

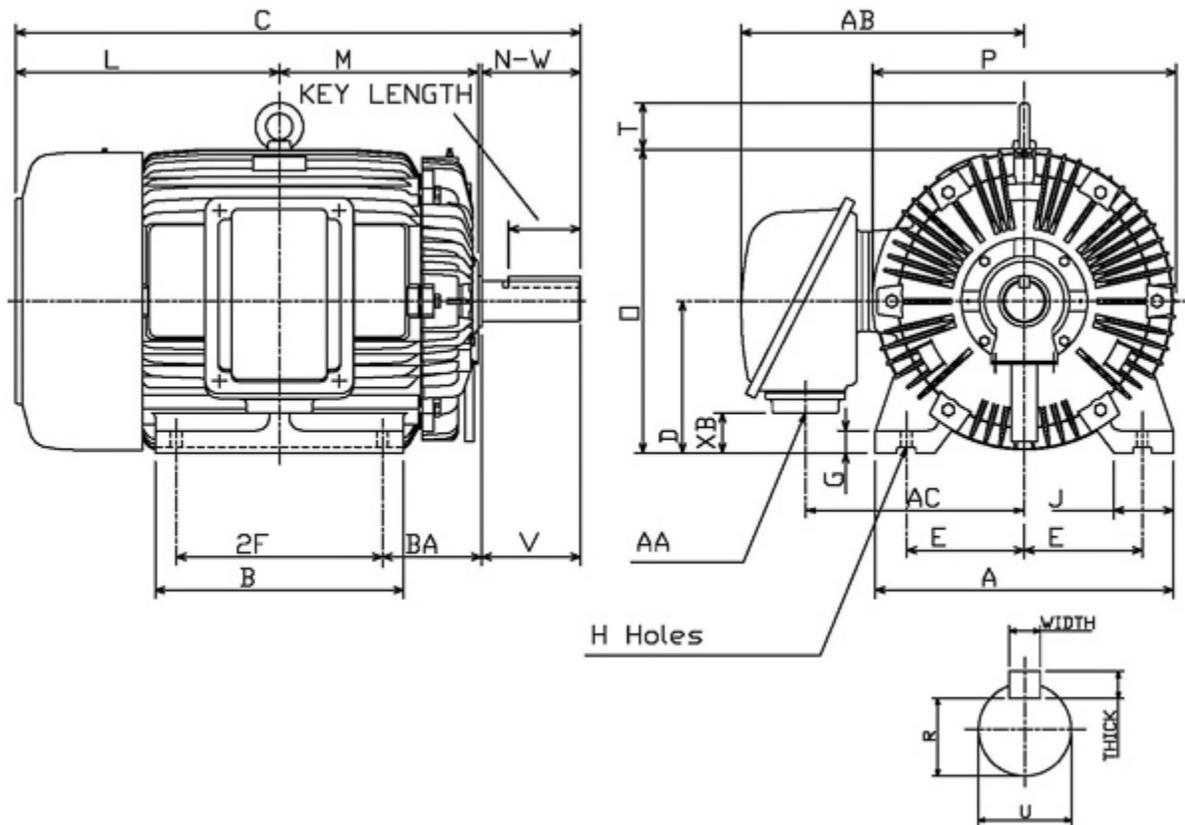
Technical Documentation

**PDH03085**  
**Optim TEFC | AEHH8N**

Date: November 30, 2016

**Dimensional Drawing**

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
PDH03085	AEHH8N	30	8	22	Continuous	575 V	60	900



Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
364T	7	11.25		0.66	5.88	17.7	13.75	32.57		9	
G	J	K	L	M	O	P	T	Key			Keyseat
1.3	3.55		15.19	11.29	18.02	18.03	2.76	Width	Thick	Length	R
								0.625	0.625	4.28	2.021
Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
3 NPT	16.81	13	2.39								
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
5.88	2.375	5.75	6313	6213	856	71	F	1.15	Direct Coupling / Belt Drive	Inches	

### Technical Data Sheet

Motor Type: AEHH8N

Catalogue No: PDH03085

#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
30	8	885	364T	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.					
93.0	91.7	93.0	92.4	77.5	72.0	62.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
178.00	200	170	200	14.5	31.2	174
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	
G	17.938	769.0	1833.0	50	35	71

#### 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

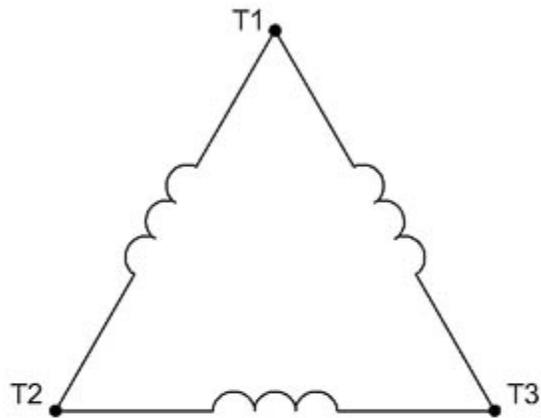
#### Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6313	6213	856

#### 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)	T3A / T3A

**Connection Diagram**

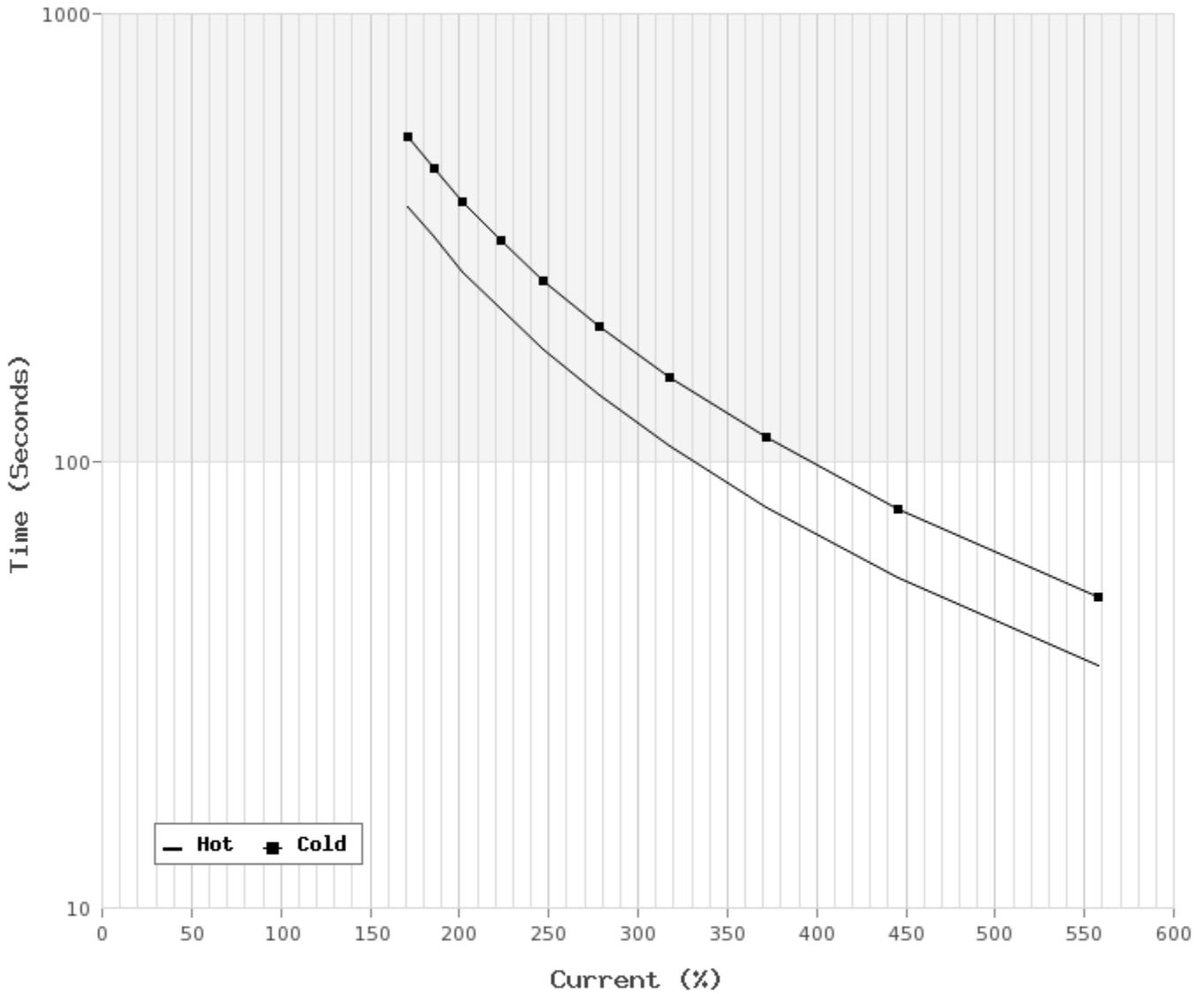


3 LEAD SINGLE VOLTAGE DELTA					
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD\_3D

**Thermal Limit Curves**

Motor Type: AEHH8N		Catalogue No: PDH03085		Family: Optim TEFC	
HP	30	Safe Stall Time		Full Load A	0.0 / 31.2 A
Voltage	0 / 575V 60Hz	Hot	35 s	Locked Rotor A	558 %
RPM	900	Cold	50 s	Locked Rotor A	0.0 / 174 A



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

Motor Type: AEHH8N		Catalogue No: PDH03085		Family: Optim TEFC	
HP	30	Full Load T	178.00 lb-ft	Full Load A	31.2 A
Voltage	575V 60Hz	Locked Rotor T	200 %	Locked Rotor A	174.0 A
RPM	900	Pull Up T	170 %	Break Down T	200 %

