

	Beaver Electrical Machinery	
	Date: June 6, 2022	

Technical Documentation

APH10025-841

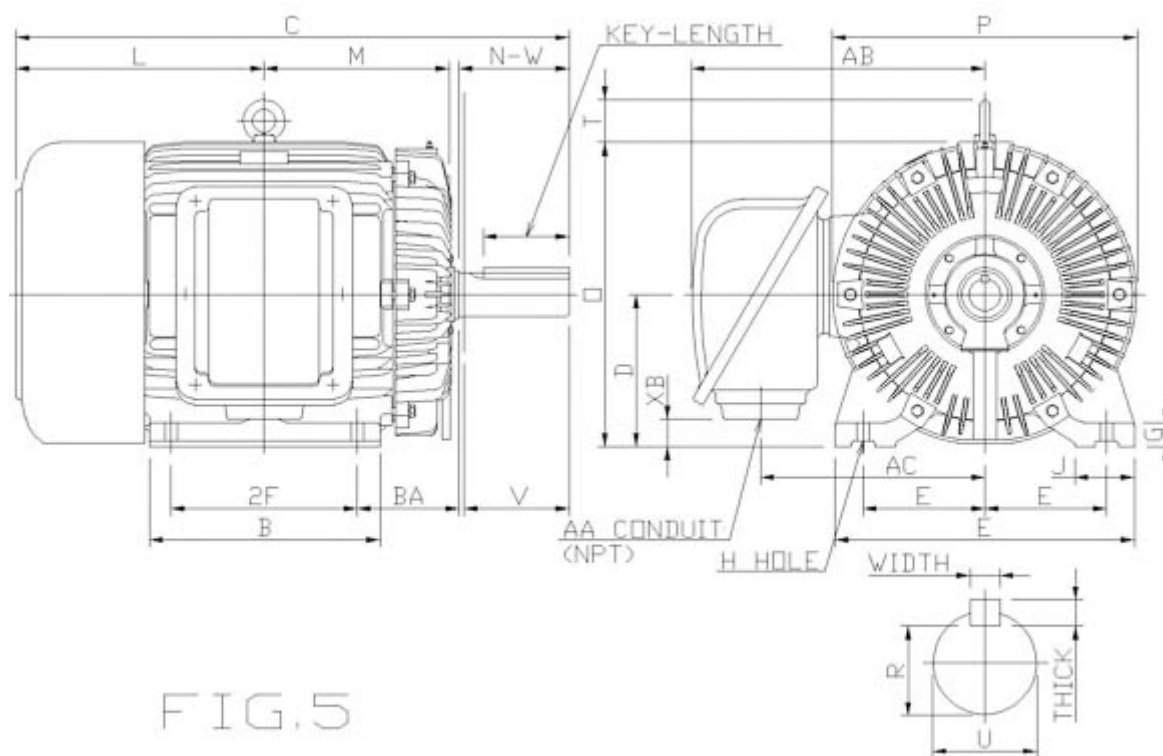
Advantage Plus IEEE 841 | AEHH8B

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Dimensional Drawing

Catalogue	Type	HP	RPM	Voltage	Hz	Frame Size
APH10025-841	AEHH8B	100	3600	575	60	405TS



Mounting					A	B	C	CL1	CL2	D	G
E	2F1	2F2	H	BA							
8	13.75	12.25	0.81	6.62	19.68	16.73	34.99			10	1.57

J	K	L	M	O	P	T
3.94		17.24	13.27	20	20.08	3.54

Terminal Housing			
AA	AB	AC	XB
NPT3"	19.41	14.76	1.81

Shaft Extension			Key			Keyseat
N-W	U	V	Width	Thick	Length	R
4.25	2.125	4.13	0.5	0.5	2.78	1.845

Bearings		Weight Lbs	Drive Method	Dimensions
DE	NDE			
6313C3	6313ZC3	1225	Direct Coupling	Inches

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Technical Data Sheet

Motor Type: AEHH8B	Catalogue No: APH10025-841
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Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
100	2	3560	405TS	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.					
95.4	94.5	95.8	95.4	92	91.5	88.5
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
147.5	140	125	270	15.7	85.4	580
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	10.773	92	213	17	12	83

VFD Duty Information

Max HP	Current (A)	Speed Range		VFD		S.F.
		Constant Torque	Variable Torque	Carrier Hz	Type	
100	85.35	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 / T3

Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6313C3	6313ZC3	1225

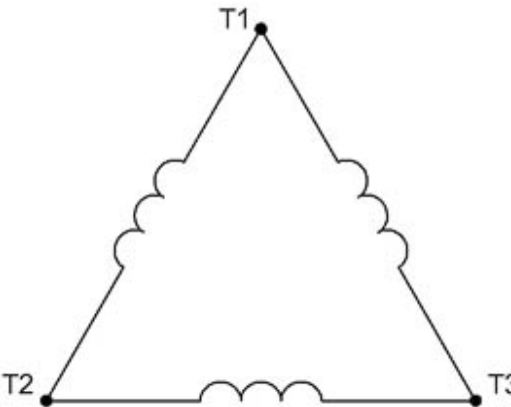
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Nameplate Drawing

Advantage Plus IEEE 841

TYPE	AEHH8B	CAT. NO.	APH10025-841			
OUTPUT	100 HP 74.6 kW	FRAME	405TS	TEFC		
R.P.M.	3560	POLE	2	INS.	F	
VOLTS	575	PHASE	3	Hz	60	
AMPS	85.4	CODE	G	S.F.	1.15	
AMBIENT	40 °C	NOM. EFF. 95.4			MIN. EFF. 94.5	
BEARINGS	6313C3 / 6313ZC3				RATING Cont.	
SER. NO.	TBD		DESIGN	B	WT. 1225 LBS	
PWM VFD DUTY	VT	CT	CP		S.F.	
	3-60Hz	6-60Hz	60-60Hz		1	

Connection Diagram

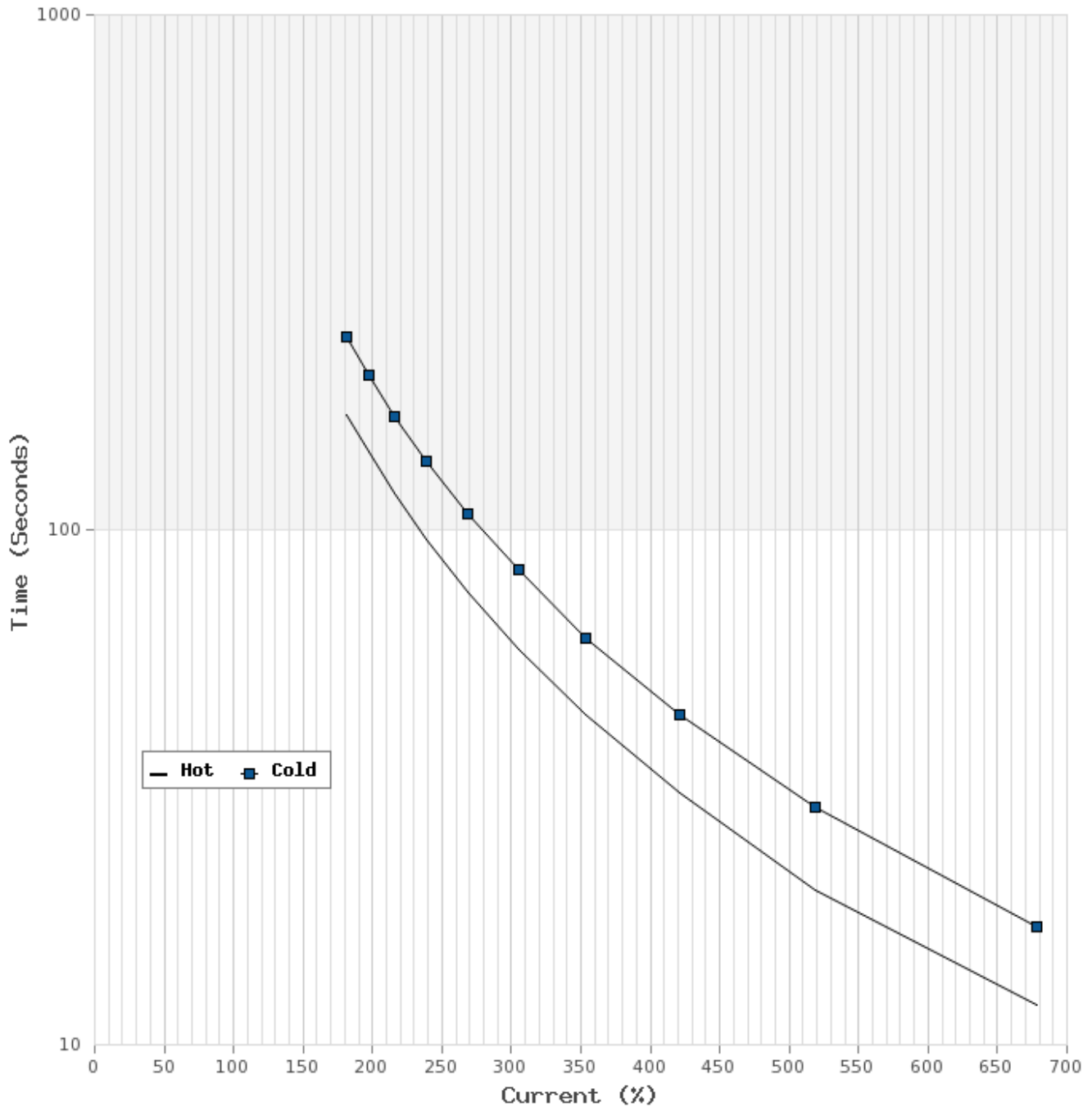


3 LEAD		SINGLE VOLTAGE			DELTA
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD_3D

Thermal Limit Curves

Motor Type: AEHH8B		Catalogue No: APH10025-841		Family: Advantage Plus IEEE 841	
HP	100	Safe Stall Time		Full Load A	85.4 A
Voltage	575V 60Hz	Hot	12 s	% Inrush	680 %
RPM	3600	Cold	17 s	Locked Rotor A	580 A



T-N and I-N Curves

Motor Type: AEHH8B		Catalogue No: APH10025-841		Family: Advantage Plus IEEE 841	
HP	100	Full Load T	147.5 lb-ft	Full Load A	85.4 A
Voltage	575V 60Hz	Locked Rotor T	140 %	Locked Rotor A	580.0 A
RPM	3600	Pull Up T	125 %	Break Down T	270 %

