

Technical Documentation

XC7/545C
Optim TEXP | AEHHXF

Date: May 28, 2018

Technical Data Sheet

Motor Type: AEHHXF

Catalogue No: XC7/545C

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
7.5	4	1760	213TC	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	92.0	91.0	86.5	83.0	75.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
22.4	280.0	230.0	310.0	2.3	7.1	51
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	
H	0.7	39.0	91.0	17.0	12.0	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
6308ZZ	6306ZZ	187

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.	XC7/545C		
OUTPUT	7.5 HP 5.6 kW	FRAME	213TC	TEXP	
R.P.M.	1760	POLE	4	INS.	F
VOLTS	575	PHASE	3	Hz	60
AMPS	7.1	CODE	H	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 91.7		MIN. EFF. 90.2	
BEARINGS	6308ZZ / 6306ZZ			RATING Cont.	
SER. NO.	TBD	DESIGN	C	WT. 187 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-90Hz	1.0 Only	

Connection Diagram

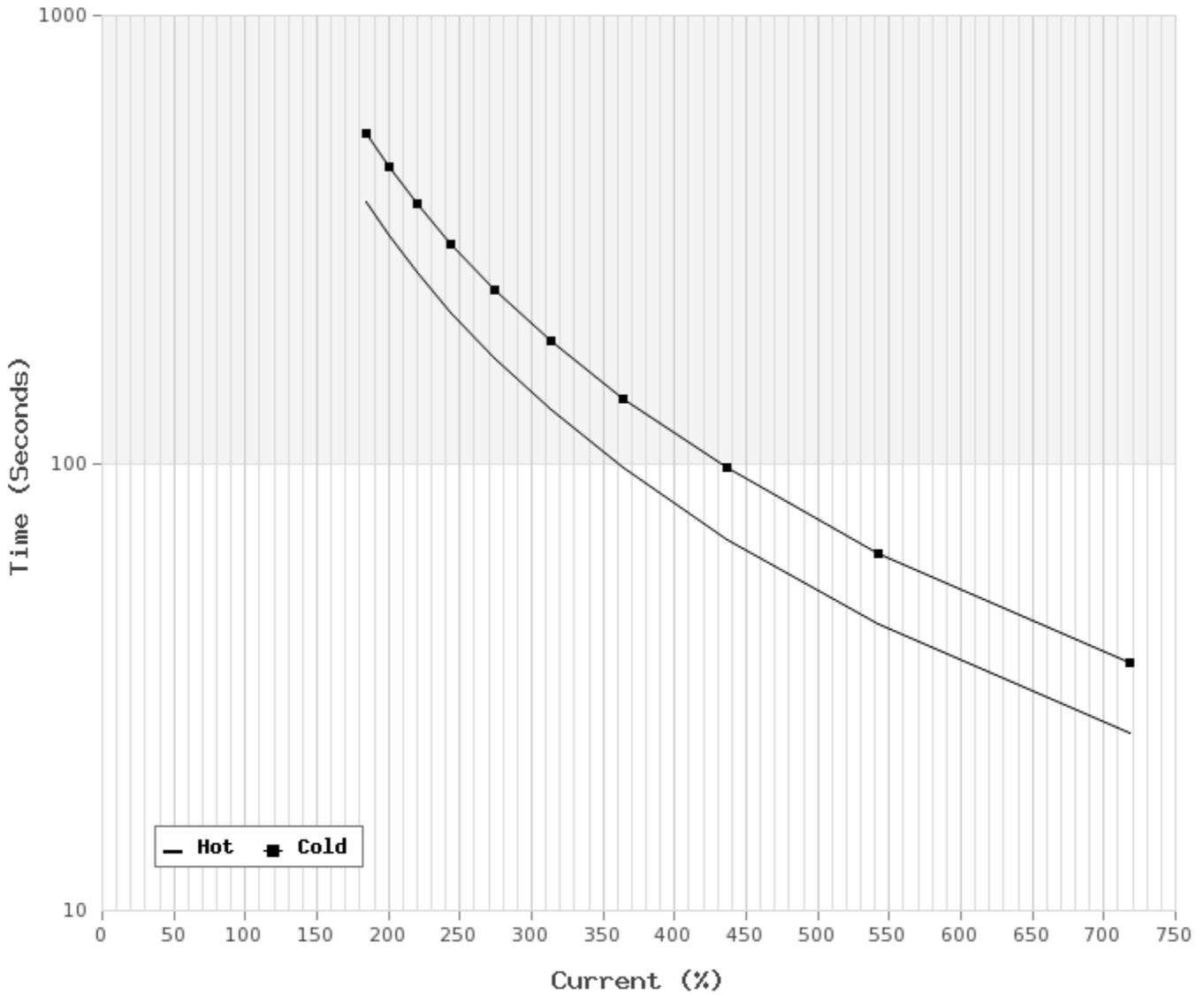


3 LEAD SINGLE VOLTAGE DELTA					
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD_3D

Thermal Limit Curves

Motor Type: AEHHXF		Catalogue No: XC7/545C		Family: Optim TEXP	
HP	7.5	Safe Stall Time		Full Load A	0.0 / 7.1 A
Voltage	0 / 575V 60Hz	Hot	12.0 s	Locked Rotor A	720 %
RPM	1800	Cold	17.0 s	Locked Rotor A	0.0 / 51 A



T-N and I-N Curves

Motor Type: AEHHXF		Catalogue No: XC7/545C		Family: Optim TEXP	
HP	7.5	Full Load T	22.4 lb-ft	Full Load A	7.1 A
Voltage	575V 60Hz	Locked Rotor T	280.0 %	Locked Rotor A	51.0 A
RPM	1800	Pull Up T	230.0 %	Break Down T	310.0 %

