

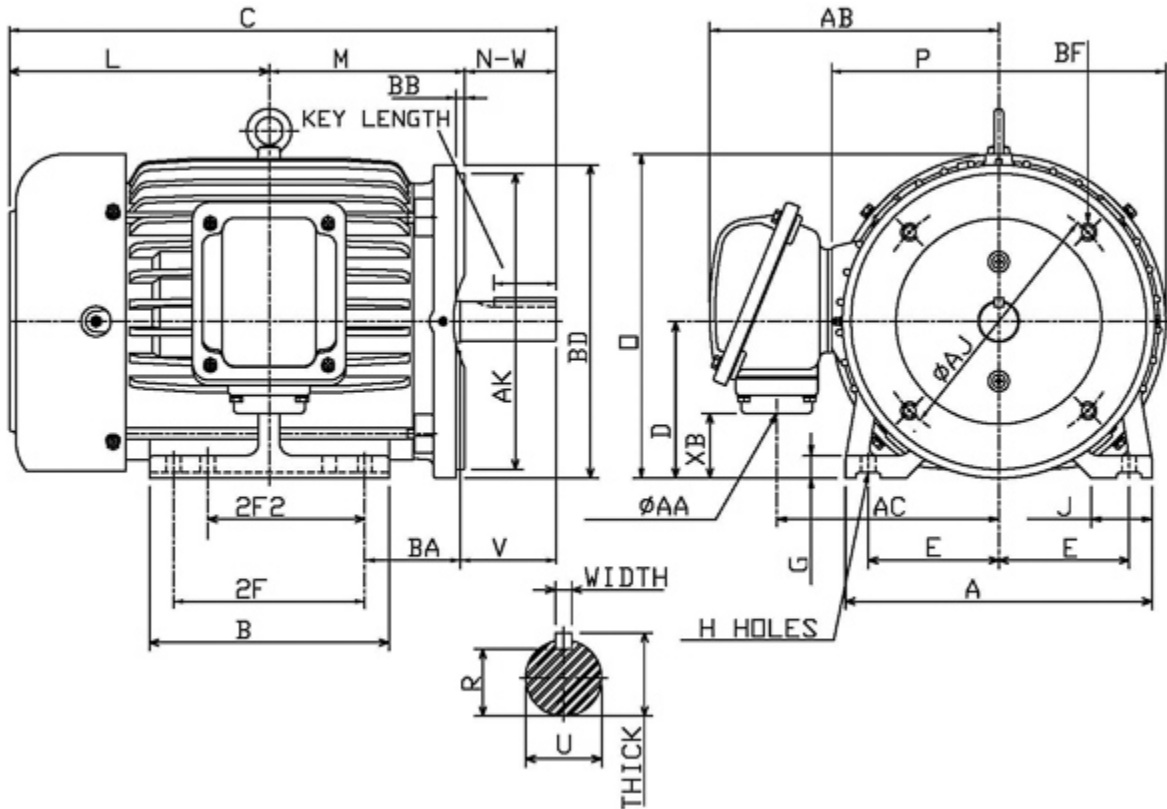
Technical Documentation

**PDH0038C**  
**Optim TEFC | AEHH8N**

Date: November 30, 2016

### Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
PDH0038C	AEHH8N	3	8	2.2	Continuous	230 / 460 V	60	900



Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
215TC	4.25	7	5.5	0.41	3.5	9.85	8.35	19.48		5.25	
G	J	K	L	M	O	P	T	Key			Keyseat
0.7	1.75		9.1	6.81	10.8	11.1	1.46	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
1 NPT	9.78	7.34	2.34			0.25	3.12	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							
3.38	1.375	3.3	6308ZZ	6306ZZ	161	53	F	1.15	Direct Coupling / Belt Drive	Inches	

### Technical Data Sheet

Motor Type: AEHH8N

Catalogue No: PDH0038C

#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
3	8	865	215TC	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.					
85.5	82.5	84.0	82.5	66.0	57.0	44.5
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
18.21	240	230	305	6.9 / 3.5	10.0 / 5.0	64 / 32
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	
K	0.821	87.0	303.0	58	41	53

#### 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

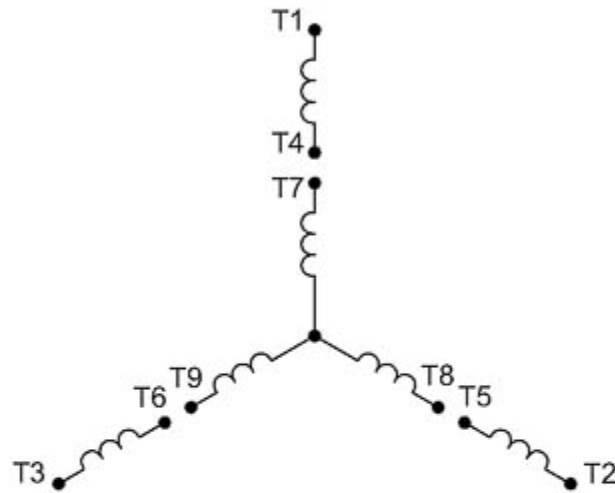
#### Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6308ZZ	6306ZZ	161

#### 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**

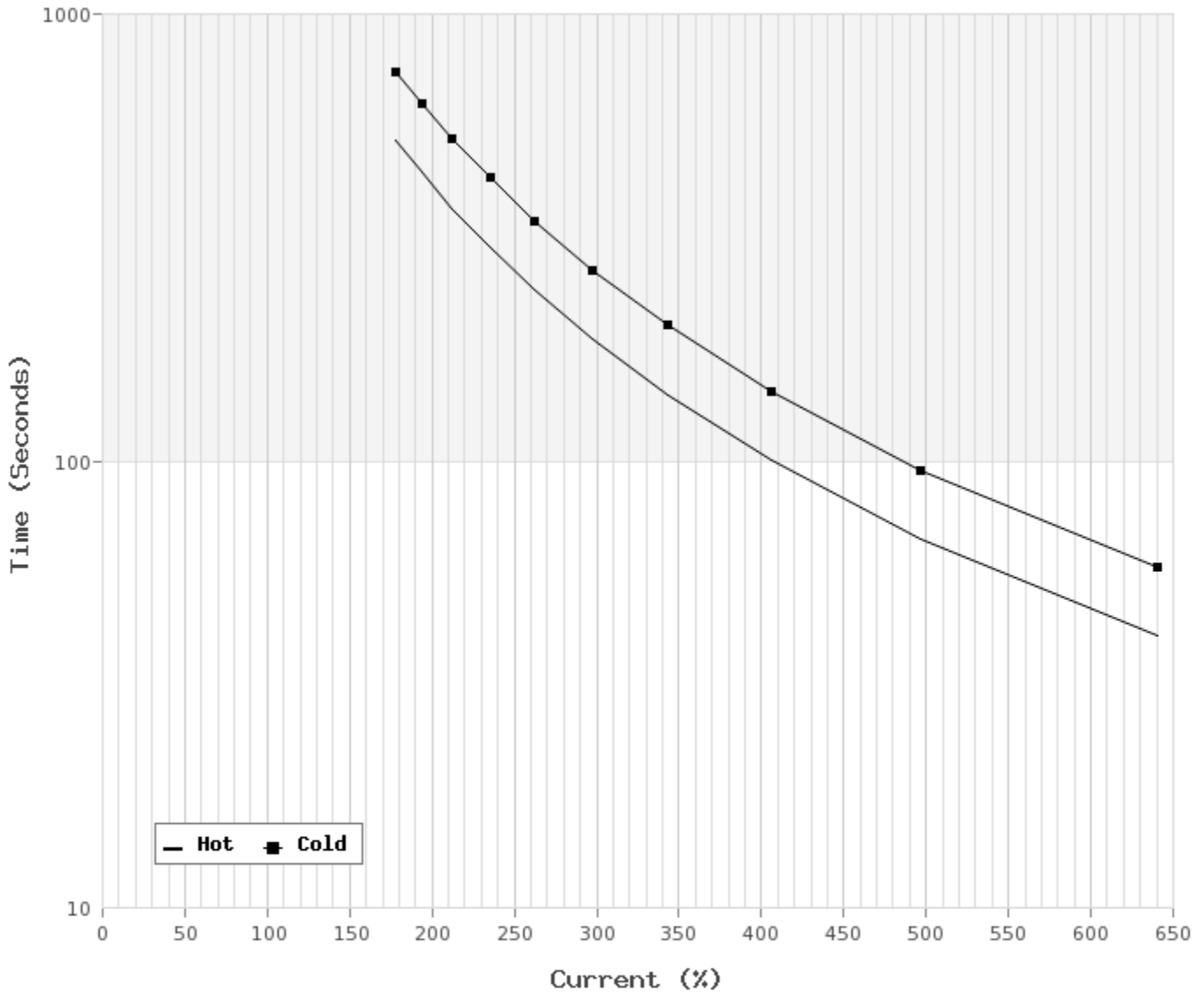


9 LEAD DUAL VOLTAGE WYE					
VOLTAGE	CONN.	L1	L2	L3	JOIN
HIGH	WYE	1	2	3	4&7,5&8,6&9
LOW	2 WYE	1,7	2,8	3,9	4&5&6

WD\_9Y

**Thermal Limit Curves**

Motor Type: AEHH8N		Catalogue No: PDH0038C		Family: Optim TEFC	
HP	3	Safe Stall Time		Full Load A	10.0 / 5.0 A
Voltage	230 / 460V 60Hz	Hot	41 s	Locked Rotor A	643 / 643 %
RPM	900	Cold	58 s	Locked Rotor A	64.0 / 32 A



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

Motor Type: AEHH8N		Catalogue No: PDH0038C		Family: Optim TEFC	
HP	3	Full Load T	18.21 lb-ft	Full Load A	10.0 / 5.0 A
Voltage	230 / 460V 60Hz	Locked Rotor T	240 %	Locked Rotor A	64.0 / 32.0 A
RPM	900	Pull Up T	230 %	Break Down T	305 %

