

Technical Documentation

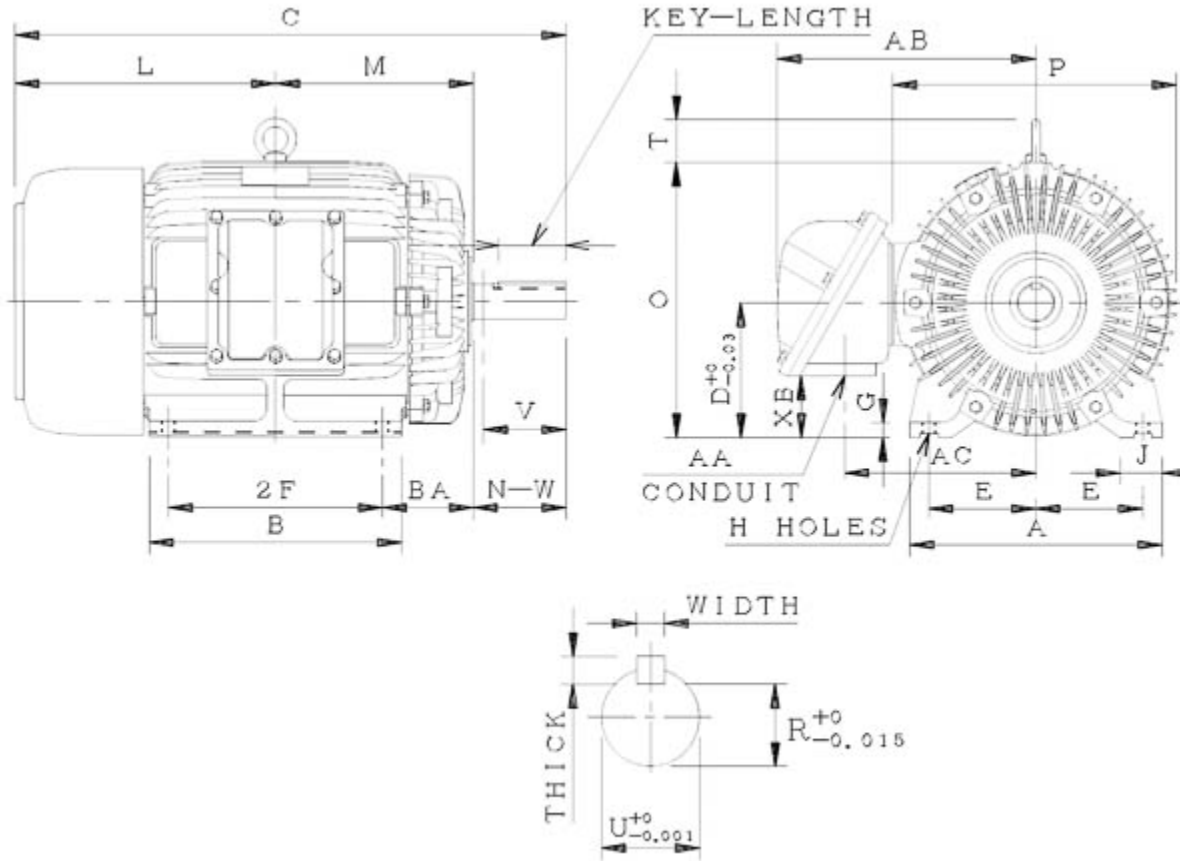
XH02065

Optim TEXP | AEHHXU

Date: May 28, 2018

Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
XH02065	AEHHXU	20	6	15	Continuous	575 V	60	1200



AEHHXU-SMP-3 1 0

Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
286T	5.5	11		0.53	4.75	14	13.2	28.3		7	
G	J	K	L	M	O	P	T	Key			Keyseat
0.7	2.95		13.42	10.02	14.52	15.04	2.36	Width	Thick	Length	R
								0.5	0.5	3.28	1.591
Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
NPT11/2"	13.23	9.92	3.57								
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
4.62	1.875	4.5	6311ZZ	6310ZZ	530	60.0	F	1.15	Direct Coupling / Belt Drive	Inches	

Technical Data Sheet

Motor Type: AEHHXU

Catalogue No: XH02065

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
20	6	1170	286T	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 °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.					
91.7	90.2	93.0	93.0	84.0	81.0	74.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
89.7	210.0	175.0	220.0	5.9	19.5	116
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	
G	8.0	262.0	540.0	27.0	19.0	60.0

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
6311ZZ	6310ZZ	530

Hazardous Locations Information

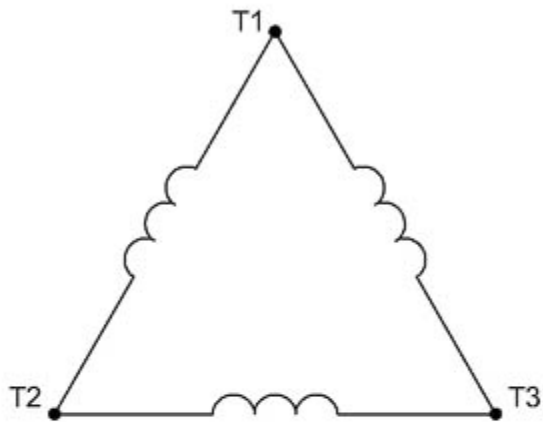
CSA/UL Certified	
Class I, Div 1, Groups D; Class II, Div 1, Groups E, F & G Class I, Zone 1, Groups IIA; Class II, Div 1, Groups E, F & G	
Temp Code (Sinewave / VFD)	T3B / T3B

Nameplate Drawing

Optim TEXP

TYPE	AEHHXU	CAT. NO.	XH02065		
OUTPUT	20 HP 15 kW	FRAME	286T	TEXP	
R.P.M.	1170	POLE	6	INS.	F
VOLTS	575	PHASE	3	Hz	60
AMPS	19.5	CODE	G	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 91.7		MIN. EFF. 90.2	
BEARINGS	6311ZZ / 6310ZZ			RATING Cont.	
SER. NO.	TBD	DESIGN	C	WT. 530 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-90Hz	1.0 Only	

Connection Diagram

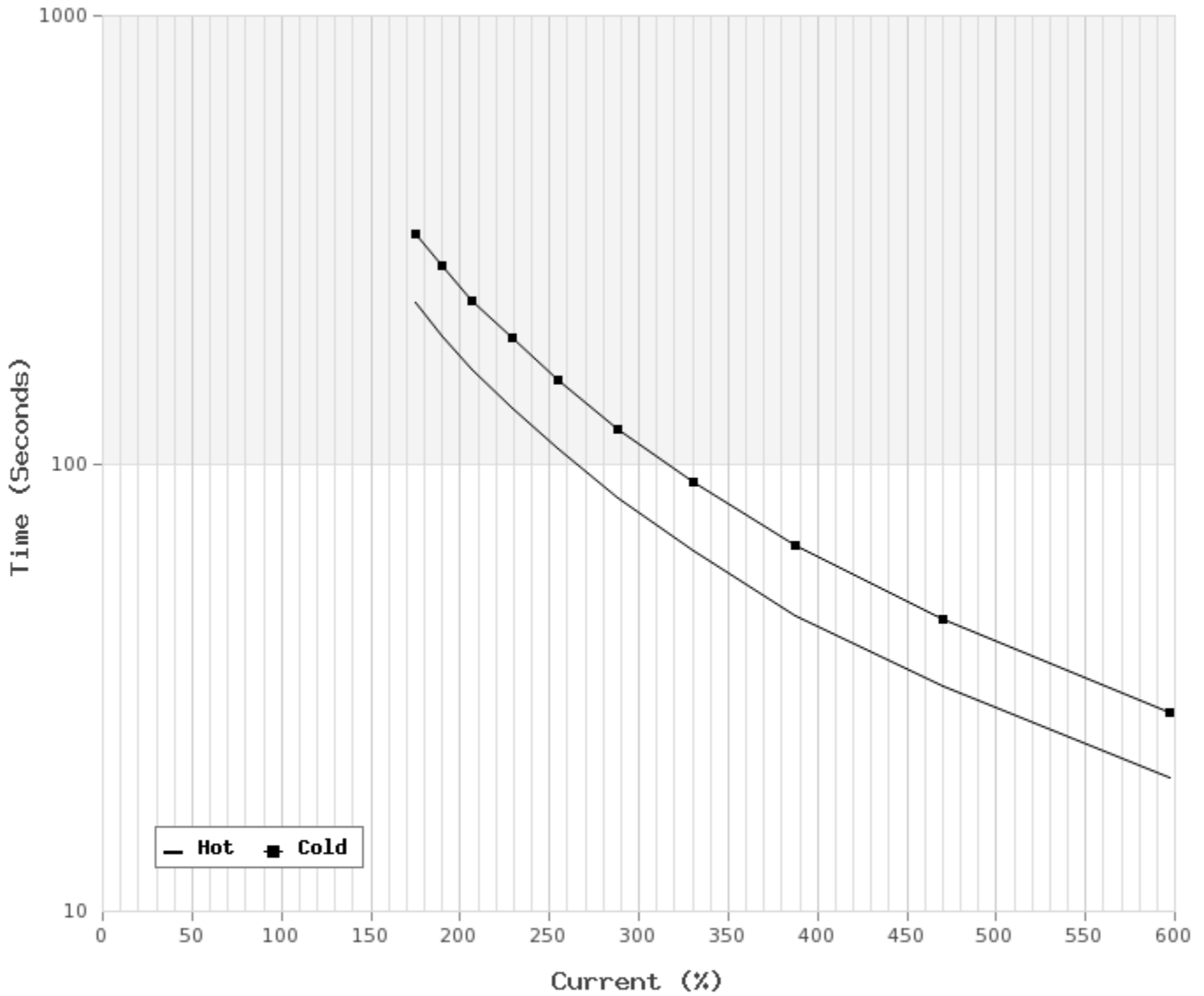


3 LEAD SINGLE VOLTAGE DELTA					
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD_3D

Thermal Limit Curves

Motor Type: AEHHXU		Catalogue No: XH02065		Family: Optim TEXP	
HP	20	Safe Stall Time		Full Load A	0.0 / 19.5 A
Voltage	0 / 575V 60Hz	Hot	19.0 s	Locked Rotor A	596 %
RPM	1200	Cold	27.0 s	Locked Rotor A	0.0 / 116 A



T-N and I-N Curves

Motor Type: AEHHXU		Catalogue No: XH02065		Family: Optim TEXP	
HP	20	Full Load T	89.7 lb-ft	Full Load A	19.5 A
Voltage	575V 60Hz	Locked Rotor T	210.0 %	Locked Rotor A	116.0 A
RPM	1200	Pull Up T	175.0 %	Break Down T	220.0 %

