

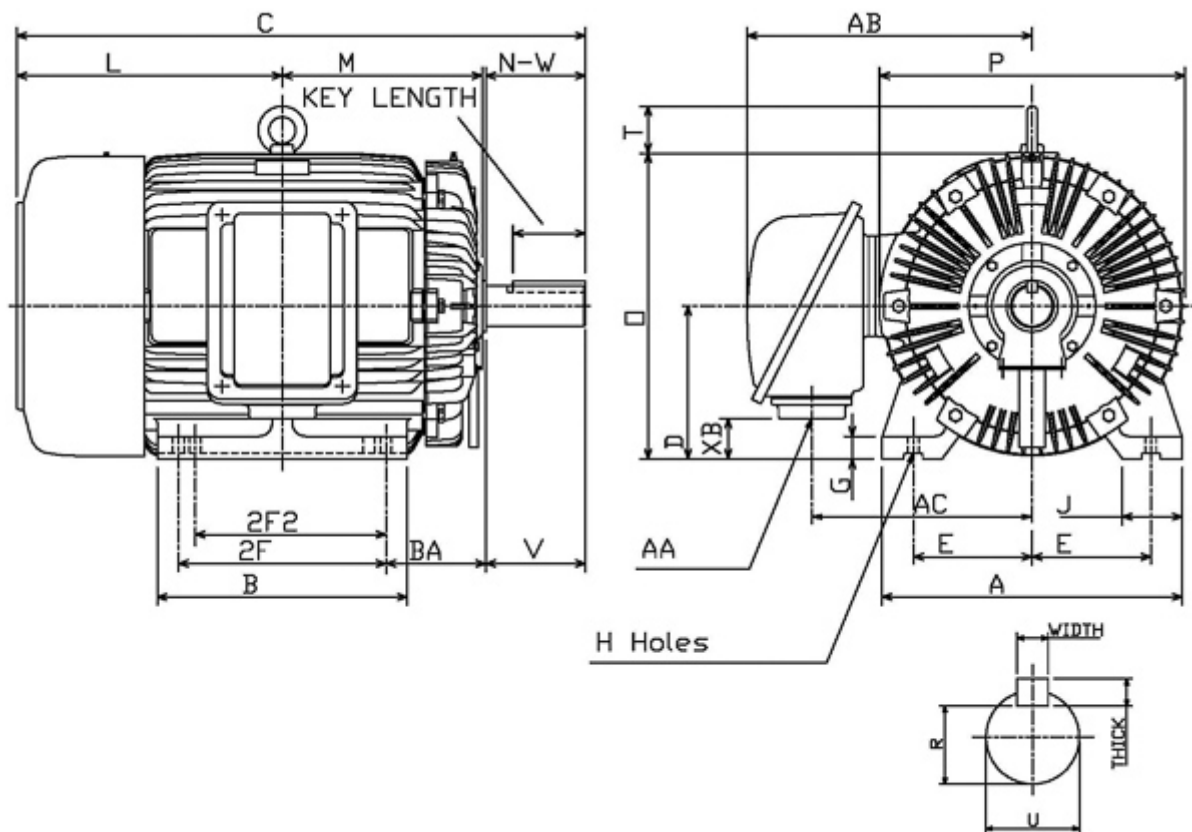
Technical Documentation

**PDH0756**  
**Optim TEFC | AEHH8N**


Date: October 16, 2018

**Dimensional Drawing**

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
PDH0756	AEHH8N	75	6	56	Continuous	230 / 460 V	60	1200



Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
405T	8	13.75	12.25	0.81	6.62	19.7	16.75	37.8		10	
G	J	K	L	M	O	P	T	Key			Keyseat R
								Width	Thick	Length	
1.55	3.95		17.05	13.27	20.04	20.08	2.76	0.75	0.75	5.65	2.45
Terminal Housing			Aux Box			C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
3 NPT	19.37	14.76	1.81								
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
7.25	2.875	7.15	6317	6313	1340	78	F	1.15	Direct Coupling / Belt Drive	Inches	

	
	Date: October 16, 2018

### Technical Data Sheet

Motor Type: AEHH8N	Catalogue No: PDH0756
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#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
75	6	1180	405T	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 °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.					
94.5	93.6	94.5	94.5	86.5	84.5	79.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
333.70	200	175	225	45.2 / 22.6	171.8 / 85.9	1086 / 543
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	37.862	904.0	2050.0	30	21	78

#### 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
6317	6313	1340

#### Hazardous Locations Information

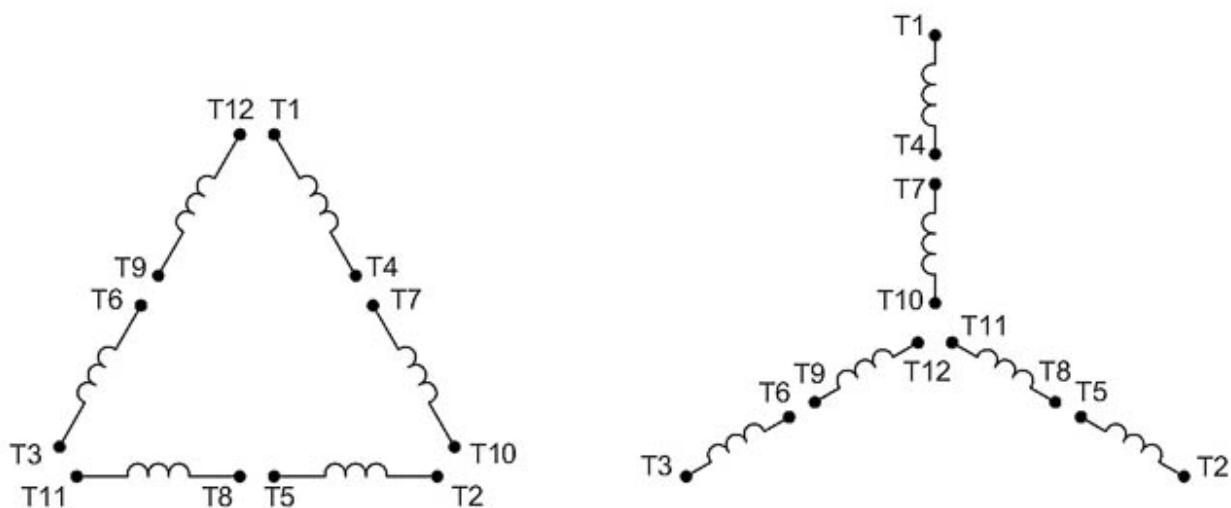
CSA Certified	
Class I, Div 2, Groups B, C & D Class I, Zone 2, Groups IIB+H2, IIB & IIA	
Temp Code (Sinewave / VFD)	T3C / T3

**Nameplate Drawing**

# Optim TEFC

TYPE	AEHH8N	CAT. NO.	PDH0756		
OUTPUT	75 HP 56 kW	FRAME	405T	TEFC	
R.P.M.	1180	POLE	6	INS.	F
VOLTS	230 / 460	PHASE	3	Hz	60
AMPS	171.8 / 85.9	CODE	G	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 94.5		MIN. EFF. 93.6	
BEARINGS	6317 / 6313			RATING Cont.	
SER. NO.	TBD	DESIGN	B	WT. 1340 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-120Hz	1.0 Only	

**Connection Diagram**

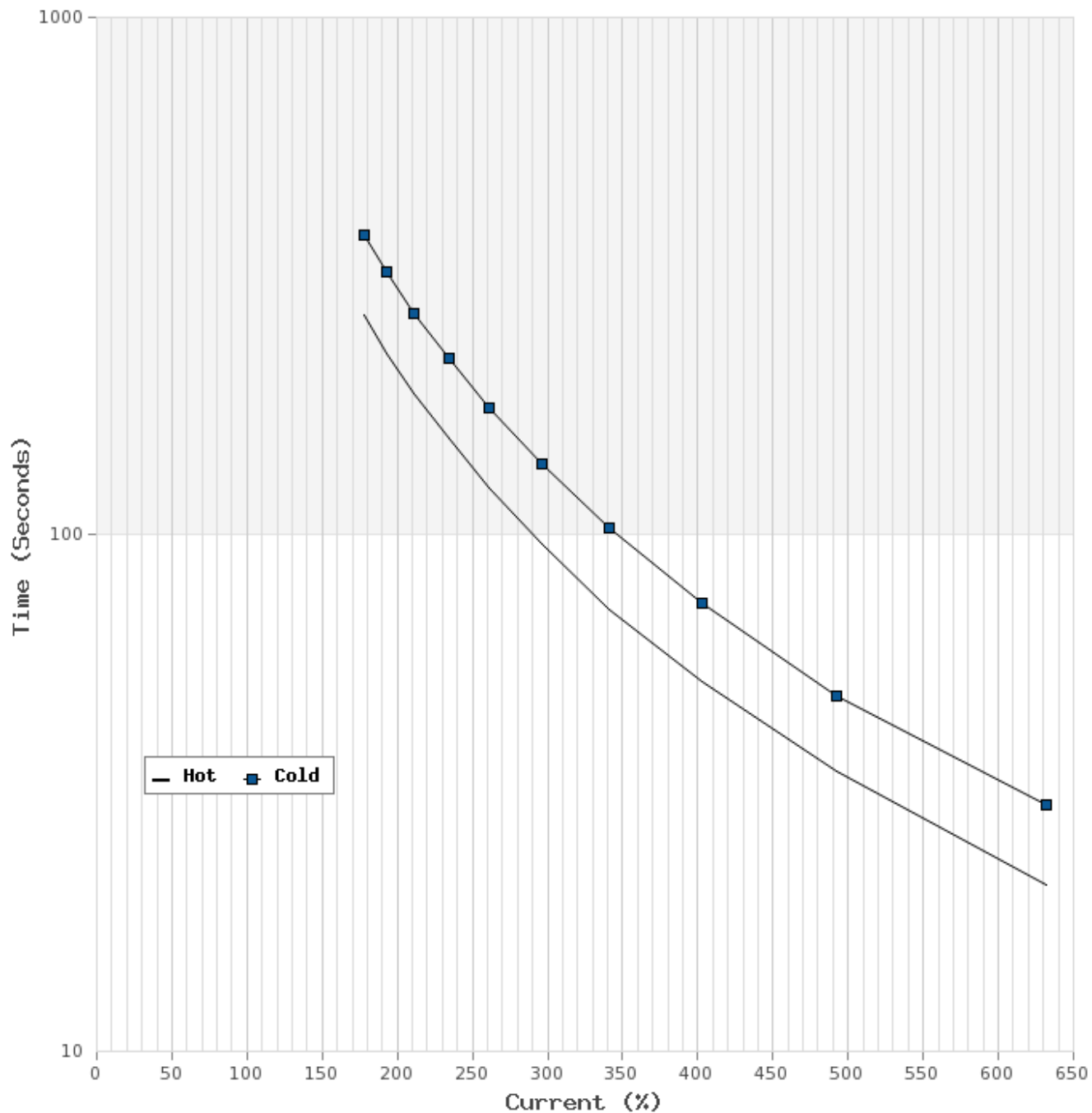


12 LEAD		DUAL VOLTAGE			WYE/DELTA	
VOLTAGE	CONNECTION	L1	L2	L3	JOIN	
HIGH	START	WYE	1	2	3	4&7,5&8,6&9 10&11&12
	RUN	DELTA	1,12	2,10	3,11	4&7,5&8,6&9
LOW	START	2 WYE	1,7	2,8	3,9	4&5&6 10&11&12
	RUN	2 DELTA	1,6,7 12	2,4,8 10	3,5,9 11	

WD\_12YD

### Thermal Limit Curves

Motor Type: AEHH8N		Catalogue No: PDH0756		Family: Optim TEFC	
HP	75	Safe Stall Time		Full Load A	171.8 / 85.9 A
Voltage	230 / 460V 60Hz	Hot	21 s	Locked Rotor A	632 / 632 %
RPM	1200	Cold	30 s	Locked Rotor A	1,086.0 / 543 A



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

Motor Type: AEHH8N		Catalogue No: PDH0756		Family: Optim TEFC	
HP	75	Full Load T	333.70 lb-ft	Full Load A	171.8 / 85.9 A
Voltage	230 / 460V 60Hz	Locked Rotor T	200 %	Locked Rotor A	1,086.0 / 543.0 A
RPM	1200	Pull Up T	175 %	Break Down T	225 %

