

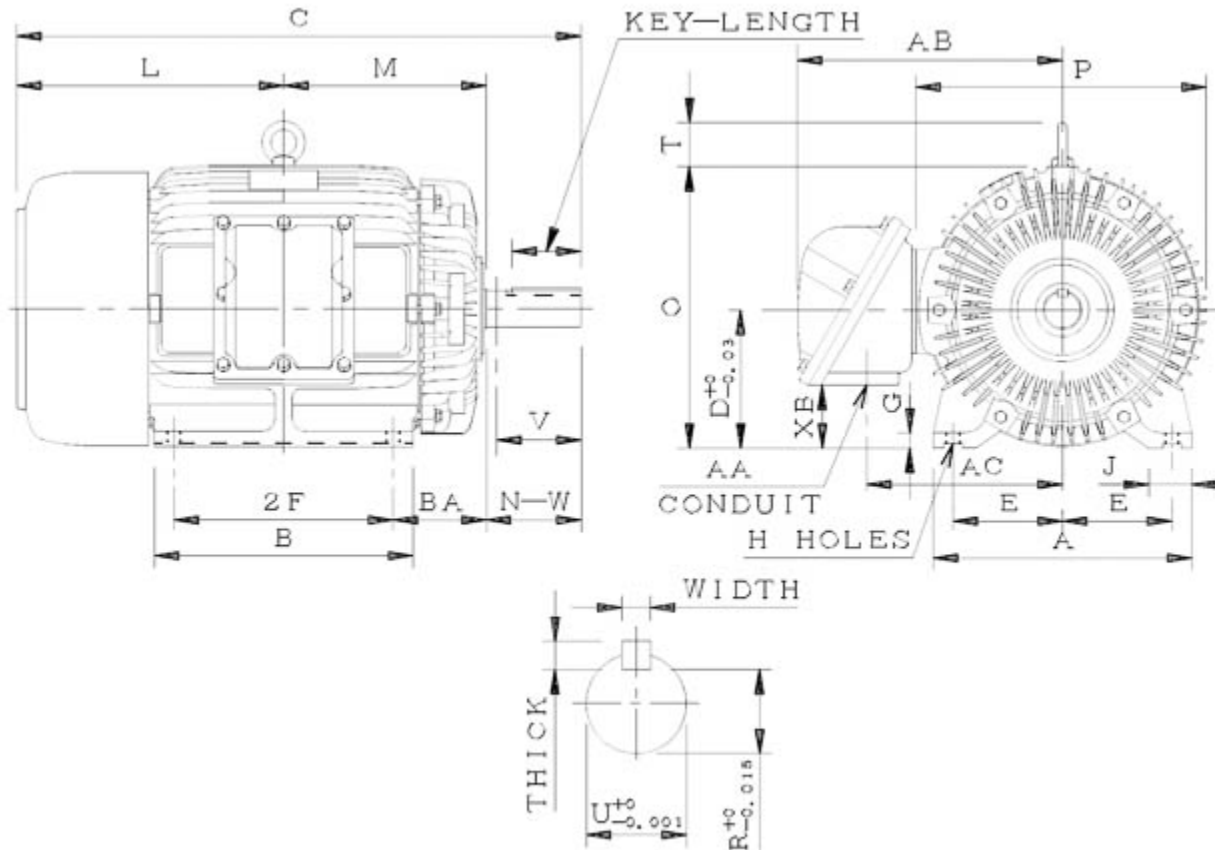
Technical Documentation

**XC02045**  
**Optim TEXP | AEHHXV**

Date: December 1, 2016

**Dimensional Drawing**

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
XC02045	AEHHXV	20	4	15	Continuous	575 V	60	1800



AEHHXV-SMP-4 1 0

Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
256T	5	10		0.53	4.25	11.8	11.8	25.52		6.25	
G	J	K	L	M	O	P	T	Key			Keyseat
0.65	1.95		12.27	9.15	12.8	13.15	2	Width	Thick	Length	R
								0.375	0.375	2.91	1.416
Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
NPT11/4"	12.24	8.94	2.83								
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
4	1.625	3.9	6309ZZ	6307ZZ	376	65.0	F	1.15	Direct Coupling / Belt Drive	Inches	

### Technical Data Sheet

Motor Type: AEHHXV

Catalogue No: XC02045

#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
20	4	1765	256T	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.					
93.0	91.7	93.0	93.0	85.5	83.0	75.5
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
59.5	200.0	135.0	255.0	5.9	18.8	116
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	
G	2.7	99.0	172.0	17.0	12.0	65.0

#### VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
6-60Hz	3-60Hz	60-90Hz	≤ 5 kHz	VPWM or CPWM	1.0 Only

#### Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6309ZZ	6307ZZ	376

#### 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**

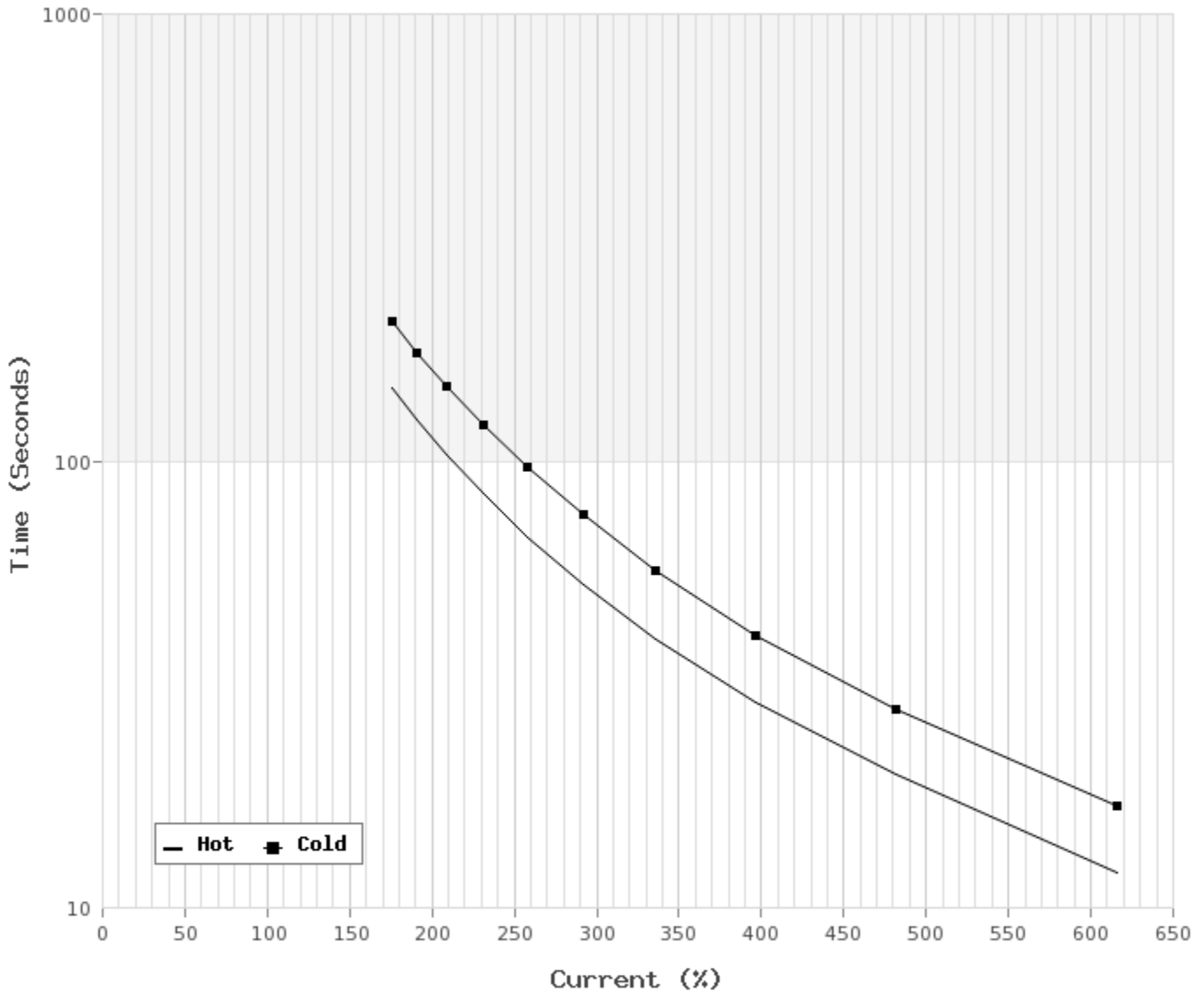


3 LEAD SINGLE VOLTAGE DELTA					
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD\_3D

**Thermal Limit Curves**

Motor Type: AEHHXV		Catalogue No: XC02045		Family: Optim TEXP	
HP	20	Safe Stall Time		Full Load A	0.0 / 18.8 A
Voltage	0 / 575V 60Hz	Hot	12.0 s	Locked Rotor A	616 %
RPM	1800	Cold	17.0 s	Locked Rotor A	0.0 / 116 A



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

Motor Type: AEHHXV		Catalogue No: XC02045		Family: Optim TEXP	
HP	20	Full Load T	59.5 lb-ft	Full Load A	18.8 A
Voltage	575V 60Hz	Locked Rotor T	200.0 %	Locked Rotor A	116.0 A
RPM	1800	Pull Up T	135.0 %	Break Down T	255.0 %

