

Technical Documentation

# **PDX0258**

## **Optim TEFC | AEHH8N**

Date: July 1, 2021

**Dimensional Drawing**

Catalogue	Type	HP	RPM	Voltage	Hz	Frame Size
PDX0258	AEHH8N	25	900	230 / 460	60	326T(X)

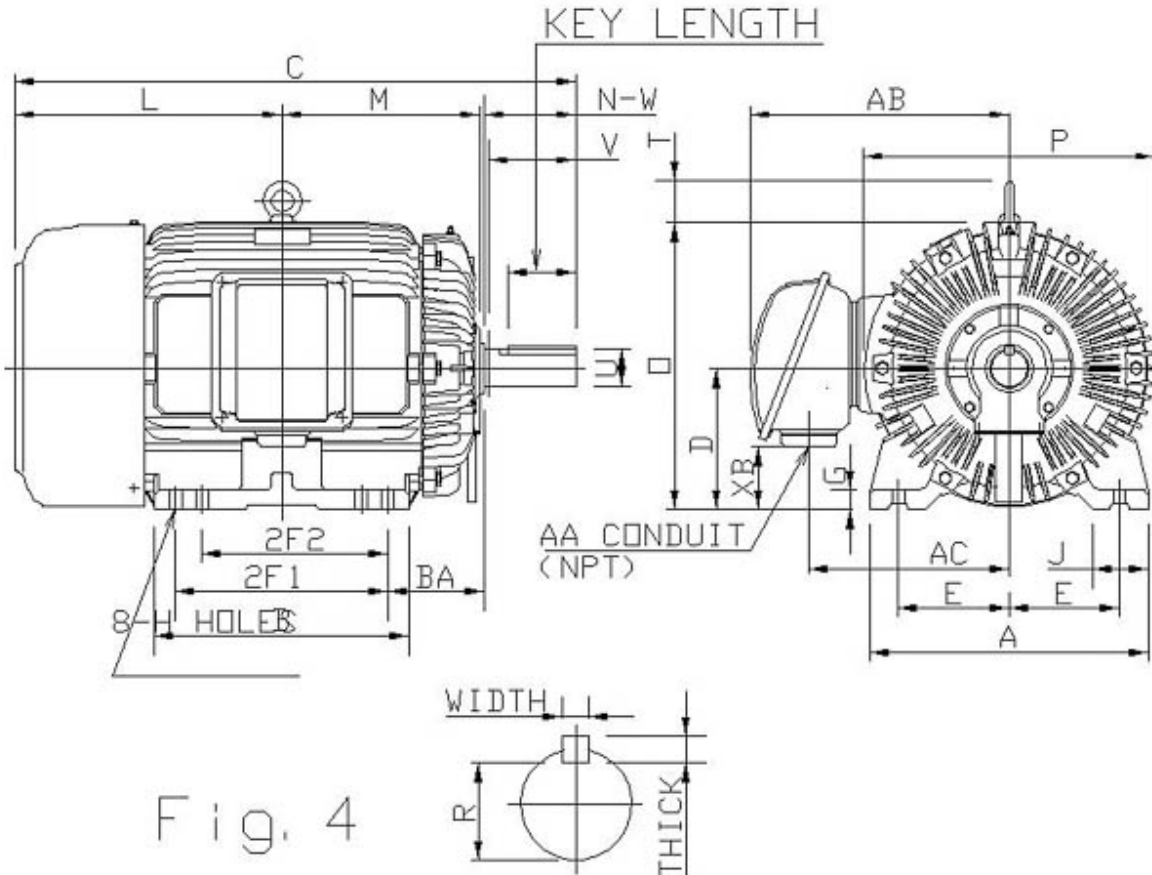


Fig. 4


Mounting					A	B	C	CL1	CL2	D	G
E	2F1	2F2	H	BA							
6.25	12	10.5	0.67	5.25	15.75	14.37	30.99			8	1.1

J	K	L	M	O	P	T
3.15		14.49	10.96	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	2.201

Bearings		Weight Lbs	Drive Method	Dimensions
DE	NDE			
6312	6310	569	Direct Coupling / Belt Drive	Inches

	
	Date: July 1, 2021

### Technical Data Sheet

Motor Type: AEHH8N	Catalogue No: PDX0258
--------------------	-----------------------

#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
25	8	875	326T(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.					
91.00	89.50	91.70	91.70	80.00	75.00	65.00
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
150.00	210	170	230	27.6 / 13.8	64.4 / 32.2	366.00 / 182.50
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	9.856	647.00	1759.00	29	20	70.0

#### VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
6-60Hz	3-60Hz	60-120Hz	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

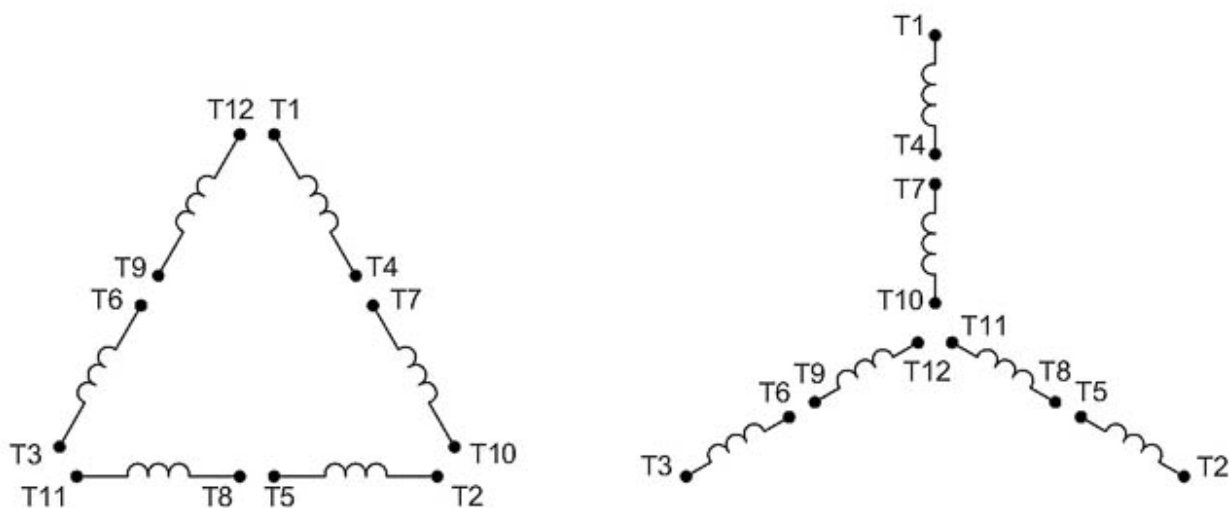
Bearings		Approx. Weight
DE	NDE	lbs
6312	6310	569

**Nameplate Drawing**

# Optim TEFC

TYPE	AEHH8N	CAT. NO.	PDX0258		
OUTPUT	25 HP 18.65 kW	FRAME	326T(X)	TEFC	
R.P.M.	875	POLE	8	INS.	F
VOLTS	230 / 460	PHASE	3	Hz	60
AMPS	64.4 / 32.2	CODE	G	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 91.00		MIN. EFF. 89.50	
BEARINGS	6312 / 6310			RATING Cont.	
SER. NO.	TBD	DESIGN	C	WT. 569 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-120Hz	1.0 Only	

**Connection Diagram**

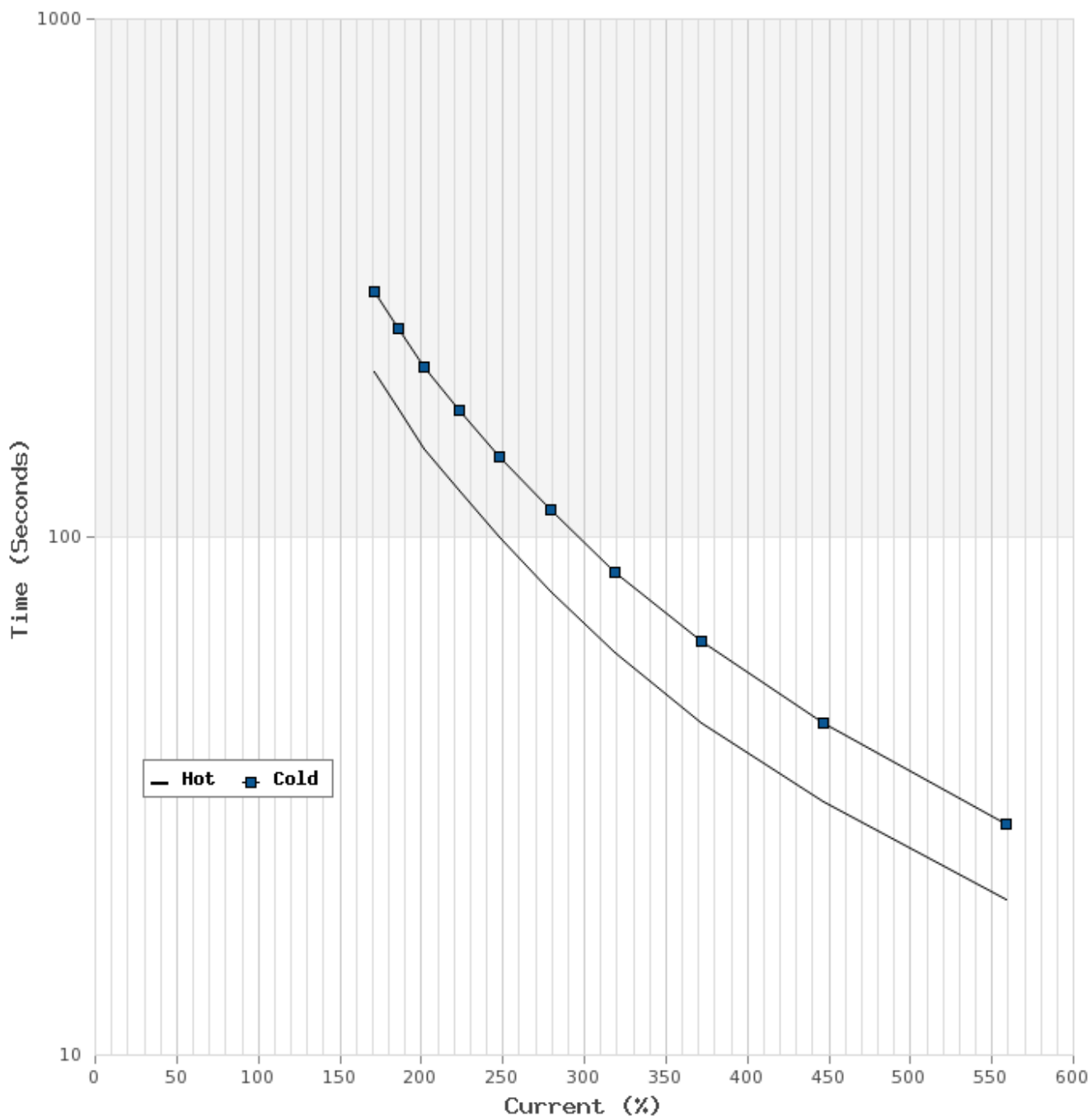


12 LEAD		DUAL VOLTAGE			WYE/DELTA	
VOLTAGE	CONNECTION	L1	L2	L3	JOIN	
HIGH	START	WYE	1	2	3	4&7,5&8,6&9 10&11&12
	RUN	DELTA	1,12	2,10	3,11	4&7,5&8,6&9
LOW	START	2 WYE	1,7	2,8	3,9	4&5&6 10&11&12
	RUN	2 DELTA	1,6,7 12	2,4,8 10	3,5,9 11	

WD\_12YD

### Thermal Limit Curves

Motor Type: AEHH8N		Catalogue No: PDX0258		Family: Optim TEFC	
HP	25	Safe Stall Time		Full Load A	64.4 / 32.2 A
Voltage	230 / 460V 60Hz	Hot	20 s	% Inrush	568 / 568 %
RPM	900	Cold	29 s	Locked Rotor A	366.00 / 182.50 A



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

Motor Type: AEHH8N		Catalogue No: PDX0258		Family: Optim TEFC	
HP	25	Full Load T	150.00 lb-ft	Full Load A	64.4 / 32.2 A
Voltage	230 / 460V 60Hz	Locked Rotor T	210 %	Locked Rotor A	366.0 / 182.5 A
RPM	900	Pull Up T	170 %	Break Down T	230 %

