3				RATING Cont.	
SER. NO.	TBD		DESIGN	B	WT. 337 LBS	
PWM VFD DUTY	VT	CT	CP		S.F.	
	3-60Hz	6-60Hz	60-120Hz		1	

Connection Diagram

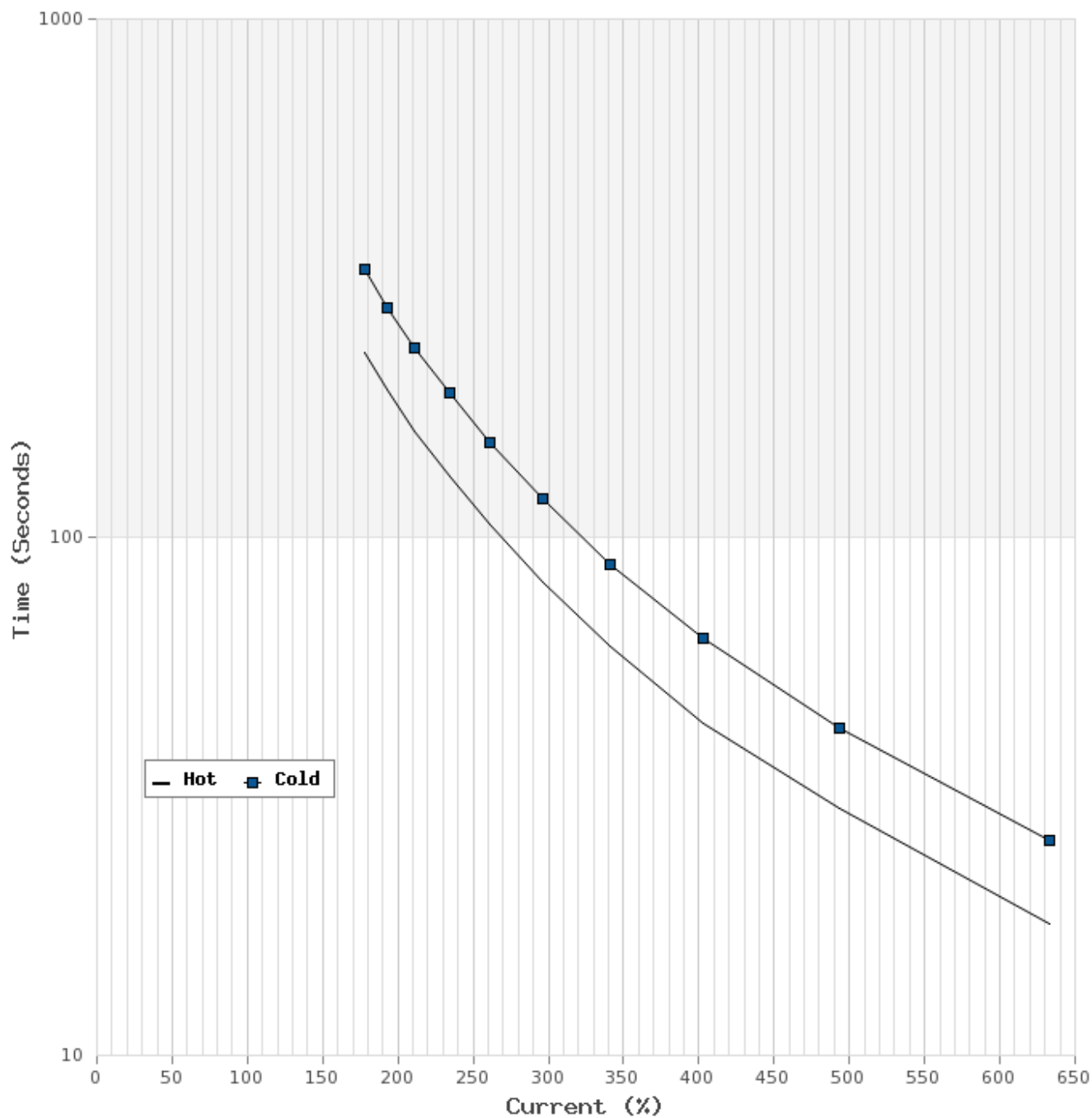


3 LEAD		SINGLE VOLTAGE			DELTA
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD_3D

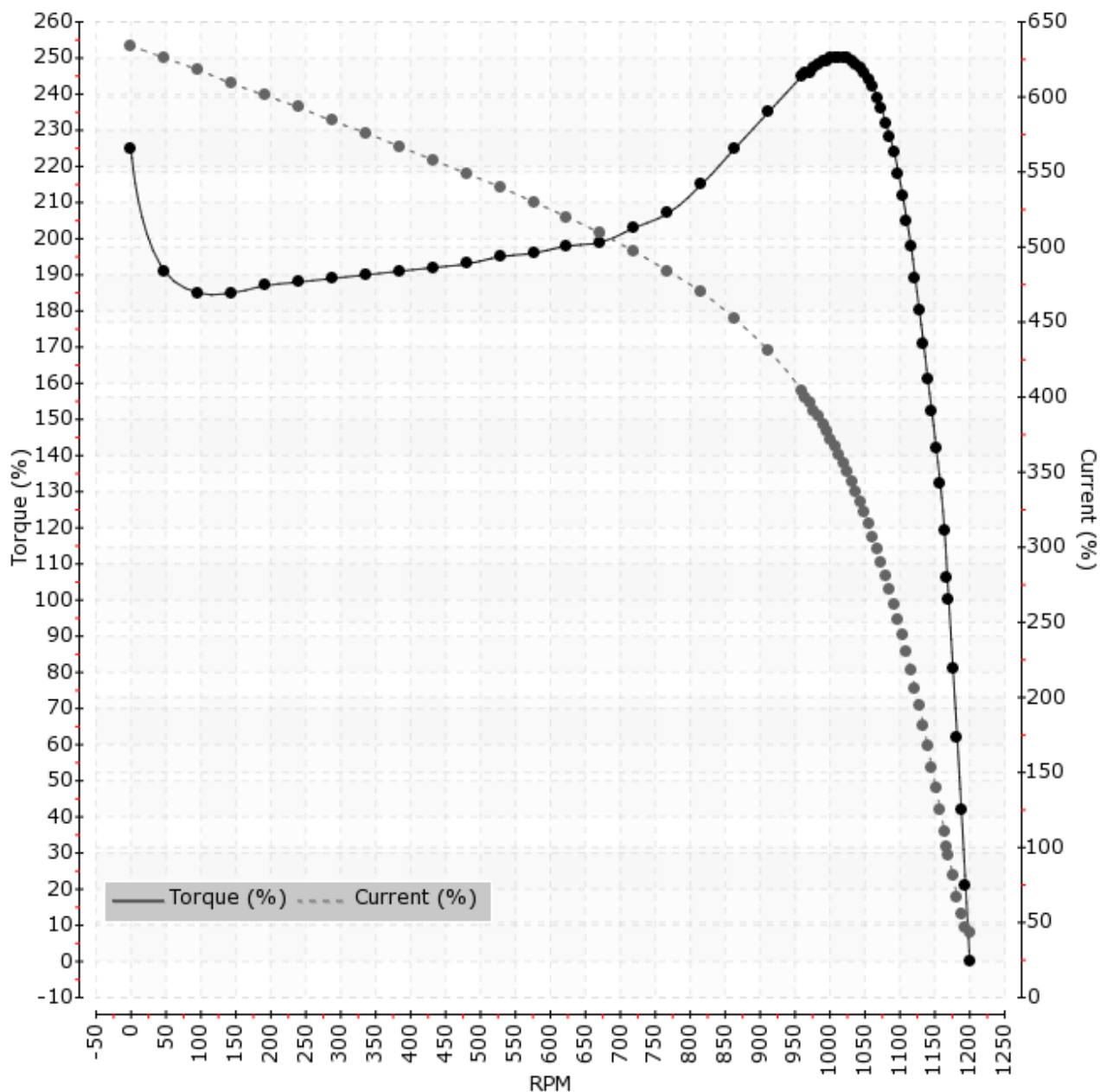
Thermal Limit Curves

Motor Type: AEHH8B		Catalogue No: APH0106-841		Family: Advantage Plus IEEE 841	
HP	10	Safe Stall Time		Full Load A	12.8 A
Voltage	460V 60Hz	Hot	18 s	% Inrush	634 %
RPM	1200	Cold	26 s	Locked Rotor A	81 A



T-N and I-N Curves

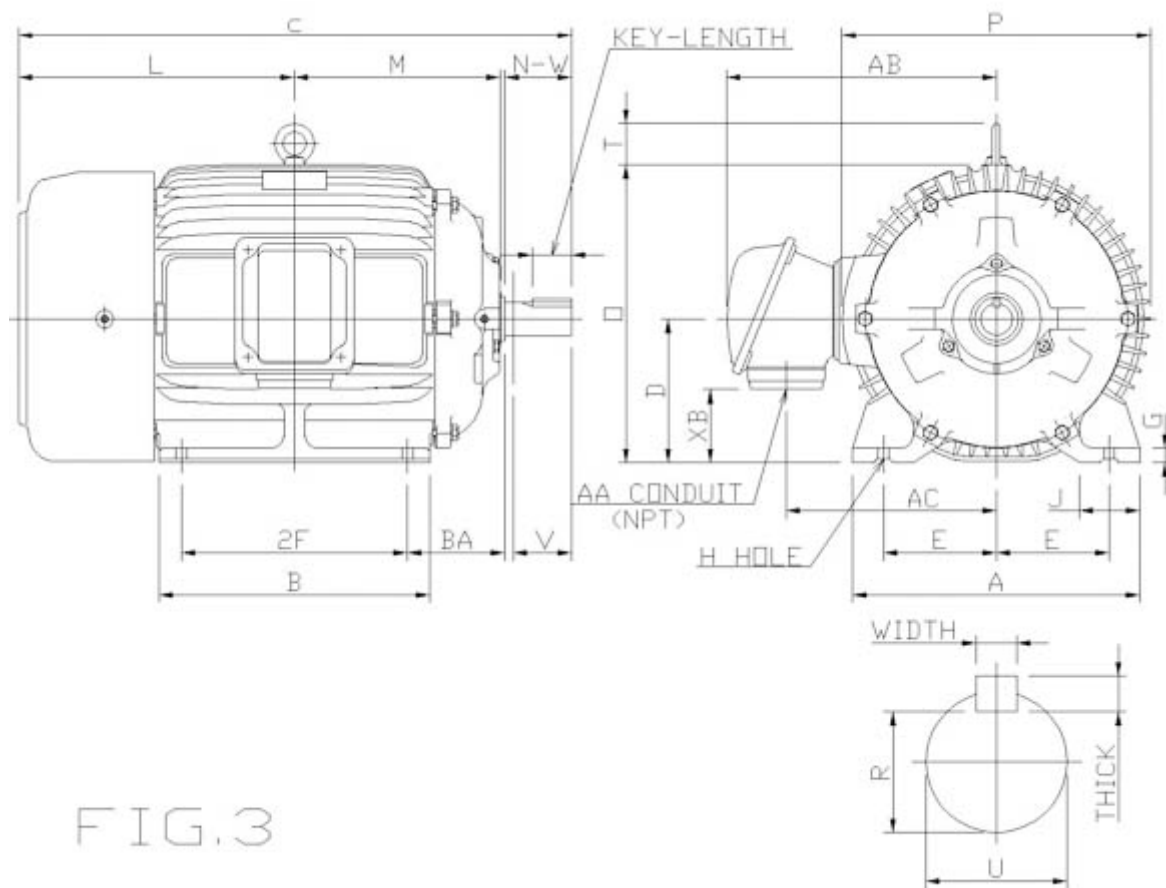
Motor Type: AEHH8B		Catalogue No: APH0106-841		Family: Advantage Plus IEEE 841	
HP	10	Full Load T	44.87 lb-ft	Full Load A	12.8 A
Voltage	460V 60Hz	Locked Rotor T	225 %	Locked Rotor A	81.0 A
RPM	1200	Pull Up T	185 %	Break Down T	250 %



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Dimensional Drawing (50 Hz)

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
APH0106-841	AEHH8B	10	6	7.46	Continuous	380	50	



Frame Size	Mounting					A	B	C	CD	D
	E	2F	2F2	H	BA					
256T	5		8.25	0.53	4.25	11.81	11.81	25.52		6.25

G	J	K	L	M	O	P	T	Key			Keyseat R
								Width	Thick	Length	
0.66	1.95		12.27	8.93	12.8	13.15	2.01	0.375	0.375	2.91	1.416

Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
NPT11/4"	11.3	8.86	3.22								

Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions
N-W	U	V	DE	NDE						
4	1.625	3.9	6309ZC3	6307ZC3	337	60	F	1	Direct Coupling / Belt Drive	Inches

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Technical Data Sheet (50 Hz)

Motor Type: AEHH8B	Catalogue No: APH0106-841
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Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
10	6		256T	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.					
90.2	88.5	91.7	91.7	85	82.00	74.00
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
55	175	155	220	5.1	14.8	107
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	2.872	211.7	476.71	26	18	60

VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
6-50Hz	3-50Hz	50-100Hz	3-6kHz	VPWM or CPWM	1

Hazardous Locations Information

Additional Certification

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

Additional Information

Bearings		Approx. Weight
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6309ZC3	6307ZC3	337