

Technical Documentation

**XC00165C**  
**Optim TEXP | AEHHXF**

Date: May 28, 2018

### Technical Data Sheet

Motor Type: AEHHXF

Catalogue No: XC00165C

#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
1	6	1145	145TC	575	60	3
Enclosure	Ins. Class	Service Factor	Time Rating	NEMA Design	Rated Amb.	Rated Altitude
TEXP	F	1.15	Continuous	B	-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.					
82.5	80.0	82.0	79.5	66.0	57.0	45.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
4.6	250.0	235.0	305.0	0.9	1.4	12
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	
N	0.1	15.0	79.0	60.0	42.0	50.0

#### 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
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

**Nameplate Drawing**

# Optim TEXP

TYPE	AEHHXF	CAT. NO.	XC00165C		
OUTPUT	1 HP 0.746 kW	FRAME	145TC	TEXP	
R.P.M.	1145	POLE	6	INS.	F
VOLTS	575	PHASE	3	Hz	60
AMPS	1.4	CODE	N	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 82.5		MIN. EFF. 80.0	
BEARINGS	6205ZZ / 6205ZZ			RATING Cont.	
SER. NO.	TBD	DESIGN	B	WT. 70 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	12-60Hz	60-90Hz	1.0 Only	

**Connection Diagram**

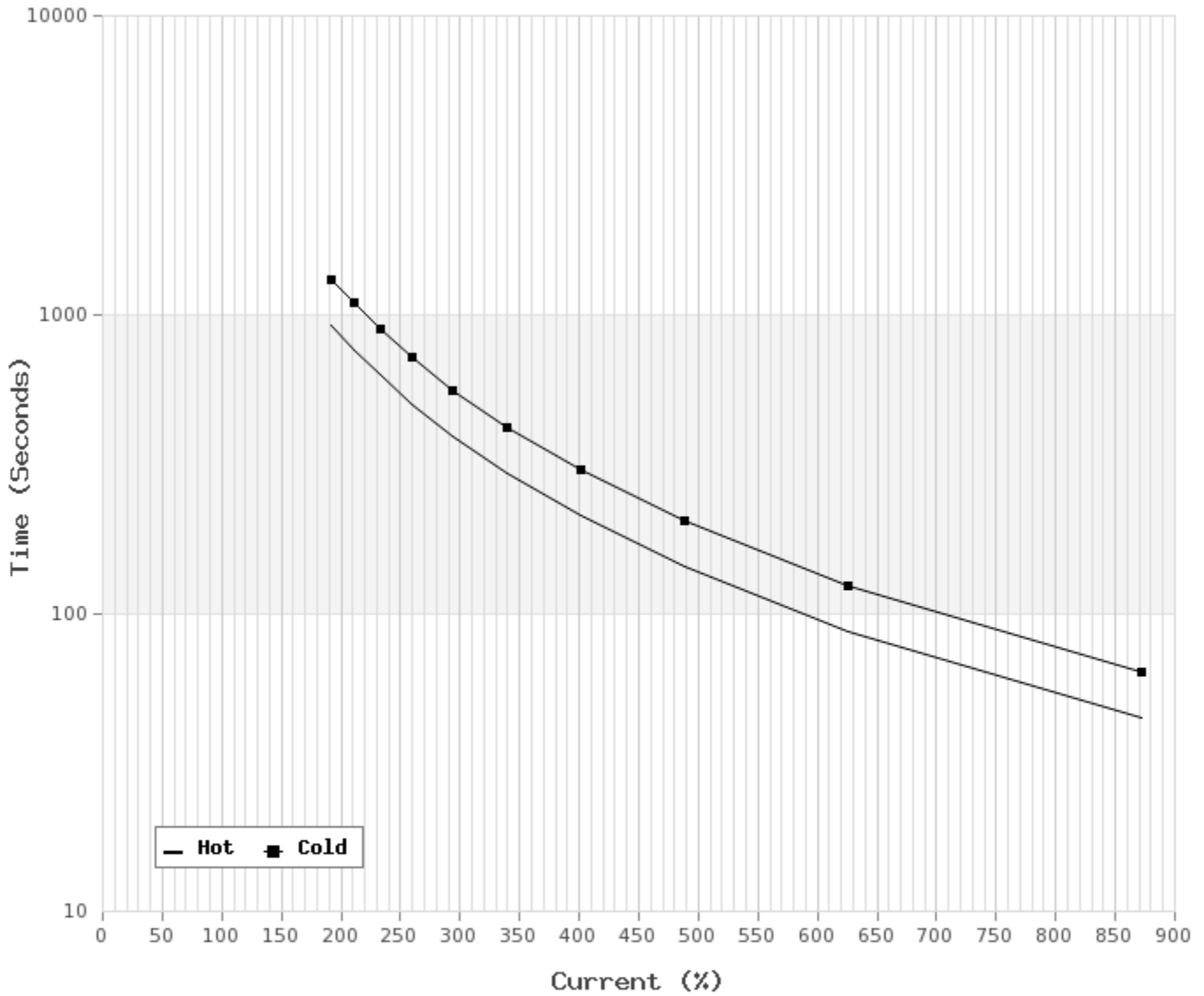


3 LEAD		SINGLE VOLTAGE			WYE
VOLTAGE	CONN.	L1	L2	L3	
-	WYE	1	2	3	

WD\_3Y

**Thermal Limit Curves**

Motor Type: AEHHXF		Catalogue No: XC00165C		Family: Optim TEXP	
HP	1	Safe Stall Time		Full Load A	0.0 / 1.4 A
Voltage	0 / 575V 60Hz	Hot	42.0 s	Locked Rotor A	870 %
RPM	1200	Cold	60.0 s	Locked Rotor A	0.0 / 12 A



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

Motor Type: AEHHXF		Catalogue No: XC00165C		Family: Optim TEXP	
HP	1	Full Load T	4.6 lb-ft	Full Load A	1.4 A
Voltage	575V 60Hz	Locked Rotor T	250.0 %	Locked Rotor A	12.0 A
RPM	1200	Pull Up T	235.0 %	Break Down T	305.0 %

