



Technical Documentation

# **APH12545R-841**

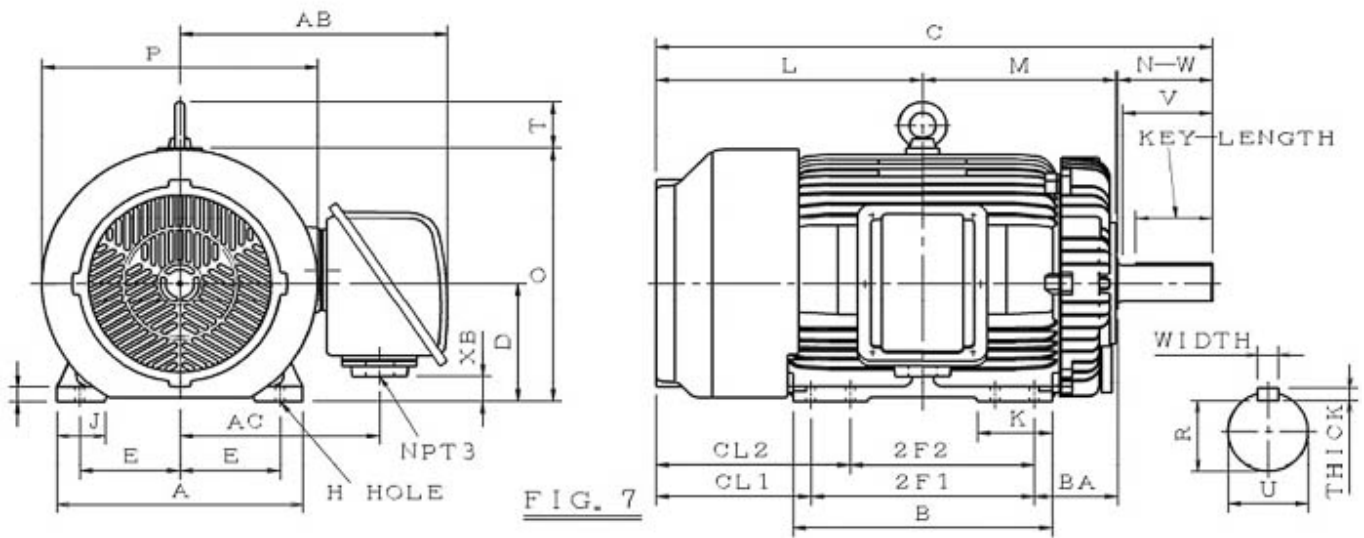
## **Advantage Plus IEEE 841 | AEHH8B**

Beaver Electrical Machinery

Date: June 6, 2022

### Dimensional Drawing

Catalogue	Type	HP	RPM	Voltage	Hz	Frame Size
APH12545R-841	AEHH8B	125	1800	575	60	444T





Mounting					A	B	C	CL1	CL2	D	G
E	2F1	2F2	H	BA							
9	14.5		0.81	7.5	22.05	17.5	44.4			11	1.4

J	K	L	M	O	P	T
4.35	4.35	21.15	14.4	23.55	24.75	4.35

Terminal Housing			
AA	AB	AC	XB
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			
NU318	6316C3	1716	Direct Coupling / Belt Drive	Inches

	Beaver Electrical Machinery	
	Date: June 6, 2022	

### Technical Data Sheet

Motor Type: AEHH8B	Catalogue No: APH12545R-841
--------------------	-----------------------------

#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
125	4	1780	444T	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	94.1	84	82	77
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
368	130	100	220	30.3	116.8	726
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	44.3	542	1084	24	17	81

#### VFD Duty Information

Max HP	Current (A)	Speed Range		VFD		S.F.
		Constant Torque	Variable Torque	Carrier Hz	Type	
125	116.84	12-60Hz	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
---------------------

#### Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
NU318	6316C3	1716

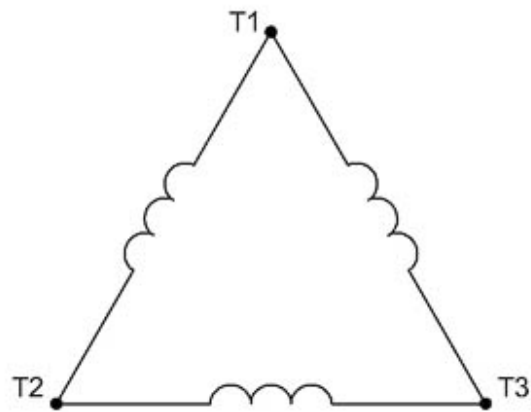
	Beaver Electrical Machinery	
	Date: June 6, 2022	

### Nameplate Drawing

Advantage Plus IEEE 841					
TYPE	AEHH8B		CAT. NO.	APH12545R-841	
OUTPUT	125 HP 93.25 kW		FRAME	444T	TEFC
R.P.M.	1780		POLE	4	INS. F
VOLTS	575		PHASE	3	Hz 60
AMPS	116.8		CODE	G	S.F. 1.15
AMBIENT	40 °C		NOM. EFF. 95.4		MIN. EFF. 94.5
BEARINGS	NU318 / 6316C3				RATING Cont.
SER. NO.	TBD		DESIGN	B	WT. 1716 LBS
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	12-60Hz	60-90Hz	1	



### Connection Diagram



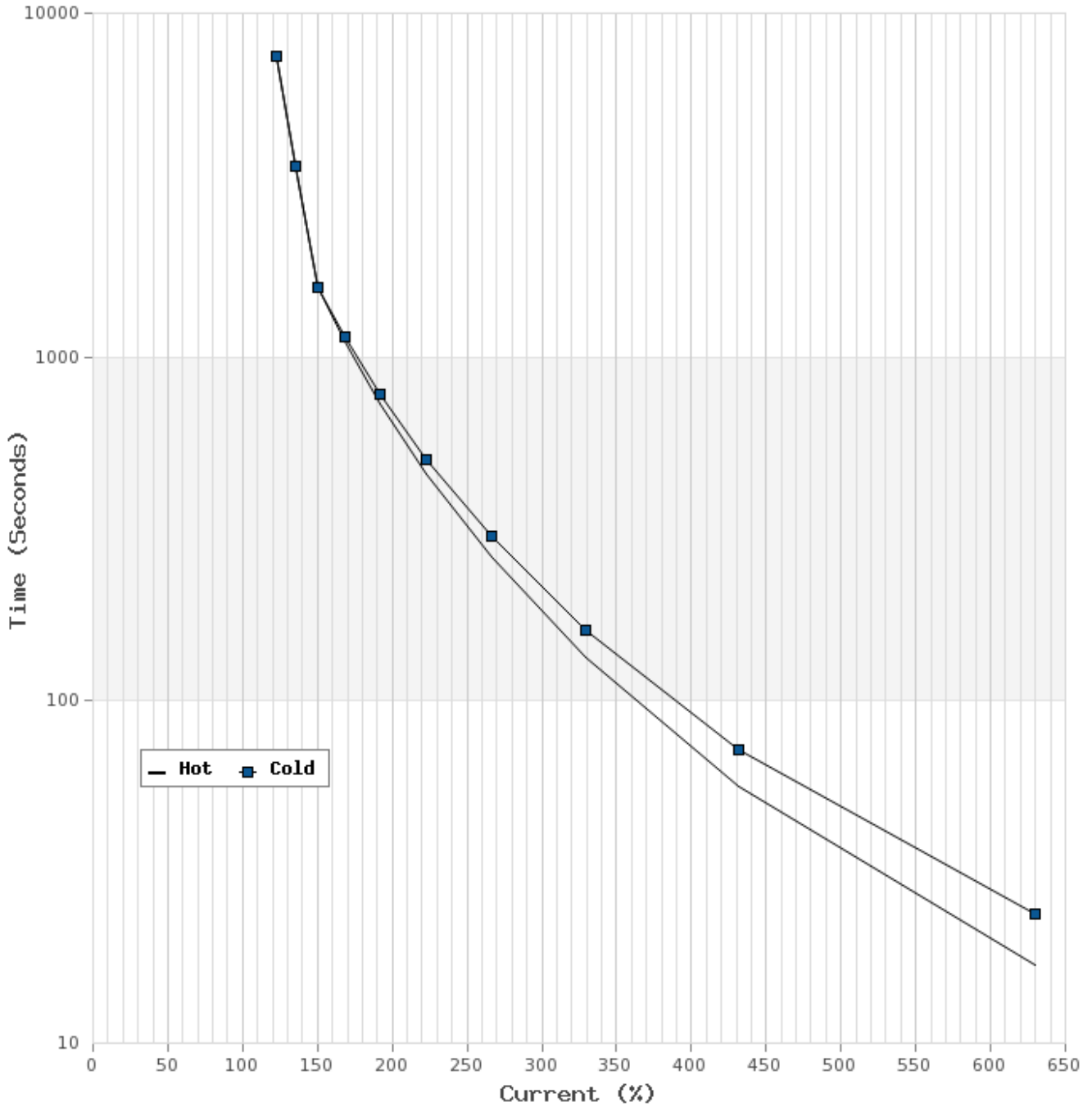
3 LEAD SINGLE VOLTAGE DELTA					
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD\_3D



### Thermal Limit Curves

Motor Type: AEHH8B		Catalogue No: APH12545R-841		Family: Advantage Plus IEEE 841	
HP	125	Safe Stall Time		Full Load A	116.8 A
Voltage	575V 60Hz	Hot	17 s	% Inrush	621 %
RPM	1800	Cold	24 s	Locked Rotor A	726 A





### T-N and I-N Curves

Motor Type: AEHH8B		Catalogue No: APH12545R-841		Family: Advantage Plus IEEE 841	
HP	125	Full Load T	368 lb-ft	Full Load A	116.8 A
Voltage	575V 60Hz	Locked Rotor T	130 %	Locked Rotor A	726.0 A
RPM	1800	Pull Up T	100 %	Break Down T	220 %

