

Technical Documentation

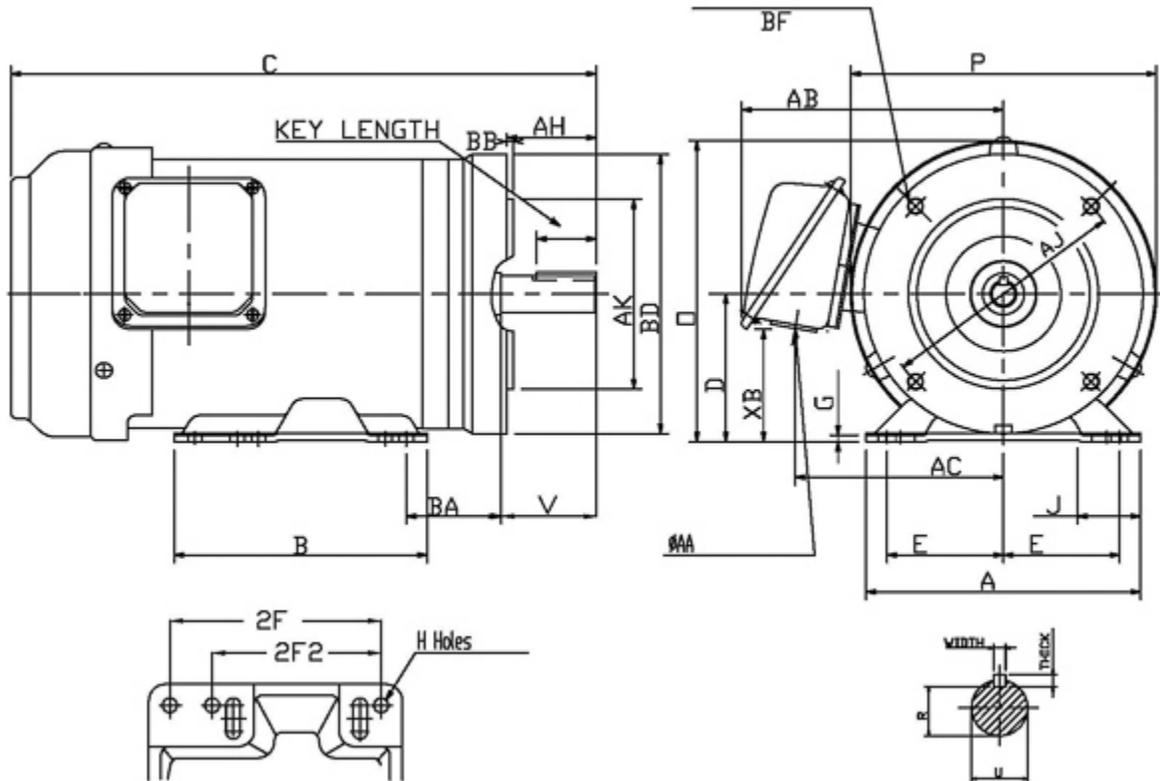
# **RF1/545C**

## **Rolled Steel TEFC | AEGH**

Date: December 1, 2016

### Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
RF1/545C	AEGH	1.5	4	1.1	Continuous	575 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
0.16	1.5				7.12	7.24		Width	Thick	Length	R
								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: RF1/545C

#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
1.5	4	1740	145TC	575	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	0.8	1.6	16
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	
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**

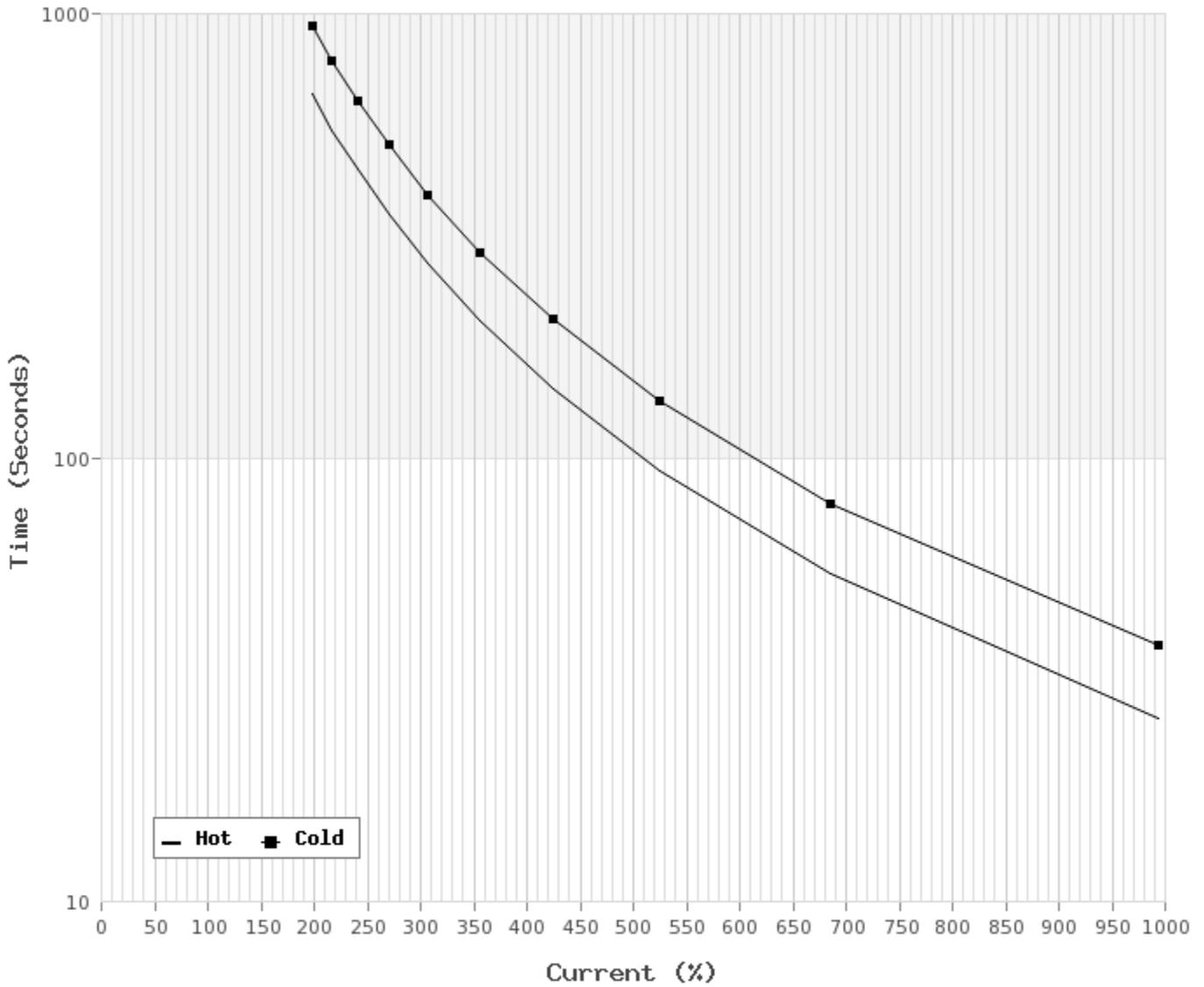


3 LEAD		SINGLE VOLTAGE			WYE
VOLTAGE	CONN.	L1	L2	L3	
-	WYE	1	2	3	

WD\_3Y

**Thermal Limit Curves**

Motor Type: AEGH		Catalogue No: RF1/545C		Family: Rolled Steel TEFC	
HP	1.5	Safe Stall Time		Full Load A	0.0 / 1.6 A
Voltage	0 / 575V 60Hz	Hot	27 s	Locked Rotor A	994 %
RPM	1800	Cold	38 s	Locked Rotor A	0.0 / 16 A



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

Motor Type: AEGH		Catalogue No: RF1/545C		Family: Rolled Steel TEFC	
HP	1.5	Full Load T	4.50 lb-ft	Full Load A	1.6 A
Voltage	575V 60Hz	Locked Rotor T	250 %	Locked Rotor A	16.0 A
RPM	1800	Pull Up T	215 %	Break Down T	350 %

