

	Beaver Electrical Machinery Ltd.	
	No: 015730	
	Date: May 8, 2025	

Technical Documentation

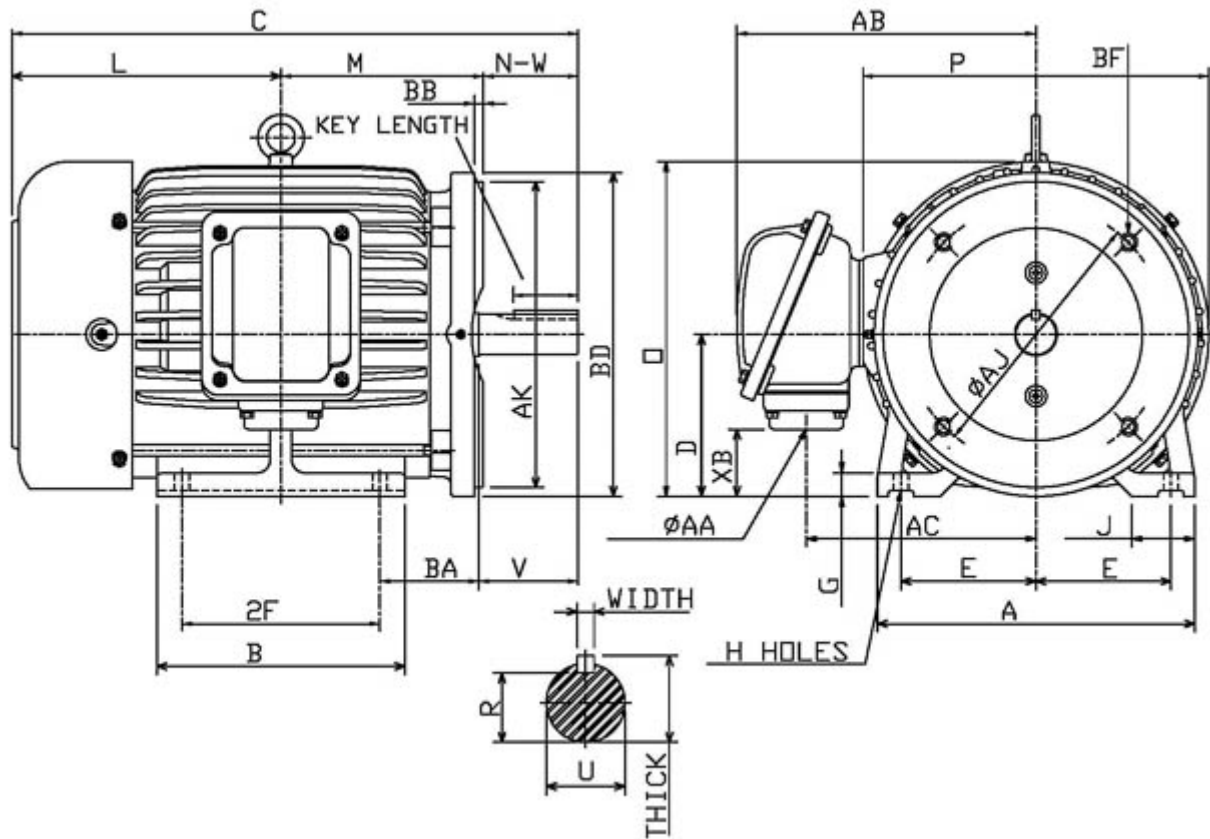
APH7/545C-841
Advantage Plus IEEE 841 | AEHH8B

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Dimensional Drawing

Catalogue	Type	HP	RPM	Voltage	Hz	Frame Size
APH7/545C-841	AEHH8B	7.5	1800	575	60	213TC



Mounting					A	B	C	CL1	CL2	D	G
E	2F1	2F2	H	BA							
4.25	5.5		0.41	3.5	9.85	6.9	17.98			5.25	0.7
J	K	AK	AJ	L	M	O	P	T	BD	BB	BF
1.75		8.5	7.25	8.35	6.06	10.8	11.1	1.46	9	0.25	1/2-13UNC

Terminal Housing			
AA	AB	AC	XB
1 NPT	9.78	7.34	2.34

Shaft Extension			Key			Keyseat
N-W	U	V	Width	Thick	Length	R
3.38	1.375	3.3	0.312	0.312	2.41	1.201

Bearings		Weight Lbs	Drive Method	Dimensions
DE	NDE			
6308ZC3	6306ZC3	174	Direct Coupling / Belt Drive	Inches

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Technical Data Sheet

Motor Type: AEHH8B	Catalogue No: APH7/545C-841
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Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
7.5	4	1755	213TC	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.					
91.70	90.20	91.00	89.50	86.50	82.00	72.00
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
22.44	250	155	270	2.2	7.1	51.20
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	0.848	39.00	110.00	29	20	60.0

VFD Duty Information

MAX HP	Current (A)	Speed Range			VFD		S.F.
		CT	VT	CHP	Carrier Hz	Type	
7.5	7.08	6-60Hz	3-60Hz	60-120Hz	3-6kHz	VPWM or CPWM	1.0

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

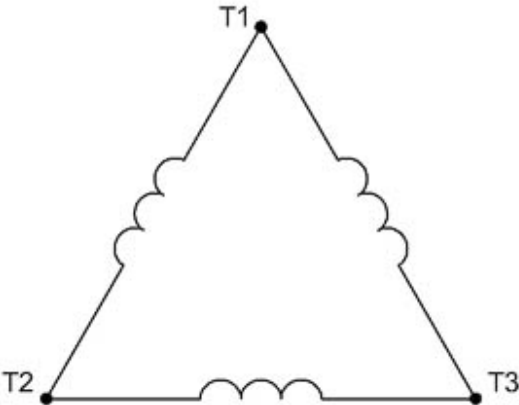
Bearings		Approx. Weight
DE	NDE	lbs
6308ZC3	6306ZC3	174

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Nameplate Drawing

Advantage Plus IEEE 841					
TYPE	AEHH8B		CAT. NO.	APH7/545C-841	
OUTPUT	7.5 HP 5.60 kW		FRAME	213TC	TEFC
R.P.M.	1755		POLE	4	INS. F
VOLTS	575		PHASE	3	Hz 60
AMPS	7.1		CODE	H	S.F. 1.15
AMBIENT	40 °C		NOM. EFF. 91.70		MIN. EFF. 90.20
BEARINGS	6308ZC3 / 6306ZC3				RATING Cont.
SER. NO.	TBD		DESIGN	B	WT. 174 LBS
PWM VFD DUTY	VT	CT	CP		S.F.
	3-60Hz	6-60Hz	60-120Hz		1.0

Connection Diagram

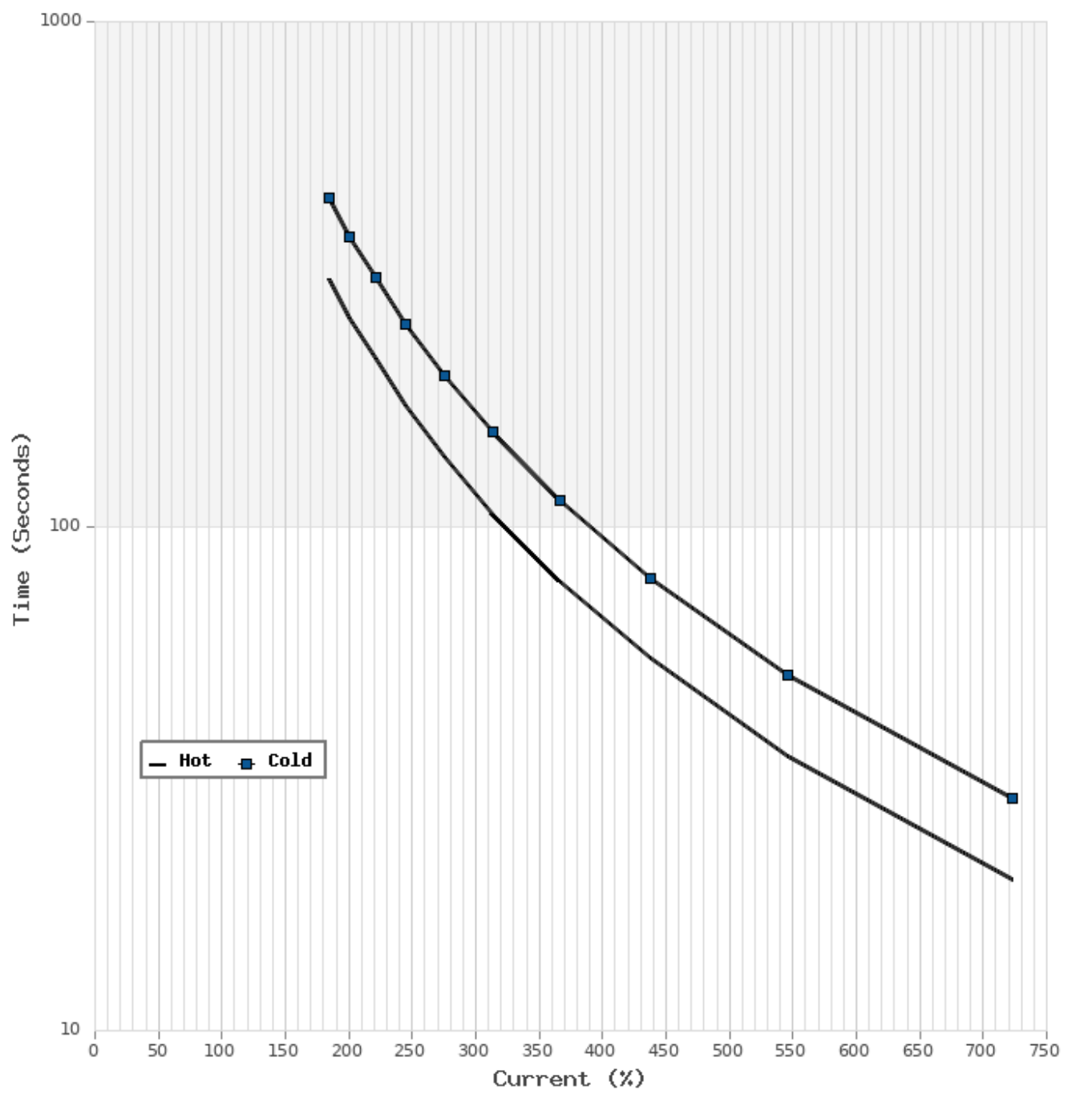


3 LEAD		SINGLE VOLTAGE			DELTA
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD_3D

Thermal Limit Curves

Motor Type: AEHH8B		Catalogue No: APH7/545C-841		Family: Advantage Plus IEEE 841	
HP	7.5	Safe Stall Time		Full Load A	7.1 A
Voltage	575V 60Hz	Hot	20 s	% Inrush	723 %
RPM	1800	Cold	29 s	Locked Rotor A	51.20 A



T-N and I-N Curves

Motor Type: AEHH8B		Catalogue No: APH7/545C-841		Family: Advantage Plus IEEE 841	
HP	7.5	Full Load T	22.44 lb-ft	Full Load A	7.1 A
Voltage	575V 60Hz	Locked Rotor T	250 %	Locked Rotor A	51.2 A
RPM	1800	Pull Up T	155 %	Break Down T	270 %

