

Technical Documentation

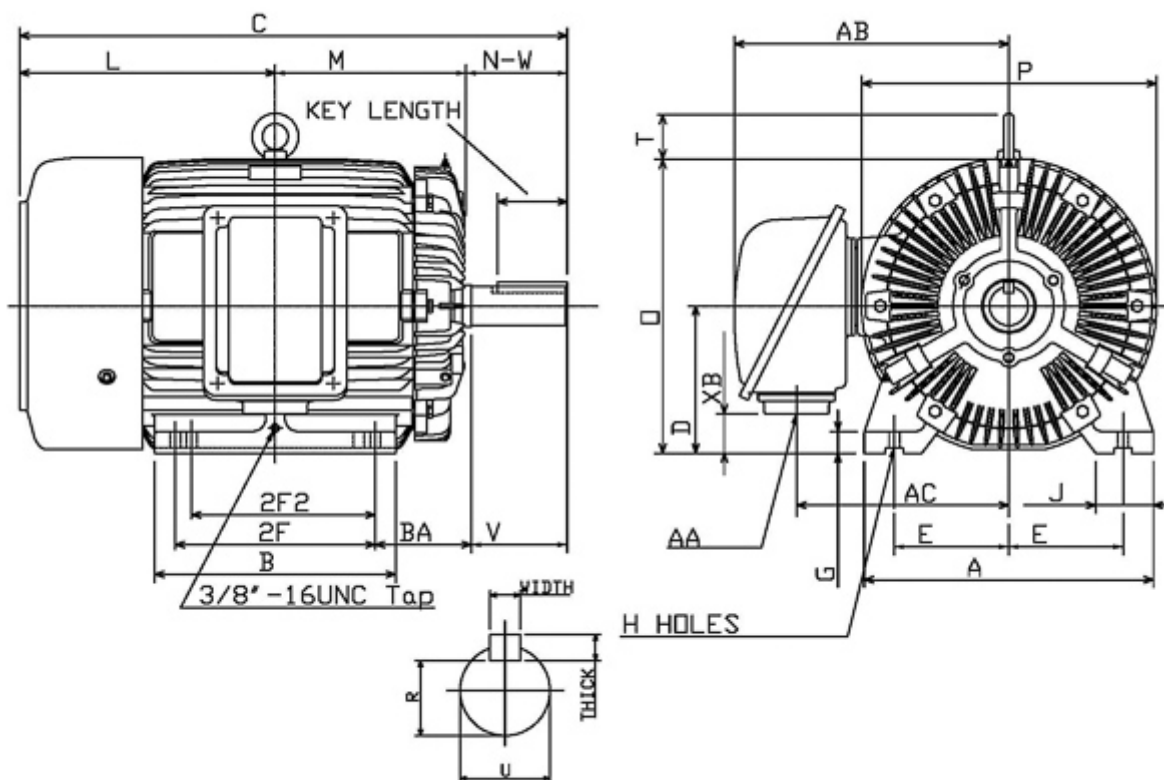
APH05045

Advantage Plus IEEE Ready | AEHH8R


Date: June 26, 2020

Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
APH05045	AEHH8R	50	4	37	Continuous	575	60	1800



Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
326T	6.25	12	10.5	0.66	5.25	15.75	14.37	31.43		8	
G	J	K	L	M	O	P	T	Key			Keyseat
1.1	3.15		14.93	10.85	16.22	16.55	2.36	Width	Thick	Length	R
								0.5	0.5	3.91	1.845
Terminal Housing			Aux Box			C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
NPT2"	14.72	11.3	3.59								
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
5.25	2.125	5.15	6312ZC3	6212ZC3	675	76	F	1.15	Direct Coupling / Belt Drive	Inches	

	
	Date: June 26, 2020

Technical Data Sheet

Motor Type: AEHH8R	Catalogue No: APH05045
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Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
50	4	1770	326T	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.					
94.5	93.6	95.0	95.0	87.0	86.0	80.5
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
148.30	210	170	220	10.5	45.6	290
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	10.123	232.00	427.00	17	12	76

VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
6-60Hz	3-60Hz	60-90Hz	≤ 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)
T3C / T3

Additional Certifications

Other Certification
Class II, Div 2, Groups F & G

Additional Information

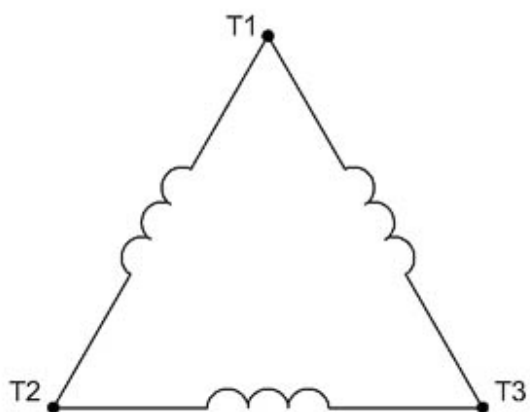
Bearings		Approx. Weight
DE	NDE	lbs
6312ZC3	6212ZC3	675

Nameplate Drawing

Advantage Plus IEEE Ready

TYPE	AEHH8R	CAT. NO.	APH05045		
OUTPUT	50 HP 37 kW	FRAME	326T	TEFC	
R.P.M.	1770	POLE	4	INS.	F
VOLTS	575	PHASE	3	Hz	60
AMPS	45.6	CODE	G	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 94.5		MIN. EFF. 93.6	
BEARINGS	6312ZC3 / 6212ZC3			RATING Cont.	
SER. NO.	TBD	DESIGN	B	WT. 675 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-90Hz	1.0 Only	

Connection Diagram

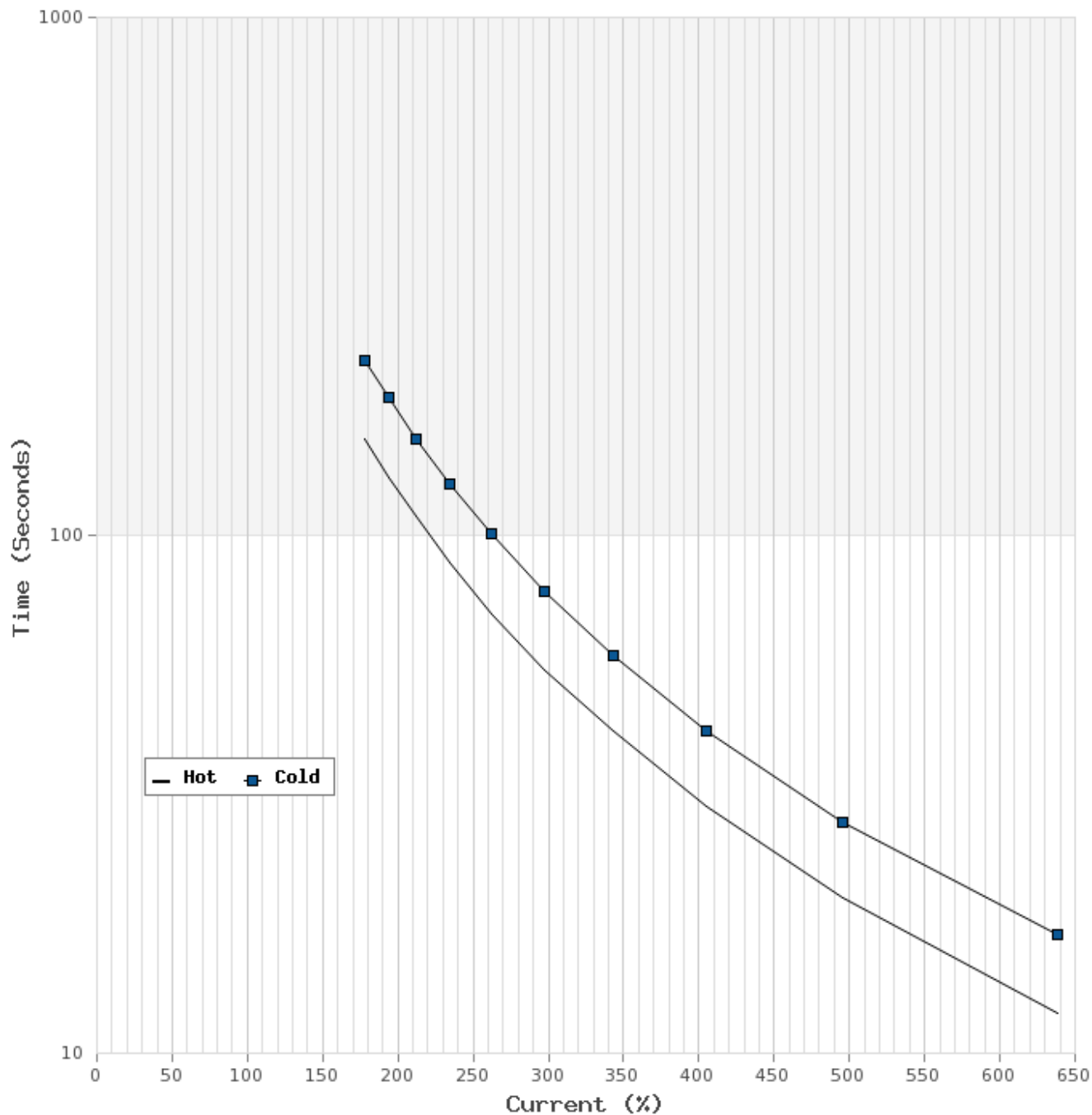


3 LEAD		SINGLE VOLTAGE			DELTA
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD_3D

Thermal Limit Curves

Motor Type: AEHH8R		Catalogue No: APH05045		Family: Advantage Plus IEEE Ready	
HP	50	Safe Stall Time		Full Load A	45.6 A
Voltage	575V 60Hz	Hot	12 s	% Inrush	637 %
RPM	1800	Cold	17 s	Locked Rotor A	290 A



T-N and I-N Curves

Motor Type: AEHH8R		Catalogue No: APH05045		Family: Advantage Plus IEEE Ready	
HP	50	Full Load T	148.30 lb-ft	Full Load A	45.6 A
Voltage	575V 60Hz	Locked Rotor T	210 %	Locked Rotor A	290.0 A
RPM	1800	Pull Up T	170 %	Break Down T	220 %

