

Technical Documentation

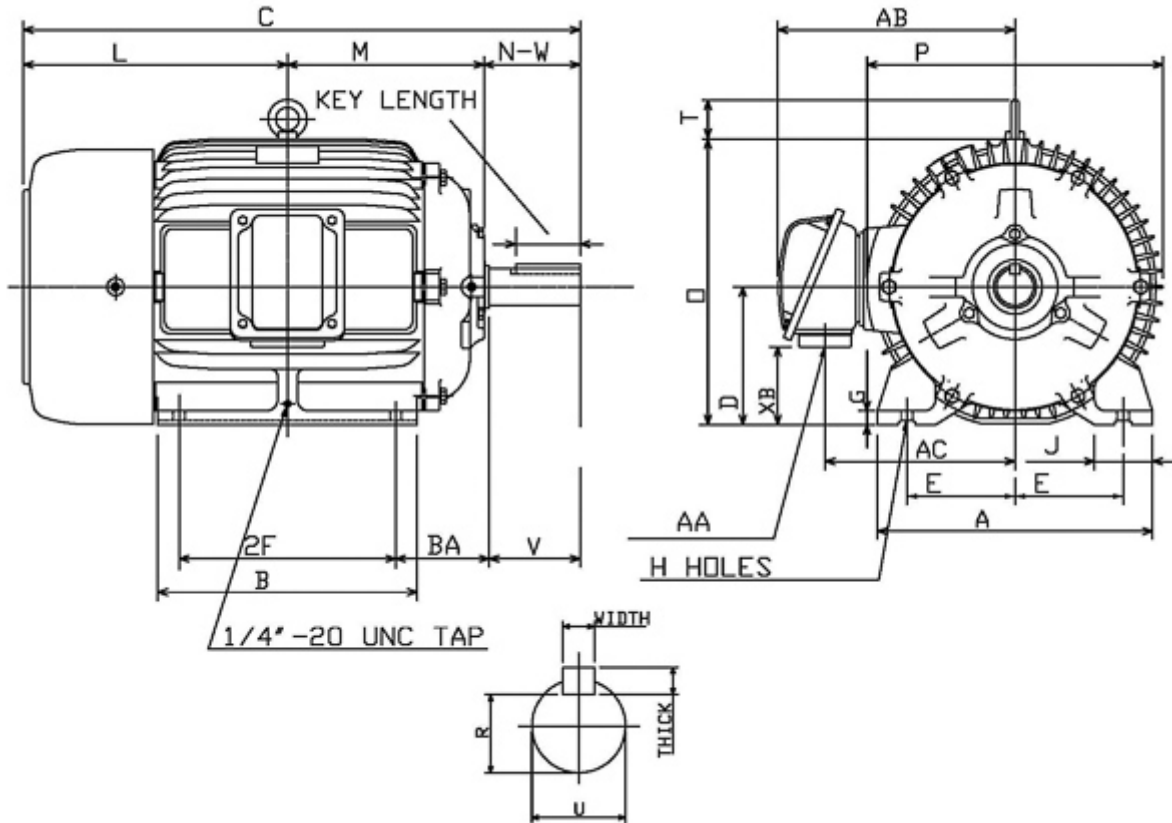
APH0058

Advantage Plus IEEE Ready | AEHH8R


Date: June 25, 2020

Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
APH0058	AEHH8R	5	8	3.7	Continuous	460	60	900



Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
254T	5	8.25		0.53	4.25	11.81	9.85	23.78		6.25	
G	J	K	L	M	O	P	T	Key			Keyseat
0.66	1.95		11.41	8.06	12.8	13.15	2.01	Width	Thick	Length	R
								0.375	0.375	2.91	1.416
Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
NPT11/4"	11.3	8.86	3.22								
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
4	1.625	3.9	6309ZC3	6307ZC3	288	54	F	1.15	Direct Coupling / Belt Drive	Inches	

	
	Date: June 25, 2020

Technical Data Sheet

Motor Type: AEHH8R	Catalogue No: APH0058
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Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
5	8	870	254T	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.					
86.5	84.0	86.5	85.5	72.0	64.0	51.5
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
30.17	190	185	240	4.6	7.5	46
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	
J	1.660	142.00	353.00	46	33	54

VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
6-60Hz	3-60Hz	60-120Hz	≤ 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 / T3A

Additional Certifications

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

Additional Information

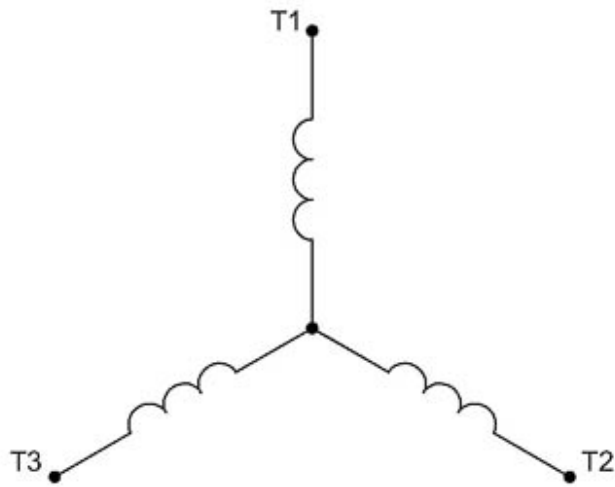
Bearings		Approx. Weight
DE	NDE	lbs
6309ZC3	6307ZC3	288

Nameplate Drawing

Advantage Plus IEEE Ready

TYPE	AEHH8R	CAT. NO.	APH0058		
OUTPUT	5 HP 3.7 kW	FRAME	254T	TEFC	
R.P.M.	870	POLE	8	INS.	F
VOLTS	460	PHASE	3	Hz	60
AMPS	7.5	CODE	J	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 86.5		MIN. EFF. 84.0	
BEARINGS	6309ZC3 / 6307ZC3			RATING Cont.	
SER. NO.	TBD	DESIGN	B	WT. 288 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-120Hz	1.0 Only	

Connection Diagram

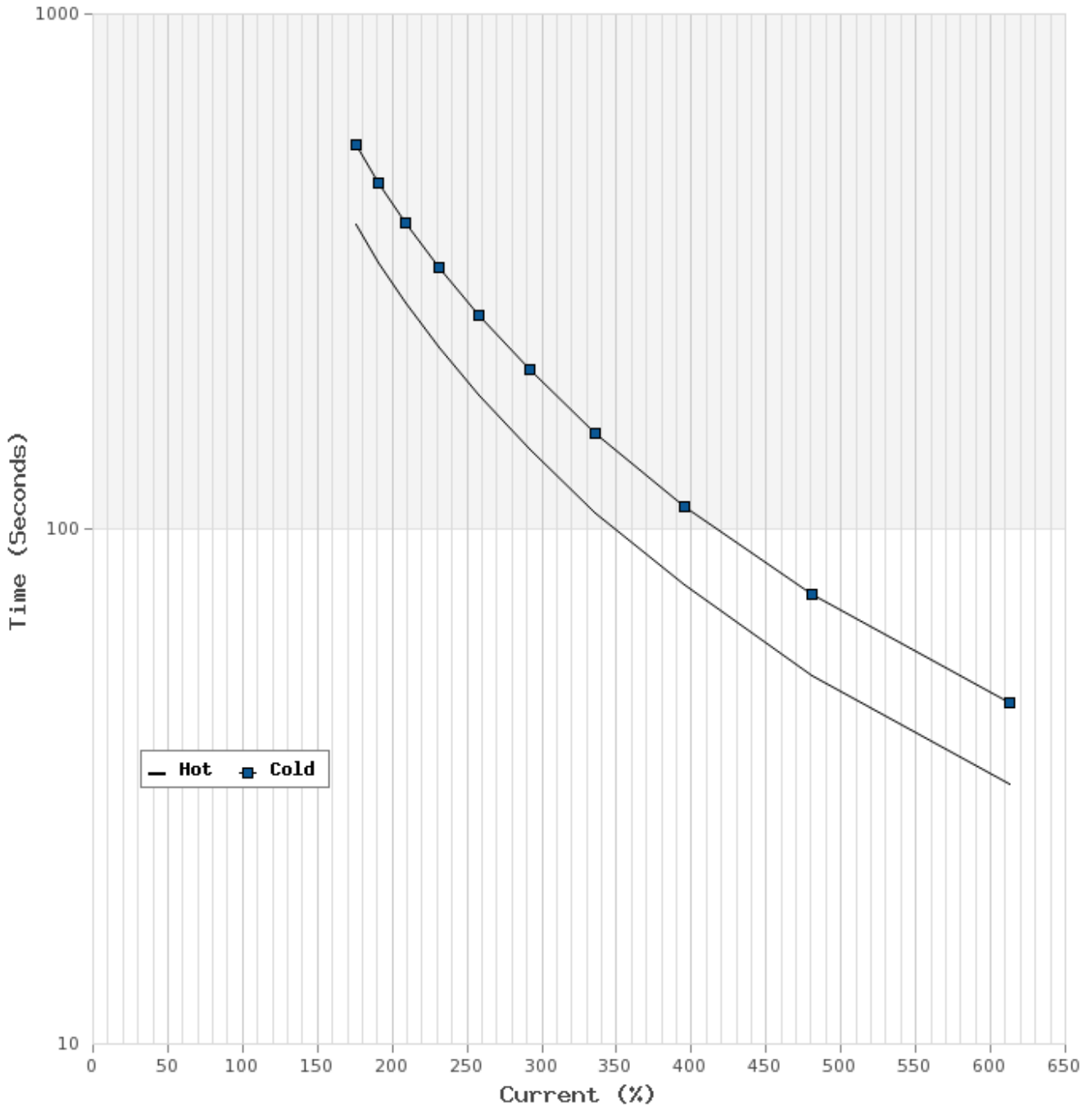


3 LEAD		SINGLE VOLTAGE			WYE
VOLTAGE	CONN.	L1	L2	L3	
-	WYE	1	2	3	

WD_3Y

Thermal Limit Curves

Motor Type: AEHH8R		Catalogue No: APH0058		Family: Advantage Plus IEEE Ready	
HP	5	Safe Stall Time		Full Load A	7.5 A
Voltage	460V 60Hz	Hot	33 s	% Inrush	612 %
RPM	900	Cold	46 s	Locked Rotor A	46 A



T-N and I-N Curves

Motor Type: AEHH8R		Catalogue No: APH0058		Family: Advantage Plus IEEE Ready	
HP	5	Full Load T	30.17 lb-ft	Full Load A	7.5 A
Voltage	460V 60Hz	Locked Rotor T	190 %	Locked Rotor A	46.0 A
RPM	900	Pull Up T	185 %	Break Down T	240 %

