

Technical Documentation

# **PDX0256**

## **Optim TEFC | AEHH8N**

Date: July 1, 2021

**Dimensional Drawing**

Catalogue	Type	HP	RPM	Voltage	Hz	Frame Size
PDX0256	AEHH8N	25	1200	230 / 460	60	324T(X)

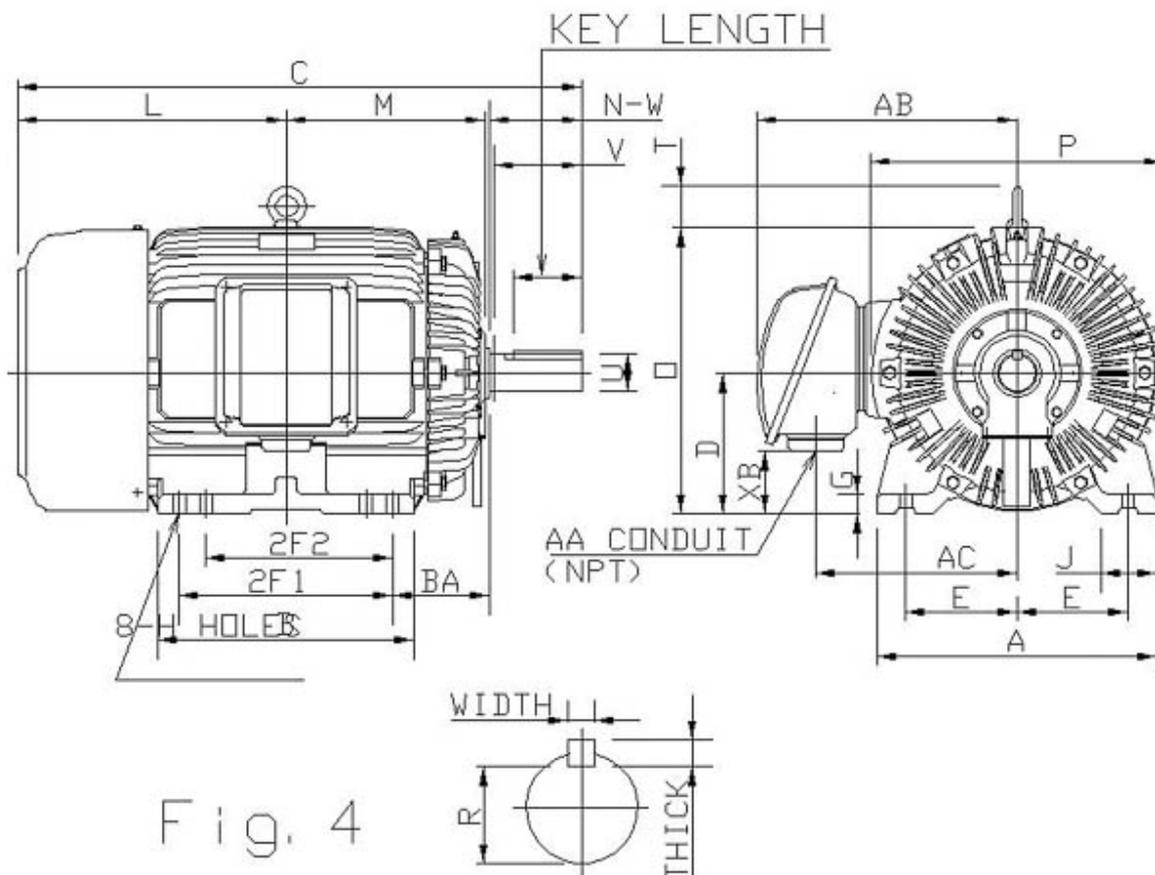


Fig. 4

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	549	Direct Coupling / Belt Drive	Inches

	
	Date: July 1, 2021

### Technical Data Sheet

Motor Type: AEHH8N	Catalogue No: PDX0256
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#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
25	6	1170	324T(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.					
93.00	91.70	93.60	93.60	83.00	80.00	71.50
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
112.18	240	200	250	17.3 / 8.7	60.6 / 30.3	366.00 / 183.00
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	10.197	49.00	956.00	45	32	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
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#### Additional Information

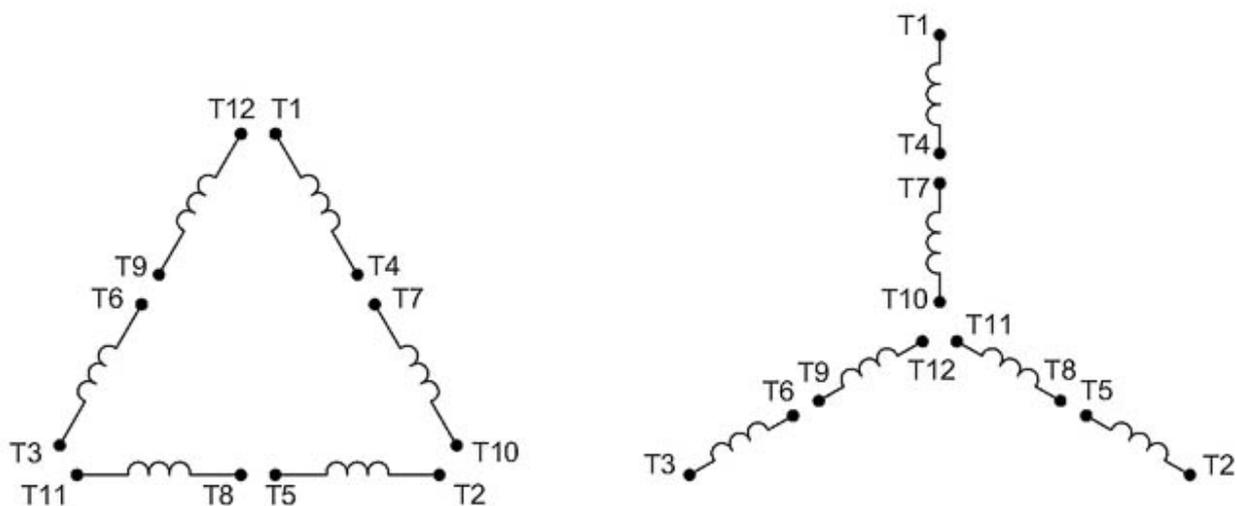
Bearings		Approx. Weight
DE	NDE	lbs
6312	6310	549

**Nameplate Drawing**

# Optim TEFC

TYPE	AEHH8N	CAT. NO.	PDX0256		
OUTPUT	25 HP 18.65 kW	FRAME	324T(X)	TEFC	
R.P.M.	1170	POLE	6	INS.	F
VOLTS	230 / 460	PHASE	3	Hz	60
AMPS	60.6 / 30.3	CODE	G	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 93.00		MIN. EFF. 91.70	
BEARINGS	6312 / 6310			RATING Cont.	
SER. NO.	TBD	DESIGN	C	WT. 549 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-120Hz	1.0 Only	

**Connection Diagram**

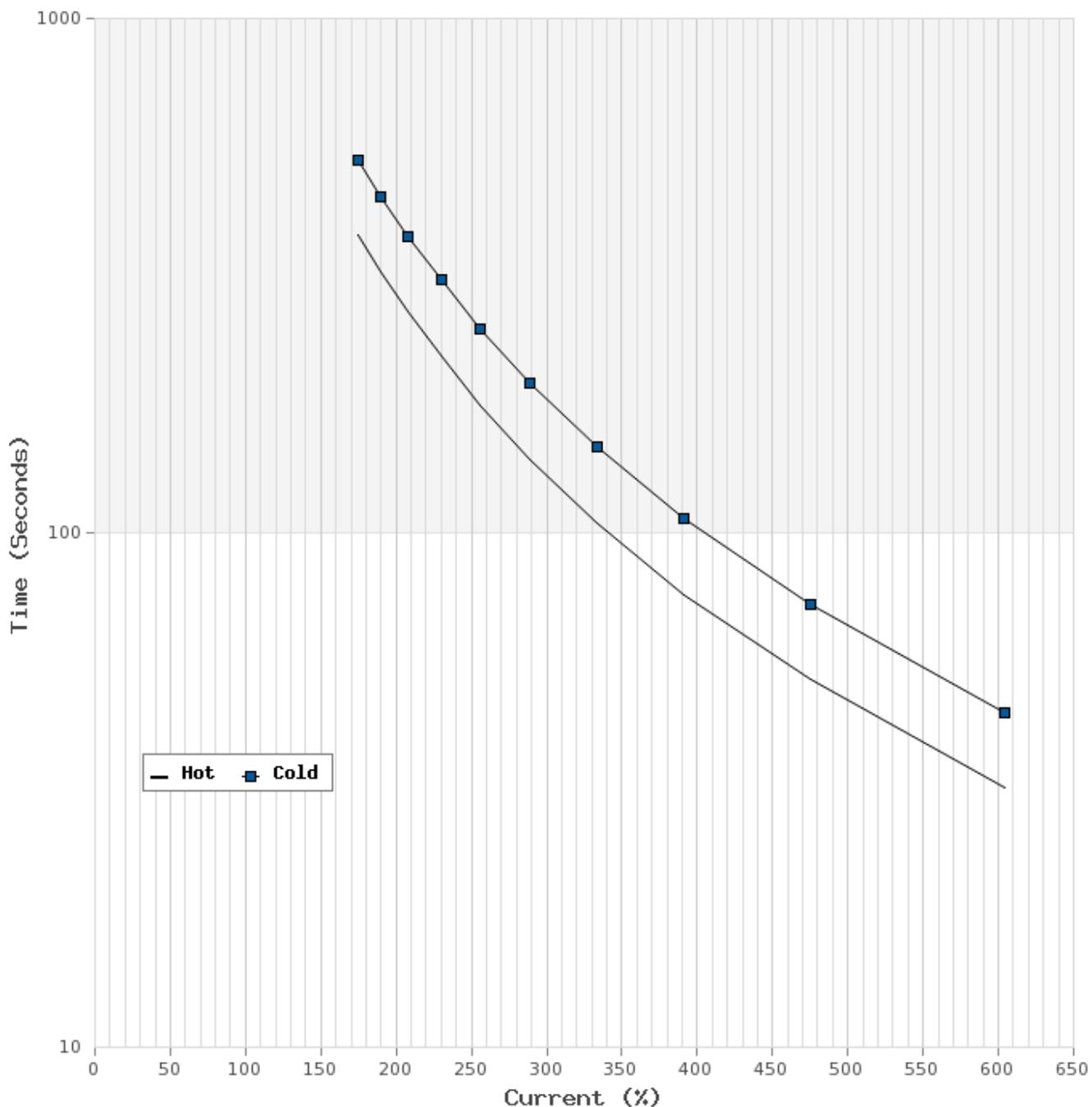


12 LEAD		DUAL VOLTAGE			WYE/DELTA	
VOLTAGE	CONNECTION	L1	L2	L3	JOIN	
HIGH	START	WYE	1	2	3	4&7,5&8,6&9 10&11&12
	RUN	DELTA	1,12	2,10	3,11	4&7,5&8,6&9
LOW	START	2 WYE	1,7	2,8	3,9	4&5&6 10&11&12
	RUN	2 DELTA	1,6,7 12	2,4,8 10	3,5,9 11	

WD\_12YD

### Thermal Limit Curves

Motor Type: AEHH8N		Catalogue No: PDX0256		Family: Optim TEFC	
HP	25	Safe Stall Time		Full Load A	60.6 / 30.3 A
Voltage	230 / 460V 60Hz	Hot	32 s	% Inrush	604 / 603 %
RPM	1200	Cold	45 s	Locked Rotor A	366.00 / 183.00 A



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

Motor Type: AEHH8N		Catalogue No: PDX0256		Family: Optim TEFC	
HP	25	Full Load T	112.18 lb-ft	Full Load A	60.6 / 30.3 A
Voltage	230 / 460V 60Hz	Locked Rotor T	240 %	Locked Rotor A	366.0 / 183.0 A
RPM	1200	Pull Up T	200 %	Break Down T	250 %

