

Technical Documentation

**XH07545C**  
**Optim TEXP | AEHHXF**

Date: May 28, 2018

### Technical Data Sheet

Motor Type: AEHHXF

Catalogue No: XH07545C

#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
75	4	1780	365TC	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.					
95.4	94.5	95.5	95.5	88.0	86.0	80.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
221.2	215.0	175.0	250.0	18.4	66.9	434
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	14.7	338.0	582.0	17.0	12.0	75.0

#### 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
6313	6213	1019

#### 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	AEHHXF	CAT. NO.	XH07545C		
OUTPUT	75 HP 56 kW	FRAME	365TC	TEXP	
R.P.M.	1780	POLE	4	INS.	F
VOLTS	575	PHASE	3	Hz	60
AMPS	66.9	CODE	G	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 95.4		MIN. EFF. 94.5	
BEARINGS	6313 / 6213			RATING Cont.	
SER. NO.	TBD	DESIGN	C	WT. 1019 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-90Hz	1.0 Only	

**Connection Diagram**

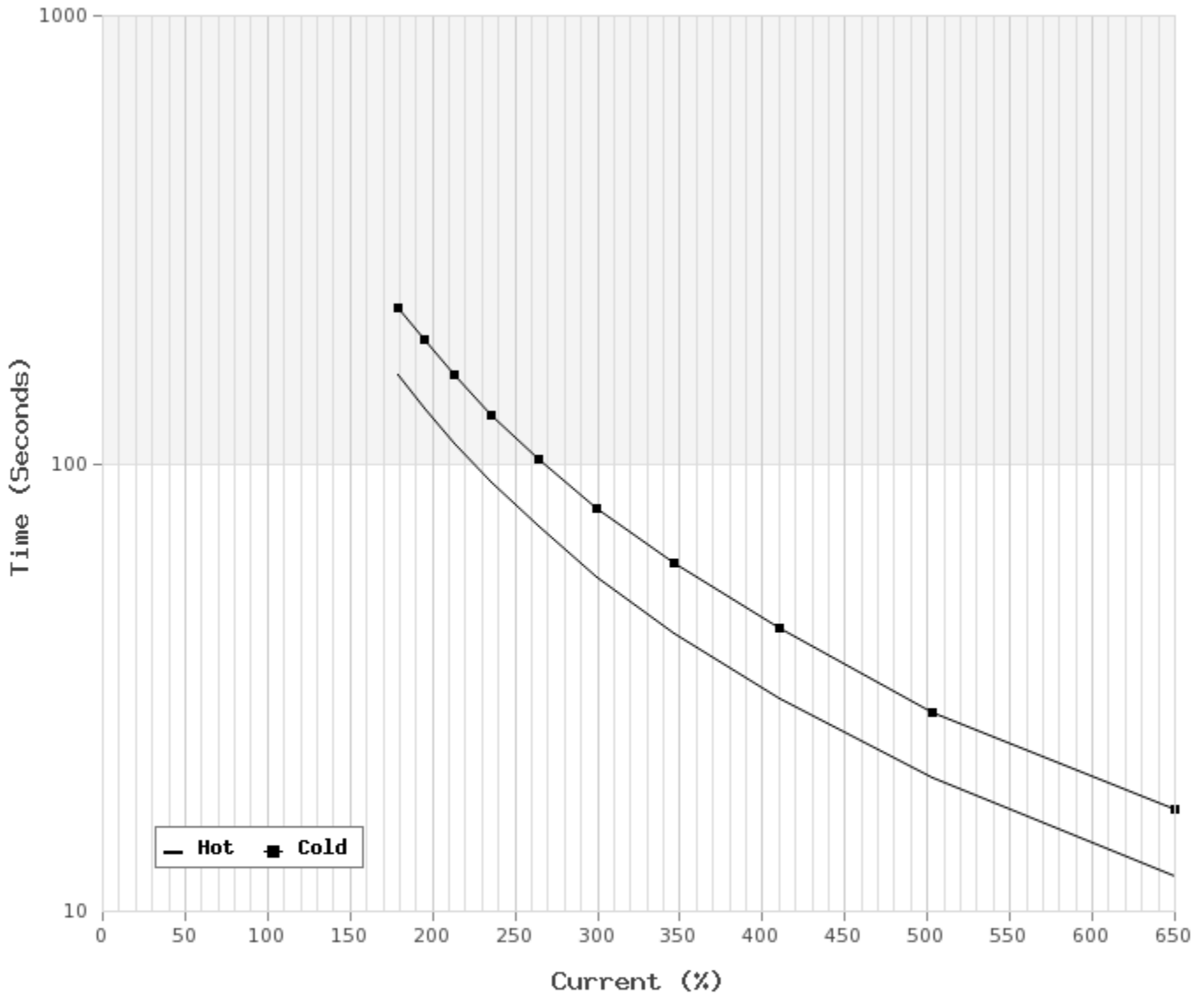


3 LEAD SINGLE VOLTAGE DELTA					
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD\_3D

**Thermal Limit Curves**

Motor Type: AEHHXF		Catalogue No: XH07545C		Family: Optim TEXP	
HP	75	Safe Stall Time		Full Load A	0.0 / 66.9 A
Voltage	0 / 575V 60Hz	Hot	12.0 s	Locked Rotor A	649 %
RPM	1800	Cold	17.0 s	Locked Rotor A	0.0 / 434 A



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

Motor Type: AEHHXF		Catalogue No: XH07545C		Family: Optim TEXP	
HP	75	Full Load T	221.2 lb-ft	Full Load A	66.9 A
Voltage	575V 60Hz	Locked Rotor T	215.0 %	Locked Rotor A	434.0 A
RPM	1800	Pull Up T	175.0 %	Break Down T	250.0 %

