

Technical Documentation

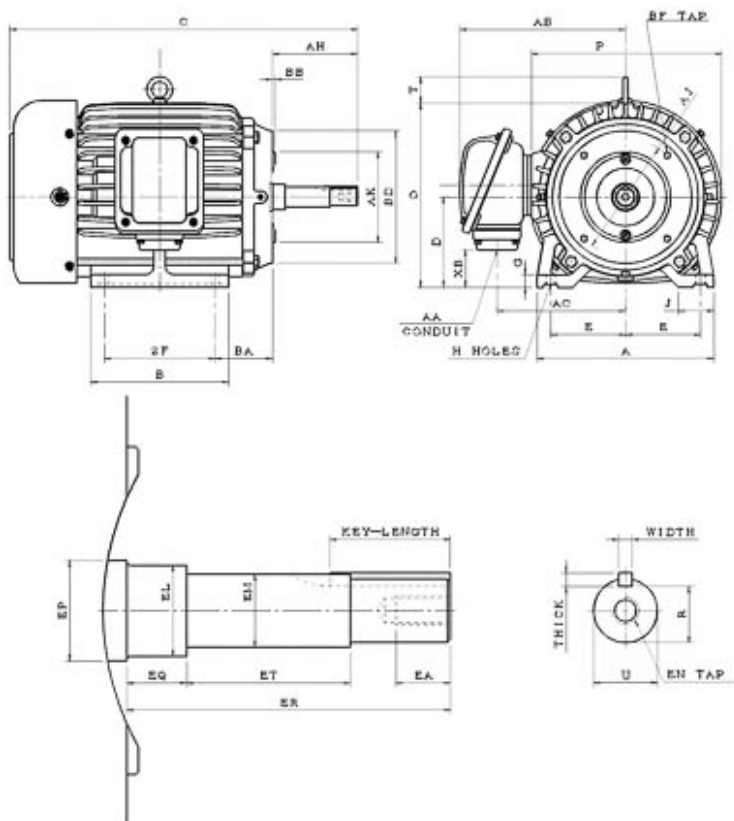
CJP0054

Optim JP | AEHH8N_JP

Date: April 15, 2021

Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
CJP0054	AEHH8N_JP	5	4	3.73	Continuous	230 / 460	60	1800



AEHH8N-JP-SMP-2

Frame Size		Mounting					A	B	C	CD	D
		E	2F	2F2	H	BA					
184JP		3.75	5.5		0.41	2.88	8.82	6.89	20.602		4.5
G	J	K	L	M	O	P	T	Key			Keyseat
								Width	Thick	Length	R
0.65	1.75				9.31	9.61	1.3	0.188	0.188	1.65	0.771
Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
3/4"	8.31	6.38	1.86			0.156	7.312	4.5	6.61	5.875	4-3/8"16UNC
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE						Inches	
	0.875		6307ZZ	6306ZZ	110	54.0	F	1.15	DirectCoupling	Inches	

	
	Date: April 15, 2021

Technical Data Sheet

Motor Type: AEHH8N_JP	Catalogue No: CJP0054
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Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
5	4	1745	184JP	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	<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.					
89.50	87.50	88.50	88.50	85.50	81.50	71.50
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
15.04	185	140	285	4.4 / 2.2	12.2 / 6.1	92.00 / 46.00
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	
J	0.422	27.00	88.00	35	25	54.0

VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
6-60Hz	3-60Hz	60-120Hz	0	VPWM or CPWM	1.0 Only

Hazardous Locations Information

Additional Certifications

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)	T3C / T3C

Additional Information

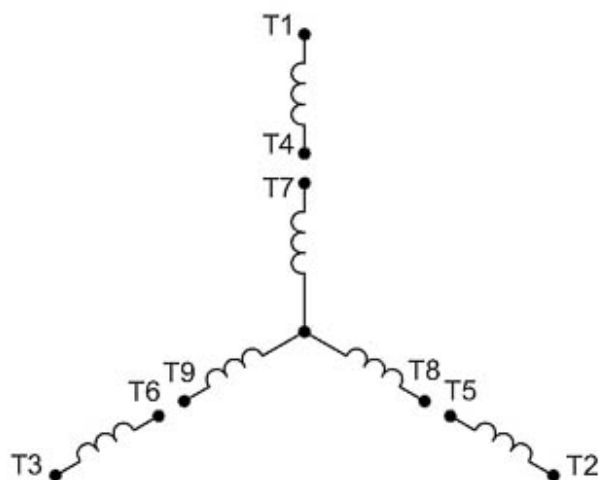
Bearings		Approx. Weight
DE	NDE	lbs
6307ZZ	6306ZZ	110

Nameplate Drawing

Optim JP

TYPE	AEHH8N JP	CAT. NO.	CJP0054		
OUTPUT	5 HP 3.73 kW	FRAME	184JP	TEFC	
R.P.M.	1745	POLE	4	INS.	F
VOLTS	230 / 460	PHASE	3	Hz	60
AMPS	12.2 / 6.1	CODE	J	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 89.50		MIN. EFF. 87.50	
BEARINGS	6307ZZ / 6306ZZ			RATING Cont.	
SER. NO.	TBD		DESIGN	B	WT. 110 LBS
PWM VFD DUTY	VT	CT	CP	S.F.	
	3-60Hz	6-60Hz	60-120Hz	1.0 Only	

Connection Diagram

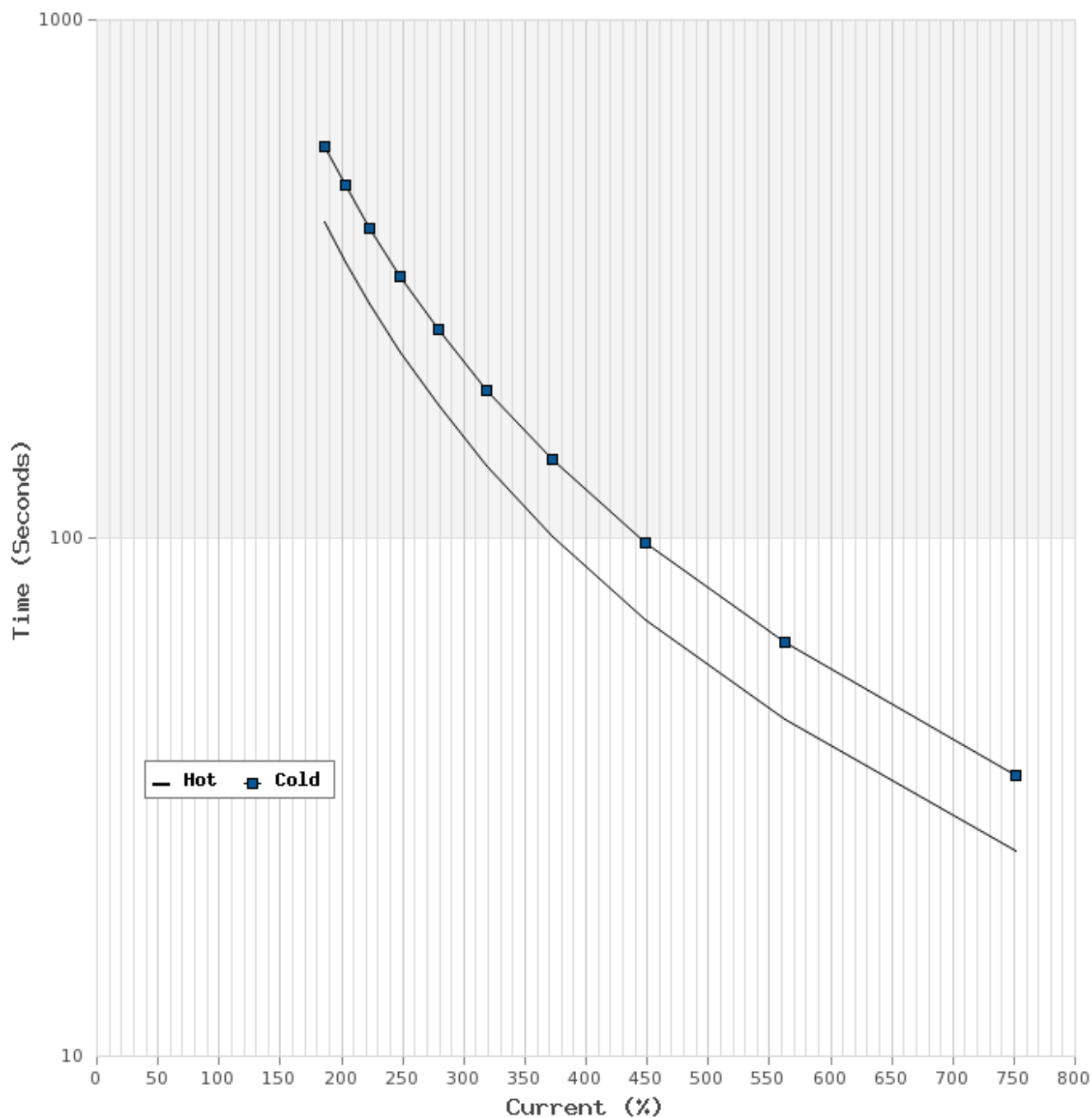


9 LEAD		DUAL VOLTAGE			WYE
VOLTAGE	CONN.	L1	L2	L3	JOIN
HIGH	WYE	1	2	3	4&7,5&8,6&9
LOW	2 WYE	1,7	2,8	3,9	4&5&6

WD_9Y

Thermal Limit Curves

Motor Type: AEHH8N JP		Catalogue No: CJP0054		Family: Optim JP	
HP	5	Safe Stall Time		Full Load A	12.2 / 6.1 A
Voltage	230 / 460V 60Hz	Hot	25 s	% Inrush	752 / 752 %
RPM	1800	Cold	35 s	Locked Rotor A	92.00 / 46.00 A



T-N and I-N Curves

Motor Type: AEHH8N_JP		Catalogue No: CJP0054		Family: Optim JP	
HP	5	Full Load T	15.04 lb-ft	Full Load A	12.2 / 6.1 A
Voltage	230 / 460V 60Hz	Locked Rotor T	185 %	Locked Rotor A	92.0 / 46.0 A
RPM	1800	Pull Up T	140 %	Break Down T	285 %

