

Technical Documentation

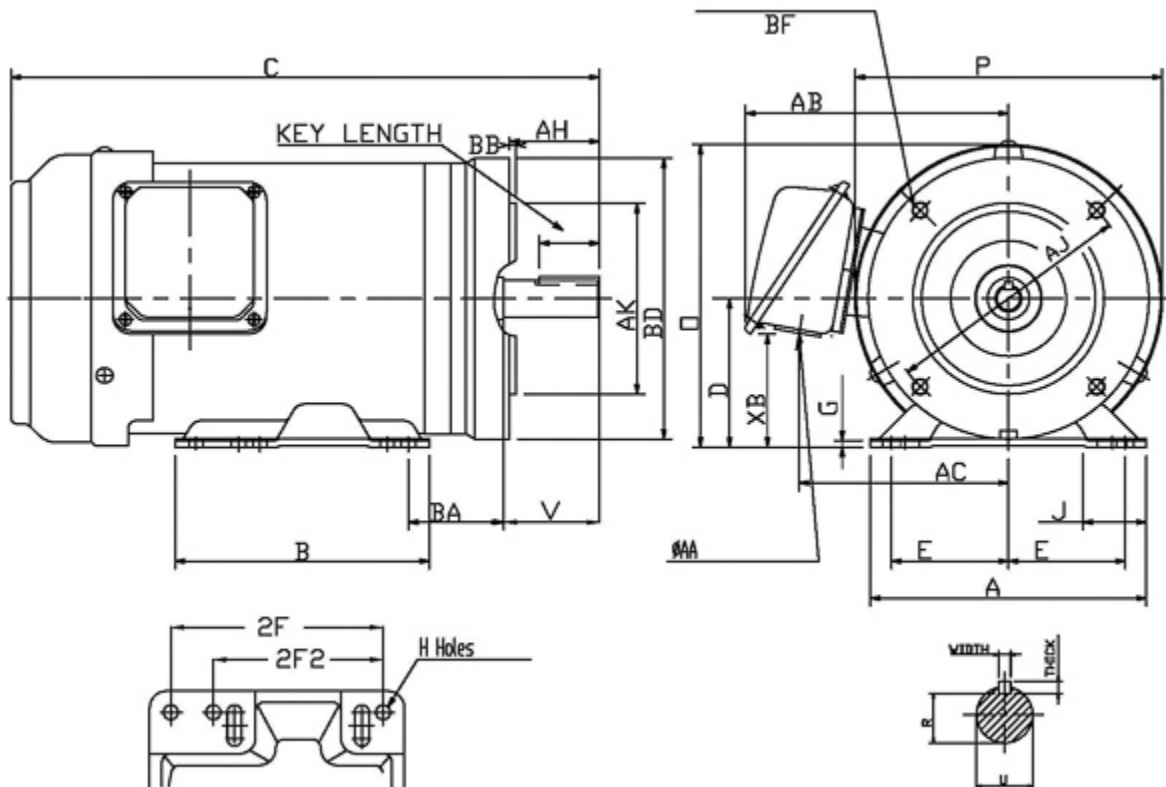
RF1/54C

Rolled Steel TEFC | AEGH

Date: December 1, 2016

Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
RF1/54C	AEGH	1.5	4	1.1	Continuous	230 / 460 V	60	1800



Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
145TC	2.75	5	4	0.34	2.25	6.5	6	13.87		3.5	
G	J	K	L	M	O	P	T	Key			Keyseat
								Width	Thick	Length	R
0.16	1.5				7.12	7.24		0.188	0.188	1.41	0.771
Terminal Housing			Aux Box			C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
1.1	6.2	4.93	2.66			0.16	2.12	4.5	6.61	5.875	3/8-16
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
2.25	0.875	2.2	6205ZZ	6204ZZ	40	59	F	1.15	Direct Coupling / Belt Drive	Inches	

Technical Data Sheet

Motor Type: AEGH

Catalogue No: RF1/54C

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
1.5	4	1740	145TC	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	<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	86.0	84.0	80.5	73.5	61.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
4.50	250	215	350	2.1 / 1.1	4.0 / 2.0	40 / 20
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	
M	0.115	8.6	41	38	27	59

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
6205ZZ	6204ZZ	40

Hazardous Locations Information

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

Connection Diagram

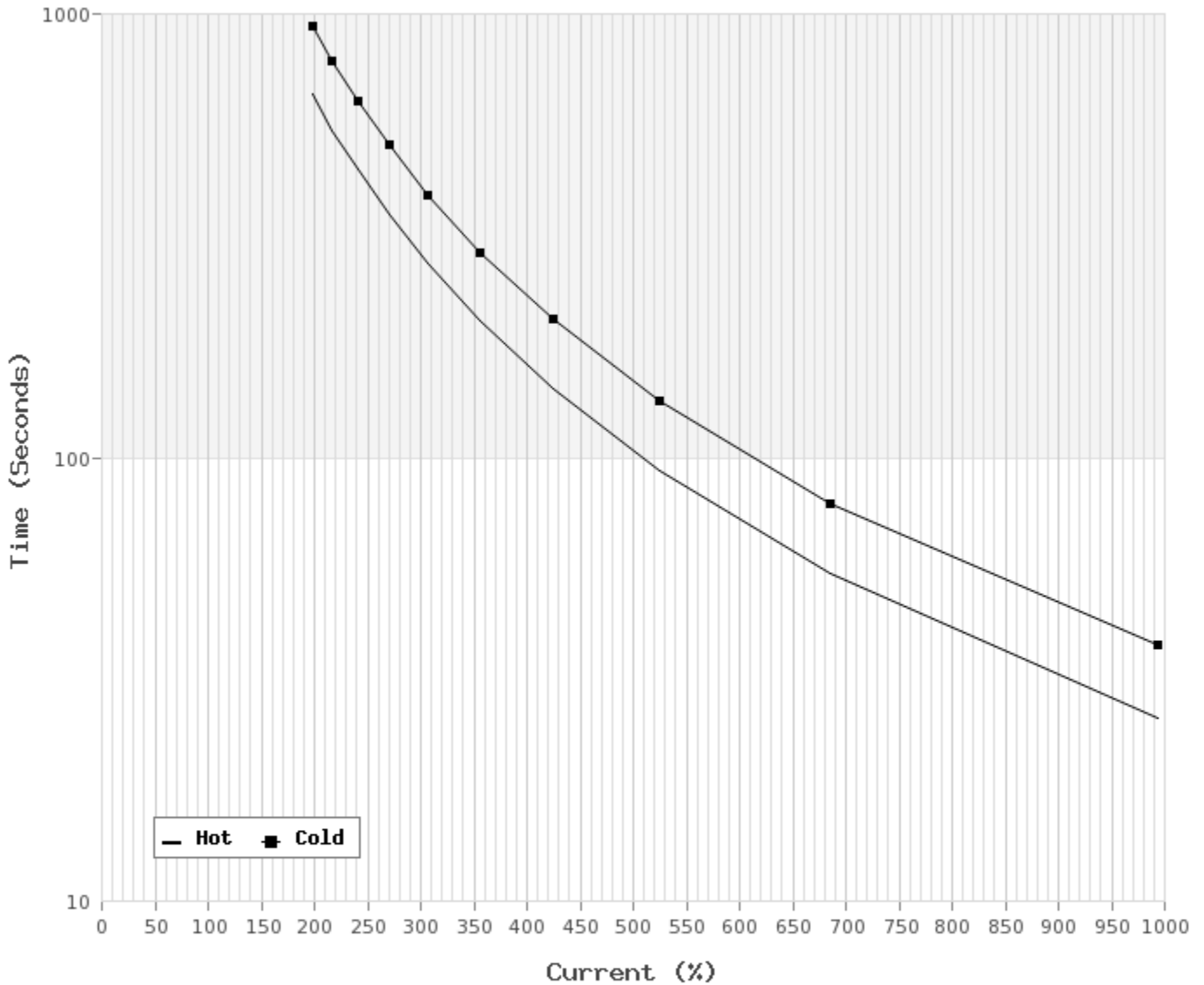


9 LEAD DUAL VOLTAGE WYE					
VOLTAGE	CONN.	L1	L2	L3	JOIN
HIGH	WYE	1	2	3	4&7,5&8,6&9
LOW	2 WYE	1,7	2,8	3,9	4&5&6

WD_9Y

Thermal Limit Curves

Motor Type: AEGH		Catalogue No: RF1/54C		Family: Rolled Steel TEFC	
HP	1.5	Safe Stall Time		Full Load A	4.0 / 2.0 A
Voltage	230 / 460V 60Hz	Hot	27 s	Locked Rotor A	993 / 990 %
RPM	1800	Cold	38 s	Locked Rotor A	40.0 / 20 A



T-N and I-N Curves

Motor Type: AEGH		Catalogue No: RF1/54C		Family: Rolled Steel TEFC	
HP	1.5	Full Load T	4.50 lb-ft	Full Load A	4.0 / 2.0 A
Voltage	230 / 460V 60Hz	Locked Rotor T	250 %	Locked Rotor A	40.0 / 20.0 A
RPM	1800	Pull Up T	215 %	Break Down T	350 %

