

Technical Documentation

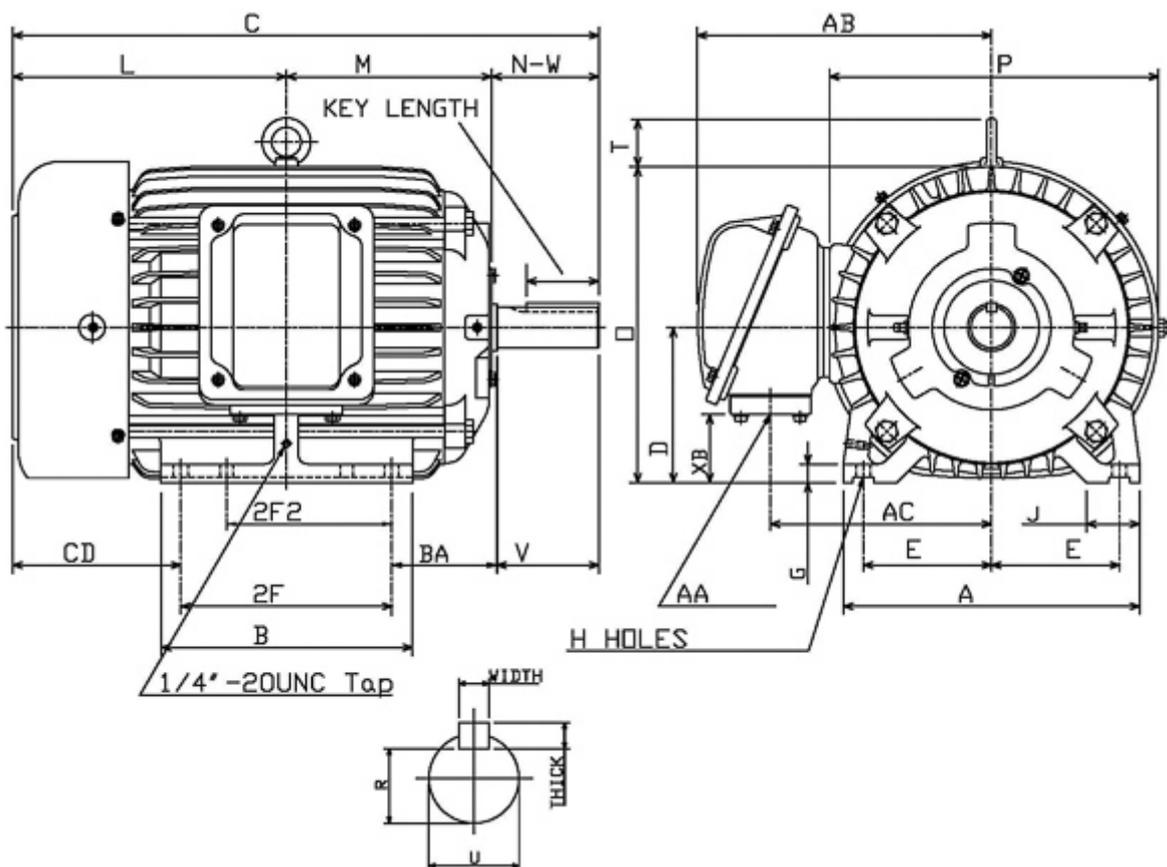
# **APH0102**

## **Advantage Plus IEEE Ready | AEHH8R**

Date: June 25, 2020

**Dimensional Drawing**

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
APH0102	AEHH8R	10	2	7.5	Continuous	460	60	3600



Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
215T	4.25	7	5.5	0.41	3.5	9.85	8.35	19.76		5.25	
G	J	K	L	M	O	P	T	Key			Keyseat
0.7	1.75		9.38	6.85	10.62	11.1	1.65	Width	Thick	Length	R
								0.312	0.312	2.41	1.201
Terminal Housing			Aux Box			C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
NPT1"	9.78	7.34	2.34								
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
3.38	1.375	3.3	6308ZC3	6306ZC3	194	71	F	1.15	Direct Coupling / Belt Drive	Inches	

	
	Date: June 25, 2020

### Technical Data Sheet

Motor Type: AEHH8R	Catalogue No: APH0102
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#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
10	2	3510	215T	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.					
91.0	89.5	91.7	91.0	89.5	88.5	82.5
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
14.96	220	180	260	3.0	11.5	81
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	
H	0.573	11.00	20.00	17	12	71

#### 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 / T3B

#### Additional Certifications

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

#### Additional Information

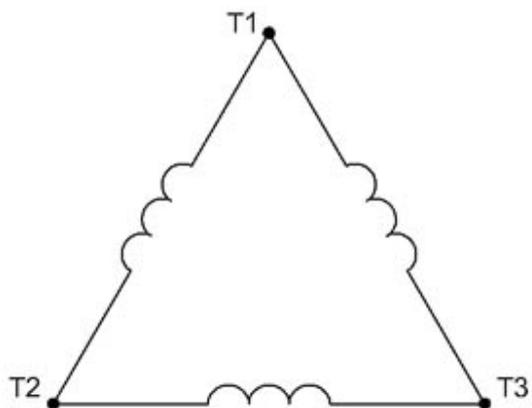
Bearings		Approx. Weight
DE	NDE	lbs
6308ZC3	6306ZC3	194

**Nameplate Drawing**

# Advantage Plus IEEE Ready

TYPE	AEHH8R	CAT. NO.	APH0102		
OUTPUT	10 HP 7.5 kW	FRAME	215T	TEFC	
R.P.M.	3510	POLE	2	INS.	F
VOLTS	460	PHASE	3	Hz	60
AMPS	11.5	CODE	H	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 91.0		MIN. EFF. 89.5	
BEARINGS	6308ZC3 / 6306ZC3			RATING Cont.	
SER. NO.	TBD	DESIGN	B	WT. 194 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-90Hz	1.0 Only	

**Connection Diagram**

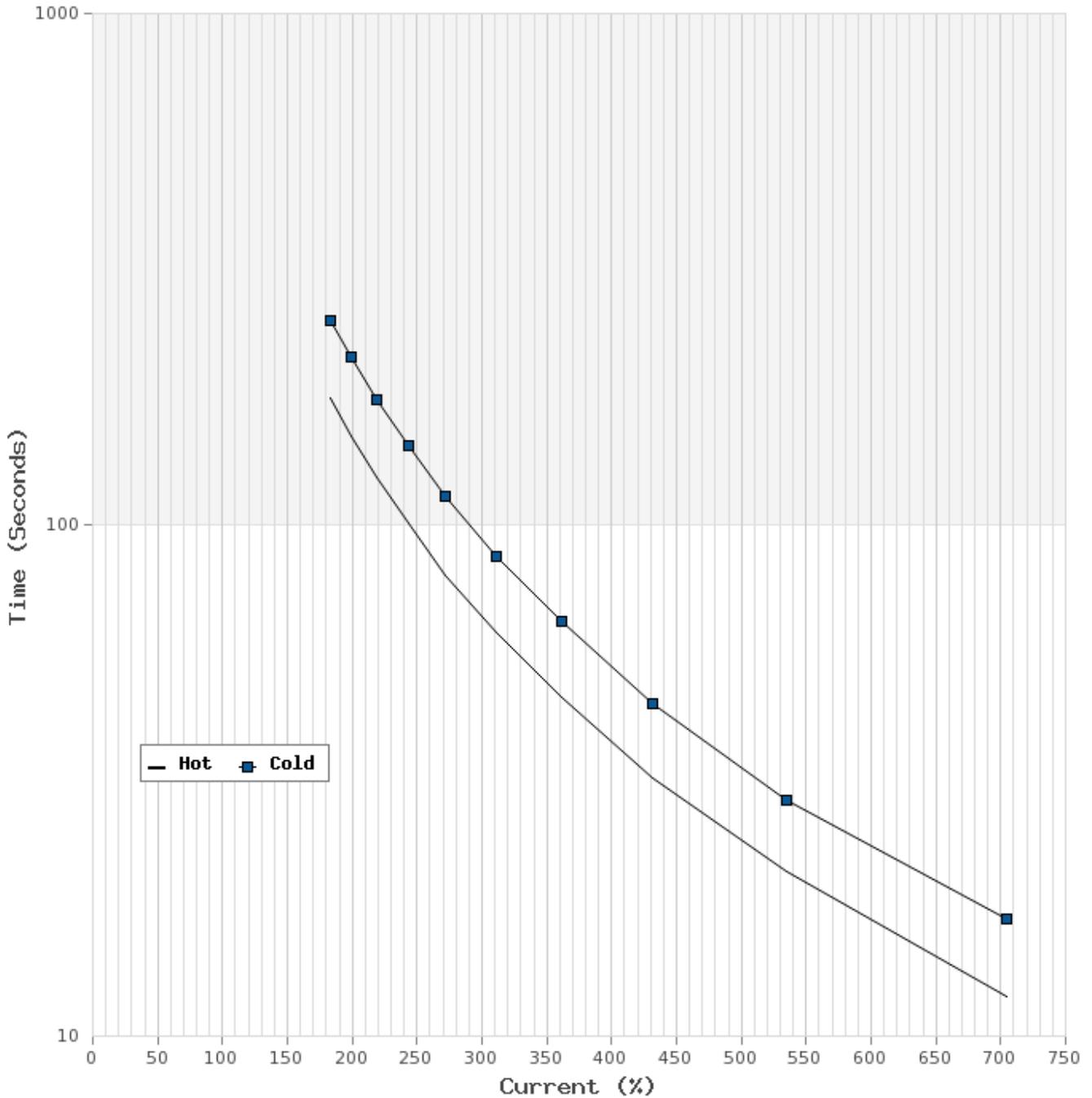


3 LEAD		SINGLE VOLTAGE			DELTA
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD\_3D

**Thermal Limit Curves**

Motor Type: AEHH8R		Catalogue No: APH0102		Family: Advantage Plus IEEE Ready	
HP	10	Safe Stall Time		Full Load A	11.5 A
Voltage	460V 60Hz	Hot	12 s	% Inrush	704 %
RPM	3600	Cold	17 s	Locked Rotor A	81 A



**T-N and I-N Curves**

Motor Type: AEHH8R		Catalogue No: APH0102		Family: Advantage Plus IEEE Ready	
HP	10	Full Load T	14.96 lb-ft	Full Load A	11.5 A
Voltage	460V 60Hz	Locked Rotor T	220 %	Locked Rotor A	81.0 A
RPM	3600	Pull Up T	180 %	Break Down T	260 %

