

Technical Documentation

PDH1254C

Optim TEFC | AEHH8N

Date: May 22, 2019

 MOTORS (CANADA) INC.	
	Date: May 22, 2019

Technical Data Sheet

Motor Type: AEHH8N	Catalogue No: PDH1254C
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Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
125	4	1780	444T	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.					
95.4	94.5	95.0	94.1	84.0	82.0	77.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
368.00	130	100	220	75.8 / 37.9	292.1 / 146.1	1815 / 908
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	44.300	542.00	1084.00	24	17	81

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)	T3C / T3

Additional Certifications

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

Additional Information

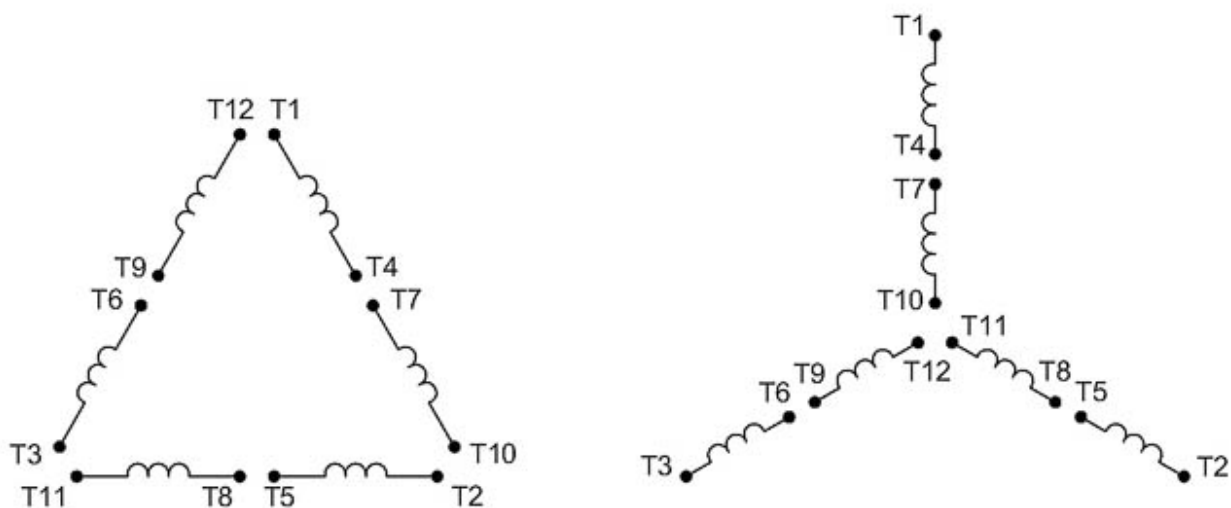
Bearings		Approx. Weight
DE	NDE	lbs
6318	6316	1716

Nameplate Drawing

Optim TEFC

TYPE	AEHH8N	CAT. NO.	PDH1254C		
OUTPUT	125 HP 93 kW	FRAME	444T	TEFC	
R.P.M.	1780	POLE	4	INS.	F
VOLTS	230 / 460	PHASE	3	Hz	60
AMPS	292.1 / 146.1	CODE	G	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 95.4		MIN. EFF. 94.5	
BEARINGS	6318 / 6316			RATING Cont.	
SER. NO.	TBD	DESIGN	B	WT. 1716 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	12-60Hz	60-90Hz	1.0 Only	

Connection Diagram

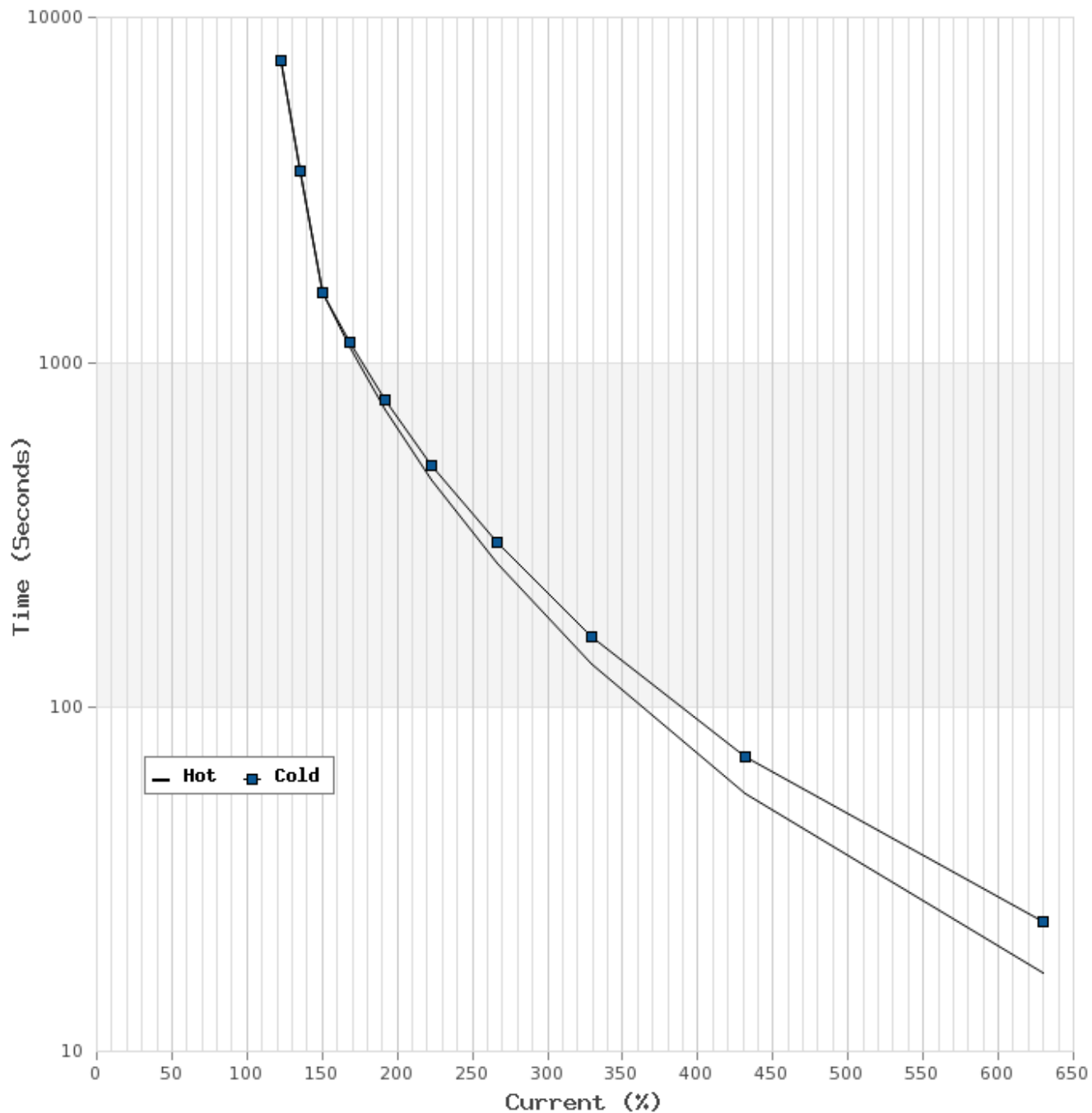


12 LEAD		DUAL VOLTAGE			WYE/DELTA	
VOLTAGE	CONNECTION	L1	L2	L3	JOIN	
HIGH	START	WYE	1	2	3	4&7,5&8,6&9 10&11&12
	RUN	DELTA	1,12	2,10	3,11	4&7,5&8,6&9
LOW	START	2 WYE	1,7	2,8	3,9	4&5&6 10&11&12
	RUN	2 DELTA	1,6,7 12	2,4,8 10	3,5,9 11	

WD_12YD

Thermal Limit Curves

Motor Type: AEHH8N		Catalogue No: PDH1254C		Family: Optim TEFC	
HP	125	Safe Stall Time		Full Load A	292.1 / 146.1 A
Voltage	230 / 460V 60Hz	Hot	17 s	% Inrush	621 / 622 %
RPM	1800	Cold	24 s	Locked Rotor A	1815 / 908 A



T-N and I-N Curves

Motor Type: AEHH8N		Catalogue No: PDH1254C		Family: Optim TEFC	
HP	125	Full Load T	368.00 lb-ft	Full Load A	292.1 / 146.1 A
Voltage	230 / 460V 60Hz	Locked Rotor T	130 %	Locked Rotor A	1815.0 / 908.0 A
RPM	1800	Pull Up T	100 %	Break Down T	220 %

