

Technical Documentation

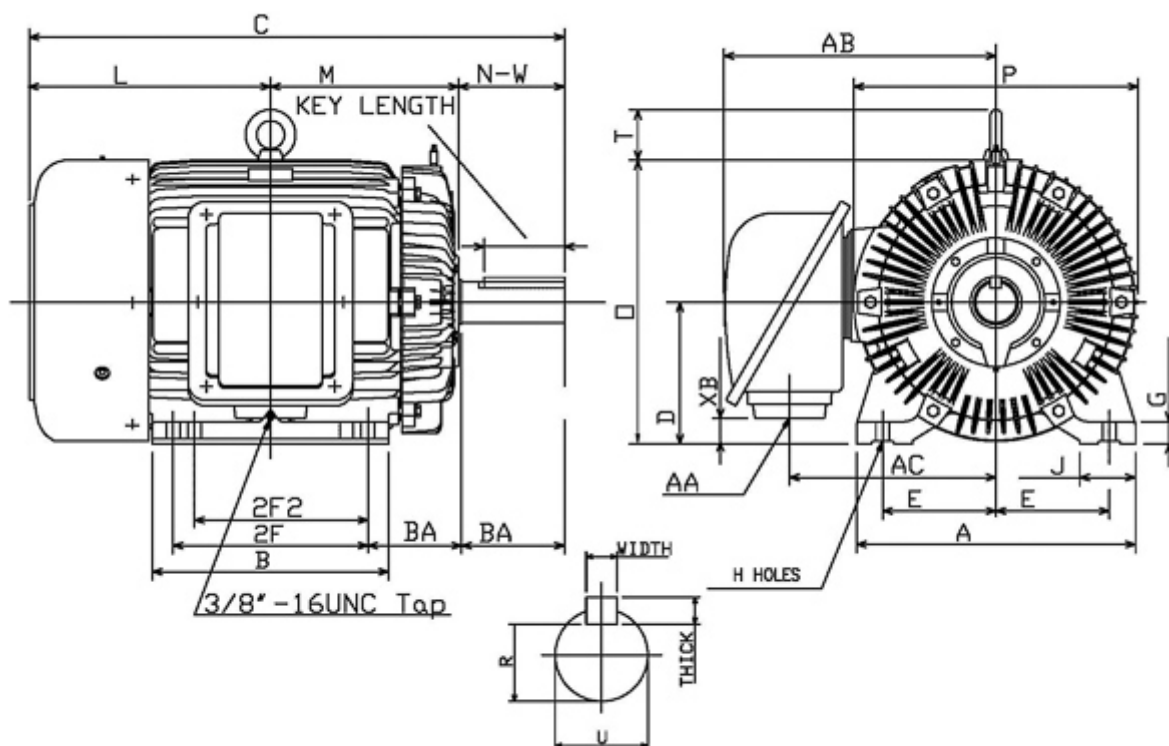
APH1004

Advantage Plus IEEE Ready | AEHH8R

Date: June 26, 2020

Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
APH1004	AEHH8R	100	4	75	Continuous	460	60	1800



Frame Size		Mounting					A	B	C	CD	D
		E	2F	2F2	H	BA					
405T		8	13.75	12.25	0.81	6.62	19.68	16.73	37.99		10
G	J	K	L	M	O	P	T	Key			Keyseat
								Width	Thick	Length	R
1.57	3.94		17.24	13.27	20	20.08	3.54	0.75	0.75	5.65	2.45
Terminal Housing				Aux Box			C/D Flange				
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
NPT3"	19.41	14.76	1.81								
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
7.25	2.875	7.16	6317C3	6313ZC3	1298	82	F	1.15	Direct Coupling / Belt Drive	Inches	

	
	Date: June 26, 2020

Technical Data Sheet

Motor Type: AEHH8R	Catalogue No: APH1004
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Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
100	4	1775	405T	460	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	95.4	95.0	87.5	85.5	80.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
295.80	215	140	215	25.4	112.2	725
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	26.637	441.00	590.00	17	12	82

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		Other Certification	
Class I, Div 2, Groups B, C & D Class I, Zone 2, Groups IIB+H2, IIB & IIA		Class II, Div 2, Groups F & G	
Temp Code (Sinewave / VFD)		T3C / T3	

Additional Certifications

Additional Information

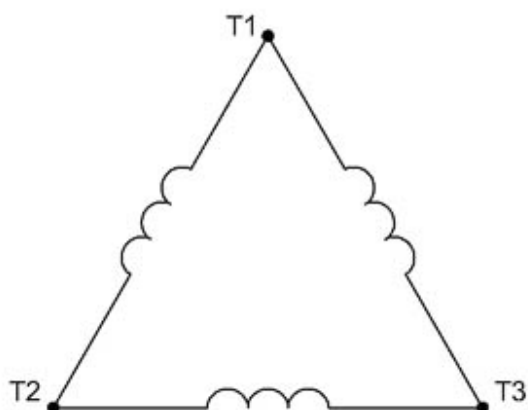
Bearings		Approx. Weight
DE	NDE	lbs
6317C3	6313ZC3	1298

Nameplate Drawing

Advantage Plus IEEE Ready

TYPE	AEHH8R	CAT. NO.	APH1004		
OUTPUT	100 HP 75 kW	FRAME	405T	TEFC	
R.P.M.	1775	POLE	4	INS.	F
VOLTS	460	PHASE	3	Hz	60
AMPS	112.2	CODE	G	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 95.4		MIN. EFF. 94.5	
BEARINGS	6317C3 / 6313ZC3			RATING Cont.	
SER. NO.	TBD		DESIGN	B	WT. 1298 LBS
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-90Hz	1.0 Only	

Connection Diagram

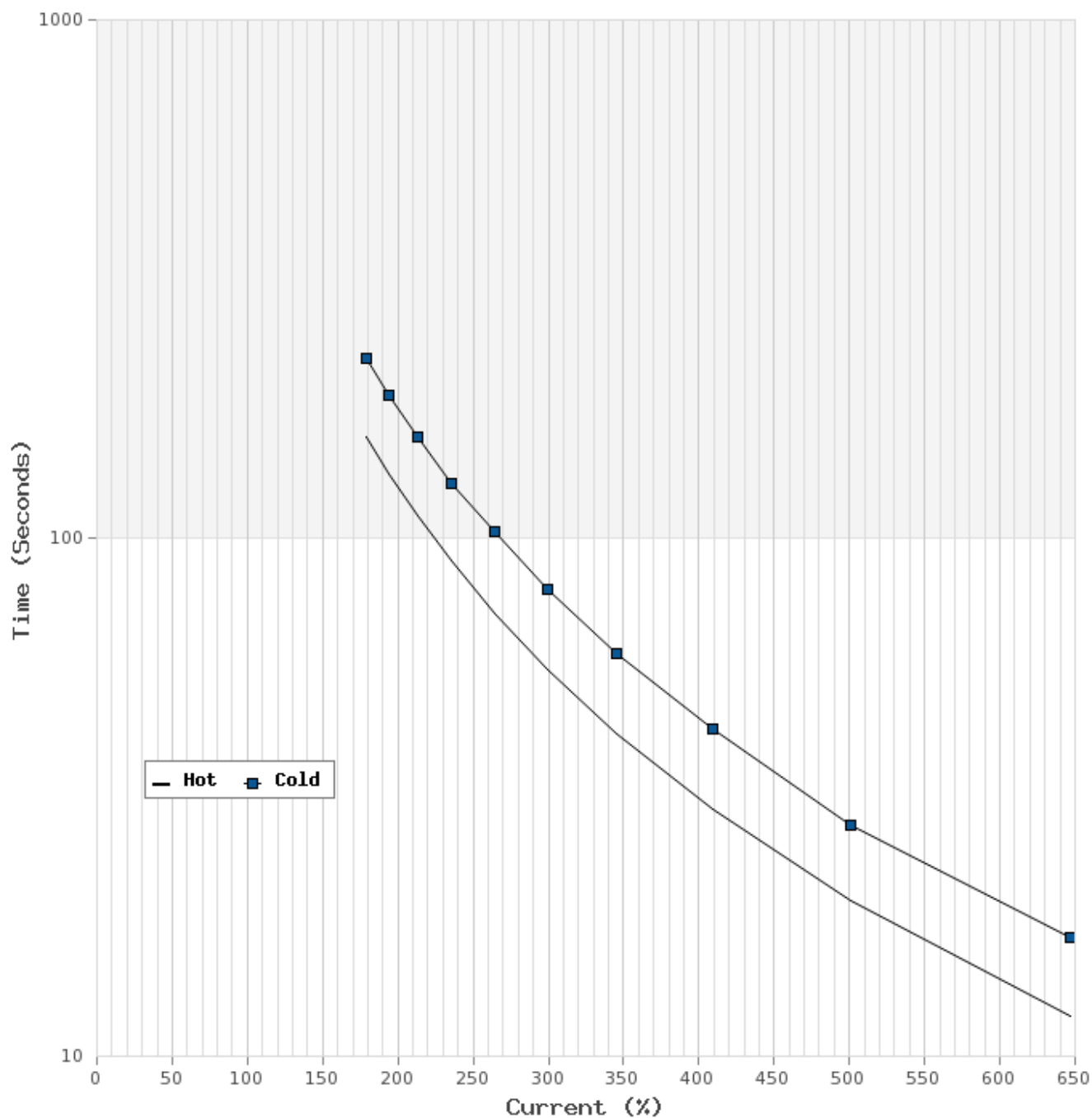


3 LEAD		SINGLE VOLTAGE			DELTA
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD_3D

Thermal Limit Curves

Motor Type: AEHH8R		Catalogue No: APH1004		Family: Advantage Plus IEEE Ready	
HP	100	Safe Stall Time		Full Load A	112.2 A
Voltage	460V 60Hz	Hot	12 s	% Inrush	646 %
RPM	1800	Cold	17 s	Locked Rotor A	725 A



T-N and I-N Curves

Motor Type: AEHH8R		Catalogue No: APH1004		Family: Advantage Plus IEEE Ready	
HP	100	Full Load T	295.80 lb-ft	Full Load A	112.2 A
Voltage	460V 60Hz	Locked Rotor T	215 %	Locked Rotor A	725.0 A
RPM	1800	Pull Up T	140 %	Break Down T	215 %

