

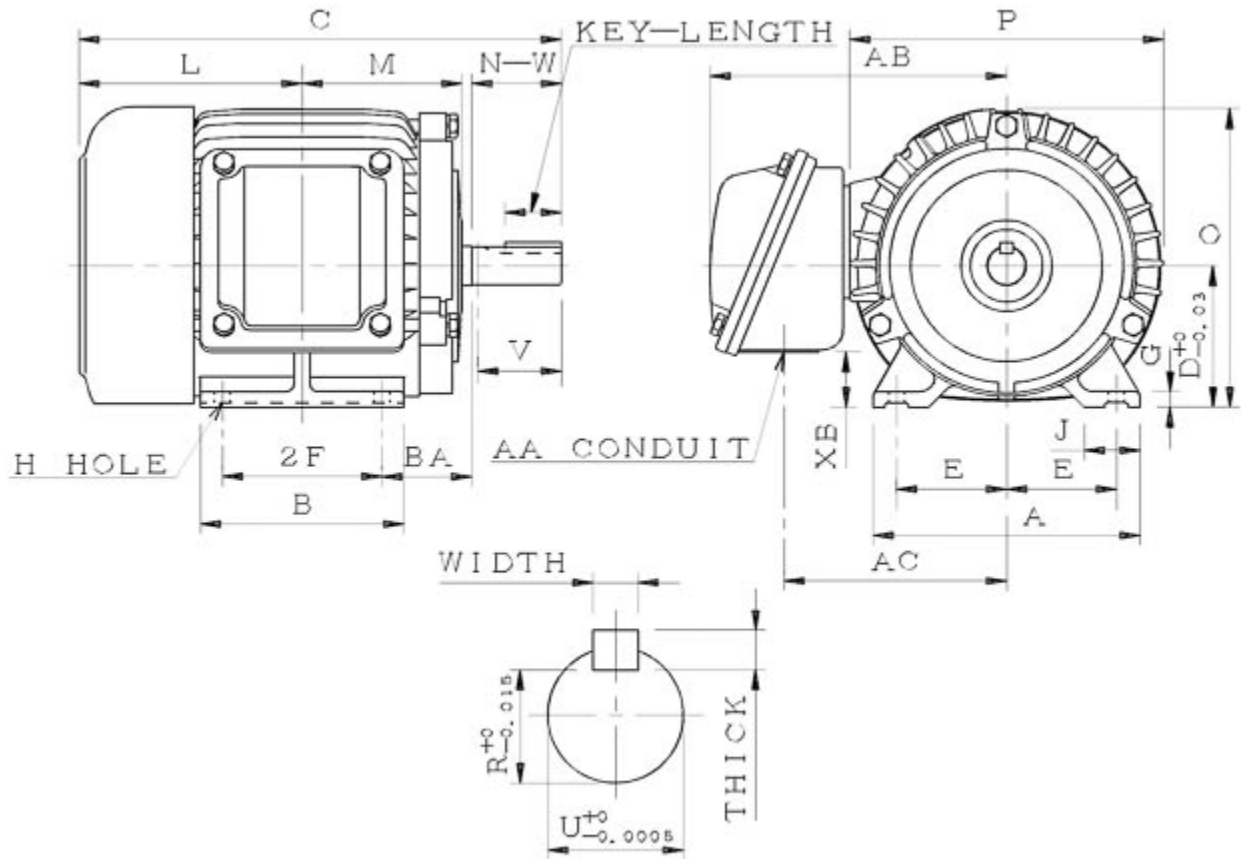
Technical Documentation

**XC0024**  
**Optim TEXP | AEHHXV**

Date: December 1, 2016

**Dimensional Drawing**

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
XC0024	AEHHXV	2	4	1.5	Continuous	230 / 460 V	60	1800



AEHHXV-SMP-1 1 0

Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
145T	2.75	5		0.34	2.25	6.7	5.9	13.54		3.5	
G	J	K	L	M	O	P	T	Key			Keyseat
0.35	1.4		6.54	4.55	7.5	8.03		Width	Thick	Length	R
								0.188	0.188	1.41	0.771
Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
NPT3/4"	8.03	5.7	1.33								
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
2.25	0.875	2.2	6205ZZ	6205ZZ	70	55	F	1.15	Direct Coupling / Belt Drive	Inches	

### Technical Data Sheet

Motor Type: AEHHXV

Catalogue No: XC0024

#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
2	4	1740	145T	230 / 460	60	3
Enclosure	Ins. Class	Service Factor	Time Rating	NEMA Design	Rated Amb.	Rated Altitude
TEXP	F	1.15	Continuous	B	°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.					
86.5	84.0	87.0	86.0	78.0	70.5	57.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
6	280	255	350	3.0 / 1.5	5.6 / 2.8	50 / 25
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	
L	0.108	11	32	26	18	55

#### 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

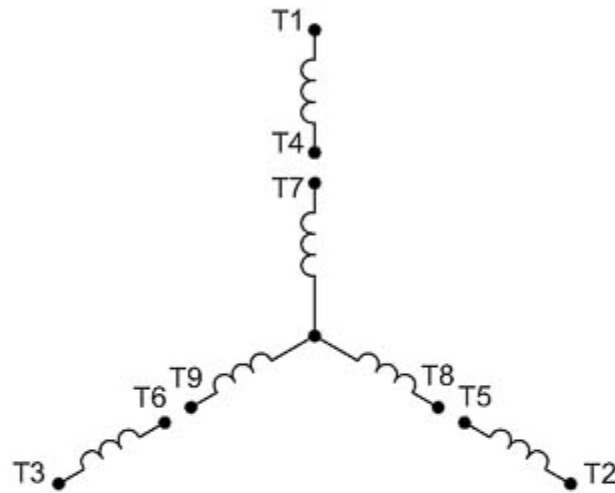
#### Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6205ZZ	6205ZZ	70

#### 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

**Connection Diagram**

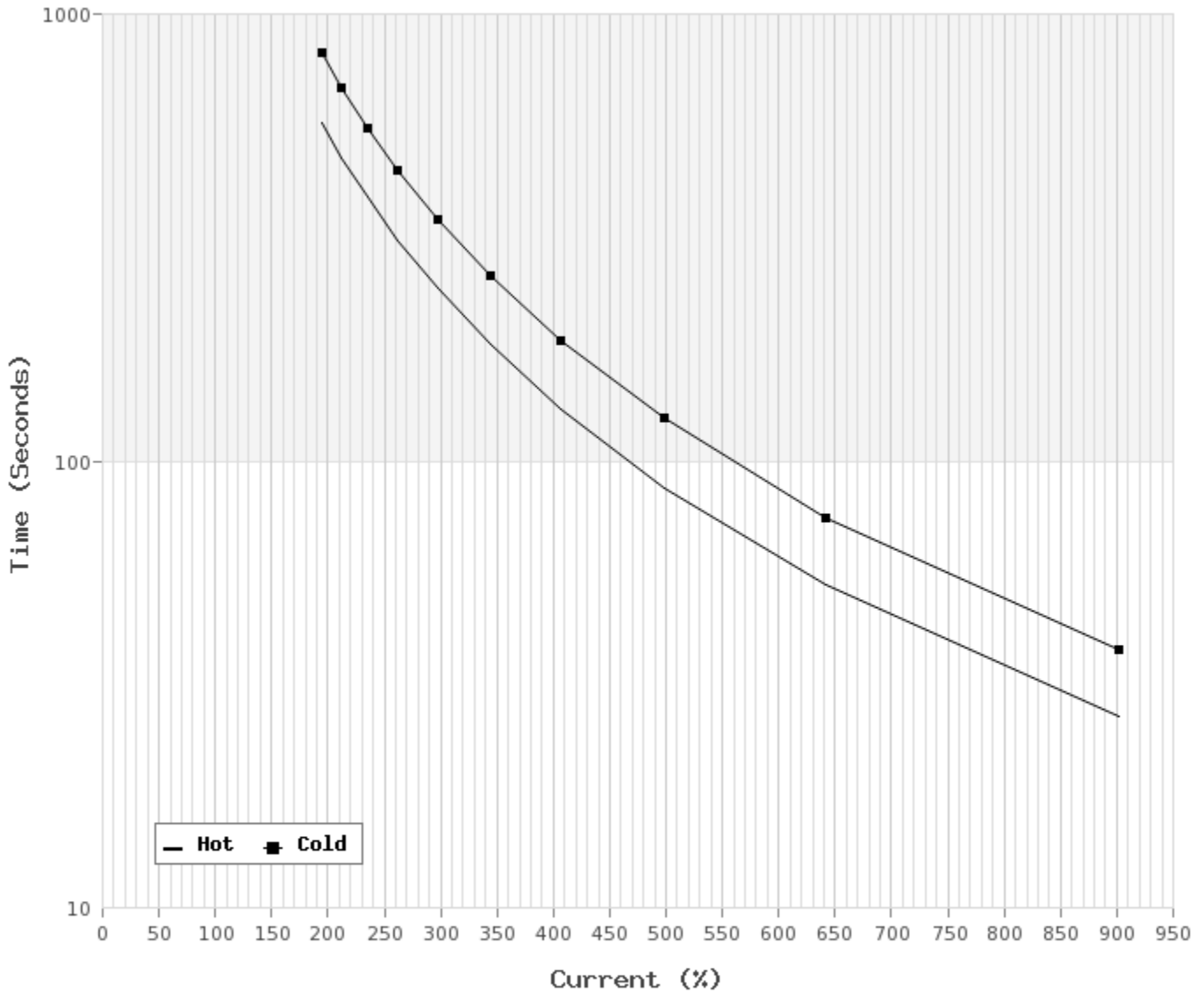


9 LEAD DUAL VOLTAGE WYE					
VOLTAGE	CONN.	L1	L2	L3	JOIN
HIGH	WYE	1	2	3	4&7,5&8,6&9
LOW	2 WYE	1,7	2,8	3,9	4&5&6

WD\_9Y

**Thermal Limit Curves**

Motor Type: AEHHXV		Catalogue No: XC0024		Family: Optim TEXP	
HP	2	Safe Stall Time		Full Load A	5.6 / 2.8 A
Voltage	230 / 460V 60Hz	Hot	18 s	Locked Rotor A	901 / 899 %
RPM	1800	Cold	26 s	Locked Rotor A	50.0 / 25 A



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

Motor Type: AEHHXV		Catalogue No: XC0024		Family: Optim TEXP	
HP	2	Full Load T	6 lb-ft	Full Load A	5.6 / 2.8 A
Voltage	230 / 460V 60Hz	Locked Rotor T	280 %	Locked Rotor A	50.0 / 25.0 A
RPM	1800	Pull Up T	255 %	Break Down T	350 %

