

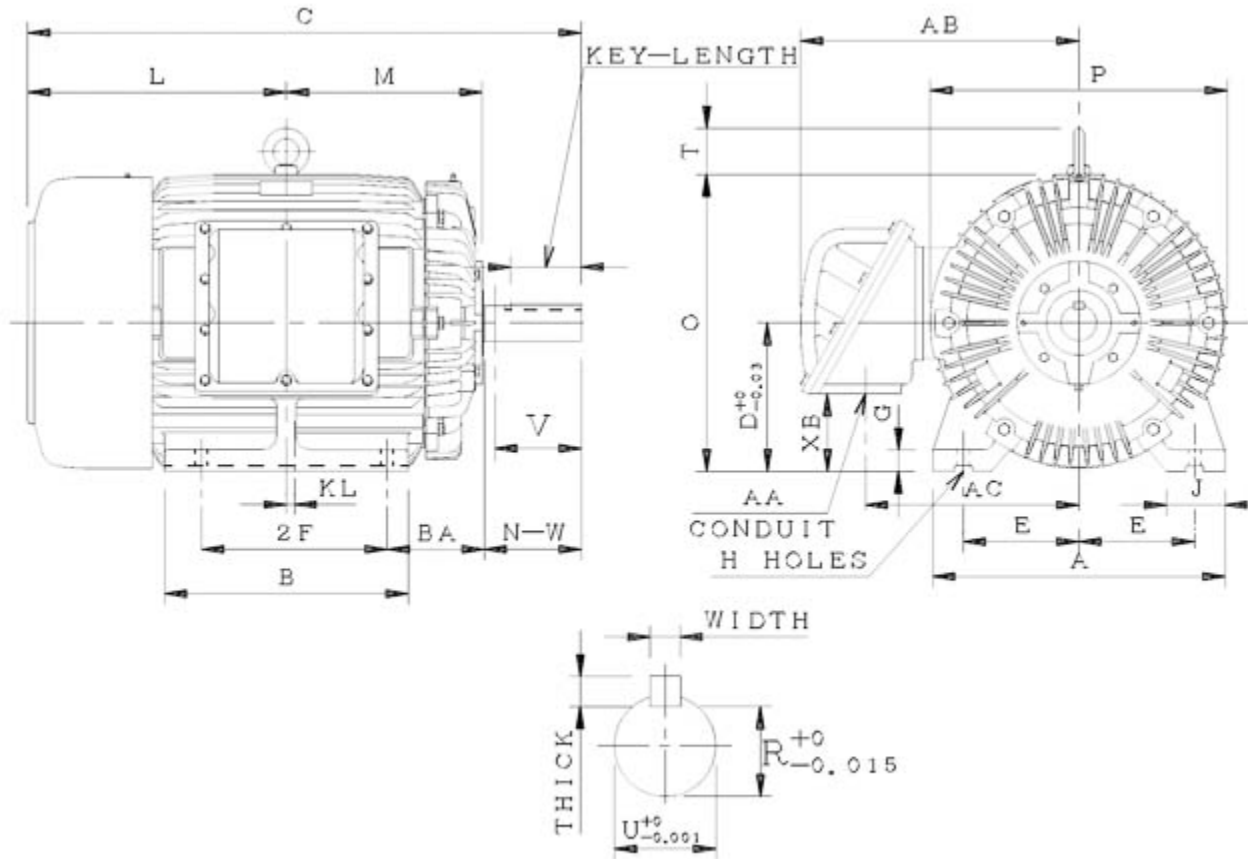
Technical Documentation

**XH02085**  
**Optim TEXP | AEHHXU**

Date: December 1, 2016

**Dimensional Drawing**

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
XH02085	AEHHXU	20	8	15	Continuous	575 V	60	900



AEHHXU-SMP-4 1 0

Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
324T	6.25	10.5		0.66	5.25	15.75	12.8	29.92		8	
G	J	K	L	M	O	P	T	Key			Keyseat
1.1	3.15		14.17	10.3	16.22	16.54	2.36	Width	Thick	Length	R
								0.5	0.5	3.91	1.845
Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
NPT2"	16.18	12.17	3.31								
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
5.25	2.125	5.15	6312	6212	708	65.0	F	1.15	Direct Coupling / Belt Drive	Inches	

### Technical Data Sheet

Motor Type: AEHHXU

Catalogue No: XH02085

#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
20	8	875	324T	575	60	3
Enclosure	Ins. Class	Service Factor	Time Rating	NEMA Design	Rated Amb.	Rated Altitude
TEXP	F	1.15	Continuous	C	-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.					
90.2	88.5	91.0	91.0	81.0	76.0	67.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
120.0	200.0	170.0	210.0	9.2	20.5	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	10.4	524.7	670.0	28.0	20.0	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
6312	6212	708

#### Hazardous Locations Information

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

**Connection Diagram**

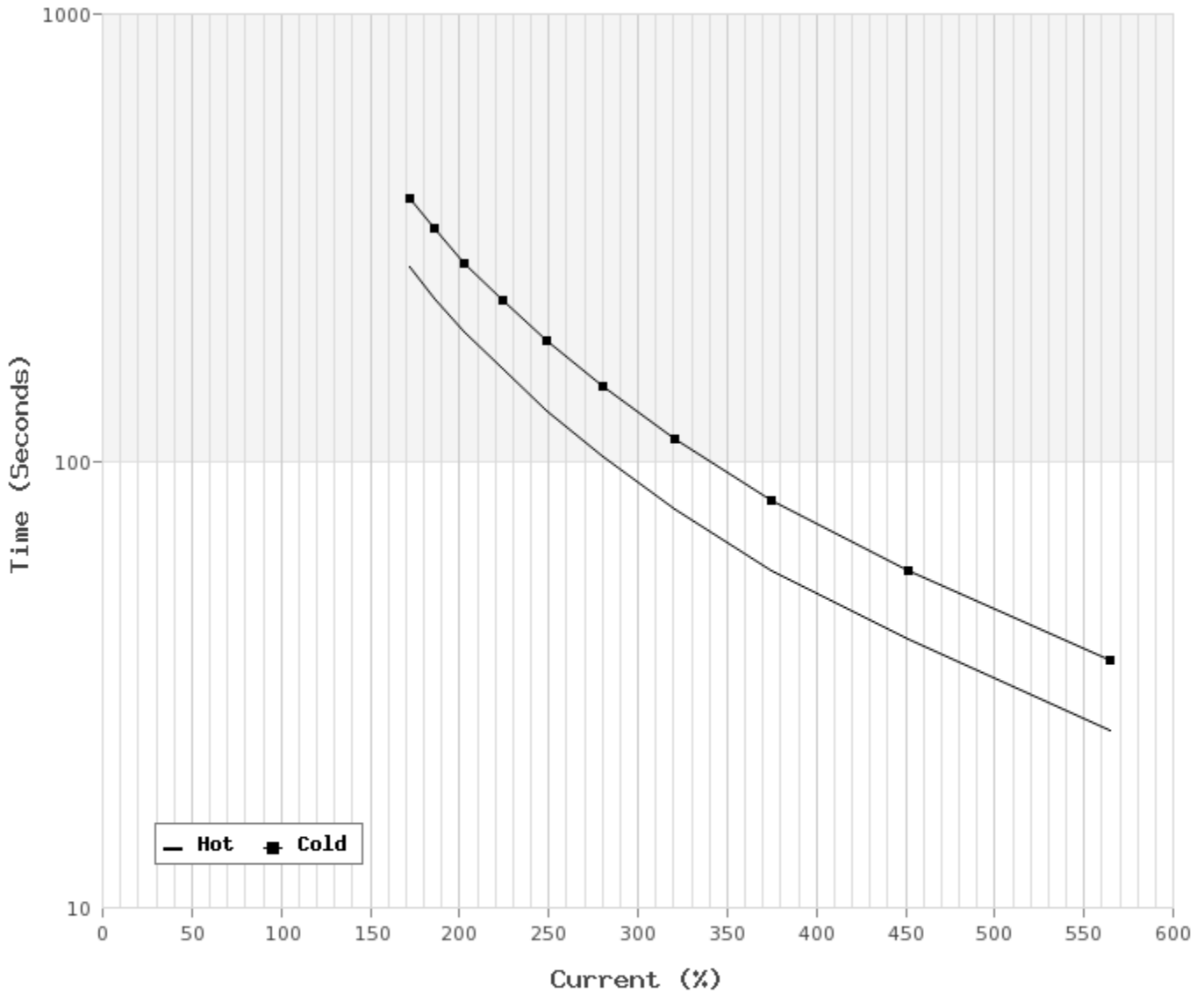


3 LEAD SINGLE VOLTAGE DELTA					
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD\_3D

### Thermal Limit Curves

Motor Type: AEHHXU		Catalogue No: XH02085		Family: Optim TEXP	
HP	20	Safe Stall Time		Full Load A	0.0 / 20.5 A
Voltage	0 / 575V 60Hz	Hot	20.0 s	Locked Rotor A	566 %
RPM	900	Cold	28.0 s	Locked Rotor A	0.0 / 116 A



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

Motor Type: AEHHXU		Catalogue No: XH02085		Family: Optim TEXP	
HP	20	Full Load T	120.0 lb-ft	Full Load A	20.5 A
Voltage	575V 60Hz	Locked Rotor T	200.0 %	Locked Rotor A	116.0 A
RPM	900	Pull Up T	170.0 %	Break Down T	210.0 %

