

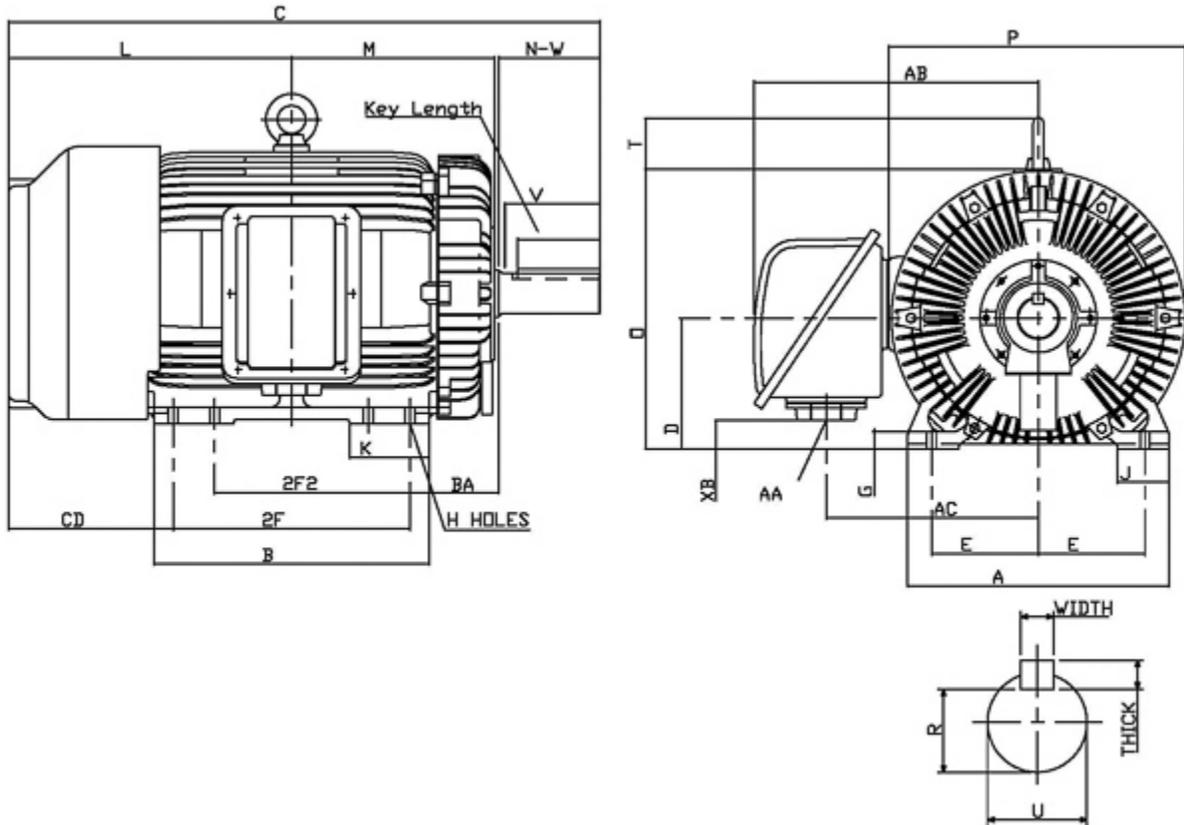
Technical Documentation

PDH25045
Optim TEFC | AEHH8N

Date: November 30, 2016

Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
PDH25045	AEHH8N	250	4	187	Continuous	575 V	60	1800



Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
449T	9	25	20	0.81	7.5	22.05	27.95	54.9	13.9	11	
G	J	K	L	M	O	P	T	Key			Keyseat
1.4	4.35	8.25	26.4	19.65	23.55	24.75	4.35	Width	Thick	Length	R
								0.875	0.875	6.91	2.88
Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
3 NPT	24	17.9	2.4								
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
8.5	3.375	8	6320	6316	2442	81	F	1.15	Direct Coupling / Belt Drive	Inches	

Technical Data Sheet

Motor Type: AEHH8N

Catalogue No: PDH25045

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
250	4	1787	449T	575	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.					
96.2	95.4	95.8	95.0	85.5	83.5	80.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
734.00	110	90	210	43.0	227.7	1460
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	83.000	1017.0	2034.0	19	13	81

VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
20-60Hz	3-60Hz	60-75Hz	≤ 5 kHz	VPWM or CPWM	1.0 Only

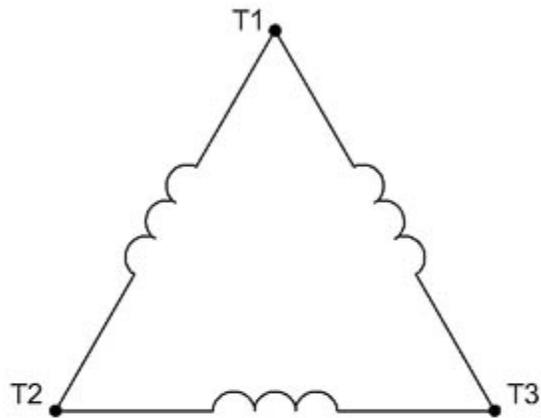
Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6320	6316	2442

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 / T3

Connection Diagram

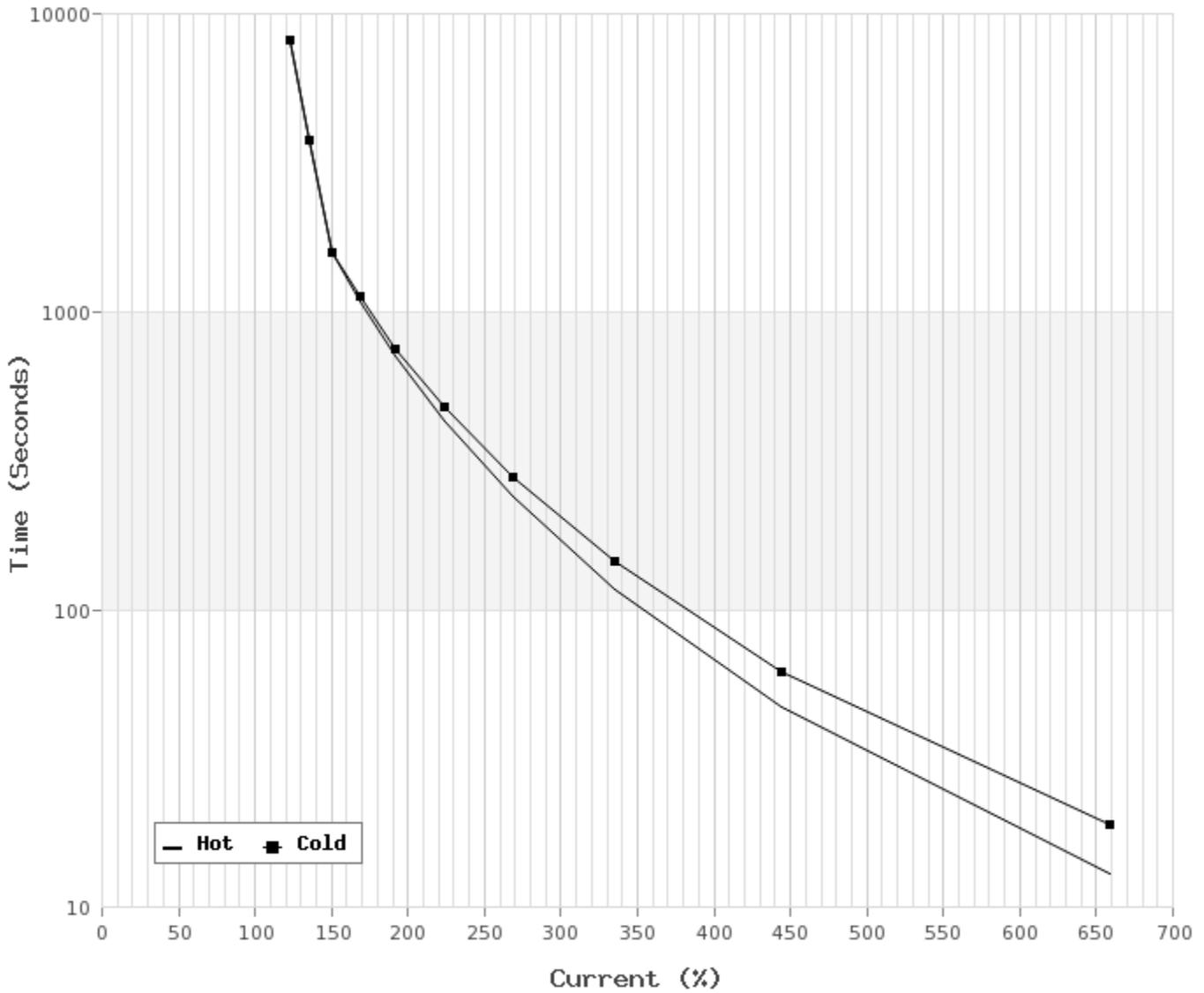


3 LEAD SINGLE VOLTAGE DELTA					
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD_3D

Thermal Limit Curves

Motor Type: AEHH8N		Catalogue No: PDH25045		Family: Optim TEFC	
HP	250	Safe Stall Time		Full Load A	0.0 / 227.7 A
Voltage	0 / 575V 60Hz	Hot	13 s	Locked Rotor A	641 %
RPM	1800	Cold	19 s	Locked Rotor A	0.0 / 1 A



T-N and I-N Curves

Motor Type: AEHH8N		Catalogue No: PDH25045		Family: Optim TEFC	
HP	250	Full Load T	734.00 lb-ft	Full Load A	227.7 A
Voltage	575V 60Hz	Locked Rotor T	110 %	Locked Rotor A	1,460.0 A
RPM	1800	Pull Up T	90 %	Break Down T	210 %

