


Technical Documentation

PDH12585C

Optim TEFC | AEHH8N

Date: May 22, 2019

	
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Technical Data Sheet

Motor Type: AEHH8N	Catalogue No: PDH12585C
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Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
125	8	888	447T	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 °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.					
93.6	92.4	93.0	91.7	80.0	77.0	69.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
739.00	150	125	200	40.1	125.1	726
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	
G	141.000	2919.00	5838.00	23	17	78

VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
12-60Hz	3-60Hz	60-90Hz	≤ 5 kHz	VPWM or CPWM	1.0 Only

Hazardous Locations Information

CSA Certified
Class I, Div 2, Groups B, C & D Class I, Zone 2, Groups IIB+H2, IIB & IIA
Temp Code (Sinewave / VFD)
T3 / T3

Additional Certifications

Other Certification
Class II, Div 2, Groups F & G

Additional Information

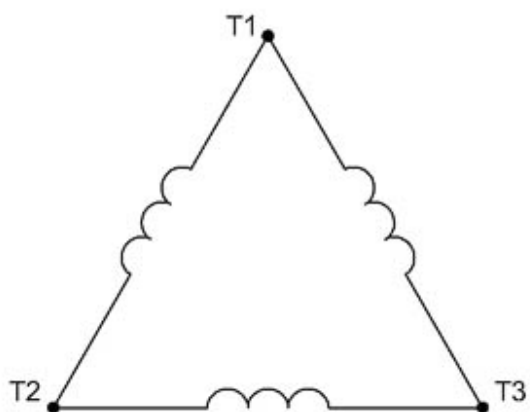
Bearings		Approx. Weight
DE	NDE	lbs
6320	6316	2068

Nameplate Drawing

Optim TEFC

TYPE	AEHH8N	CAT. NO.	PDH12585C		
OUTPUT	125 HP 93 kW	FRAME	447T	TEFC	
R.P.M.	888	POLE	8	INS.	F
VOLTS	575	PHASE	3	Hz	60
AMPS	125.1	CODE	G	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 93.6		MIN. EFF. 92.4	
BEARINGS	6320 / 6316			RATING Cont.	
SER. NO.	TBD	DESIGN	B	WT. 2068 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	12-60Hz	60-90Hz	1.0 Only	

Connection Diagram

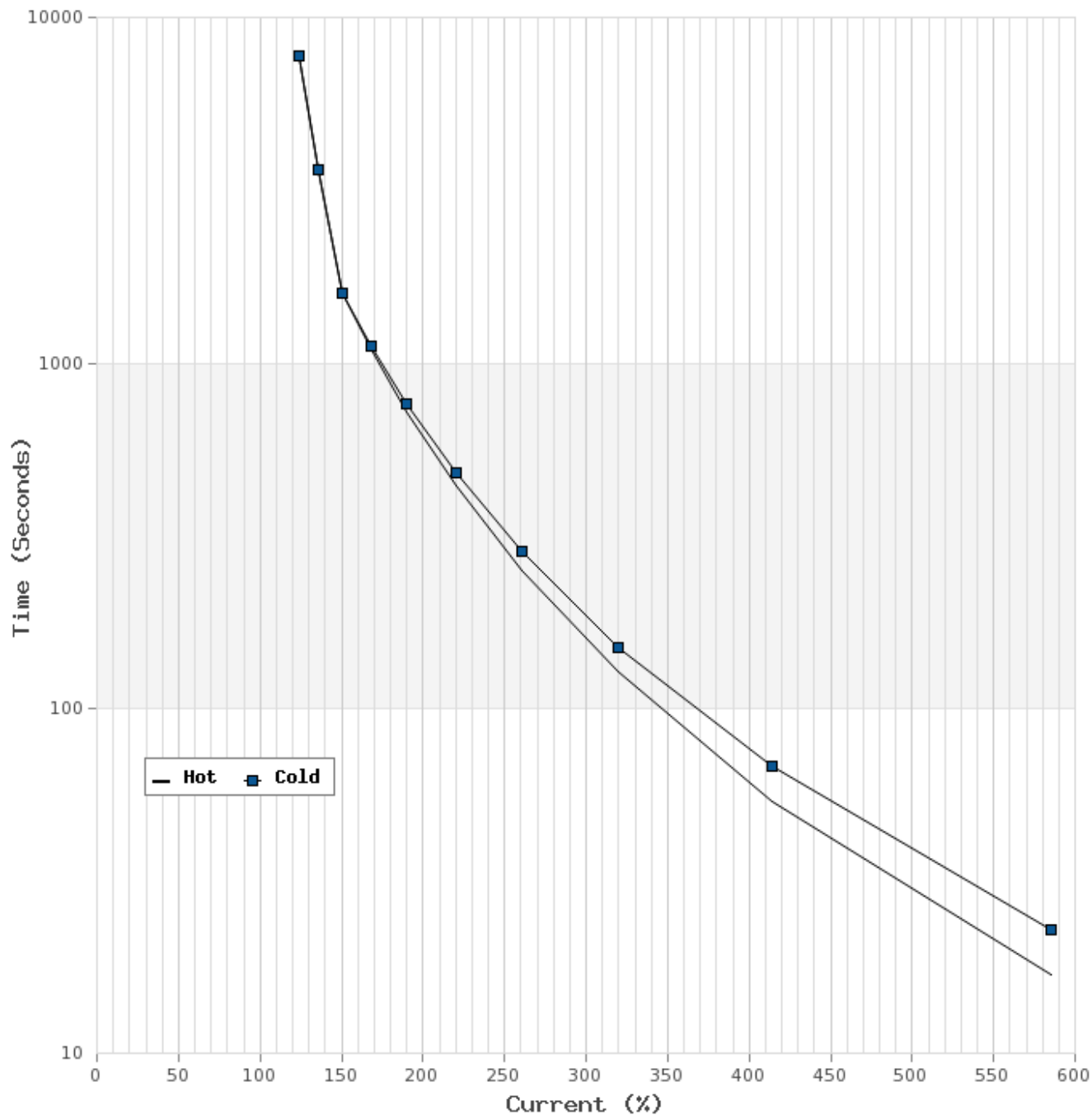


3 LEAD		SINGLE VOLTAGE			DELTA
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD_3D

Thermal Limit Curves

Motor Type: AEHH8N		Catalogue No: PDH12585C		Family: Optim TEFC	
HP	125	Safe Stall Time		Full Load A	125.1 A
Voltage	575V 60Hz	Hot	17 s	% Inrush	581 %
RPM	900	Cold	23 s	Locked Rotor A	726 A



T-N and I-N Curves

Motor Type: AEHH8N		Catalogue No: PDH12585C		Family: Optim TEFC	
HP	125	Full Load T	739.00 lb-ft	Full Load A	125.1 A
Voltage	575V 60Hz	Locked Rotor T	150 %	Locked Rotor A	726.0 A
RPM	900	Pull Up T	125 %	Break Down T	200 %

