

Technical Documentation

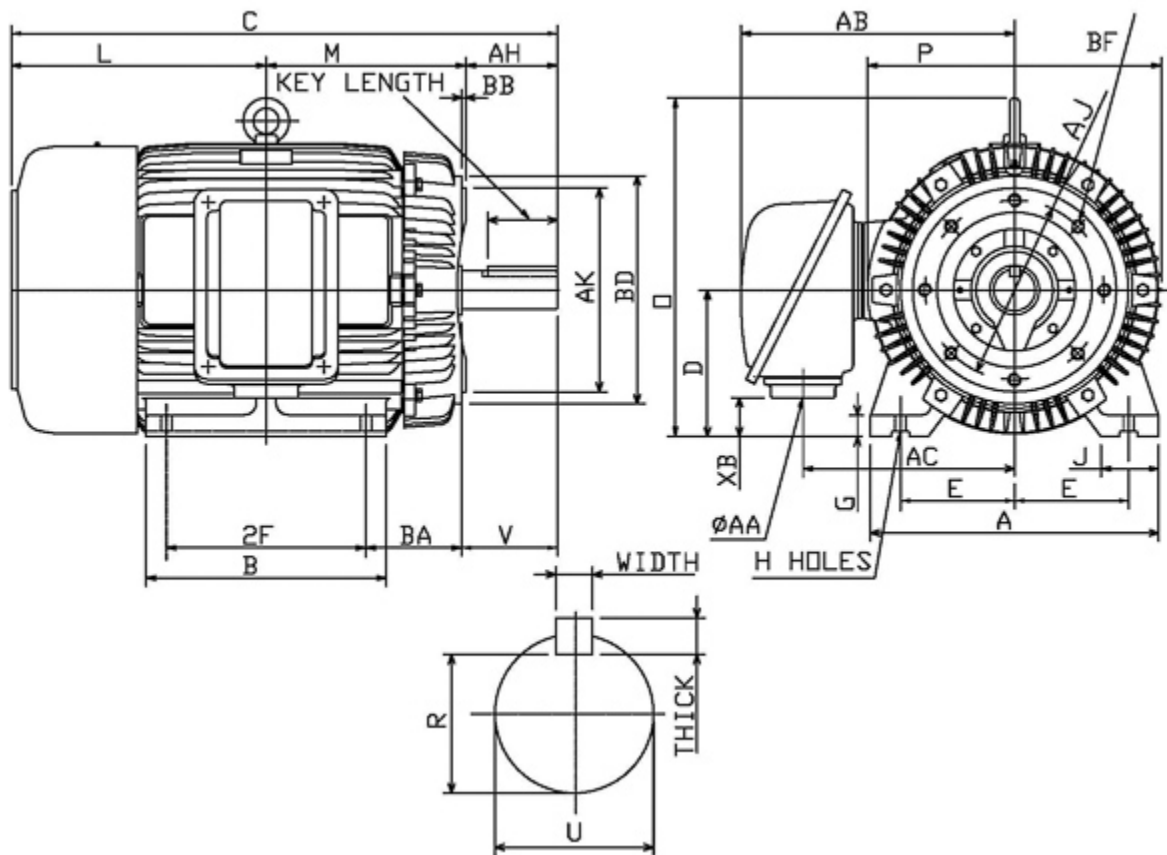
PDH02085C

Optim TEFC | AEHH8N

Date: November 30, 2016

Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
PDH02085C	AEHH8N	20	8	15	Continuous	575 V	60	900



Frame Size		Mounting					A	B	C	CD	D
		E	2F	2F2	H	BA					
324TC		6.25	10.5		0.66	5.25	15.75	12.8	29.93		8
G	J	K	L	M	O	P	T	Key			Keyseat
								Width	Thick	Length	R
1.1	3.15		14.18	10.29	16.27	16.54	2.32	0.5	0.5	3.91	1.845
Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
2 NPT	14.65	11.3	3.59			0.25	5	12.5	13.58	11	5/8-11UNC
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
5.25	2.125	5.15	6312	6212	629	65	F	1.15	Direct Coupling / Belt Drive	Inches	

Technical Data Sheet

Motor Type: AEHH8N

Catalogue No: PDH02085C

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
20	8	875	324TC	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.					
90.2	88.5	91.0	91.0	81.0	76.0	67.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
120.00	200	170	210	8.5	20.5	116
NEMA KVA Code	Inertia (WR ²)			Safe Stall Time (s)		Noise Level Sound Press. dB(A)
	Rotor (lb-ft ²)	NEMA Load (lb-ft ²)	Max. Allowable (lb-ft ²)	Cold	Hot	
G	10.393	525.0	1001.0	36	25.2	65

VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
6-60Hz	3-60Hz	60-120Hz	≤ 5 kHz	VPWM or CPWM	1.0 Only

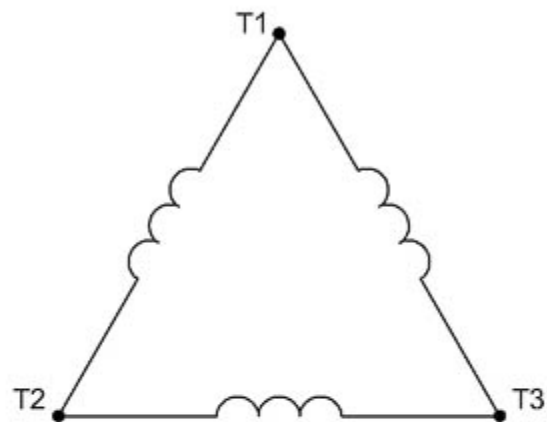
Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6312	6212	629

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)	T3A / T3A

Connection Diagram

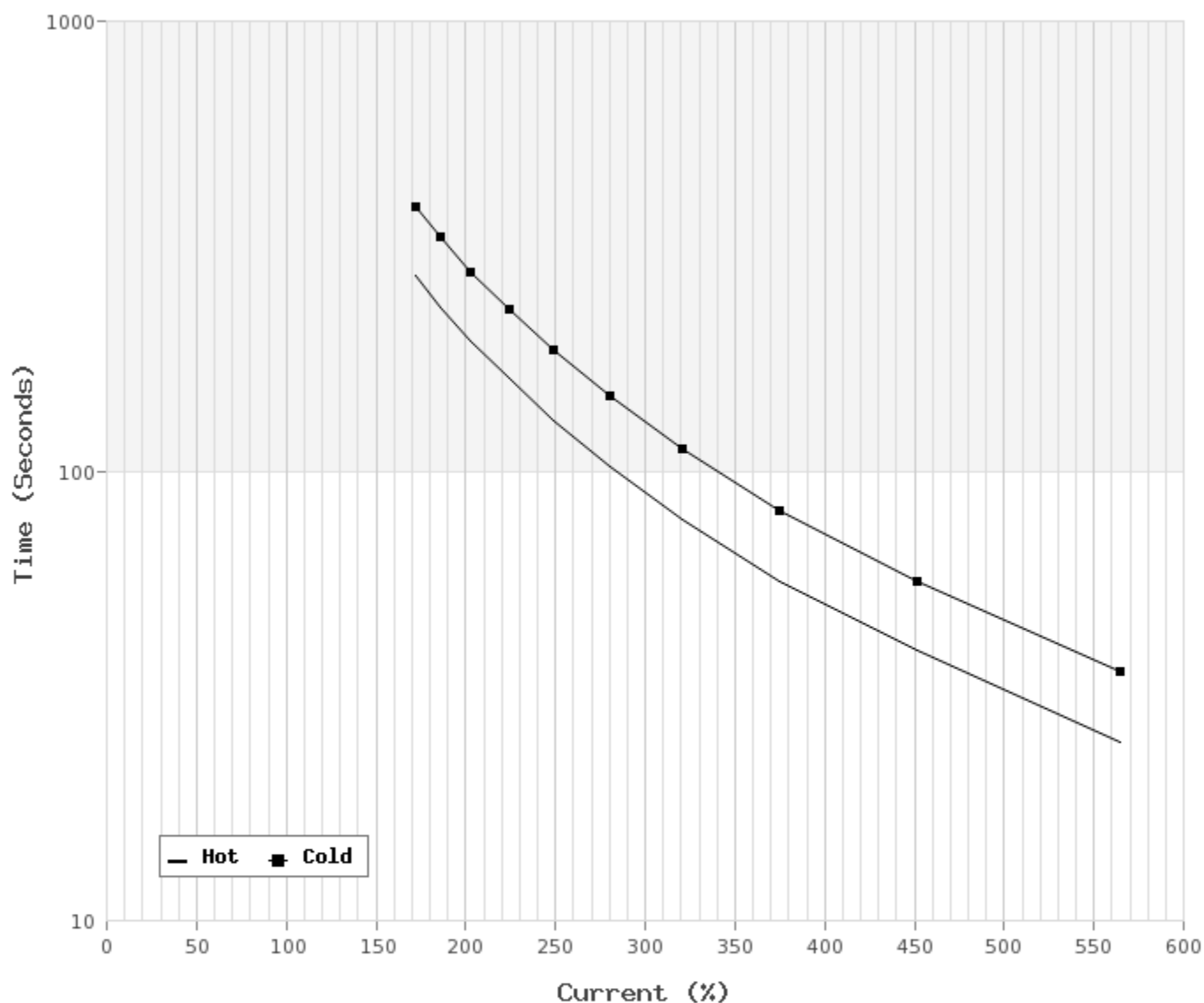


3 LEAD SINGLE VOLTAGE DELTA					
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD_3D

Thermal Limit Curves

Motor Type: AEHH8N		Catalogue No: PDH02085C		Family: Optim TEFC	
HP	20	Safe Stall Time		Full Load A	0.0 / 20.5 A
Voltage	0 / 575V 60Hz	Hot	25.2 s	Locked Rotor A	566 %
RPM	900	Cold	36 s	Locked Rotor A	0.0 / 116 A



T-N and I-N Curves

Motor Type: AEHH8N		Catalogue No: PDH02085C		Family: Optim TEFC	
HP	20	Full Load T	120.00 lb-ft	Full Load A	20.5 A
Voltage	575V 60Hz	Locked Rotor T	200 %	Locked Rotor A	116.0 A
RPM	900	Pull Up T	170 %	Break Down T	210 %

