

Technical Documentation

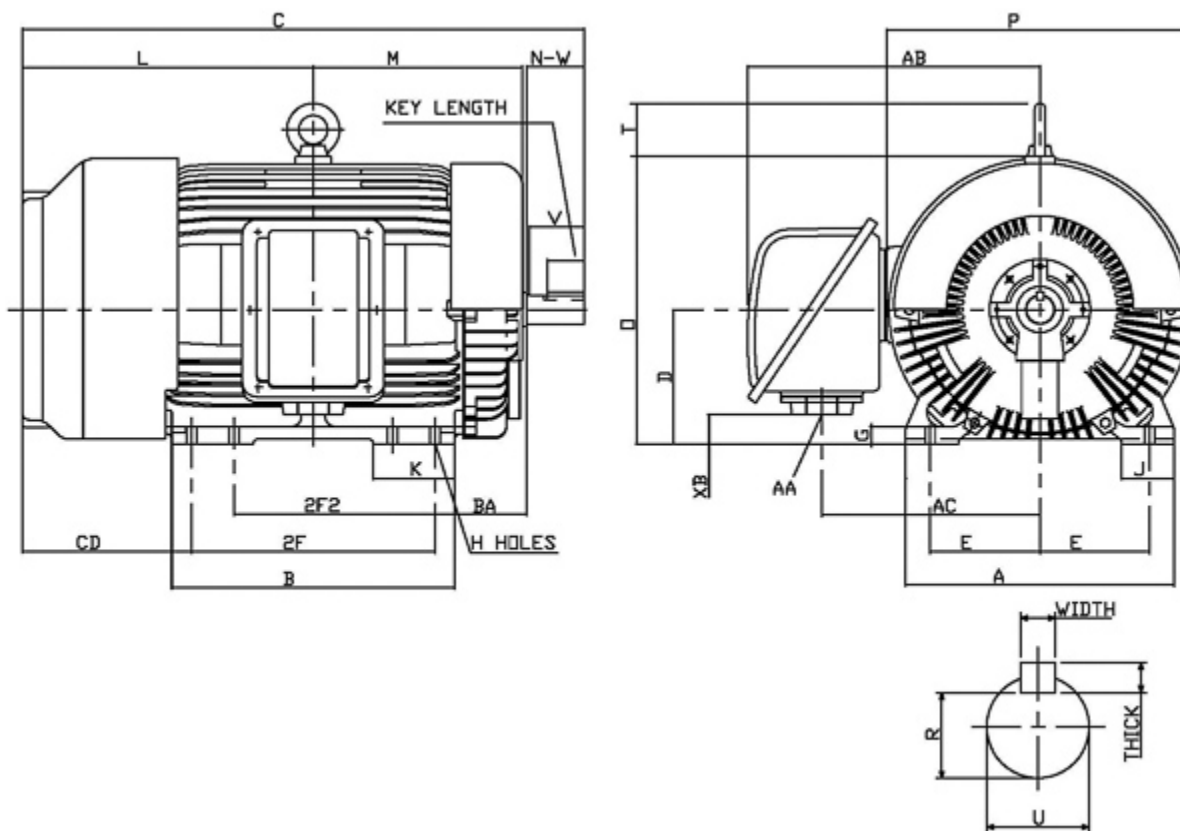
PDH1502

Optim TEFC | AEHH8N

Date: November 30, 2016

Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
PDH1502	AEHH8N	150	2	112	Continuous	460 V	60	3600



Frame Size		Mounting					A	B	C	CD	D
		E	2F	2F2	H	BA					
445TS		9	16.5	14.5	0.81	7.5	22.05	19.5	42.65	13.9	11

G	J	K	L	M	O	P	T	Key			Keyseat
								Width	Thick	Length	R
1.4	4.35	5.1	22.15	15.4	23.55	24.75	4.35	0.625	0.625	3.03	2.021

Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
3 NPT	24	17.9	2.4								

Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions
N-W	U	V	DE	NDE						
4.75	2.375	4.5	6314C3	6314C3	1696	83	F	1.15	Direct Coupling	Inches

Technical Data Sheet

Motor Type: AEHH8N

Catalogue No: PDH1502

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
150	2	3570	445TS	460	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.					
95.0	94.1	94.5	93.6	87.0	84.5	81.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
220.00	110	88	220	42.0	169.9	1085
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	20.000	133.0	133.0	28	19	83

VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
12-60Hz	3-60Hz	60-60Hz	≤ 5 kHz	VPWM or CPWM	1.0 Only

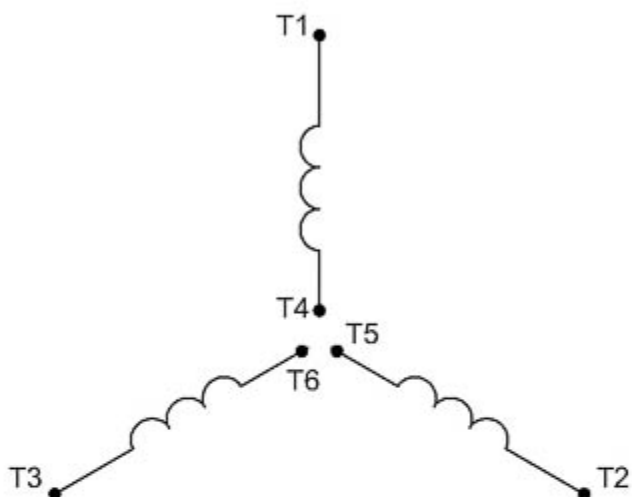
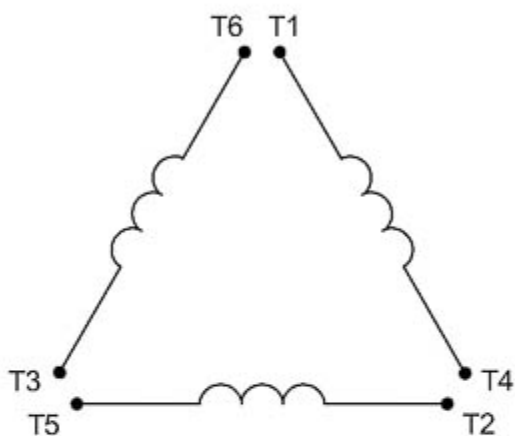
Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6314C3	6314C3	1696

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)	T3C / T3

Connection Diagram

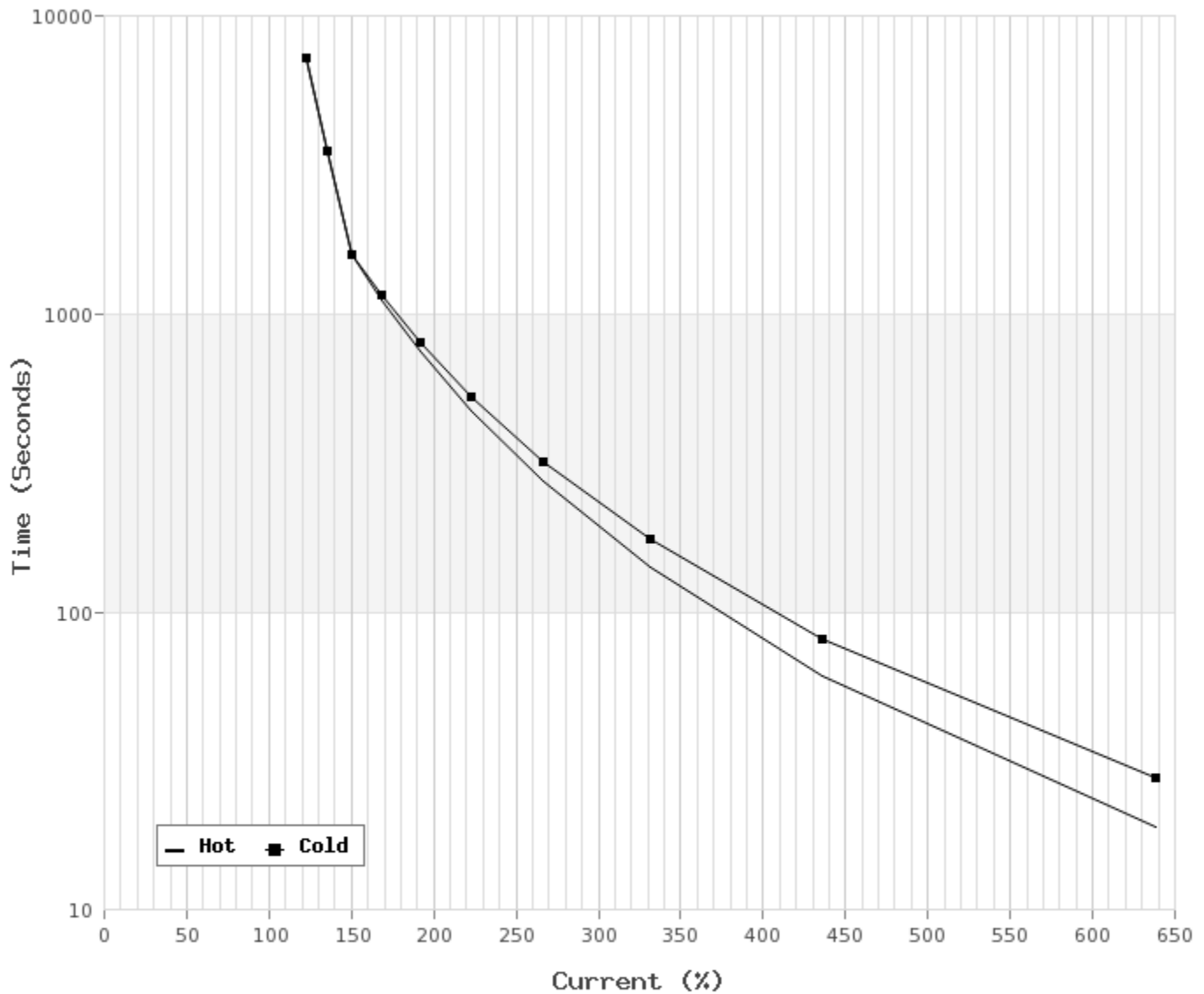


6 LEAD		SINGLE VOLTAGE			WYE/DELTA
CONNECTION		L1	L2	L3	JOIN
START	WYE	1	2	3	4&5&6
RUN	DELTA	1,6	2,4	3,5	-

WD_6YD

Thermal Limit Curves

Motor Type: AEHH8N		Catalogue No: PDH1502		Family: Optim TEFC	
HP	150	Safe Stall Time		Full Load A	0.0 / 169.9 A
Voltage	0 / 460V 60Hz	Hot	19 s	Locked Rotor A	638 %
RPM	3600	Cold	28 s	Locked Rotor A	0.0 / 1 A



T-N and I-N Curves

Motor Type: AEHH8N		Catalogue No: PDH1502		Family: Optim TEFC	
HP	150	Full Load T	220.00 lb-ft	Full Load A	169.9 A
Voltage	460V 60Hz	Locked Rotor T	110 %	Locked Rotor A	1,085.0 A
RPM	3600	Pull Up T	88 %	Break Down T	220 %

