

Technical Documentation

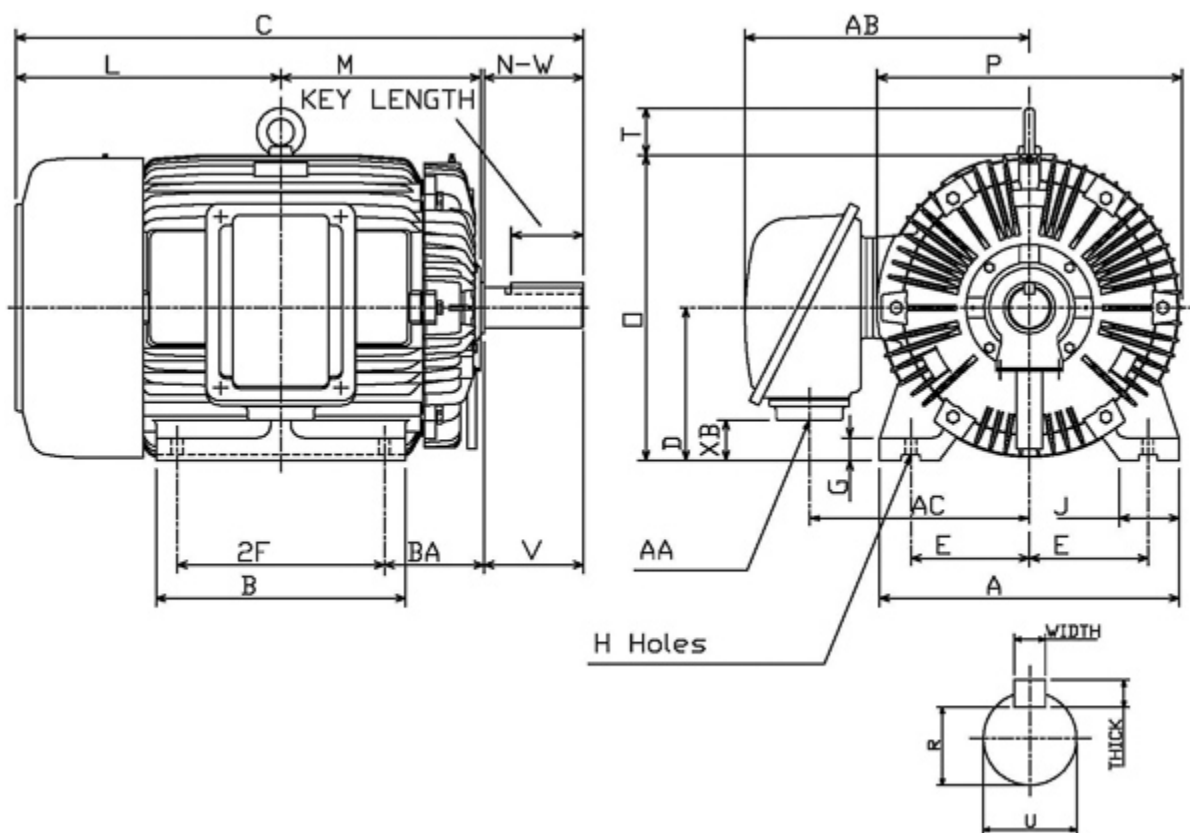
PDH06045

Optim TEFC | AEHH8N

Date: July 10, 2017

Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
PDH06045	AEHH8N	60	4	45	Continuous	575 V	60	1800



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
								Width	Thick	Length	R
1.3	3.55		15.19	11.29	18.02	18.03	2.76	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	873	79	F	1.15	Direct Coupling / Belt Drive	Inches

Technical Data Sheet

Motor Type: AEHH8N

Catalogue No: PDH06045

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
60	4	1775	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.					
95.0	94.1	95.0	94.5	86.5	83.0	75.5
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
177.50	200	155	240	17.0	54.7	348
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	12.229	275.0	583.0	17	12	79

VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
6-60Hz	3-60Hz	60-90Hz	≤ 5 kHz	VPWM or CPWM	1.0 Only

Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6313	6213	873

Hazardous Locations Information

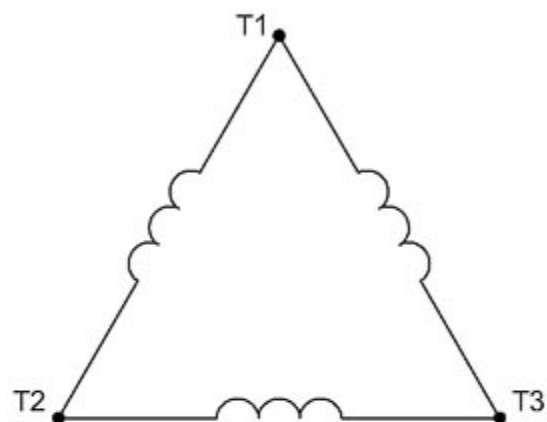
CSA Certified	
Class I, Div 2, Groups B, C & D Class I, Zone 2, Groups IIB+H2, IIB & IIA	
Temp Code (Sinewave / VFD)	T3C / T3

Nameplate Drawing

Optim TEFC

TYPE	AEHH8N	CAT. NO.	PDH06045		
OUTPUT	60 HP 45 kW	FRAME	364T	TEFC	
R.P.M.	1775	POLE	4	INS.	F
VOLTS	575	PHASE	3	Hz	60
AMPS	54.7	CODE	G	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 95.0		MIN. EFF. 94.1	
BEARINGS	6313 / 6213			RATING Cont.	
SER. NO.	TBD		DESIGN	B	WT. 873 LBS
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-90Hz	1.0 Only	

Connection Diagram

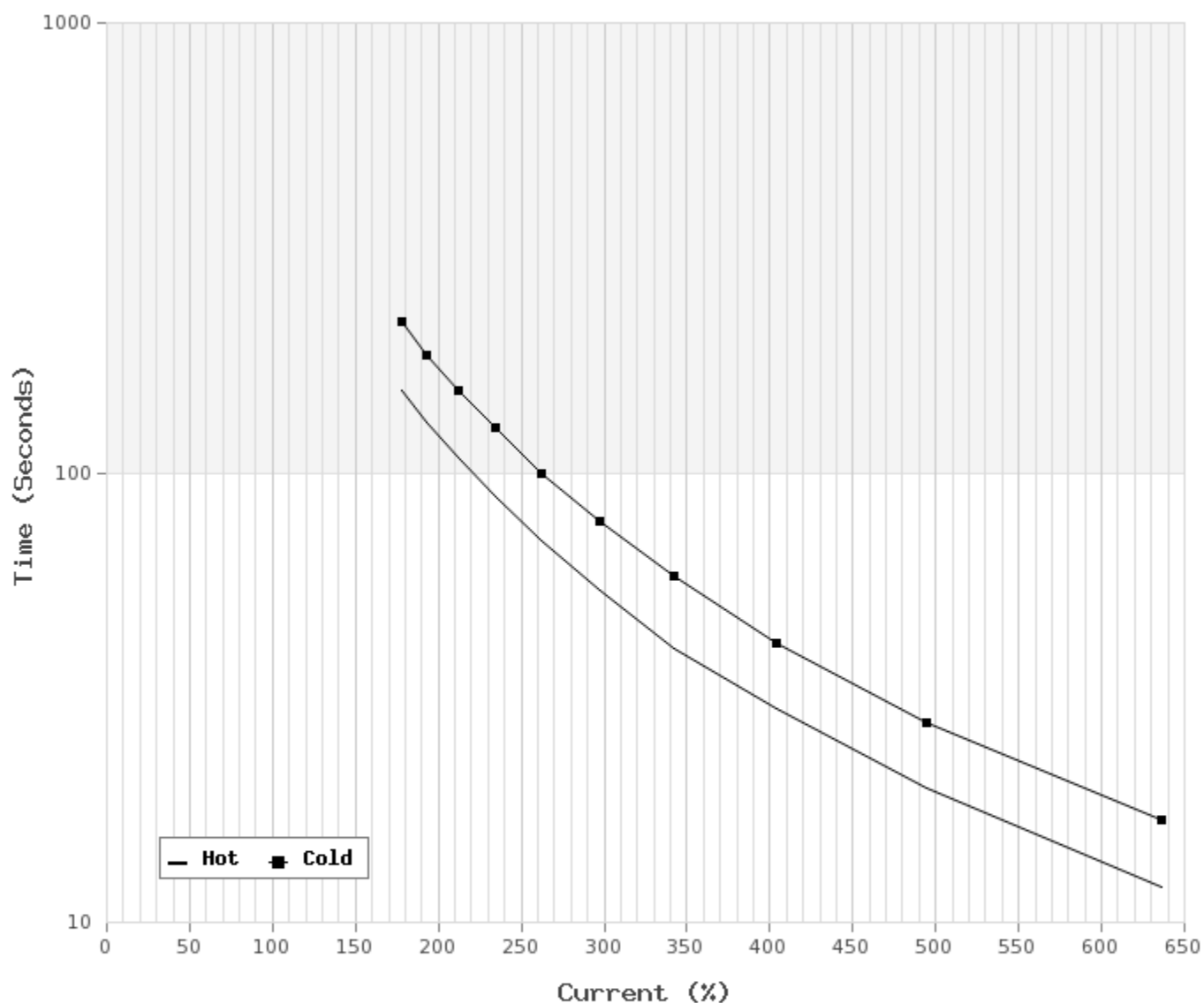


3 LEAD SINGLE VOLTAGE DELTA					
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD_3D

Thermal Limit Curves

Motor Type: AEHH8N		Catalogue No: PDH06045		Family: Optim TEFC	
HP	60	Safe Stall Time		Full Load A	0.0 / 54.7 A
Voltage	0 / 575V 60Hz	Hot	12 s	Locked Rotor A	636 %
RPM	1800	Cold	17 s	Locked Rotor A	0.0 / 348 A



T-N and I-N Curves

Motor Type: AEHH8N		Catalogue No: PDH06045		Family: Optim TEFC	
HP	60	Full Load T	177.50 lb-ft	Full Load A	54.7 A
Voltage	575V 60Hz	Locked Rotor T	200 %	Locked Rotor A	348.0 A
RPM	1800	Pull Up T	155 %	Break Down T	240 %

