

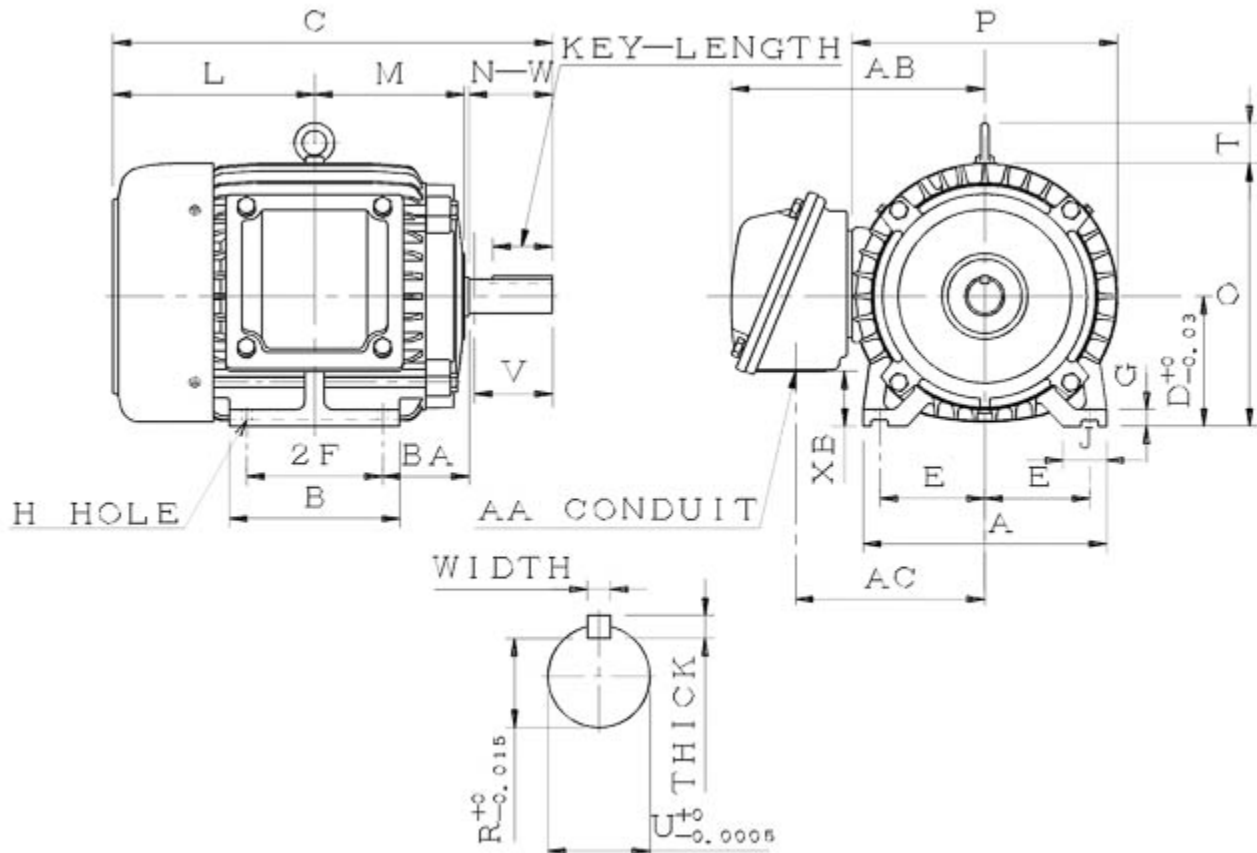
Technical Documentation

XC0034
Optim TEXP | AEHHXV

Date: July 10, 2017

Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
XC0034	AEHHXV	3	4	2.2	Continuous	230 / 460 V	60	1800



AEHHXV-SMP-2 1 0

Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
182T	3.75	4.5		0.41	2.75	8.8	5.9	14.89		4.5	
G	J	K	L	M	O	P	T	Key			Keyseat
0.65	1.75		7.14	4.9	9.35	9.6	1.15	Width	Thick	Length	R
								0.25	0.25	1.78	0.986
Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
NPT3/4"	8.78	6.45	2.33								
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
2.75	1.125	2.7	6306ZZ	6306ZZ	108	59	F	1.15	Direct Coupling / Belt Drive	Inches	

Technical Data Sheet

Motor Type: AEHHXV

Catalogue No: XC0034

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
3	4	1755	182T	230 / 460	60	3
Enclosure	Ins. Class	Service Factor	Time Rating	NEMA Design	Rated Amb.	Rated Altitude
TEXP	F	1.15	Continuous	B	-40 to 40°C °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.					
89.5	87.5	90.0	89.5	81.0	75.0	63.5
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
9	255	230	345	4.2 / 2.1	7.8 / 3.9	64 / 32
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	
K	0.312	17	57	36	25	59

VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
12-60Hz	3-60Hz	60-90Hz	≤ 5 kHz	VPWM or CPWM	1.0 Only

Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6306ZZ	6306ZZ	108

Hazardous Locations Information

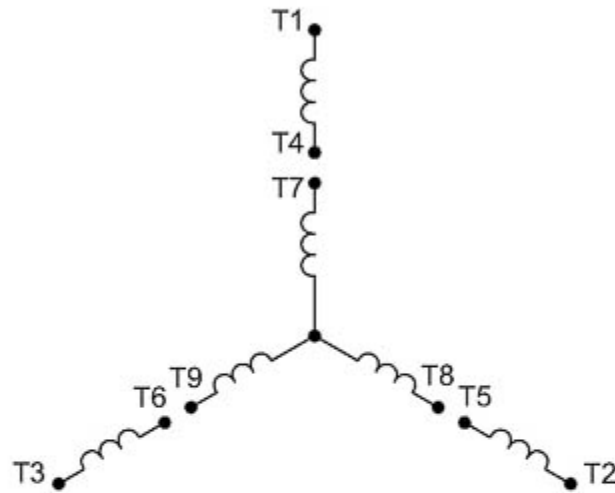
CSA/UL Certified	
Class I, Div 1, Groups C & D; Class II, Div 1, Groups E, F & G Class I, Zone 1, Groups IIB & IIA; Class II, Div 1, Groups E, F & G	
Temp Code (Sinewave / VFD)	T3B / T3B

Nameplate Drawing

Optim TEXP

TYPE	AEHHXV	CAT. NO.	XC0034		
OUTPUT	3 HP 2.2 kW	FRAME	182T	TEXP	
R.P.M.	1755	POLE	4	INS.	F
VOLTS	230 / 460	PHASE	3	Hz	60
AMPS	7.8 / 3.9	CODE	K	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 89.5		MIN. EFF. 87.5	
BEARINGS	6306ZZ / 6306ZZ			RATING Cont.	
SER. NO.	TBD	DESIGN	B	WT. 108 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	12-60Hz	60-90Hz	1.0 Only	

Connection Diagram



9 LEAD DUAL VOLTAGE WYE					
VOLTAGE	CONN.	L1	L2	L3	JOIN
HIGH	WYE	1	2	3	4&7,5&8,6&9
LOW	2 WYE	1,7	2,8	3,9	4&5&6

WD_9Y