

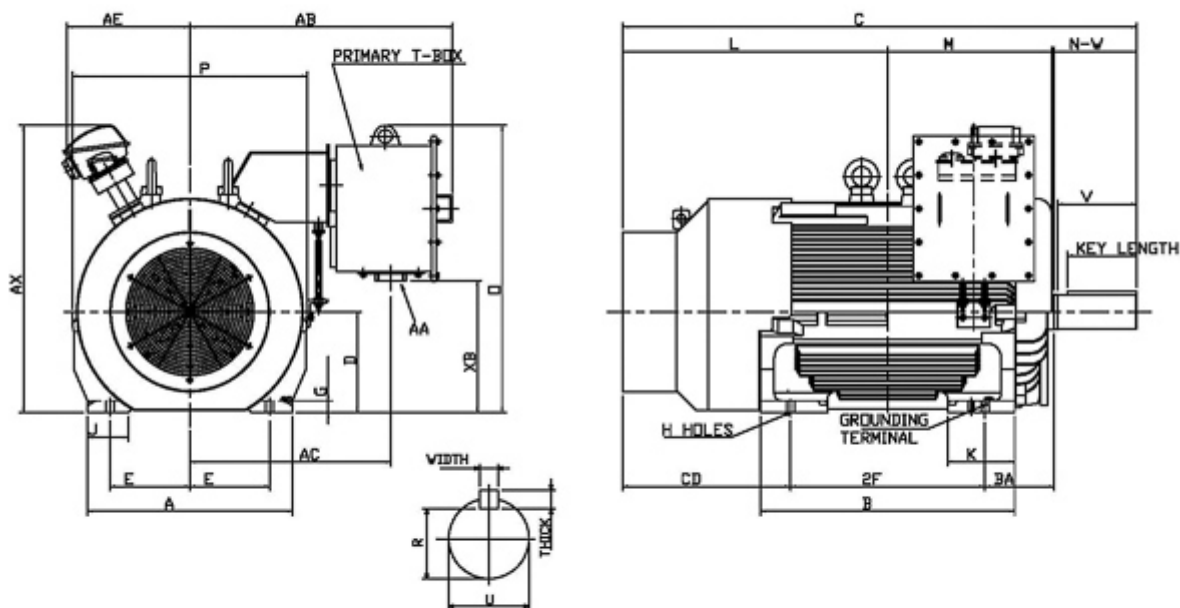
Technical Documentation

**APH5006-841**  
**Advantage Plus IEEE 841 | AEHH8B**


Date: June 30, 2020

### Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
APH5006-841	AEHH8B	500	6	373	Continuous	460	60	1200



Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
5808B	11.5	28		1.13	10	29.55	36.6	74.08		14.5	
G	J	K	L	M	O	P	T	Key			Keyseat
1.7	5.9	9.65	38.2	23.4	31.45	33.85	16.65	Width	Thick	Length	R
								1.25	1.25	10	4.169
Terminal Housing			Aux Box			C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
	37.86	28.96	19.03	18.34	41.39						
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
11.88	4.875	11.38	6326C3	6322C3	6050	80	F	1.15	Direct Coupling	Inches	

	
	Date: June 30, 2020

### Technical Data Sheet

Motor Type: AEHH8B	Catalogue No: APH5006-841
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#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
500	6	1188	5808B	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.					
95.8	95.0	95.4	93.6	88.0	86.0	82.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
2207.00	95	95	210	109.7	555.3	3625
NEMA KVA Code	Inertia (WR <sup>2</sup> )			Safe Stall Time (s)		Noise Level Sound Press. dB(A)
	Rotor (lb-ft <sup>2</sup> )	NEMA Load (lb-ft <sup>2</sup> )	Max. Allowable (lb-ft <sup>2</sup> )	Cold	Hot	
G	473.000	5126.00	5126.00	20	15	80

#### VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
20-60Hz	3-60Hz	60-60Hz	≤ 5 kHz	VPWM or CPWM	1.0 Only

#### 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)      T3 / T3

#### Additional Certifications

Other Certification
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#### Additional Information

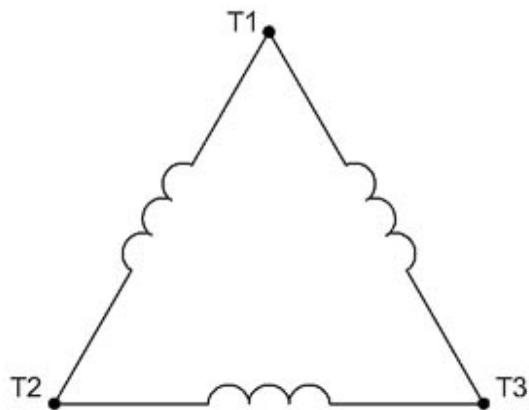
Bearings		Approx. Weight
DE	NDE	lbs
6326C3	6322C3	6050

**Nameplate Drawing**

# Advantage Plus IEEE 841

TYPE	AEHH8B	CAT. NO.	APH5006-841		
OUTPUT	500 HP 373 kW	FRAME	5808B	TEFC	
R.P.M.	1188	POLE	6	INS.	F
VOLTS	460	PHASE	3	Hz	60
AMPS	555.3	CODE	G	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 95.8		MIN. EFF. 95.0	
BEARINGS	6326C3 / 6322C3			RATING Cont.	
SER. NO.	TBD	DESIGN	B	WT. 6050 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	20-60Hz	60-60Hz	1.0 Only	

**Connection Diagram**

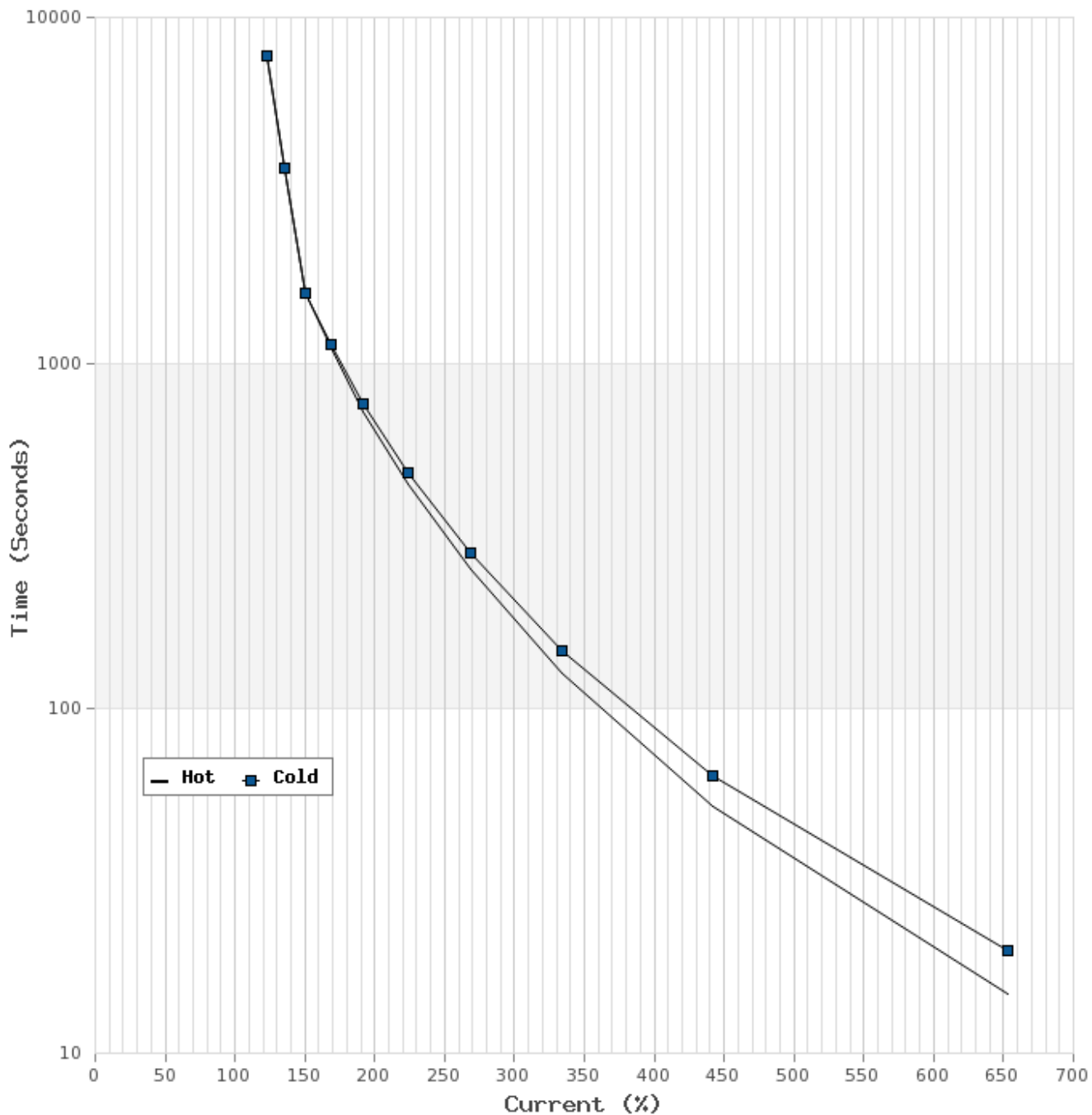


3 LEAD		SINGLE VOLTAGE			DELTA
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD\_3D

### Thermal Limit Curves

Motor Type: AEHH8B		Catalogue No: APH5006-841		Family: Advantage Plus IEEE 841	
HP	500	Safe Stall Time		Full Load A	555.3 A
Voltage	460V 60Hz	Hot	15 s	% Inrush	653 %
RPM	1200	Cold	20 s	Locked Rotor A	3625 A



**T-N and I-N Curves**

Motor Type: AEHH8B		Catalogue No: APH5006-841		Family: Advantage Plus IEEE 841	
HP	500	Full Load T	2207.00 lb-ft	Full Load A	555.3 A
Voltage	460V 60Hz	Locked Rotor T	95 %	Locked Rotor A	3625.0 A
RPM	1200	Pull Up T	95 %	Break Down T	210 %

