

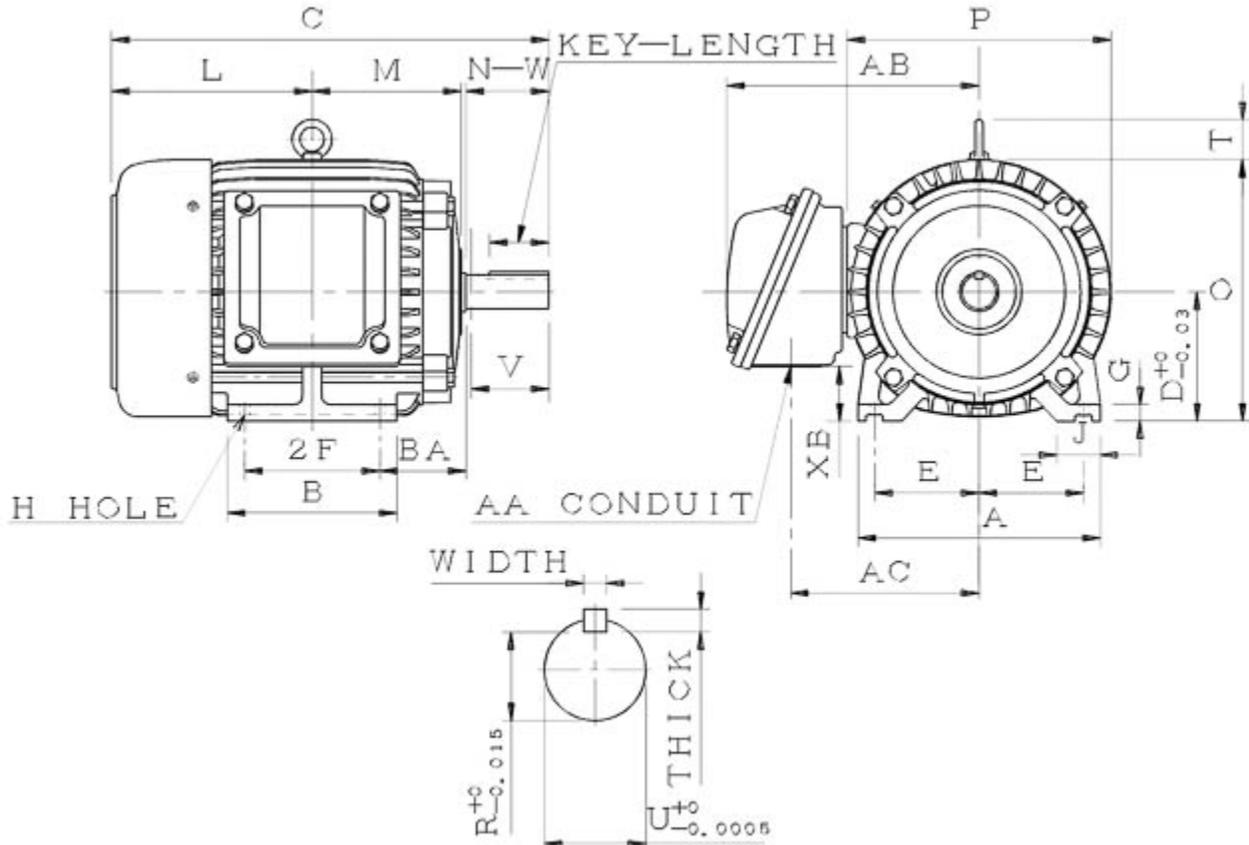
Technical Documentation

**XC1/585**  
**Optim TEXP | AEHHXV**

Date: December 1, 2016

**Dimensional Drawing**

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
XC1/585	AEHHXV	1.5	8	1.1	Continuous	575 V	60	900



AEHHXV-SMP-2 1 0

Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
184T	3.75	5.5		0.41	2.75	8.8	6.9	15.91		4.5	
G	J	K	L	M	O	P	T	Key			Keyseat
0.65	1.75		7.66	5.41	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	120	53.0	F	1.15	Direct Coupling / Belt Drive	Inches	

### Technical Data Sheet

Motor Type: AEHHXV

Catalogue No: XC1/585

#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
1.5	8	860	184T	575	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.					
78.5	75.5	75.5	70.0	60.5	51.5	39.5
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
9.2	185.0	130.0	250.0	1.8	2.4	16
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	
M	0.3	45.3	223.0	78.0	55.0	53.0

#### 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

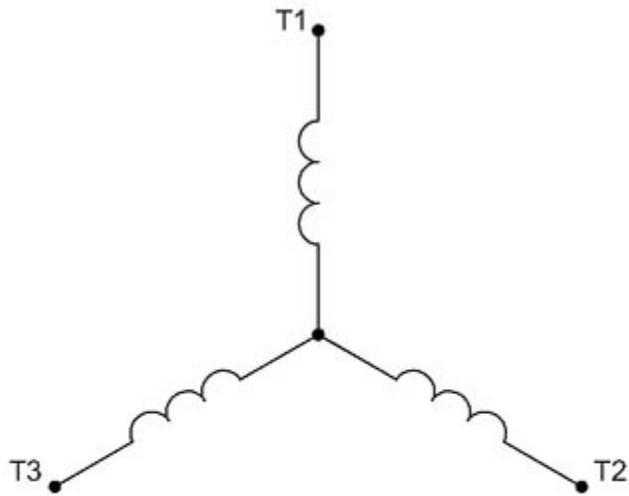
#### Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6306ZZ	6306ZZ	120

#### 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**

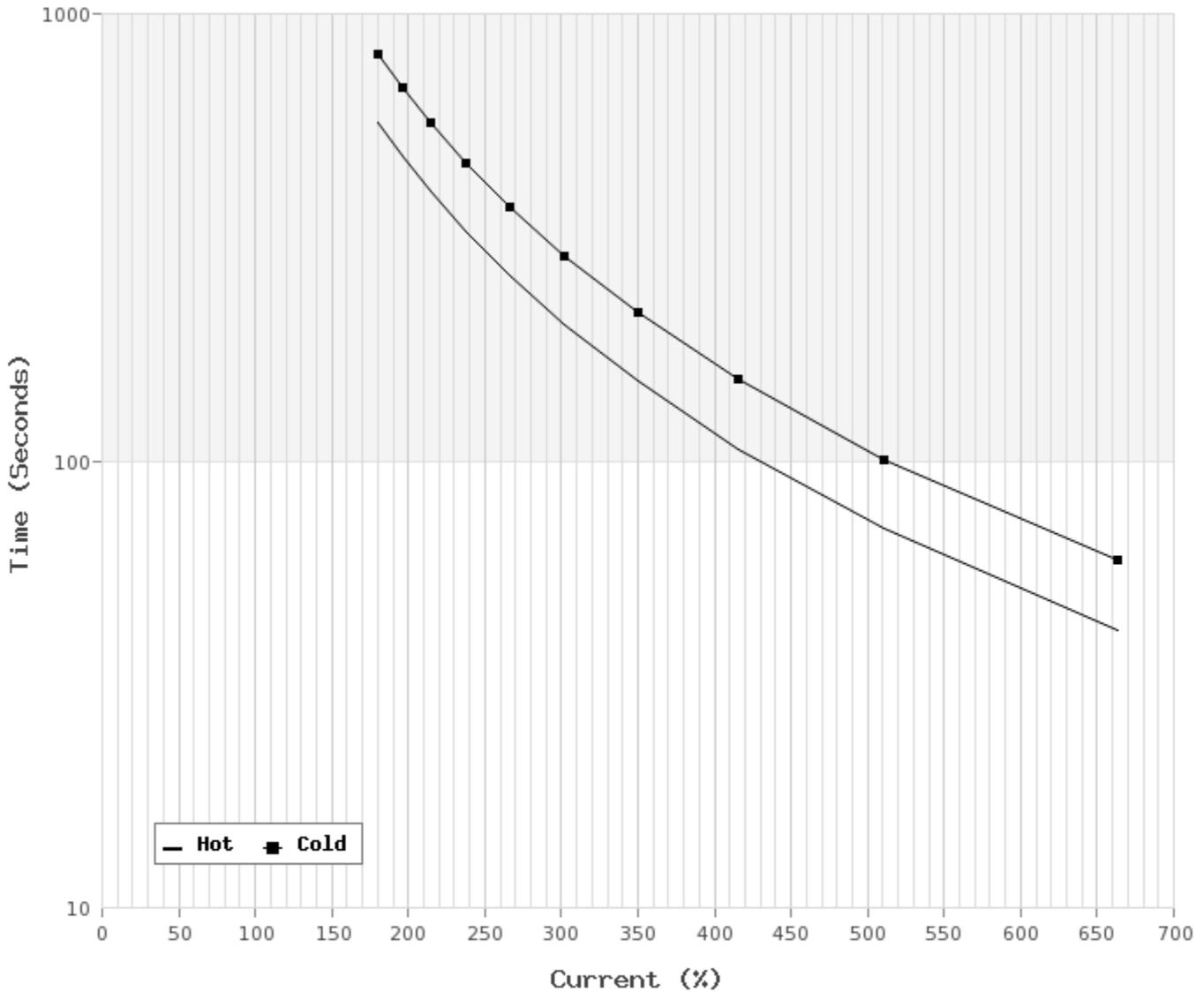


3 LEAD		SINGLE VOLTAGE			WYE
VOLTAGE	CONN.	L1	L2	L3	
-	WYE	1	2	3	

WD\_3Y

### Thermal Limit Curves

Motor Type: AEHHXV		Catalogue No: XC1/585		Family: Optim TEXP	
HP	1.5	Safe Stall Time		Full Load A	0.0 / 2.4 A
Voltage	0 / 575V 60Hz	Hot	55.0 s	Locked Rotor A	675 %
RPM	900	Cold	78.0 s	Locked Rotor A	0.0 / 16 A



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

Motor Type: AEHHXV		Catalogue No: XC1/585		Family: Optim TEXP	
HP	1.5	Full Load T	9.2 lb-ft	Full Load A	2.4 A
Voltage	575V 60Hz	Locked Rotor T	185.0 %	Locked Rotor A	16.0 A
RPM	900	Pull Up T	130.0 %	Break Down T	250.0 %

