

Technical Documentation

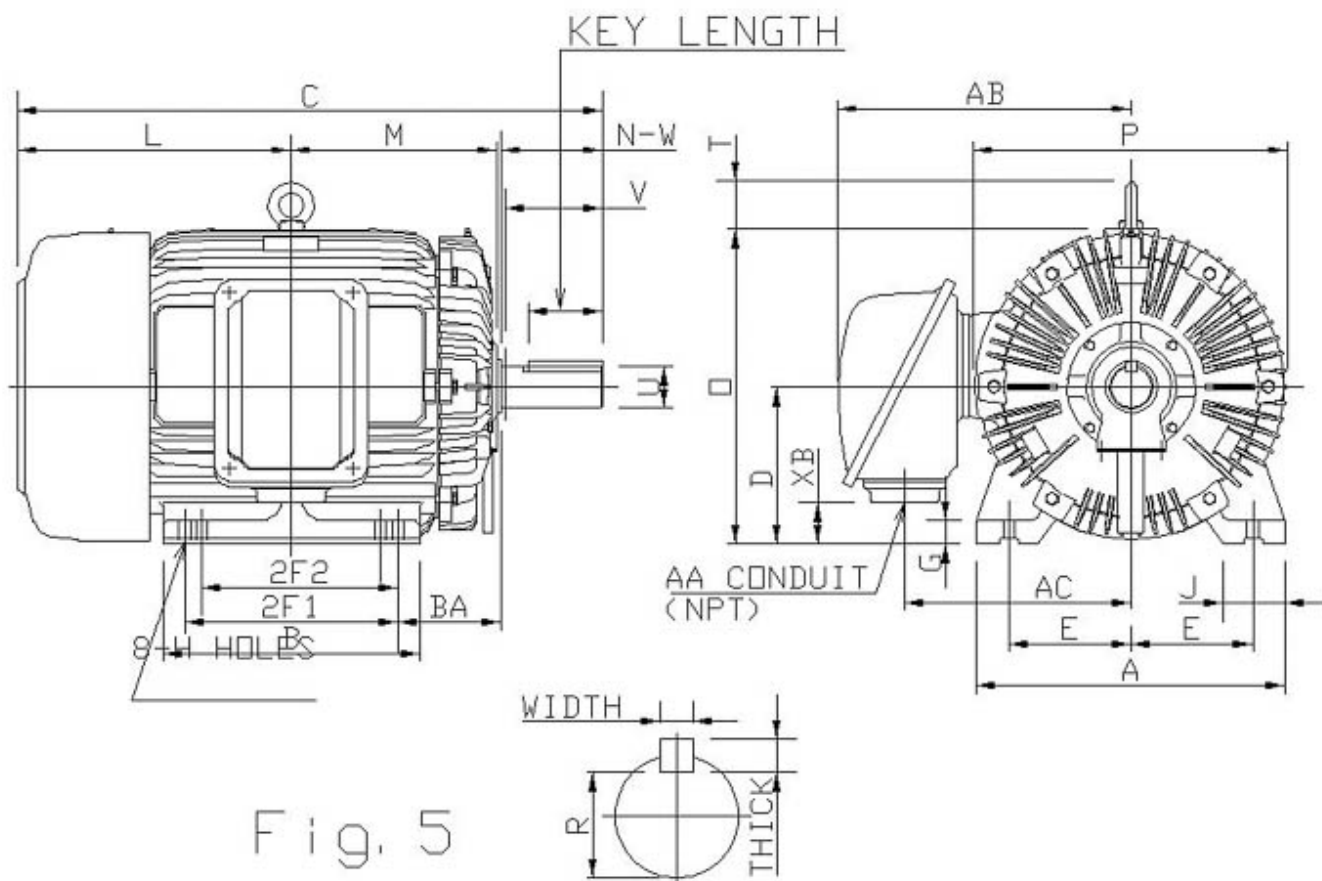
PDH0754

Optim TEFC | AEHH8N

Date: September 22, 2021

Dimensional Drawing

Catalogue	Type	HP	RPM	Voltage	Hz	Frame Size
PDH0754	AEHH8N	75	1800	230 / 460	60	365T



Mounting					A	B	C	CL1	CL2	D	G
E	2F1	2F2	H	BA							
7	12.25	11.25	0.67	5.88	17.7	14.75	33.55			9	1.3

J	K	L	M	O	P	T
3.55		15.67	11.79	18.02	18.03	2.76

Terminal Housing			
AA	AB	AC	XB
3	18.33	13.78	2.39

Shaft Extension			Key			Keyseat
N-W	U	V	Width	Thick	Length	R
5.88	2.375	5.75	0.625	0.625	4.28	2.021

Bearings		Weight Lbs	Drive Method	Dimensions
DE	NDE			
6313	6213	913	Direct Coupling / Belt Drive	Inches

	
	Date: September 22, 2021

Technical Data Sheet

Motor Type: AEHH8N	Catalogue No: PDH0754
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Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
75	4	1775	365T	230 / 460	60	3
Enclosure	Ins. Class	Service Factor	Time Rating	NEMA Design	Rated Amb.	Rated Altitude
TEFC	F	1.15	Continuous	C	-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.					
95.40	94.50	95.40	95.00	86.50	83.50	75.50
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
221.90	200	165	250	46.7 / 23.4	170.2 / 85.1	1086.00 / 543.00
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	14.670	338.00	653.83	17	12	79.0

VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
6-60Hz	3-60Hz	60-90Hz	≤ 5 kHz	VPWM or CPWM	1.0 Only

Hazardous Locations Information

CSA Certified	Other Certification
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

Additional Information

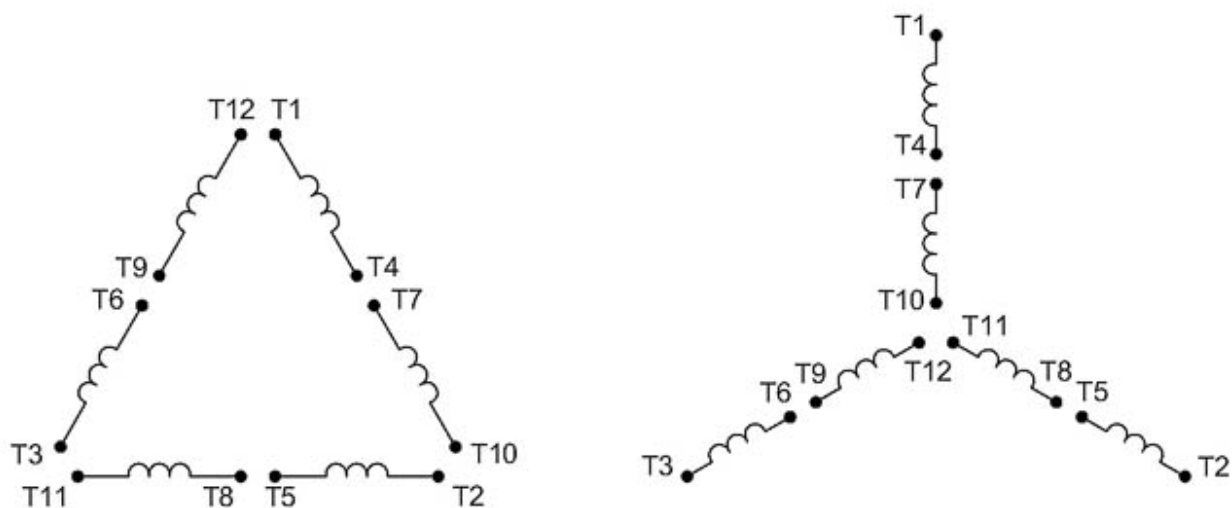
Bearings		Approx. Weight
DE	NDE	lbs
6313	6213	913

Nameplate Drawing

Optim TEFC

TYPE	AEHH8N		CAT. NO.	PDH0754		
OUTPUT	75 HP 55.95 kW		FRAME	365T	TEFC	
R.P.M.	1775		POLE	4	INS.	F
VOLTS	230 / 460		PHASE	3	Hz	60
AMPS	170.2 / 85.1		CODE	G	S.F.	1.15
AMBIENT	40 °C		NOM. EFF. 95.40		MIN. EFF. 94.50	
BEARINGS	6313 / 6213				RATING Cont.	
SER. NO.	TBD		DESIGN	C	WT. 913 LBS	
PWM VFD DUTY	VT	CT	CP		S.F.	
	3-60Hz	6-60Hz	60-90Hz		1.0 Only	

Connection Diagram

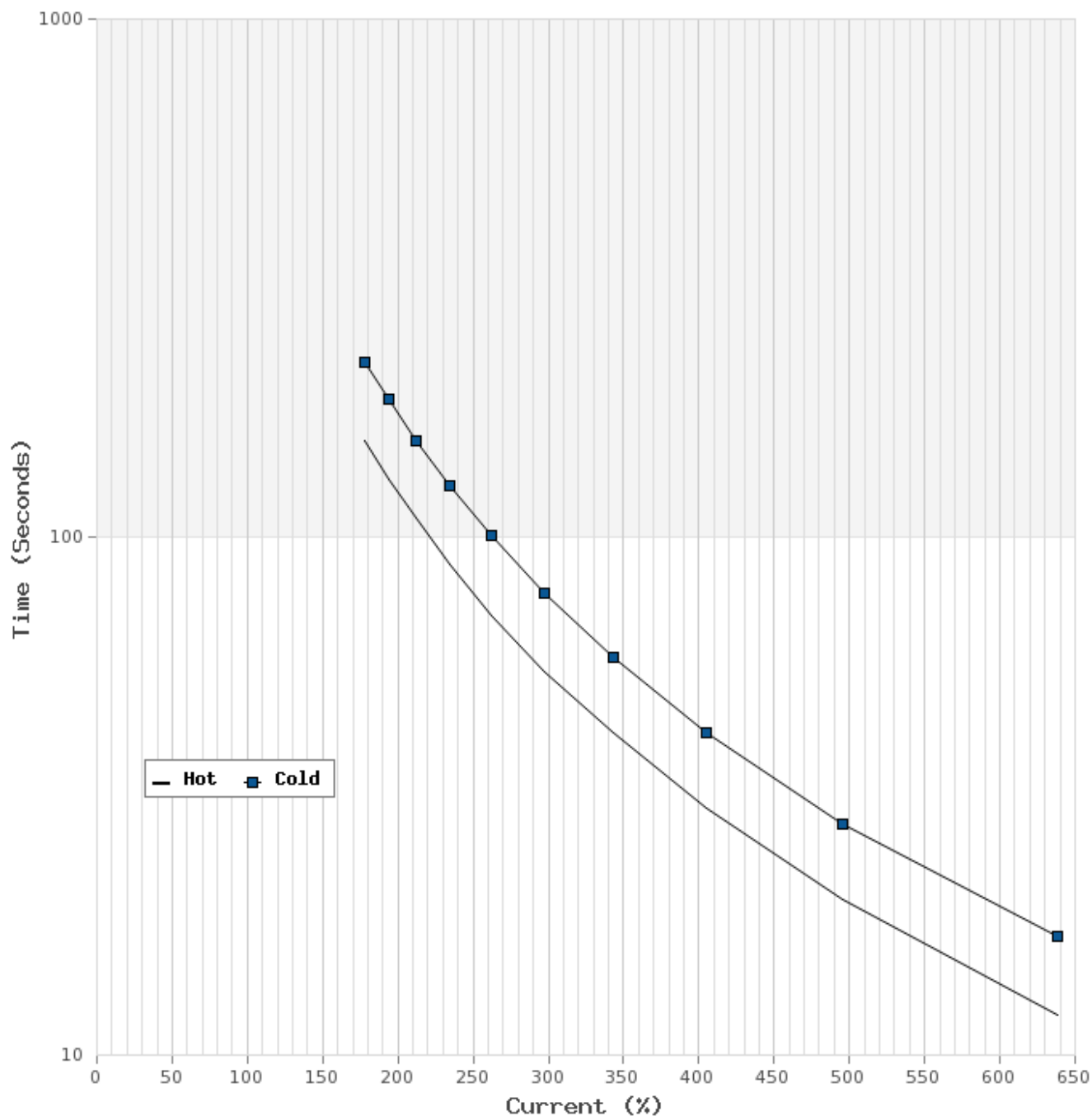


12 LEAD		DUAL VOLTAGE		WYE/DELTA		
VOLTAGE	CONNECTION		L1	L2	L3	JOIN
HIGH	START	WYE	1	2	3	4&7,5&8,6&9 10&11&12
	RUN	DELTA	1,12	2,10	3,11	4&7,5&8,6&9
LOW	START	2 WYE	1,7	2,8	3,9	4&5&6 10&11&12
	RUN	2 DELTA	1,6,7 12	2,4,8 10	3,5,9 11	

WD_12YD

Thermal Limit Curves

Motor Type: AEHH8N		Catalogue No: PDH0754		Family: Optim TEFC	
HP	75	Safe Stall Time		Full Load A	170.2 / 85.1 A
Voltage	230 / 460V 60Hz	Hot	12 s	% Inrush	638 / 638 %
RPM	1800	Cold	17 s	Locked Rotor A	1086.00 / 543.00 A



T-N and I-N Curves

Motor Type: AEHH8N		Catalogue No: PDH0754		Family: Optim TEFC	
HP	75	Full Load T	221.90 lb-ft	Full Load A	170.2 / 85.1 A
Voltage	230 / 460V 60Hz	Locked Rotor T	200 %	Locked Rotor A	1086.0 / 543.0 A
RPM	1800	Pull Up T	165 %	Break Down T	250 %

