Technical Documentation

CJP7/52

Optim JP | AEHH8N_JP

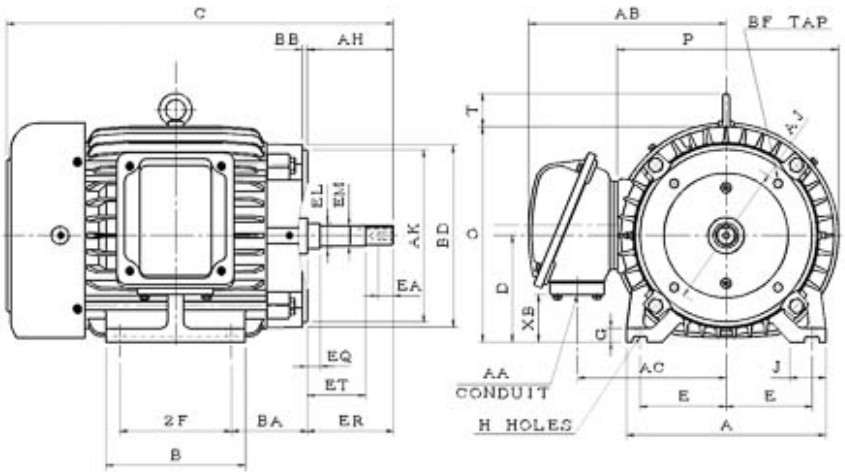
Date: April 15, 2021

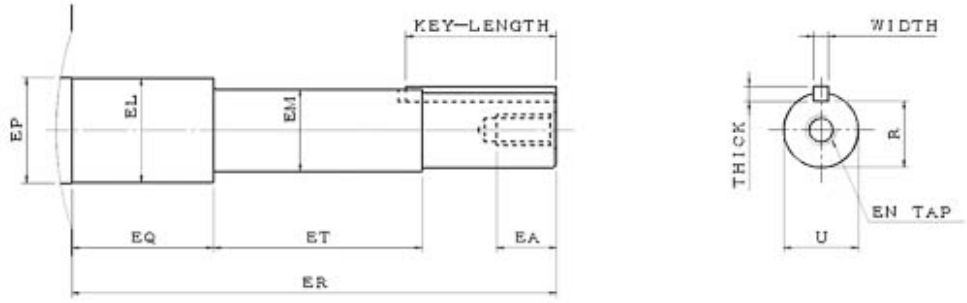
TECO Westinghouse
MOTORS (CANADA) INC.

Date: April 15, 2021

Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
CJP7/52	AEHH8N_JP	7.5	2	5.60	Continuous	230 / 460	60	3600





AEHH8N-JP-SMP-3

Frame Size	Mounting					A	B	C	CD	D
	E	2F	2F2	H	BA					
213JP	4.25	5.5		0.41	3.75	9.85	6.9	23.255		5.25

G	J	K	L	M	O	P	T	Key			Keyseat
								Width	Thick	Length	R
0.7	1.75				10.63	11.1	1.65	0.25	0.25	2.53	1.112

Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
1"	9.78	7.34	2.34			0.25	8.125	8.5	8.98	7.25	4-1/2"13UNC

Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions
N-W	U	V	DE	NDE						
	1.25		6309ZZ	6306ZZ	167	70.0	F	1.15	DirectCoupling	Inches

TECO Westinghouse MOTORS (CANADA) INC.	
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Technical Data Sheet

Motor Type: AEHH8N_JP	Catalogue No: CJP7/52

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
7.5	2	3510	213JP	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.					
91.00	89.50	91.00	90.20	89.00	87.00	80.00

Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
11.22	200	175	275	5.1 / 2.6	17.3 / 8.7	128.00 / 64.00

NEMA KVA Code	Inertia (WR^2)			Safe Stall Time (s)		Noise Level Sound Press. dB(A)
	Rotor ($lb\text{-}ft^2$)	NEMA Load ($lb\text{-}ft^2$)	Max. Allowable ($lb\text{-}ft^2$)	Cold	Hot	
H	0.448	8.30	19.00	17	12	70.0

VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
6-60Hz	3-60Hz	60-90Hz	0	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 / T3B

Additional Certifications

Other Certification

Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6309ZZ	6306ZZ	167

TECO Westinghouse MOTORS (CANADA) INC.	
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Nameplate Drawing

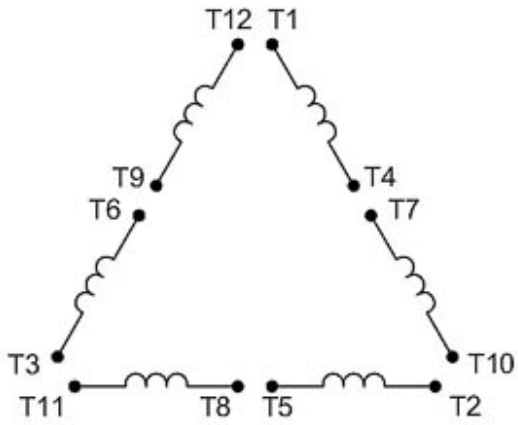
Optim JP

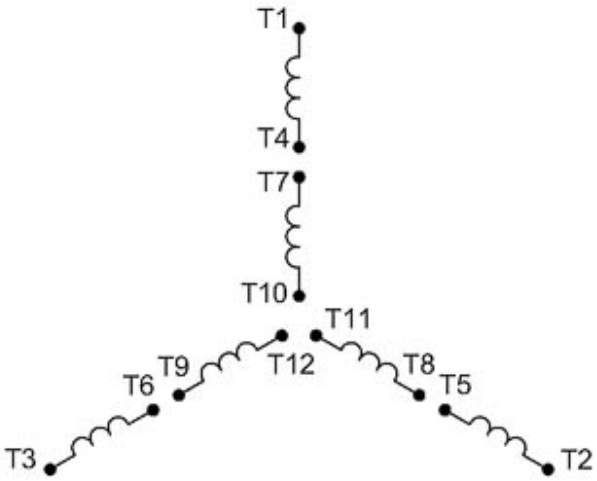
TYPE	AEHH8N_JP	CAT. NO.	CJP7/52		
OUTPUT	7.5 HP 5.60 kW	FRAME	213JP	TEFC	
R.P.M.	3510	POLE	2	INS.	F
VOLTS	230 / 460	PHASE	3	Hz	60
AMPS	17.3 / 8.7	CODE	H	S.F.	1.15
AMBIENT	40 °C	NOM. EFF. 91.00		MIN. EFF. 89.50	
BEARINGS	6309ZZ / 6306ZZ			RATING Cont.	

SER. NO.	TBD	DESIGN	B	WT. 167 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

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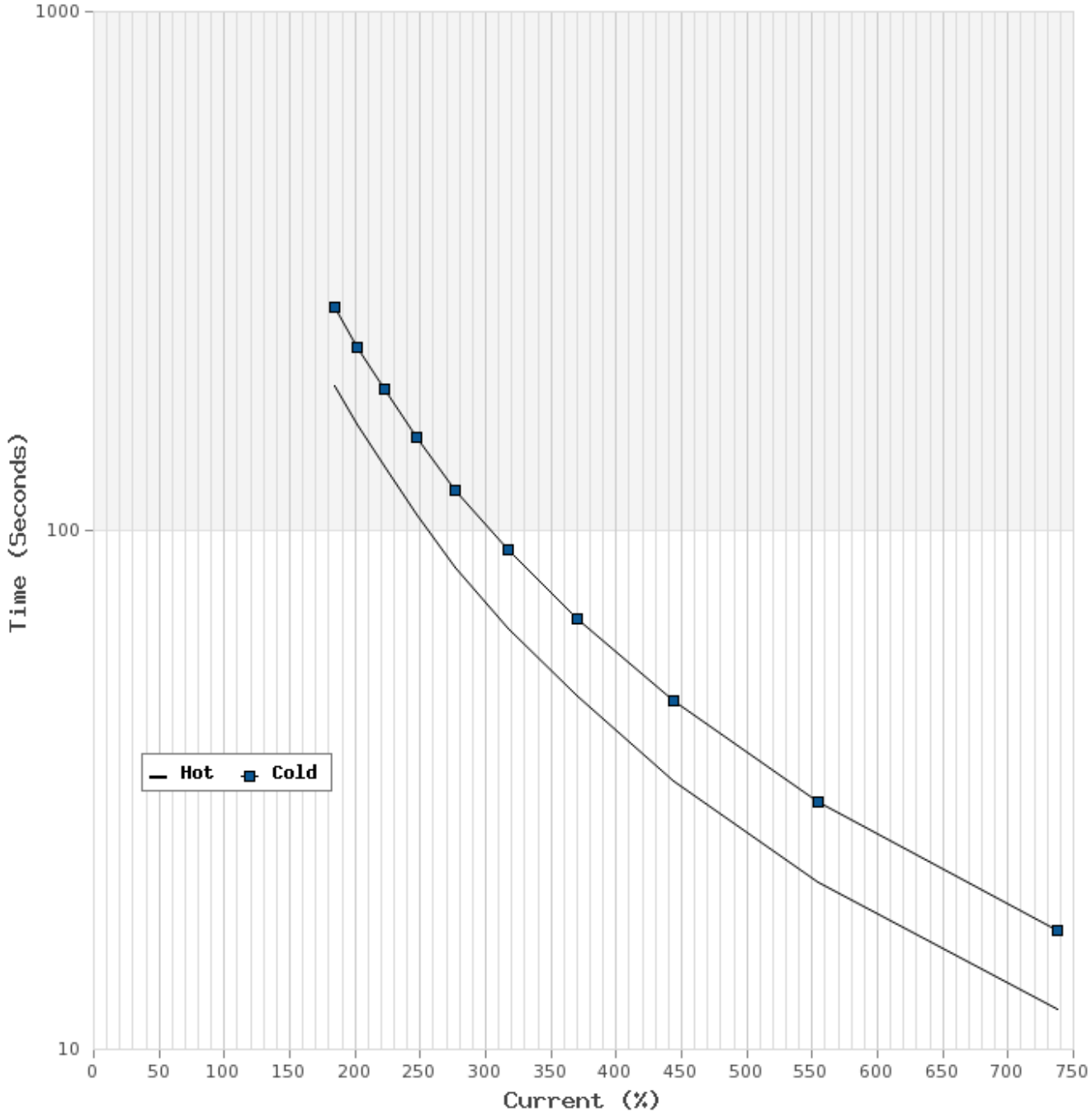
Thermal Limit Curves

Motor Type: AEHH8N_JP		Catalogue No: CJP7/52		Family: Optim JP	
HP	7.5	Safe Stall Time		Full Load A	17.3 / 8.7 A
Voltage	230 / 460V 60Hz	Hot	12 s	% Inrush	740 / 738 %
RPM	3600	Cold	17 s	Locked Rotor A	128.00 / 64.00 A



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T-N and I-N Curves

Motor Type: AEHH8N_JP		Catalogue No: CJP7/52		Family: Optim JP	
HP	7.5	Full Load T	11.22 lb-ft	Full Load A	17.3 / 8.7 A
Voltage	230 / 460V 60Hz	Locked Rotor T	200 %	Locked Rotor A	128.0 / 64.0 A
RPM	3600	Pull Up T	175 %	Break Down T	275 %