

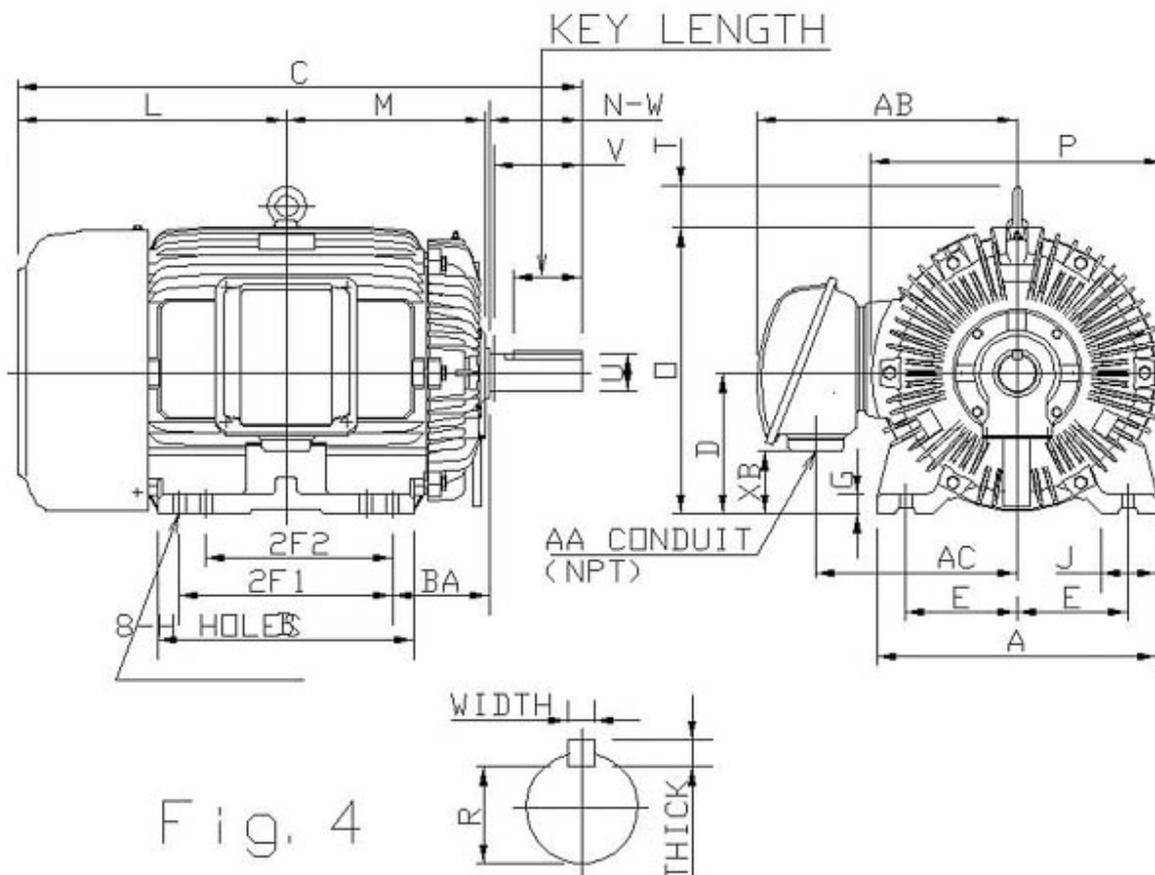
Technical Documentation

PDX04045
Optim TEFC | AEHH8N

Date: July 1, 2021

Dimensional Drawing

Catalogue	Type	HP	RPM	Voltage	Hz	Frame Size
PDX04045	AEHH8N	40	1800	575	60	324T(X)



Mounting					A	B	C	CL1	CL2	D	G
E	2F1	2F2	H	BA							
6.25	10.5		0.67	5.25	15.75	12.87	29.49			8	1.1

J	K	L	M	O	P	T
3.15		13.74	10.22	15.5	15.91	2.36

Terminal Housing			
AA	AB	AC	XB
2	16.07	12.2	3.59

Shaft Extension			Key			Keyseat
N-W	U	V	Width	Thick	Length	R
5.25	2.125	5.15	0.5	0.5	3.91	1.845

Bearings		Weight Lbs	Drive Method	Dimensions
DE	NDE			
6312	6310	529	Direct Coupling / Belt Drive	Inches

Technical Data Sheet

Motor Type: AEHH8N

Catalogue No: PDX04045

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
40	4	1770	324T(X)	575	60	3
Enclosure	Ins. Class	Service Factor	Time Rating	NEMA Design	Rated Amb.	Rated Altitude
TEFC	F	1.15	Continuous	C	-40 to 40 °C	<1000 m

Typical Performance

Efficiency (%)				Power Factor (%)		
Full Load		3/4 Load	1/2 Load	Full Load	3/4 Load	1/2 Load
Nom.	Min.					
94.10	93.00	94.50	94.50	86.00	84.50	78.50
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
118.65	205	170	220	8.5	37.0	232.00
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	5.936	49.00	403.00	25	18	74.0

VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
6-60Hz	3-60Hz	60-90Hz	0	VPWM or CPWM	1.0 Only

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)	T3 / T3

Additional Certifications

Other Certification

Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6312	6310	529

Nameplate Drawing

Optim TEFC

TYPE	AEHH8N	CAT. NO.	PDX04045		
OUTPUT	40 HP 29.84 kW	FRAME	324T(X)	TEFC	
R.P.M.	1770	POLE	4	INS.	F
VOLTS	575	PHASE	3	Hz	60
AMPS	37.0	CODE	G	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 94.10		MIN. EFF. 93.00	
BEARINGS	6312 / 6310			RATING Cont.	
SER. NO.	TBD	DESIGN	C	WT. 529 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-90Hz	1.0 Only	

Connection Diagram

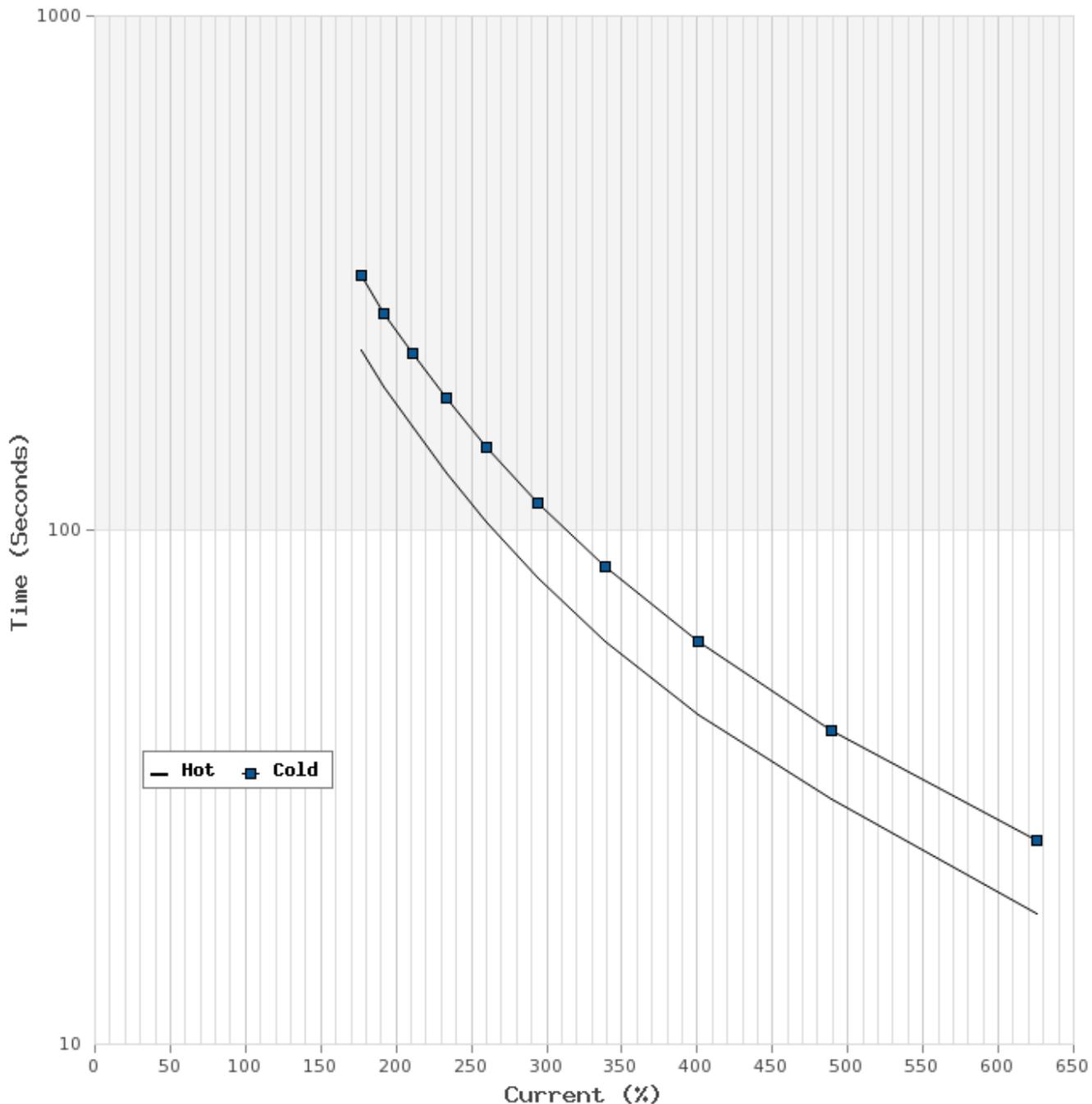


3 LEAD		SINGLE VOLTAGE			DELTA
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD_3D

Thermal Limit Curves

Motor Type: AEHH8N		Catalogue No: PDX04045		Family: Optim TEFC	
HP	40	Safe Stall Time		Full Load A	37.0 A
Voltage	575V 60Hz	Hot	18 s	% Inrush	627 %
RPM	1800	Cold	25 s	Locked Rotor A	232.00 A



T-N and I-N Curves

Motor Type: AEHH8N		Catalogue No: PDX04045		Family: Optim TEFC	
HP	40	Full Load T	118.65 lb-ft	Full Load A	37.0 A
Voltage	575V 60Hz	Locked Rotor T	205 %	Locked Rotor A	232.0 A
RPM	1800	Pull Up T	170 %	Break Down T	220 %

