

Technical Documentation

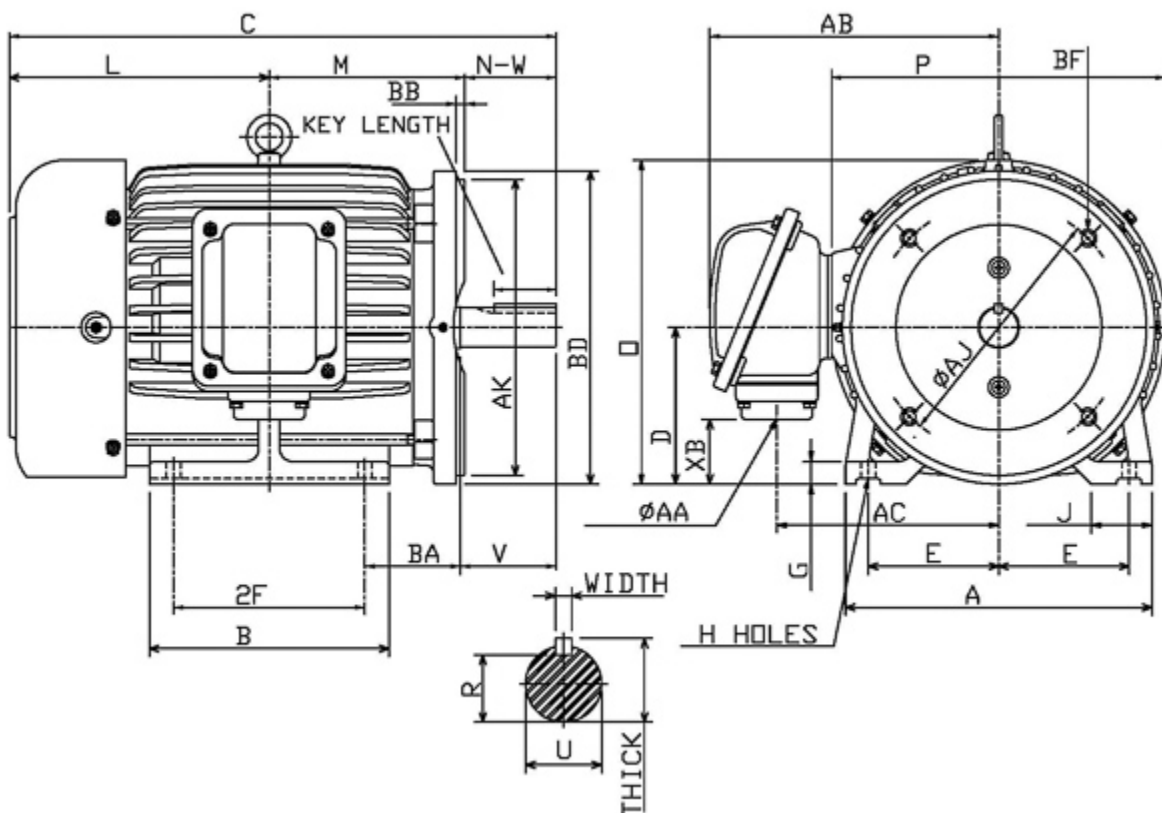
PDH0032C

Optim TEFC | AEHH8N

Date: November 30, 2016

Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
PDH0032C	AEHH8N	3	2	2.2	Continuous	230 / 460 V	60	3600



Frame Size		Mounting					A	B	C	CD	D
		E	2F	2F2	H	BA					
182TC		3.75	4.5		0.41	2.75	8.8	5.9	14.71		4.5
G	J	K	L	M	O	P	T	Key			Keyseat
								Width	Thick	Length	R
0.65	1.75		6.96	4.87	9.31	9.61	1.19	0.25	0.25	1.78	0.986
Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
3/4 NPT	8.31	6.38	1.86			0.25	2.62	8.5	9	7.25	1/2-13UNC
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
2.75	1.125	2.7	6306ZZ	6306ZZ	88	64	F	1.15	Direct Coupling / Belt Drive	Inches	

Technical Data Sheet

Motor Type: AEHH8N

Catalogue No: PDH0032C

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
3	2	3490	182TC	230 / 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	<3300 ft

Typical Performance

Efficiency (%)				Power Factor (%)		
Full Load		3/4 Load	1/2 Load	Full Load	3/4 Load	1/2 Load
Nom.	Min.					
88.5	86.5	90.2	89.5	90.0	87.0	79.5
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
4.51	280	250	380	2.4 / 1.2	7.1 / 3.5	64 / 32
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	
K	0.190	3.5	13.0	17	12	64

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

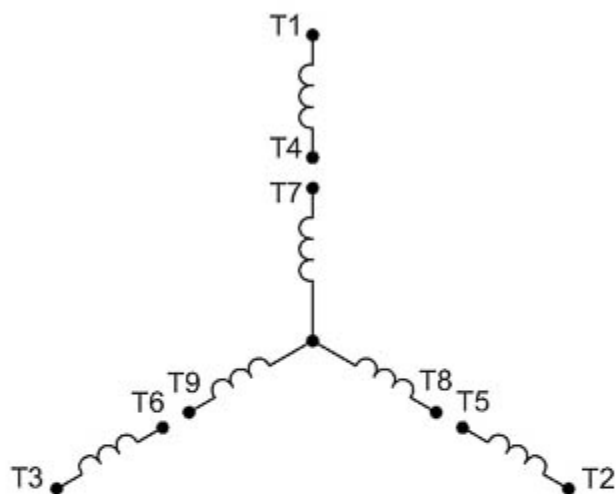
Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6306ZZ	6306ZZ	88

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 / T3C

Connection Diagram

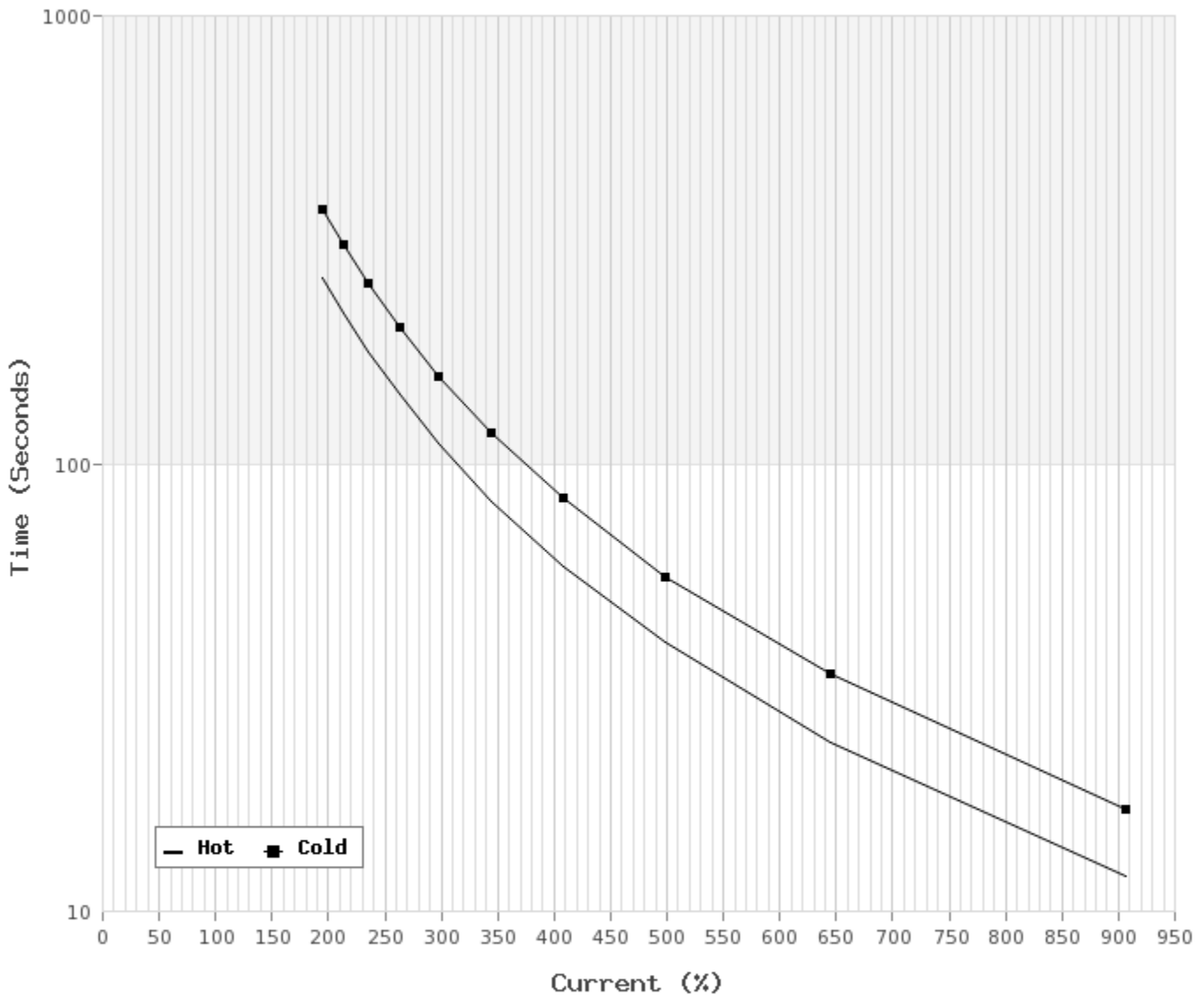


9 LEAD DUAL VOLTAGE WYE					
VOLTAGE	CONN.	L1	L2	L3	JOIN
HIGH	WYE	1	2	3	4&7,5&8,6&9
LOW	2 WYE	1,7	2,8	3,9	4&5&6

WD_9Y

Thermal Limit Curves

Motor Type: AEHH8N		Catalogue No: PDH0032C		Family: Optim TEFC	
HP	3	Safe Stall Time		Full Load A	7.1 / 3.5 A
Voltage	230 / 460V 60Hz	Hot	12 s	Locked Rotor A	907 / 907 %
RPM	3600	Cold	17 s	Locked Rotor A	64.0 / 32 A



T-N and I-N Curves

Motor Type: AEHH8N		Catalogue No: PDH0032C		Family: Optim TEFC	
HP	3	Full Load T	4.51 lb-ft	Full Load A	7.1 / 3.5 A
Voltage	230 / 460V 60Hz	Locked Rotor T	280 %	Locked Rotor A	64.0 / 32.0 A
RPM	3600	Pull Up T	250 %	Break Down T	380 %

