

Technical Documentation

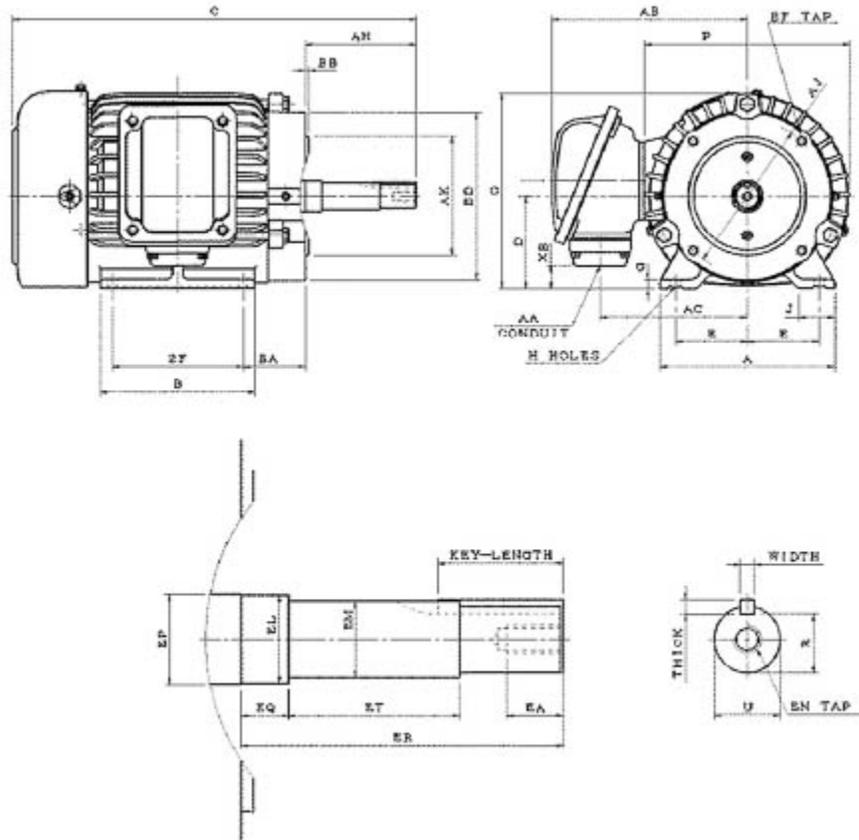
CJM0024

Optim JM | AEHH8N_JM

Date: November 29, 2016

Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
CJM0024	AEHH8N_JM	2	4	1.5	Continuous	230 / 460 V	60	1800



AEHH8N-JM-SMP-1

Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
145JM	2.75	5		0.34	2.38	6.7	5.9	15.67		3.5	
G	J	K	L	M	O	P	T	Key			Keyseat
								Width	Thick	Length	R
0.35	1.4				7.45	7.87		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"	7.56	5.63	0.86			0.156	4.25	4.5	6.38	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							
	0.875		6205ZZ	6205ZZ	59	51	F	1.15	DirectCoupling	Inches	

Technical Data Sheet

Motor Type: AEHH8N_JM

Catalogue No: CJM0024

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
2	4	1740	145JM	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	<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.					
86.5	84.0	84.0	84.0	78.0	70.0	57.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
6.04	270	220	330	2.9 / 1.5	5.6 / 2.8	50 / 25
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	
L	0.108	11	51	43	30	51

VFD Duty Information

Speed Range			VFD		S.F.
Constant Torque	Variable Torque	Constant Power	Carrier	Type	
6-60Hz	3-60Hz	60-120Hz	≤ 5 kHz	VPWM or CPWM	1.0 Only

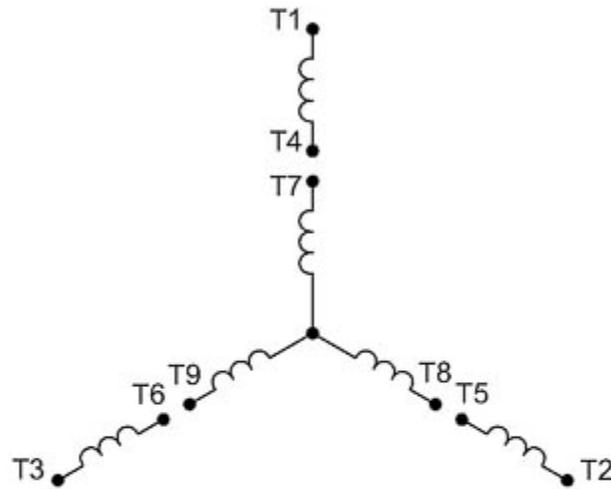
Additional Information

Bearings		Approx. Weight
DE	NDE	lbs
6205ZZ	6205ZZ	59

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 / T3C

Connection Diagram

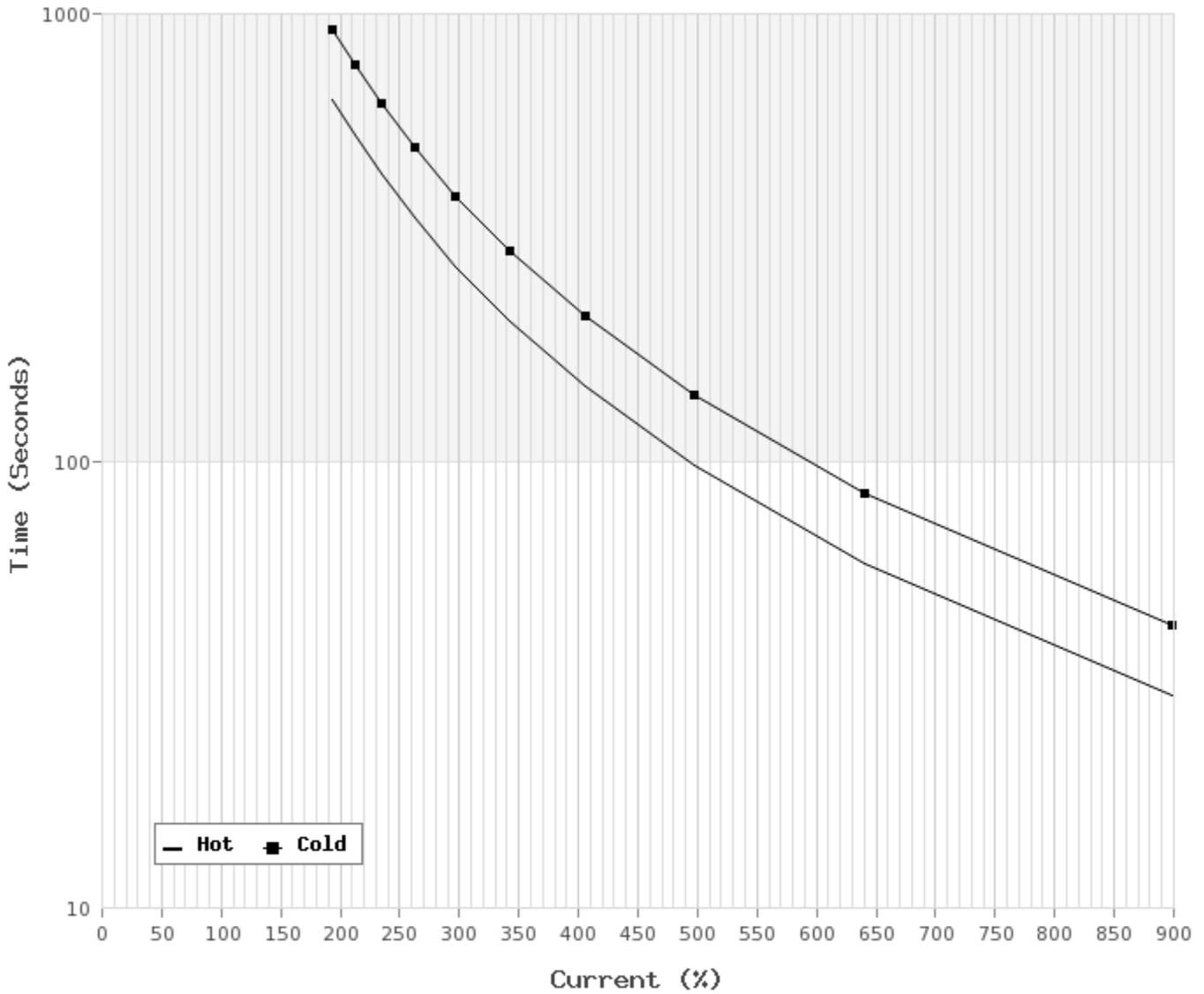


9 LEAD DUAL VOLTAGE WYE					
VOLTAGE	CONN.	L1	L2	L3	JOIN
HIGH	WYE	1	2	3	4&7,5&8,6&9
LOW	2 WYE	1,7	2,8	3,9	4&5&6

WD_9Y

Thermal Limit Curves

Motor Type: AEHH8N_JM		Catalogue No: CJM0024		Family: Optim JM	
HP	2	Safe Stall Time		Full Load A	5.6 / 2.8 A
Voltage	230 / 460V 60Hz	Hot	30 s	Locked Rotor A	899 / 899 %
RPM	1800	Cold	43 s	Locked Rotor A	50.0 / 25 A



T-N and I-N Curves

Motor Type: AEHH8N_JM		Catalogue No: CJM0024		Family: Optim JM	
HP	2	Full Load T	6.04 lb-ft	Full Load A	5.6 / 2.8 A
Voltage	230 / 460V 60Hz	Locked Rotor T	270 %	Locked Rotor A	50.0 / 25.0 A
RPM	1800	Pull Up T	220 %	Break Down T	330 %

