



Technical Documentation

# **APH25045-841**

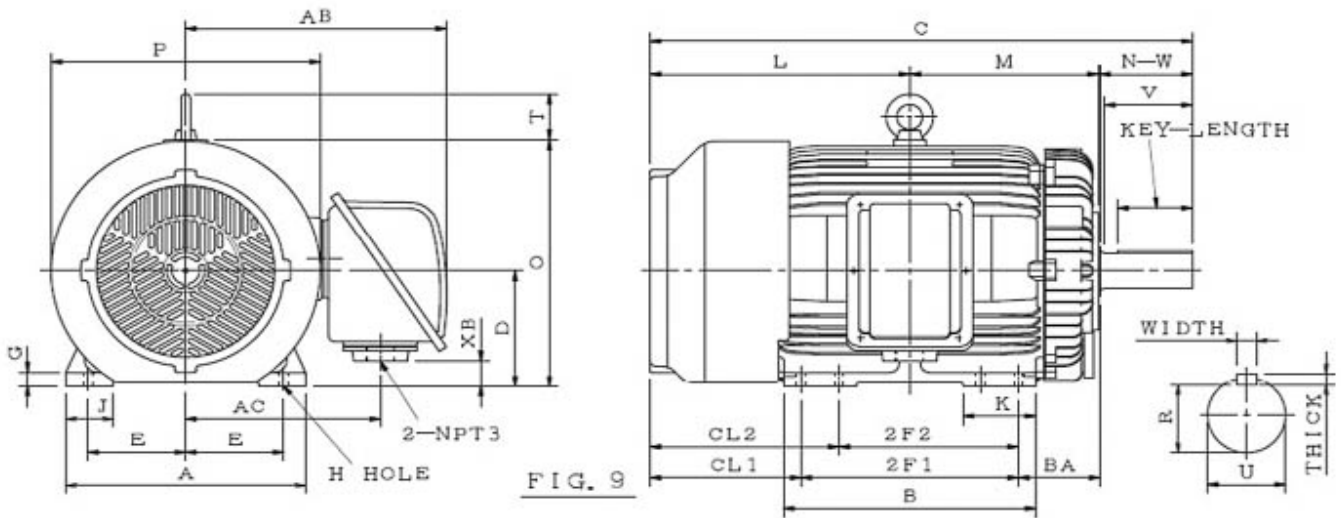
## **Advantage Plus IEEE 841 | AEHH8B**

Beaver Electrical Machinery

Date: June 6, 2022

### Dimensional Drawing

Catalogue	Type	HP	RPM	Voltage	Hz	Frame Size
APH25045-841	AEHH8B	250	1800	575	60	449T





Mounting					A	B	C	CL1	CL2	D	G
E	2F1	2F2	H	BA							
9	25	20	0.81	7.5	22.05	27.95	54.9	13.9		11	1.4

J	K	L	M	O	P	T
4.35	8.25	26.4	19.65	23.55	24.75	7.33

Terminal Housing			
AA	AB	AC	XB
2-NPT3	24	17.9	2.4

Shaft Extension			Key			Keyseat
N-W	U	V	Width	Thick	Length	R
8.5	3.375	8	0.875	0.875	6.91	2.88

Bearings		Weight Lbs	Drive Method	Dimensions
DE	NDE			
6320C3	6316C3	2442	Direct Coupling / Belt Drive	Inches

	Beaver Electrical Machinery	
	Date: June 6, 2022	

### Technical Data Sheet

Motor Type: AEHH8B	Catalogue No: APH25045-841
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#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
250	4	1787	449T	575	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.					
96.2	95.4	95.8	95	85.5	83.5	80
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
734	110	90	210	43.0	227.7	1460
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	83	1017	2034	19	13	81

#### VFD Duty Information

Max HP	Current (A)	Speed Range		VFD		S.F.
		Constant Torque	Variable Torque	Carrier Hz	Type	
250	227.68	20-60Hz	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 / T3

#### Additional Certifications

Other Certification
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#### Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6320C3	6316C3	2442

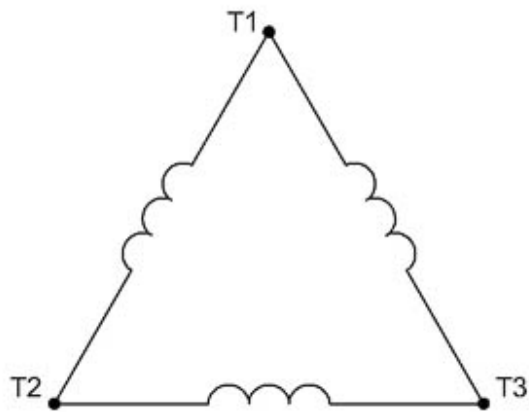
	Beaver Electrical Machinery	
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### Nameplate Drawing

Advantage Plus IEEE 841					
TYPE	AEHH8B	CAT. NO.	APH25045-841		
OUTPUT	250 HP 186.5 kW	FRAME	449T	TEFC	
R.P.M.	1787	POLE	4	INS.	F
VOLTS	575	PHASE	3	Hz	60
AMPS	227.7	CODE	G	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 96.2		MIN. EFF. 95.4	
BEARINGS	6320C3 / 6316C3			RATING Cont.	
SER. NO.	TBD	DESIGN	B	WT. 2442 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	20-60Hz	60-75Hz	1	



**Connection Diagram**



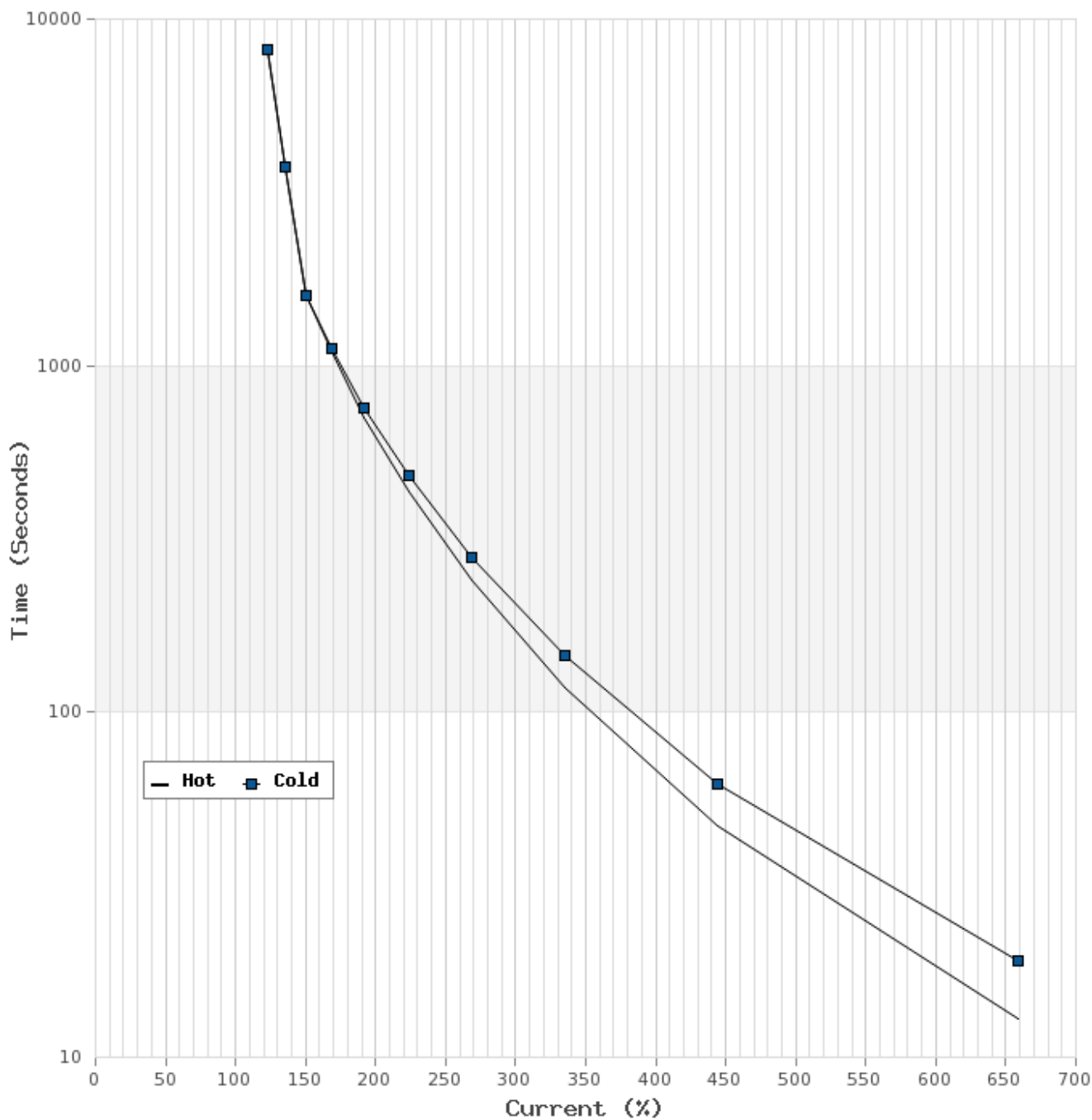
3 LEAD SINGLE VOLTAGE DELTA					
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD\_3D



### Thermal Limit Curves

Motor Type: AEHH8B		Catalogue No: APH25045-841		Family: Advantage Plus IEEE 841	
HP	250	Safe Stall Time		Full Load A	227.7 A
Voltage	575V 60Hz	Hot	13 s	% Inrush	641 %
RPM	1800	Cold	19 s	Locked Rotor A	1460 A





### T-N and I-N Curves

Motor Type: AEHH8B		Catalogue No: APH25045-841		Family: Advantage Plus IEEE 841	
HP	250	Full Load T	734 lb-ft	Full Load A	227.7 A
Voltage	575V 60Hz	Locked Rotor T	110 %	Locked Rotor A	1460.0 A
RPM	1800	Pull Up T	90 %	Break Down T	210 %

