

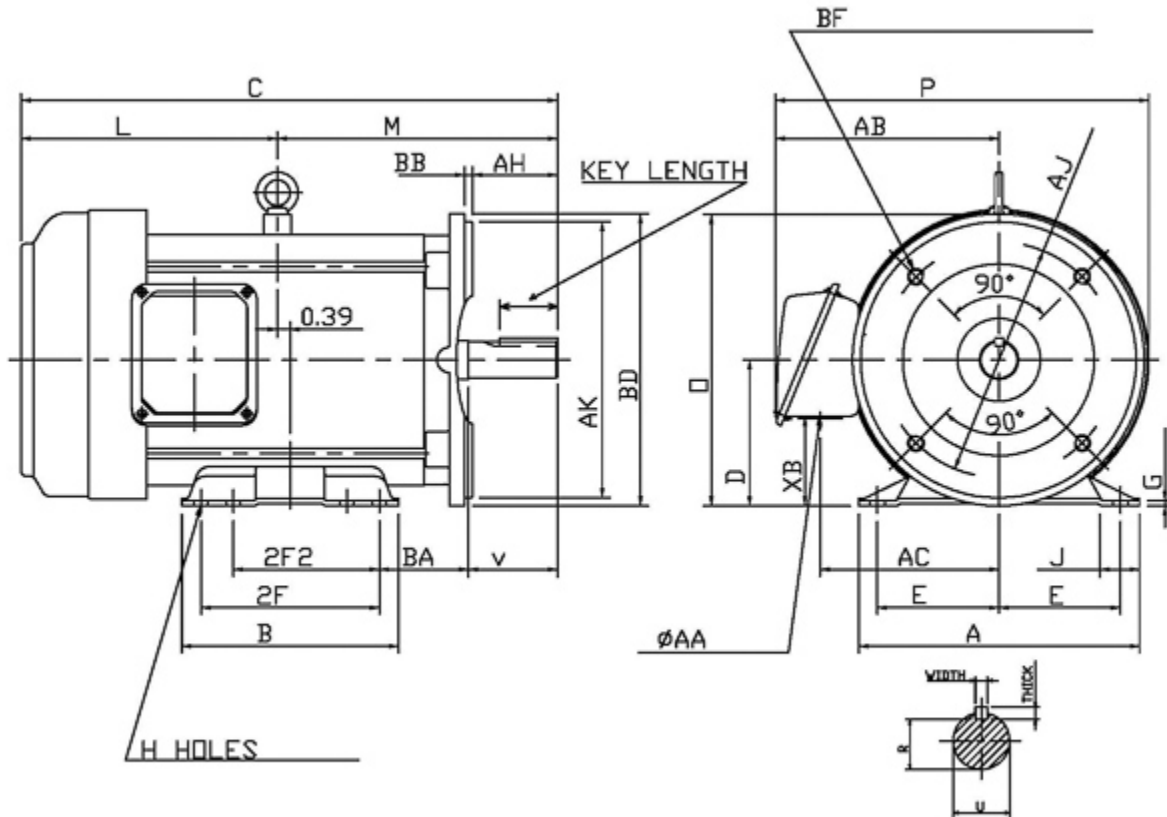
Technical Documentation

RF7/54C
Rolled Steel TEFC | AEGH

Date: July 10, 2017

Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
RF7/54C	AEGH	7.5	4	5.6	Continuous	230 / 460 V	60	1800



Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
213TC	4.25	7	5.5	0.41	3.5	9.69	8.18	20.5		5.25	
G	J	K	L	M	O	P	T	Key			Keyseat R
								Width	Thick	Length	
0.18	1.22		9.67	10.83	10.53	10.74	1.63	0.312	0.312	2.41	1.201
Terminal Housing			Aux Box			C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
1.38	8.16	6.38	2.81			0.25	3.12	8.5	9	7.25	1/2-13
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
3.38	1.375	3.3	6208ZZ	6206ZZ	117	67	F	1.15	Direct Coupling / Belt Drive	Inches	

Technical Data Sheet

Motor Type: AEGH

Catalogue No: RF7/54C

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
7.5	4	1760	213TC	230 / 460	60	3
Enclosure	Ins. Class	Service Factor	Time Rating	NEMA Design	Rated Amb.	Rated Altitude
TEFC	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.					
91.7	90.2	91.0	90.5	83.0	79.0	68.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
22.37	265	215	330	3.4 / 1.7	18.5 / 9.2	127 / 64
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	0.840	39.2	152	32	22	67

VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
6-60Hz	3-60Hz	60-120Hz	≤ 5 kHz	VPWM or CPWM	1.0 Only

Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6208ZZ	6206ZZ	117

Hazardous Locations Information

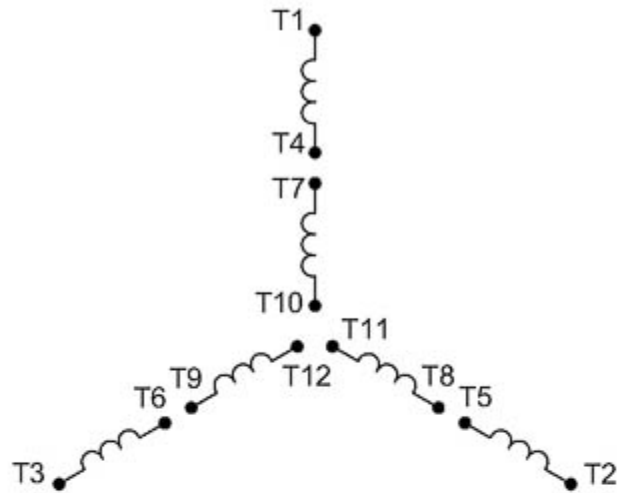
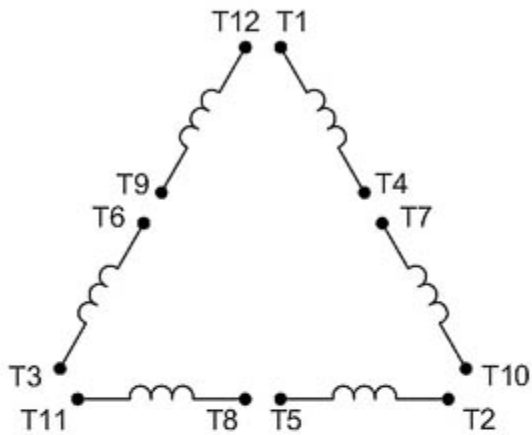
N/A	
0	
0	
Temp Code (Sinewave / VFD)	0 / 0

Nameplate Drawing

Rolled Steel TEFC

TYPE	AEGH	CAT. NO.	RF7/54C		
OUTPUT	7.5 HP 5.6 kW	FRAME	213TC	TEFC	
R.P.M.	1760	POLE	4	INS.	F
VOLTS	230 / 460	PHASE	3	Hz	60
AMPS	18.5 / 9.2	CODE	H	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 91.7		MIN. EFF. 90.2	
BEARINGS	6208ZZ / 6206ZZ			RATING Cont.	
SER. NO.	TBD	DESIGN	B	WT. 117 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-120Hz	1.0 Only	

Connection Diagram

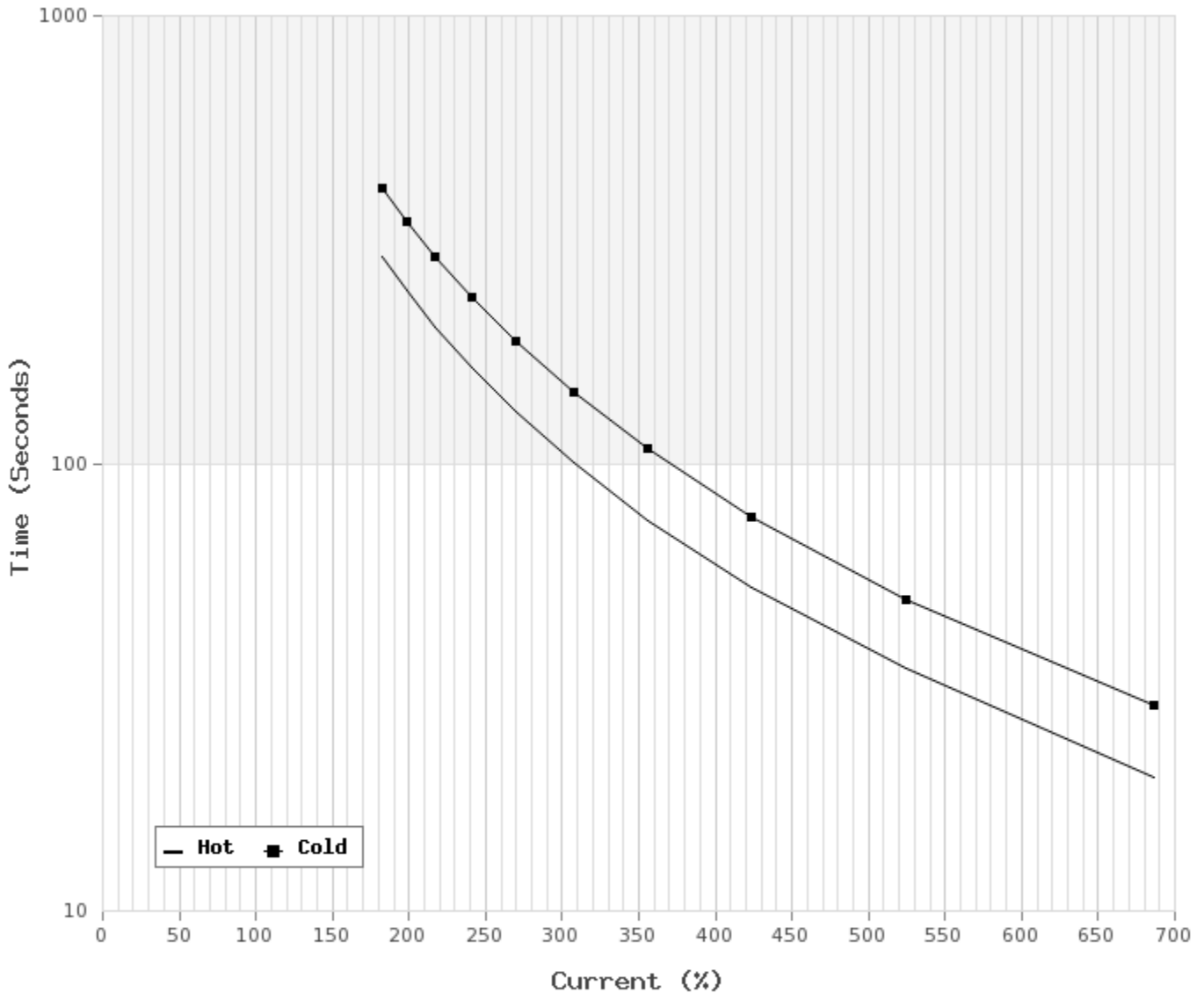


12 LEAD DUAL VOLTAGE WYE/DELTA						
VOLTAGE	CONNECTION		L1	L2	L3	JOIN
HIGH	START	WYE	1	2	3	4&7,5&8,6&9 10&11&12
	RUN	DELTA	1,12	2,10	3,11	4&7,5&8,6&9
LOW	START	2 WYE	1,7	2,8	3,9	4&5&6 10&11&12
	RUN	2 DELTA	1,6,7 12	2,4,8 10	3,5,9 11	

WD_12YD

Thermal Limit Curves

Motor Type: AEGH		Catalogue No: RF7/54C		Family: Rolled Steel TEFC	
HP	7.5	Safe Stall Time		Full Load A	18.5 / 9.2 A
Voltage	230 / 460V 60Hz	Hot	22 s	Locked Rotor A	688 / 693 %
RPM	1800	Cold	32 s	Locked Rotor A	127.0 / 64 A



T-N and I-N Curves

Motor Type: AEGH		Catalogue No: RF7/54C		Family: Rolled Steel TEFC	
HP	7.5	Full Load T	22.37 lb-ft	Full Load A	18.5 / 9.2 A
Voltage	230 / 460V 60Hz	Locked Rotor T	265 %	Locked Rotor A	127.0 / 64.0 A
RPM	1800	Pull Up T	215 %	Break Down T	330 %

