

Technical Documentation

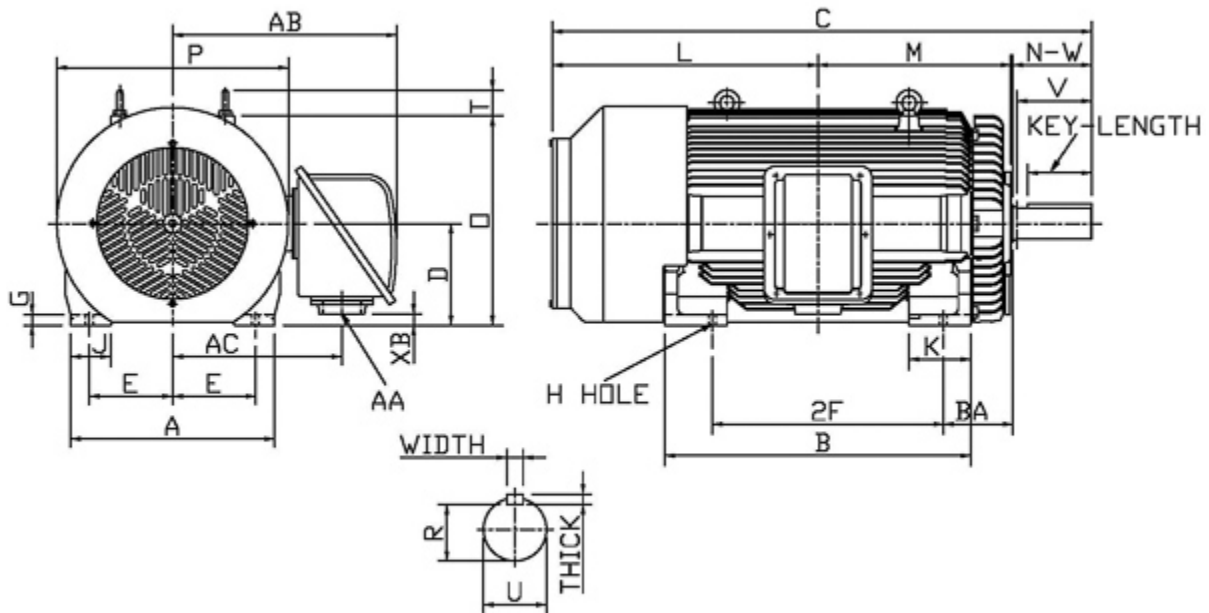
# **PDH35045**

## **Optim TEFC | AEHH8N**

Date: November 30, 2016

**Dimensional Drawing**

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
PDH35045	AEHH8N	350	4	261	Continuous	575 V	60	1800



Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
449T	9	25	20	0.81	7.5	22.05	33.05	58.63		11	
G	J	K	L	M	O	P	T	Key			Keyseat
								Width	Thick	Length	R
1.2	4.35	6.7	29.05	20.67	22.6	25.45	2.8	0.875	0.875	6.91	2.88
Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
3 NPT	25.15	19.05	1.25								
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
8.5	3.375	8	6320	6316	2959	81	F	1.15	Direct Coupling / Belt Drive	Inches	

### Technical Data Sheet

Motor Type: AEHH8N

Catalogue No: PDH35045

#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
350	4	1785	449T	575	60	3
Enclosure	Ins. Class	Service Factor	Time Rating	NEMA Design	Rated Amb.	Rated Altitude
TEFC	F	1.15	Continuous	B	-40 to 40 °C	<3300 ft

#### Typical Performance

Efficiency (%)				Power Factor (%)		
Full Load		3/4 Load	1/2 Load	Full Load	3/4 Load	1/2 Load
Nom.	Min.					
96.2	95.4	95.8	95.0	85.5	83.5	80.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
1027.00	100	85	210	76.4	318.8	2052
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	105.000	1373.0	2060.0	16	12	81

#### VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
N/A	N/A	60-60Hz	≤ 5 kHz	VPWM or CPWM	1.0 Only

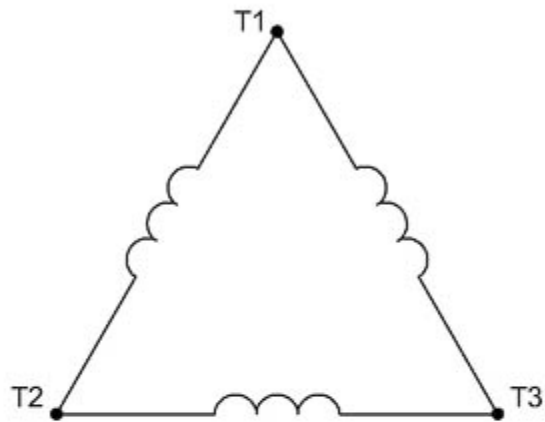
#### Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6320	6316	2959

#### 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)	T2C (1.0 SF) / N/A

**Connection Diagram**

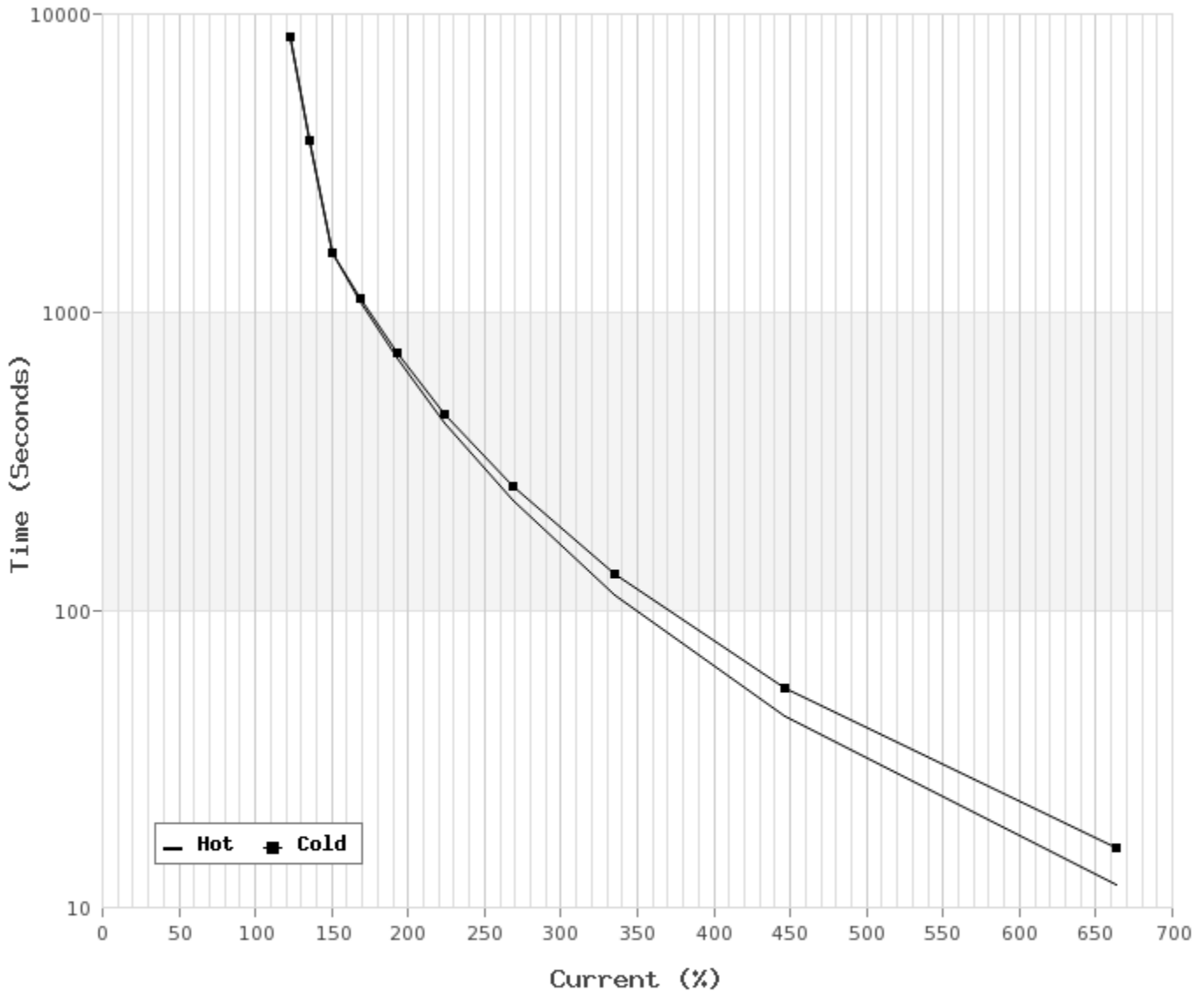


3 LEAD SINGLE VOLTAGE DELTA					
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD\_3D

**Thermal Limit Curves**

Motor Type: AEHH8N		Catalogue No: PDH35045		Family: Optim TEFC	
HP	350	Safe Stall Time		Full Load A	0.0 / 318.8 A
Voltage	0 / 575V 60Hz	Hot	12 s	Locked Rotor A	644 %
RPM	1800	Cold	16 s	Locked Rotor A	0.0 / 2 A



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

Motor Type: AEHH8N		Catalogue No: PDH35045		Family: Optim TEFC	
HP	350	Full Load T	1027.00 lb-ft	Full Load A	318.8 A
Voltage	575V 60Hz	Locked Rotor T	100 %	Locked Rotor A	2,052.0 A
RPM	1800	Pull Up T	85 %	Break Down T	210 %

