



Beaver Electrical Machinery Ltd.

Date: August 11, 2022





Technical Documentation

# **RF1/545C**

## **Rolled Steel TEFC | AEGH**

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### Technical Data Sheet

Motor Type: AEGH	Catalogue No: RF1/545C
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#### 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	<1000 m

#### 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	86	84	80.5	73.5	61
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
4.5	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

Max HP	Current (A)	Speed Range		VFD		S.F.
		Constant Torque	Variable Torque	Carrier Hz	Type	
1.5	1.61	6-60Hz	3-60Hz	3-6kHz	VPWM or CPWM	1

#### Hazardous Locations Information



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

#### Additional Certifications

Other Certification
N/A

#### Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6205ZZ	6204ZZ	40

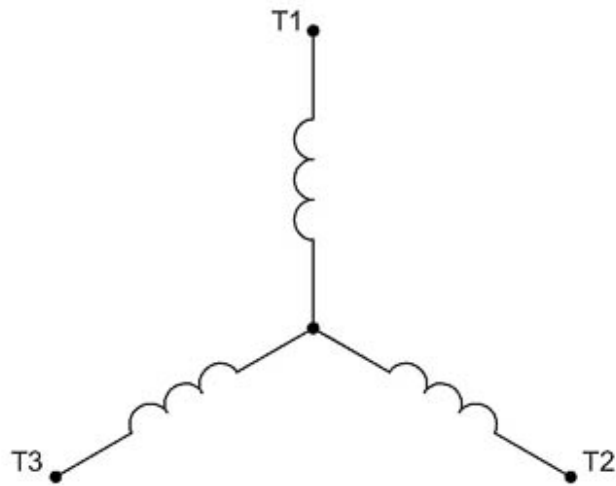
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### Nameplate Drawing

Rolled Steel TEFC					
TYPE	AEGH		CAT. NO.	RF1/545C	
OUTPUT	1.5 HP 1.12 kW		FRAME	145TC	TEFC
R.P.M.	1740		POLE	4	INS. F
VOLTS	575		PHASE	3	Hz 60
AMPS	1.6		CODE	M	S.F. 1.15
AMBIENT	40 °C		NOM. EFF. 86.5		MIN. EFF. 84
BEARINGS	6205ZZ / 6204ZZ				RATING Cont.
SER. NO.	TBD		DESIGN	B	WT. 40 LBS
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-120Hz	1	



### Connection Diagram



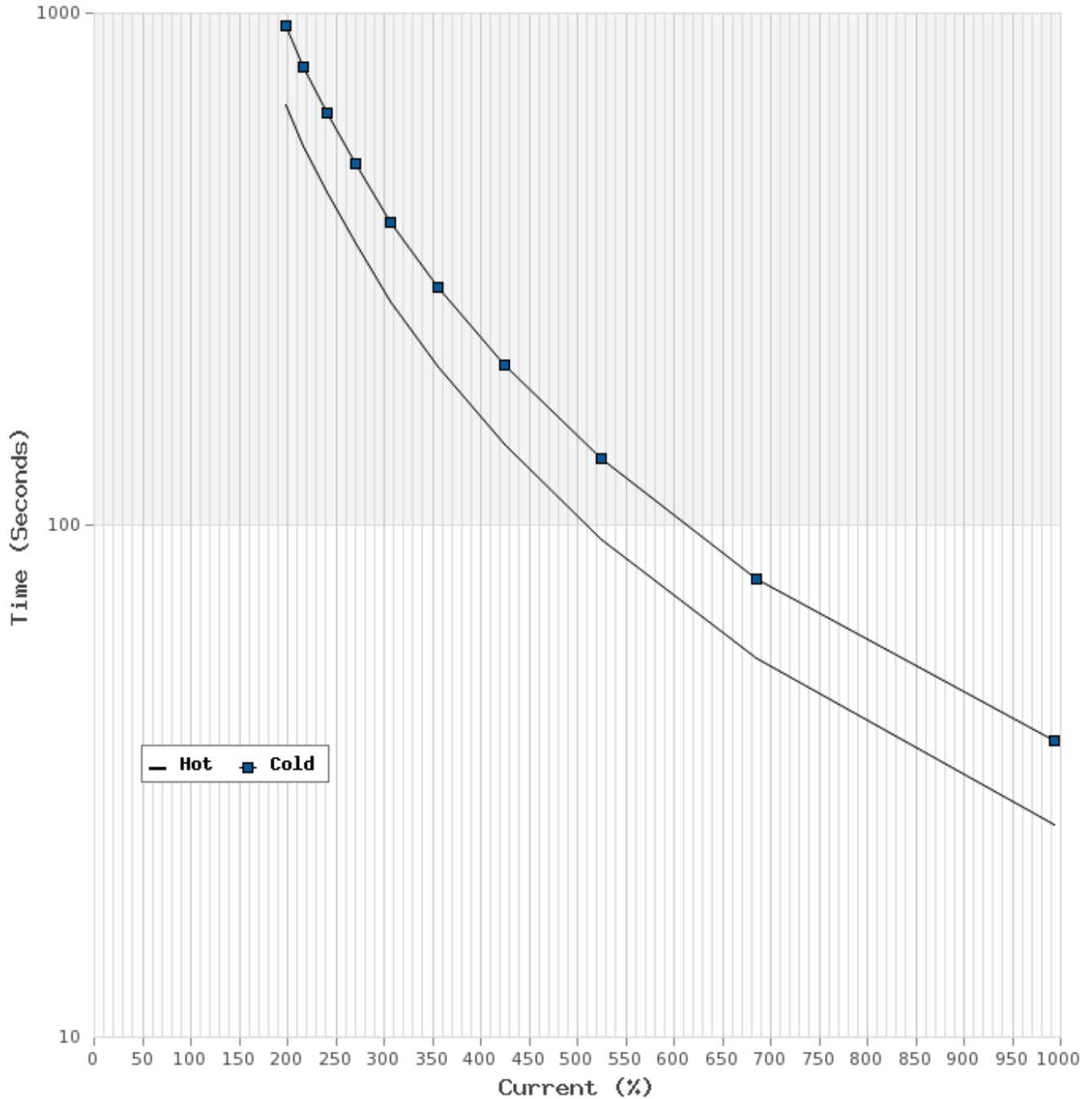
3 LEAD		SINGLE VOLTAGE			WYE
VOLTAGE	CONN.	L1	L2	L3	
-	WYE	1	2	3	

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	1.6 A
Voltage	575V 60Hz	Hot	27 s	% Inrush	994 %
RPM	1800	Cold	38 s	Locked Rotor A	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	4.5 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 %

