

Motor Data Sheet - RANS Pumps
19-P-055 A/B

Technical Documentation

APH0054-841

Advantage Plus IEEE 841 | AEHH8B

Date: November 4, 2021

Dimensional Drawing

Catalogue	Type	HP	RPM	Voltage	Hz	Frame Size
APH0054-841	AEHH8B	5	1800	460	60	184T

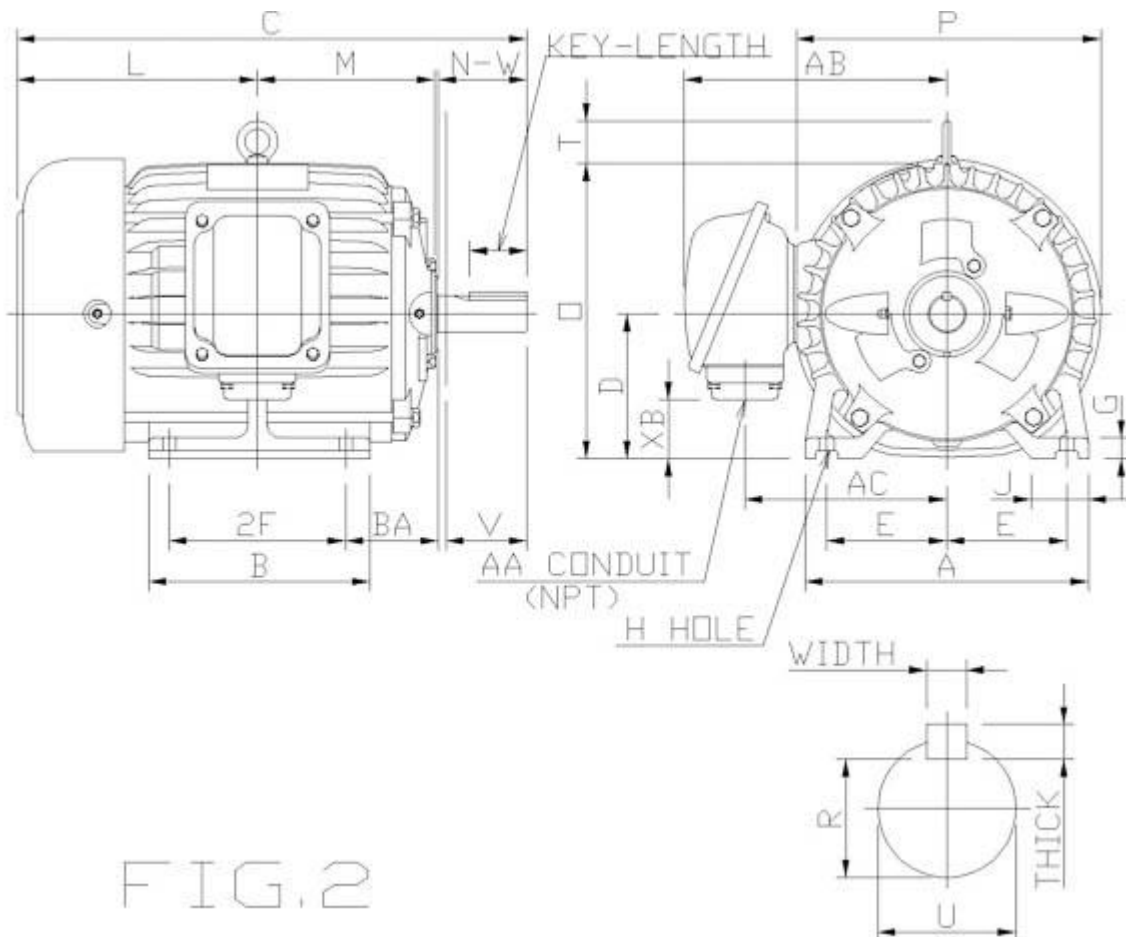


FIG. 2

Mounting					A	B	C	CL1	CL2	D	G
E	2F1	2F2	H	BA							
3.75	5.5	4.5	0.41	2.75	8.82	6.89	15.91			4.5	0.65

J	K	L	M	O	P	T
1.75		7.66	5.37	9.17	9.61	1.3

Terminal Housing			
AA	AB	AC	XB
NPT3/4"	8.31	6.38	1.86

Shaft Extension			Key			Keyseat
N-W	U	V	Width	Thick	Length	R
2.75	1.125	2.7	0.25	0.25	1.78	0.986

Bearings		Weight Lbs	Drive Method	Dimensions
DE	NDE			
6306ZC3	6306ZC3	110	Direct Coupling / Belt Drive	Inches

Technical Data Sheet

Motor Type: AEHH8B

Catalogue No: APH0054-841

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
5	4	1745	184T	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.					
89.50	87.50	88.50	88.50	85.50	81.50	71.50
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
15.04	185	140	285	2.2	6.1	46.00
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	0.422	27.00	88.00	35	25	54.0

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

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 / T3C

Additional Information

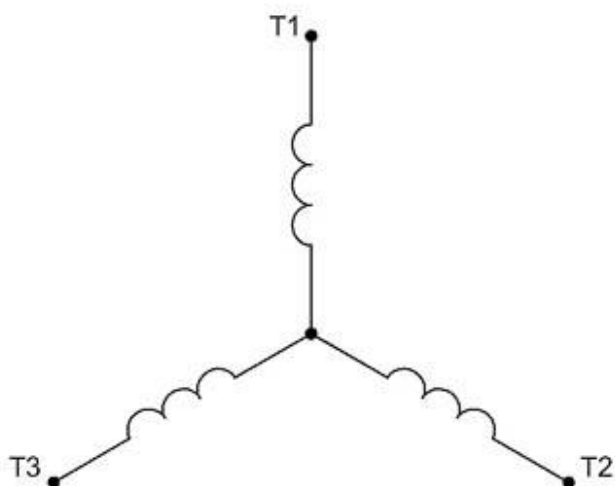
Bearings		Approx. Weight
DE	NDE	lbs
6306ZC3	6306ZC3	110

Nameplate Drawing

Advantage Plus IEEE 841

TYPE	AEHH8B	CAT. NO.	APH0054-841		
OUTPUT	5 HP 3.73 kW	FRAME	184T	TEFC	
R.P.M.	1745	POLE	4	INS.	F
VOLTS	460	PHASE	3	Hz	60
AMPS	6.1	CODE	J	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 89.50		MIN. EFF. 87.50	
BEARINGS	6306ZC3 / 6306ZC3			RATING Cont.	
SER. NO.	TBD		DESIGN	B	WT. 110 LBS
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-120Hz	1.0 Only	

Connection Diagram

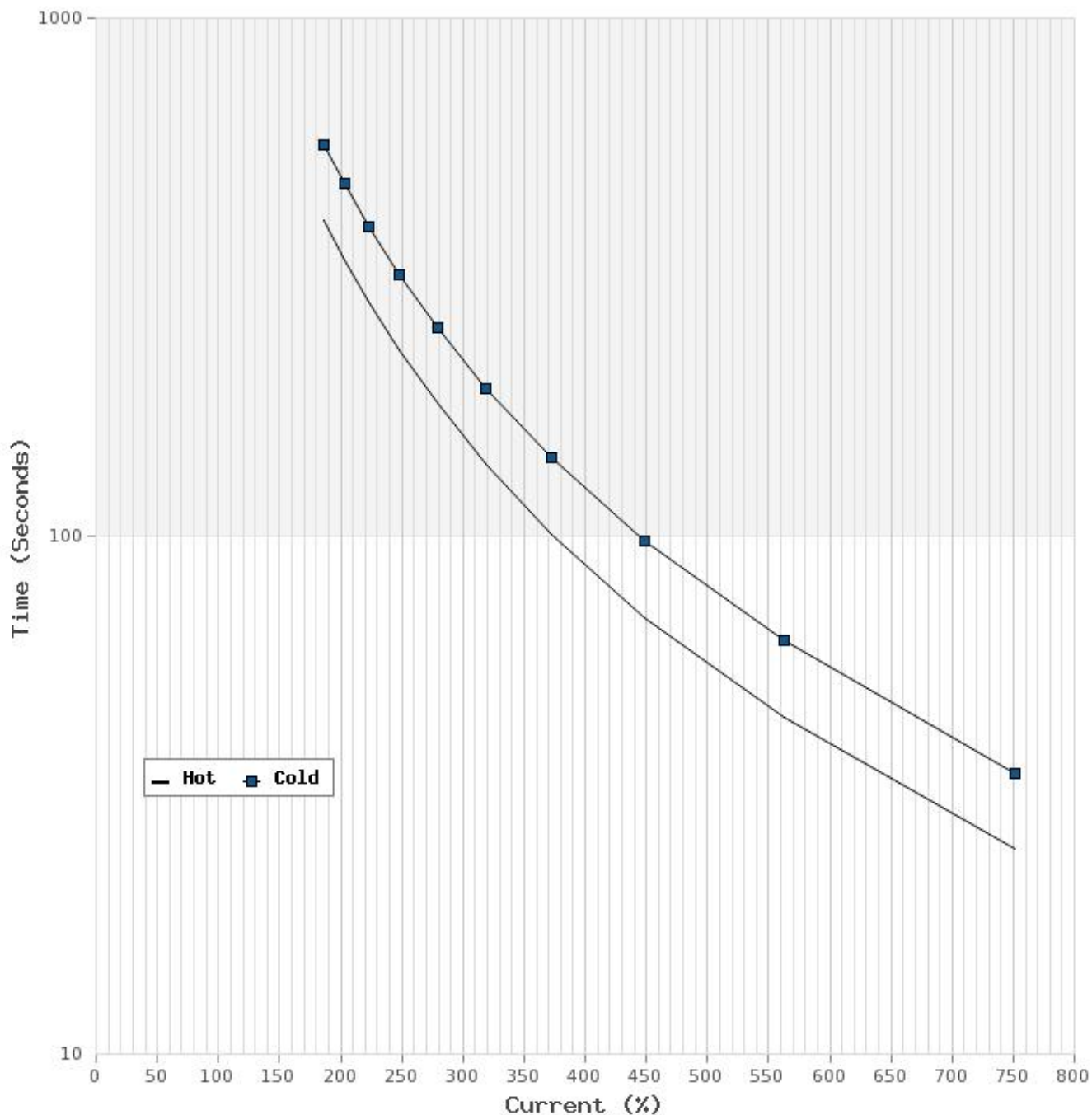


3 LEAD		SINGLE VOLTAGE			WYE
VOLTAGE	CONN.	L1	L2	L3	
-	WYE	1	2	3	

WD_3Y

Thermal Limit Curves

Motor Type: AEHH8B		Catalogue No: APH0054-841		Family: Advantage Plus IEEE 841	
HP	5	Safe Stall Time		Full Load A	6.1 A
Voltage	460V 60Hz	Hot	25 s	% Inrush	752 %
RPM	1800	Cold	35 s	Locked Rotor A	46.00 A



T-N and I-N Curves

Motor Type: AEHH8B		Catalogue No: APH0054-841		Family: Advantage Plus IEEE 841	
HP	5	Full Load T	15.04 lb-ft	Full Load A	6.1 A
Voltage	460V 60Hz	Locked Rotor T	185 %	Locked Rotor A	46.0 A
RPM	1800	Pull Up T	140 %	Break Down T	285 %

