TECO Westinghouse MOTORS (CANADA) INC.	
	Date: July 1, 2021

Technical Documentation

PDX0504C

Optim TEFC | AEHH8N

Date: July 1, 2021

TECO Westinghouse
MOTORS (CANADA) INC.

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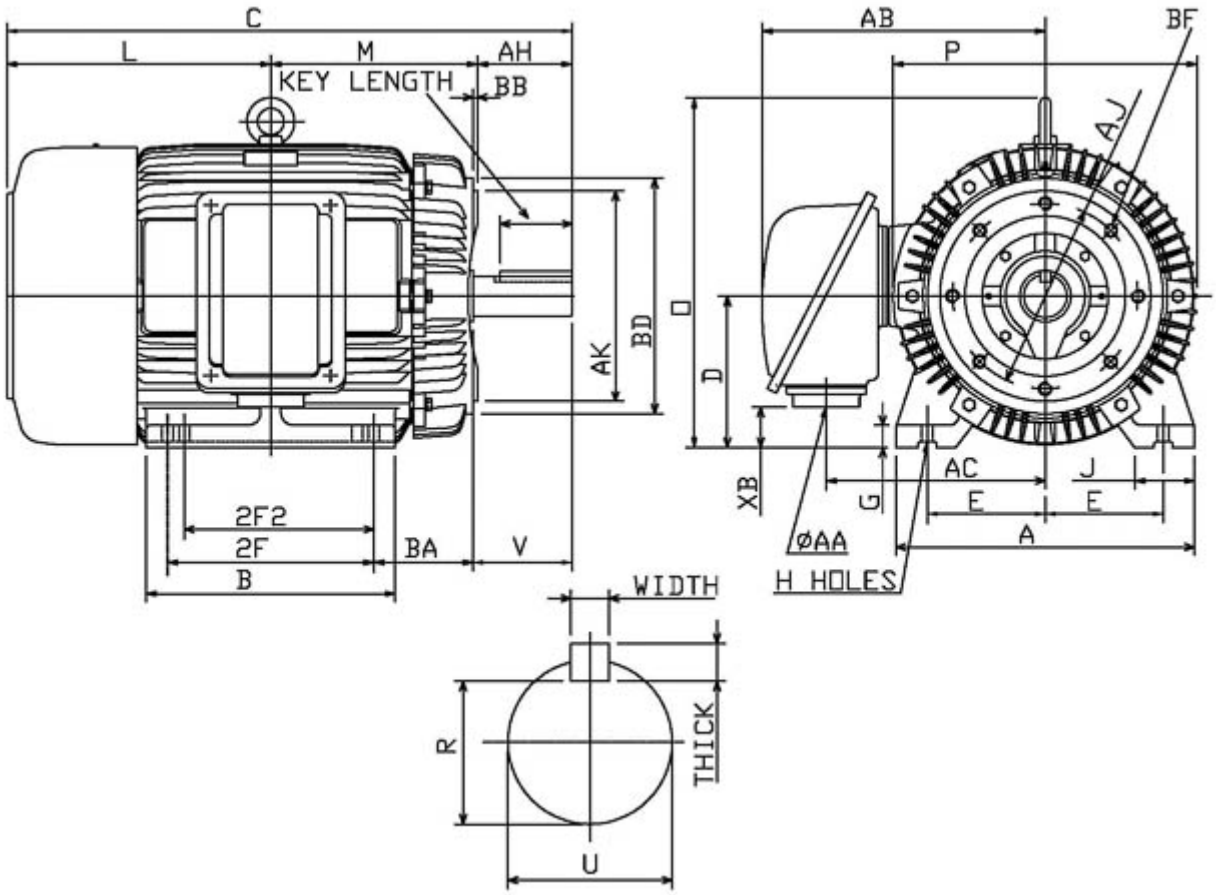
Dimensional Drawing

Catalogue	Type	HP	RPM	Voltage	Hz	Frame Size
PDX0504C	AEHH8N	50	1800	230 / 460	60	326TC(X)



Mounting					A	B	C	CL1	CL2	D	G
E	2F1	2F2	H	BA							
6.25	12	10.5	0.66	5.25	15.75	14.35	31.42			8	1.1

J	K	AK	AJ	L	M	O	P	T	BD	BB
3.15		12.5	11	14.92	11.04	16.27	16.54	2.32	13.58	0.25

Terminal Housing			
AA	AB	AC	XB
2 NPT	14.65	11.3	3.59

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

Bearings		Weight Lbs	Drive Method	Dimensions
DE	NDE			
6312	6310	591	Direct Coupling / Belt Drive	Inches

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Technical Data Sheet

Motor Type: AEHH8N	Catalogue No: PDX0504C

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
50	4	1770	326TC(X)	230 / 460	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.					
94.50	93.60	94.50	94.00	85.00	83.00	77.00

Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
148.31	230	200	250	36.6 / 18.3	116.6 / 58.3	726.00 / 363.00

NEMA KVA Code	Inertia (WR^2)			Safe Stall Time (s)		Noise Level Sound Press. dB(A)
	Rotor ($lb\text{-}ft^2$)	NEMA Load ($lb\text{-}ft^2$)	Max. Allowable ($lb\text{-}ft^2$)	Cold	Hot	
G	6.393	39.00	596.00	17	12	76.0

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	591

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Nameplate Drawing

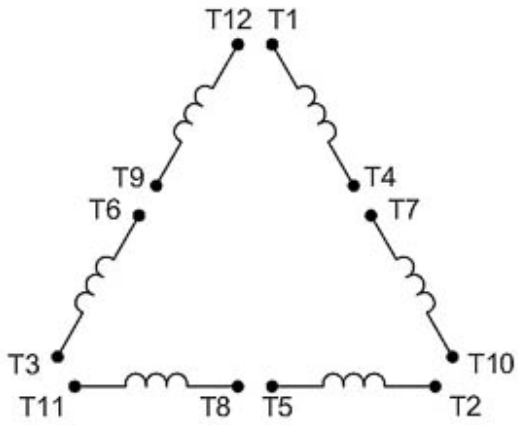
Optim TEFC

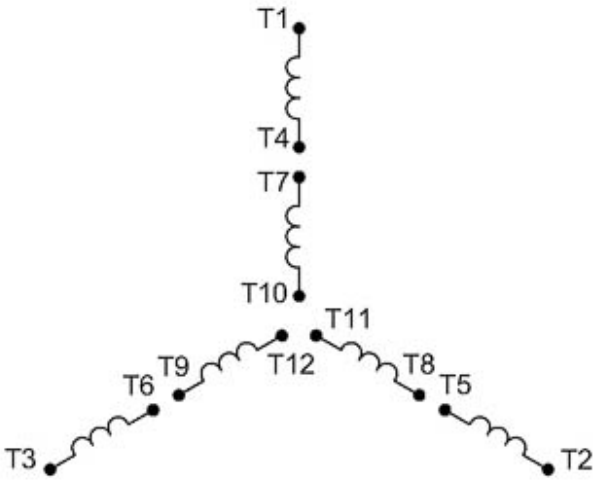
TYPE	AEHH8N	CAT. NO.	PDX0504C		
OUTPUT	50 HP 37.30 kW	FRAME	326TC(X)	TEFC	
R.P.M.	1770	POLE	4	INS.	F
VOLTS	230 / 460	PHASE	3	Hz	60
AMPS	116.6 / 58.3	CODE	G	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 94.50		MIN. EFF. 93.60	
BEARINGS	6312 / 6310			RATING Cont.	

SER. NO.	TBD	DESIGN	C	WT. 591 LBS

PWM VFD DUTY	VT	CT	CP	S.F.
	3-60Hz	6-60Hz	60-90Hz	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

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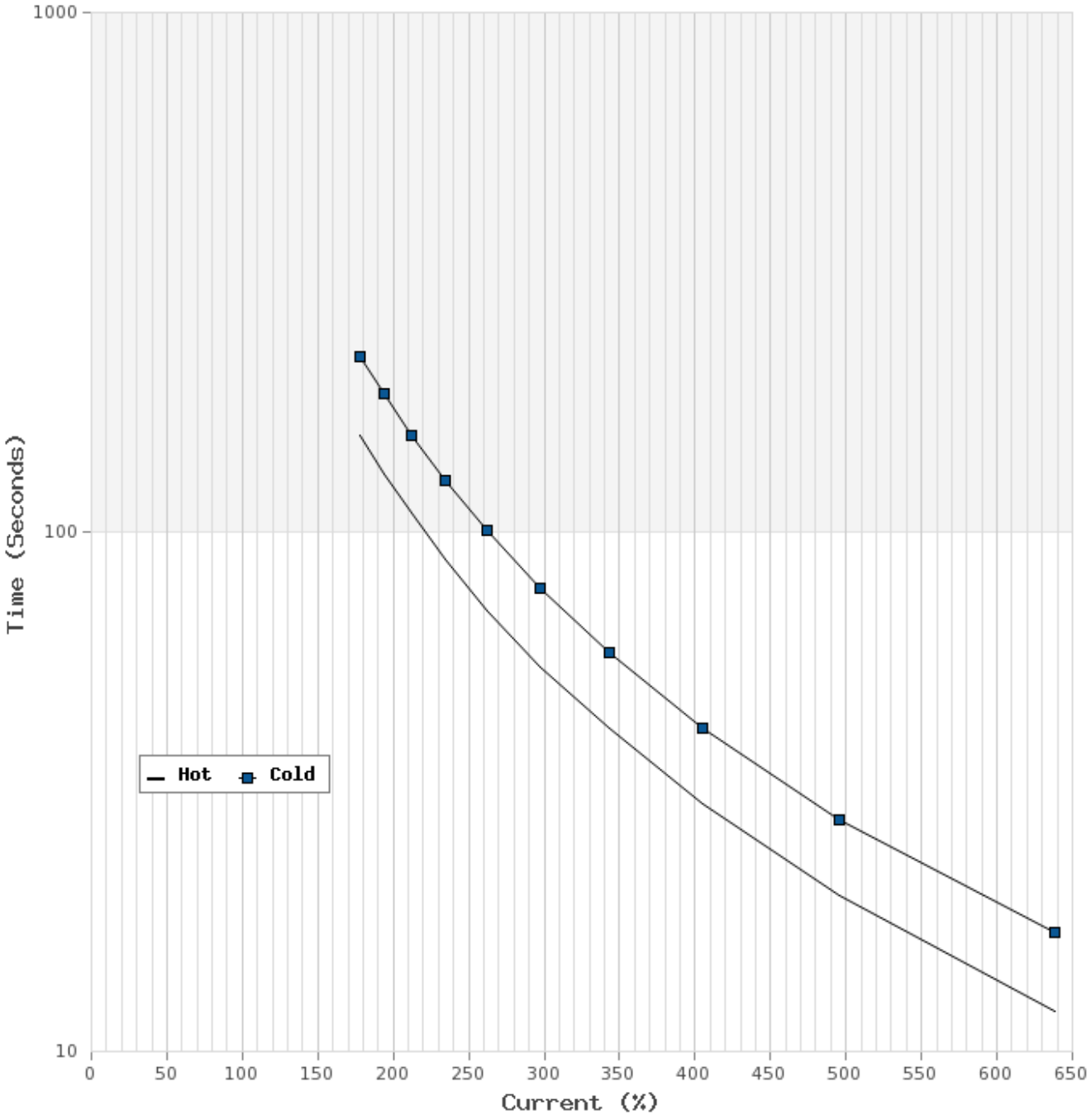
Thermal Limit Curves

Motor Type: AEHH8N	Catalogue No: PDX0504C	Family: Optim TEFC

HP	50	Safe Stall Time		Full Load A	116.6 / 58.3 A
Voltage	230 / 460V 60Hz	Hot	12 s	% Inrush	623 / 623 %
RPM	1800	Cold	17 s	Locked Rotor A	726.00 / 363.00 A



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T-N and I-N Curves

Motor Type: AEHH8N	Catalogue No: PDX0504C	Family: Optim TEFC

HP	50	Full Load T	148.31 lb-ft	Full Load A	116.6 / 58.3 A
Voltage	230 / 460V 60Hz	Locked Rotor T	230 %	Locked Rotor A	726.0 / 363.0 A
RPM	1800	Pull Up T	200 %	Break Down T	250 %