

Technical Documentation

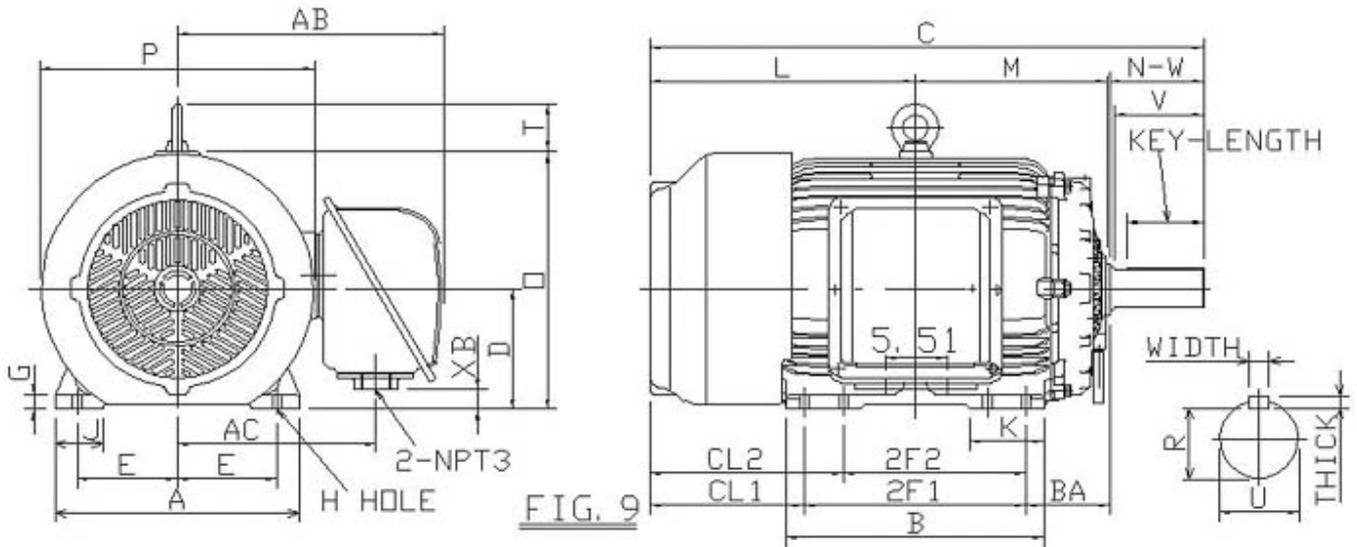
# **PDX3504R**

## **Optim TEFC | AEHH8N**

Date: July 1, 2021

**Dimensional Drawing**

Catalogue	Type	HP	RPM	Voltage	Hz	Frame Size
PDX3504R	AEHH8N	350	1800	0 / 460	60	449T(X)



Mounting					A	B	C	CL1	CL2	D	G
E	2F1	2F2	H	BA							
9	25	20	0.81	7.5	22.05	27.95	54.9			11	1.4

J	K	L	M	O	P	T
4.35		26.4	19.65	23.52	24.76	4.33

Terminal Housing			
AA	AB	AC	XB
2-3	24.02	17.91	1.83

Shaft Extension			Key			Keyseat
N-W	U	V	Width	Thick	Length	R
8.5	3.375	8	0.875	0.875	6.93	2.88

Bearings		Weight Lbs	Drive Method	Dimensions
DE	NDE			
NU320	6316	3186	Direct Coupling / Belt Drive	Inches

	
	Date: July 1, 2021

### Technical Data Sheet

Motor Type: AEHH8N	Catalogue No: PDX3504R
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#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
350	4	1785	449T(X)	0 / 460	60	3
Enclosure	Ins. Class	Service Factor	Time Rating	NEMA Design	Rated Amb.	Rated Altitude
TEFC	F	1.15	Continuous	0	-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.					
96.20	0.00	96.20	95.70	89.00	86.50	80.00
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
1027.71	150	130	350	0.0 / 0.0	382.8	2450.00
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	
0	124.000	0.00	0.00	0	0	0.0

#### VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
20-60Hz	3-60Hz	60-60Hz	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 / T2C

#### Additional Certifications

Other Certification
Class II, Div 2, Groups F & G

#### Additional Information

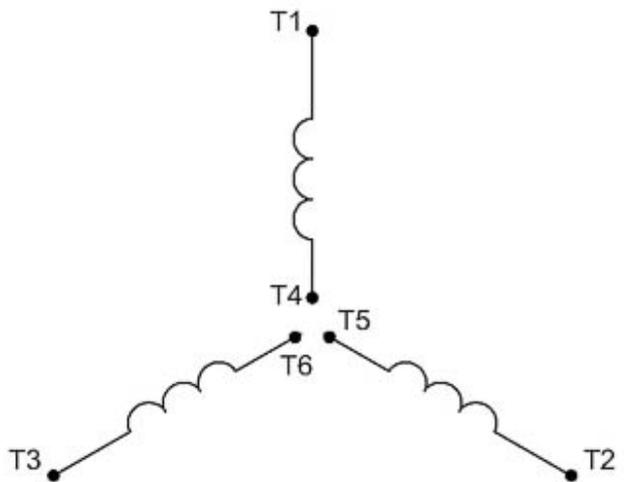
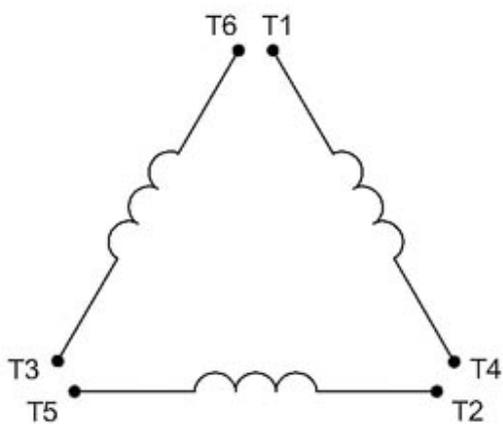
Bearings		Approx. Weight
DE	NDE	lbs
NU320	6316	3186

**Nameplate Drawing**

# Optim TEFC

TYPE	AEHH8N	CAT. NO.	PDX3504R		
OUTPUT	350 HP 261.10 kW	FRAME	449T(X)	TEFC	
R.P.M.	1785	POLE	4	INS.	F
VOLTS	0 / 460	PHASE	3	Hz	60
AMPS	382.8	CODE	0	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 96.20		MIN. EFF. 0.00	
BEARINGS	NU320 / 6316			RATING Cont.	
SER. NO.	TBD	DESIGN	0	WT. 3186 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	20-60Hz	60-60Hz	1.0 Only	

**Connection Diagram**

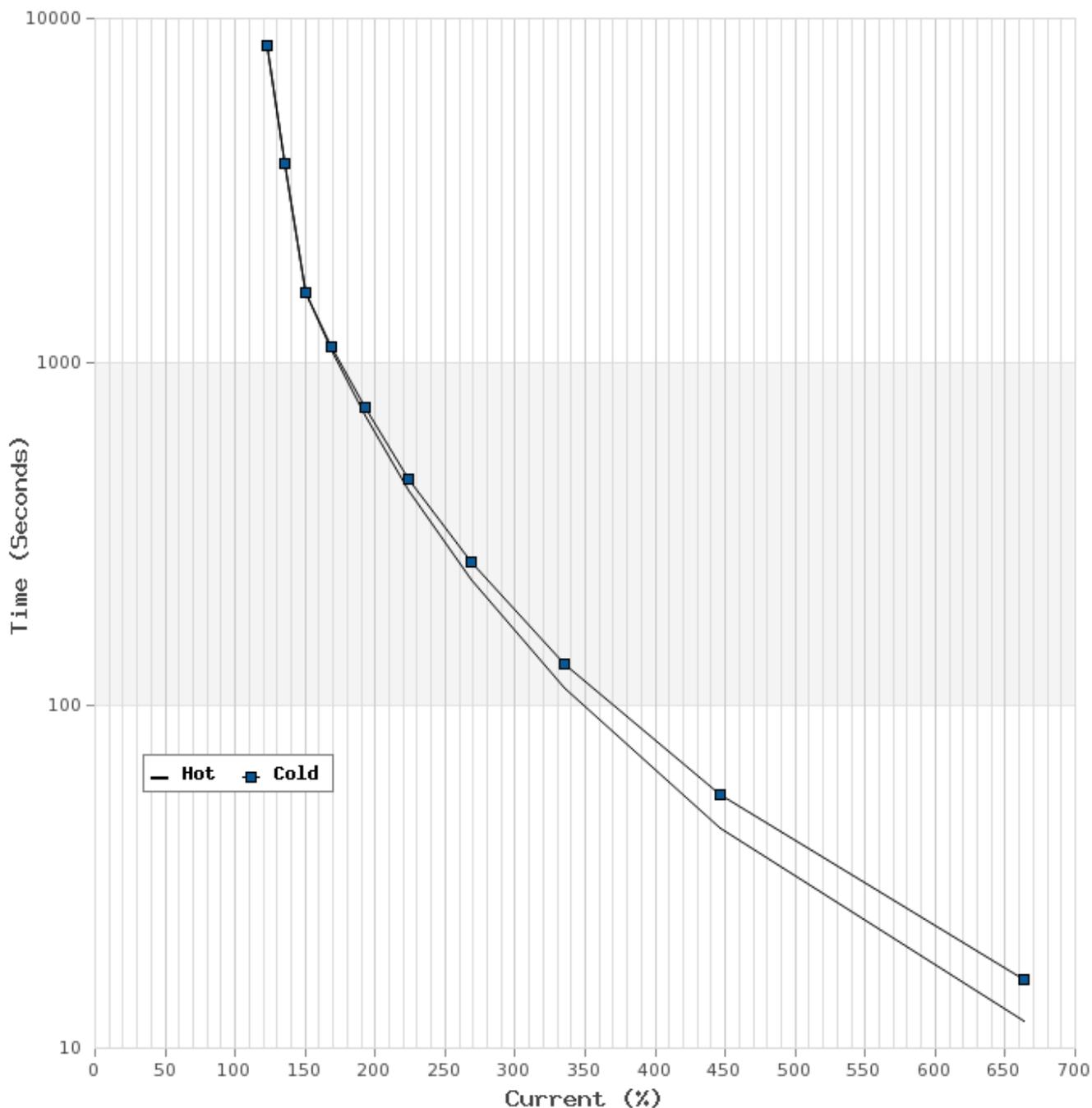


6 LEAD		SINGLE VOLTAGE			WYE/DELTA
CONNECTION		L1	L2	L3	JOIN
START	WYE	1	2	3	4&5&6
RUN	DELTA	1,6	2,4	3,5	-

WD\_6YD

**Thermal Limit Curves**

Motor Type: AEHH8N		Catalogue No: PDX3504R		Family: Optim TEFC	
HP	350	Safe Stall Time		Full Load A	382.8 A
Voltage	0 / 460V 60Hz	Hot	0 s	% Inrush	640 %
RPM	1800	Cold	0 s	Locked Rotor A	2450.00 A



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

Motor Type: AEHH8N		Catalogue No: PDX3504R		Family: Optim TEFC	
HP	350	Full Load T	1027.71 lb-ft	Full Load A	382.8 A
Voltage	0 / 460V 60Hz	Locked Rotor T	150 %	Locked Rotor A	2450.0 A
RPM	1800	Pull Up T	130 %	Break Down T	350 %

