

Technical Documentation

XC0058

Optim TEXP | AEHHXV

Date: May 31, 2019

	
	Date: May 31, 2019

Technical Data Sheet

Motor Type: AEHHXV	Catalogue No: XC0058
--------------------	----------------------

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
5	8	870	254T	230 / 460	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.					
86.5	84.0	86.5	85.5	72.0	64.0	51.5
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
30	190	185	240	9.3 / 4.6	15.0 / 7.5	92 / 46
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	
J	1.660	141.65	485.00	50	35	59

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

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

Additional Certifications

Other Certification

Additional Information

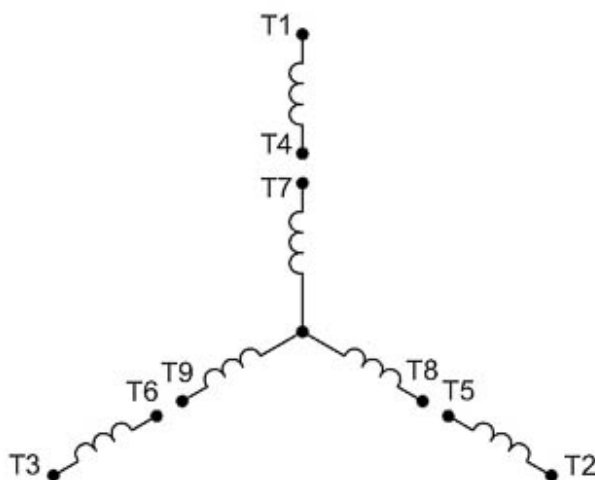
Bearings		Approx. Weight
DE	NDE	lbs
6309ZZ	6307ZZ	330

Nameplate Drawing

Optim TEXP

TYPE	AEHHXV	CAT. NO.	XC0058		
OUTPUT	5 HP 3.7 kW	FRAME	254T	TEXP	
R.P.M.	870	POLE	8	INS.	F
VOLTS	230 / 460	PHASE	3	Hz	60
AMPS	15.0 / 7.5	CODE	J	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 86.5		MIN. EFF. 84.0	
BEARINGS	6309ZZ / 6307ZZ			RATING Cont.	
SER. NO.	TBD	DESIGN	B	WT. 330 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-90Hz	1.0 Only	

Connection Diagram

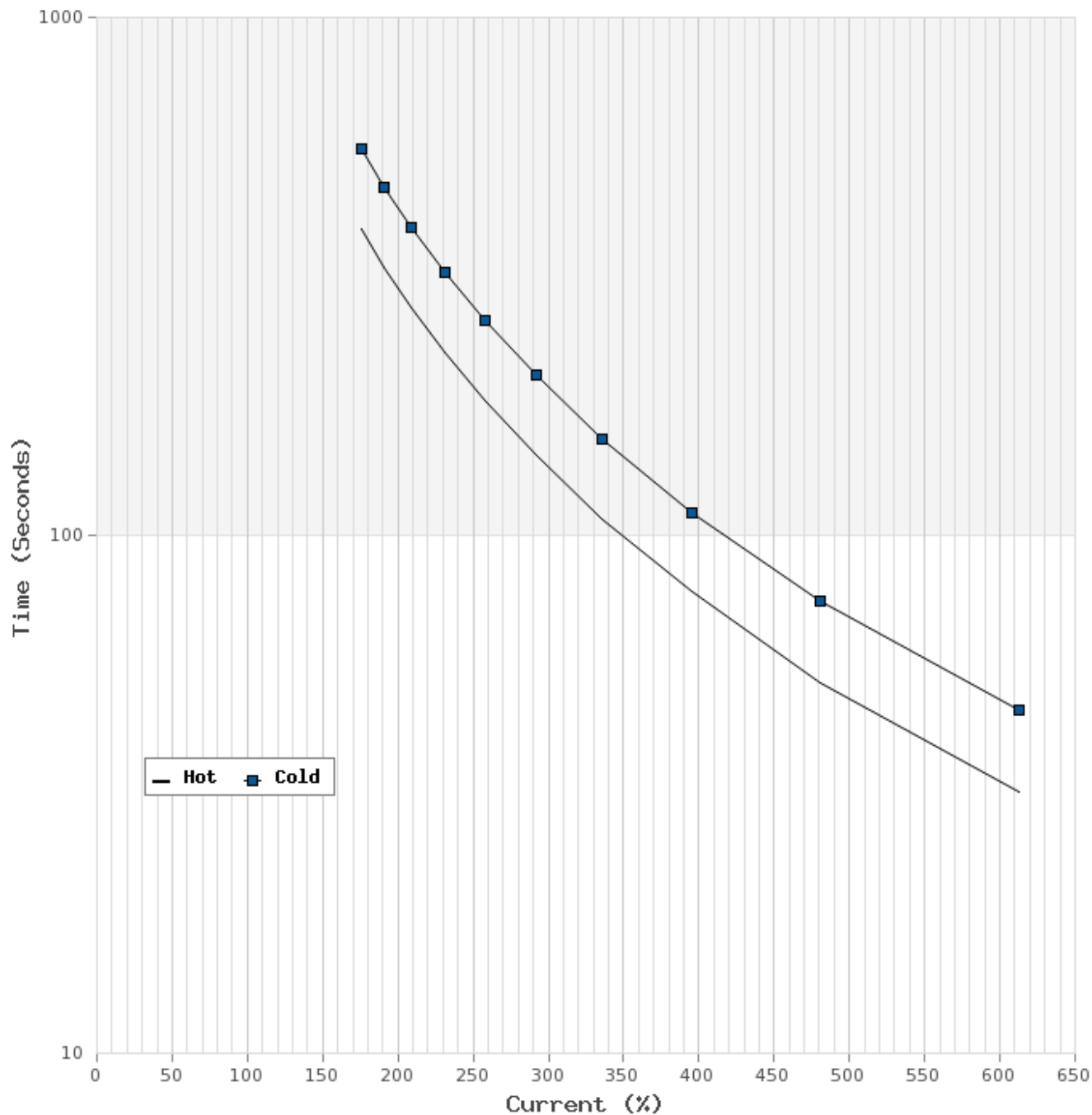


9 LEAD DUAL VOLTAGE WYE					
VOLTAGE	CONN.	L1	L2	L3	JOIN
HIGH	WYE	1	2	3	4&7,5&8,6&9
LOW	2 WYE	1,7	2,8	3,9	4&5&6

WD_9Y

Thermal Limit Curves

Motor Type: AEHHXV		Catalogue No: XC0058		Family: Optim TEXP	
HP	5	Safe Stall Time		Full Load A	15.0 / 7.5 A
Voltage	230 / 460V 60Hz	Hot	35 s	% Inrush	613 / 612 %
RPM	900	Cold	50 s	Locked Rotor A	92 / 46 A



T-N and I-N Curves

Motor Type: AEHHXV		Catalogue No: XC0058		Family: Optim TEXP	
HP	5	Full Load T	30 lb-ft	Full Load A	15.0 / 7.5 A
Voltage	230 / 460V 60Hz	Locked Rotor T	190 %	Locked Rotor A	92.0 / 46.0 A
RPM	900	Pull Up T	185 %	Break Down T	240 %

