


Technical Documentation

PDH10085RC

Optim TEFC | AEHH8N

Date: May 22, 2019

	
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Technical Data Sheet

Motor Type: AEHH8N	Catalogue No: PDH10085RC
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Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
100	8	885	445T	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.					
93.0	91.7	92.4	91.0	79.0	76.5	68.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
593.00	150	125	210	33.4	102.0	580
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	72.800	2372.00	4744.00	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

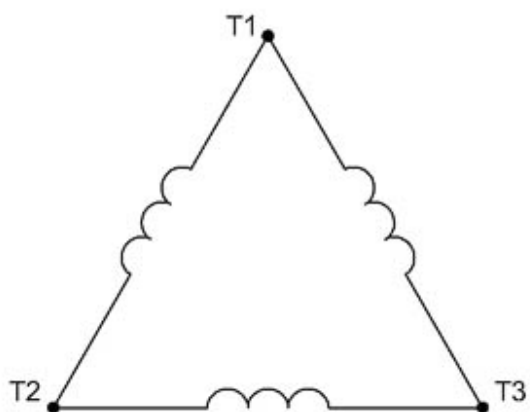
Bearings		Approx. Weight
DE	NDE	lbs
NU318	6316	1815

Nameplate Drawing

Optim TEFC

TYPE	AEHH8N	CAT. NO.	PDH10085RC		
OUTPUT	100 HP 75 kW	FRAME	445T	TEFC	
R.P.M.	885	POLE	8	INS.	F
VOLTS	575	PHASE	3	Hz	60
AMPS	102.0	CODE	G	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 93.0		MIN. EFF. 91.7	
BEARINGS	NU318 / 6316			RATING Cont.	
SER. NO.	TBD	DESIGN	B	WT. 1815 LBS	
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	12-60Hz	60-90Hz	1.0 Only	

Connection Diagram

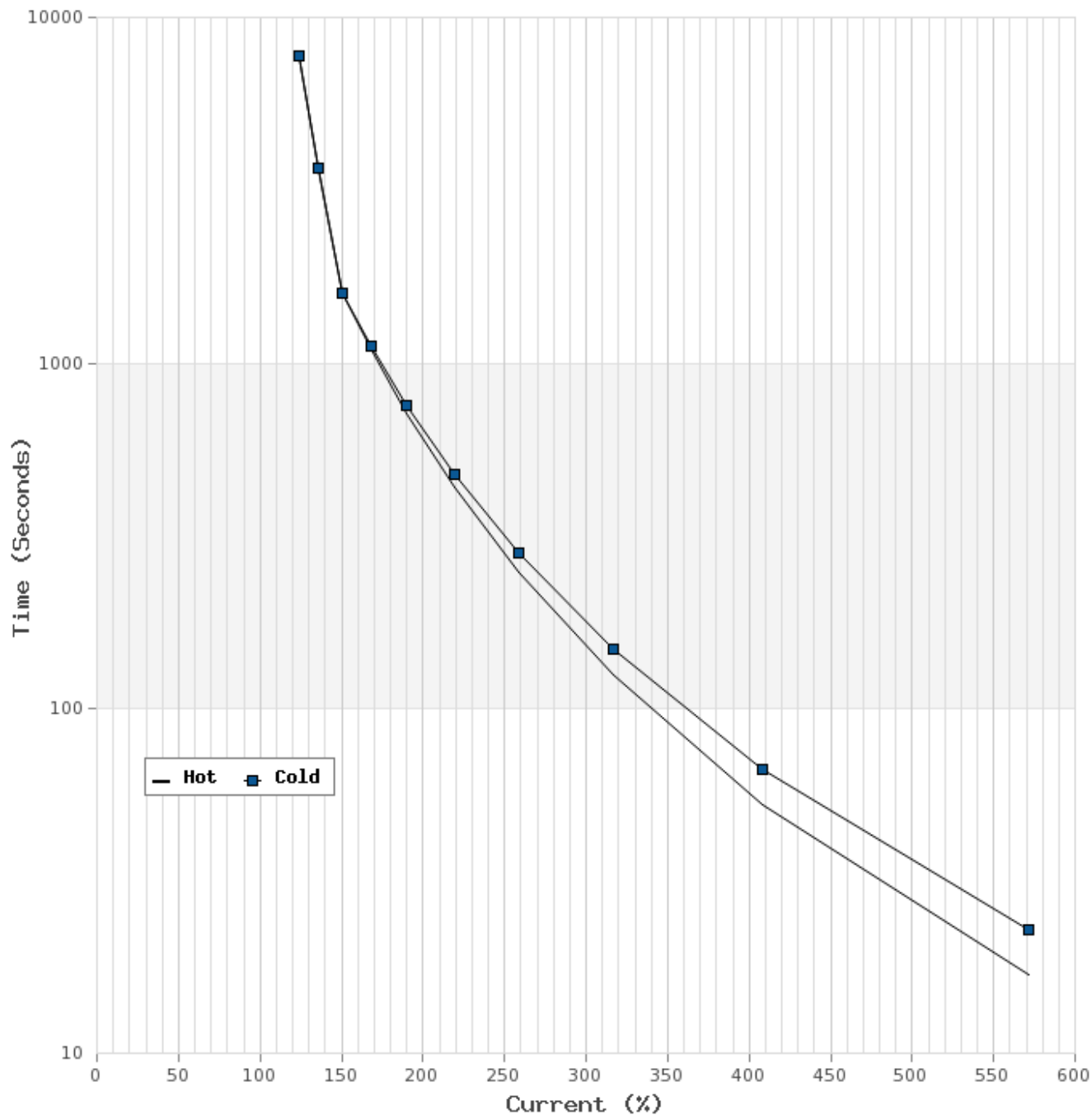


3 LEAD		SINGLE VOLTAGE			DELTA
VOLTAGE	CONN.	L1	L2	L3	
-	DELTA	1	2	3	

WD_3D

Thermal Limit Curves

Motor Type: AEHH8N		Catalogue No: PDH10085RC		Family: Optim TEFC	
HP	100	Safe Stall Time		Full Load A	102.0 A
Voltage	575V 60Hz	Hot	17 s	% Inrush	569 %
RPM	900	Cold	23 s	Locked Rotor A	580 A



T-N and I-N Curves

Motor Type: AEHH8N		Catalogue No: PDH10085RC		Family: Optim TEFC	
HP	100	Full Load T	593.00 lb-ft	Full Load A	102.0 A
Voltage	575V 60Hz	Locked Rotor T	150 %	Locked Rotor A	580.0 A
RPM	900	Pull Up T	125 %	Break Down T	210 %

