


Technical Documentation

CJM00545
Optim JM | AEHH8N_JM

Date: April 14, 2021

	
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Technical Data Sheet

Motor Type: AEHH8N_JM	Catalogue No: CJM00545
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Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
5	4	1745	184JM	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	<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	1.8	4.9	36.80
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

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

Additional Certifications

Other Certification

Additional Information

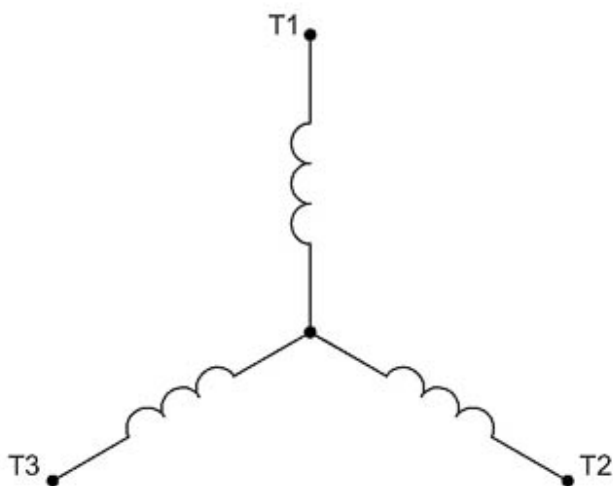
Bearings		Approx. Weight
DE	NDE	lbs
6307ZZ	6306ZZ	110

Nameplate Drawing

Optim JM

TYPE	AEHH8N JM	CAT. NO.	CJM00545		
OUTPUT	5 HP 3.73 kW	FRAME	184JM	TEFC	
R.P.M.	1745	POLE	4	INS.	F
VOLTS	575	PHASE	3	Hz	60
AMPS	4.9	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

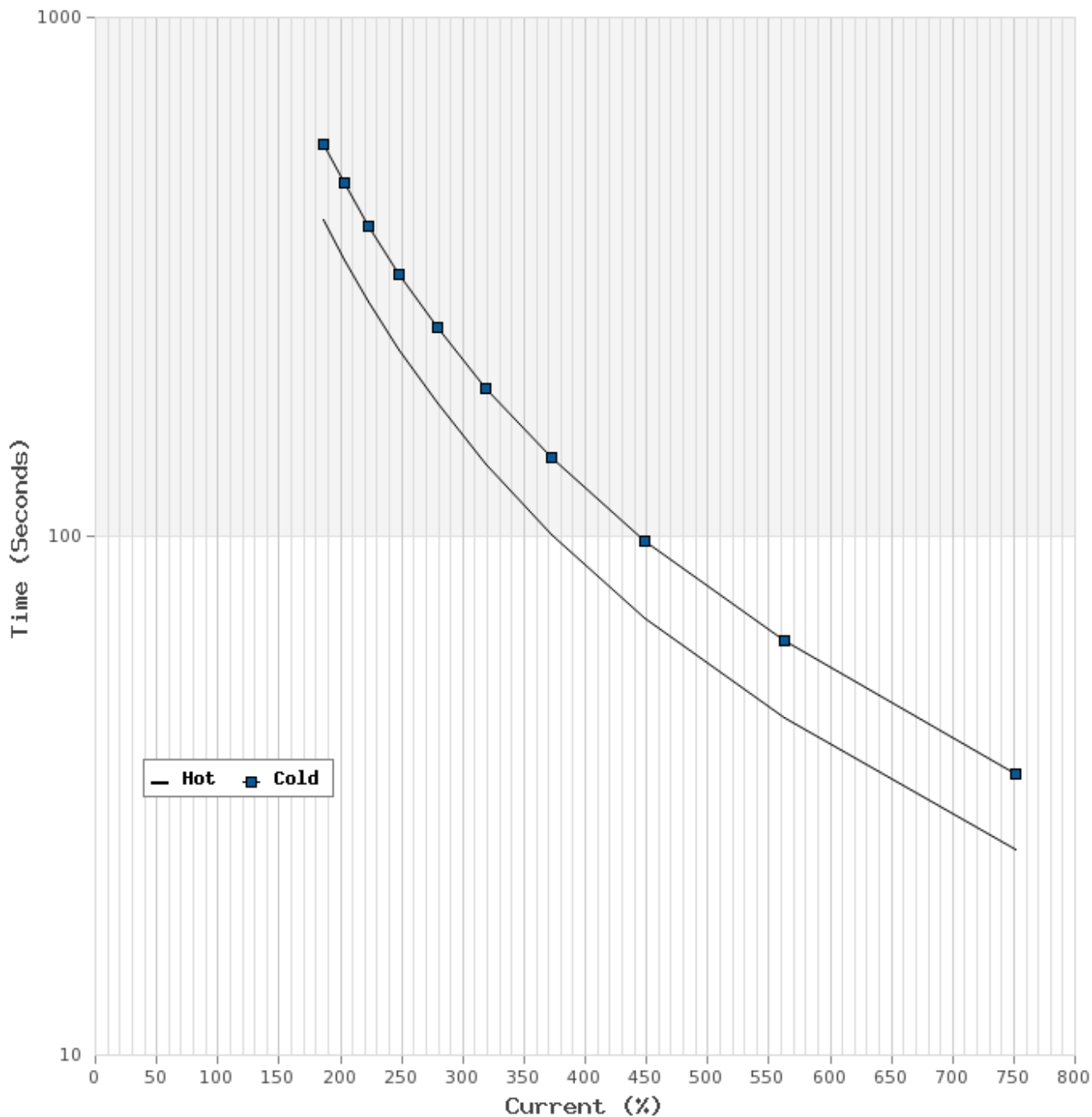


3 LEAD		SINGLE VOLTAGE			WYE
VOLTAGE	CONN.	L1	L2	L3	
-	WYE	1	2	3	

WD_3Y

Thermal Limit Curves

Motor Type: AEHH8N_JM		Catalogue No: CJM00545		Family: Optim JM	
HP	5	Safe Stall Time		Full Load A	4.9 A
Voltage	575V 60Hz	Hot	25 s	% Inrush	753 %
RPM	1800	Cold	35 s	Locked Rotor A	36.80 A



T-N and I-N Curves

Motor Type: AEHH8N_JM		Catalogue No: CJM00545		Family: Optim JM	
HP	5	Full Load T	15.04 lb-ft	Full Load A	4.9 A
Voltage	575V 60Hz	Locked Rotor T	185 %	Locked Rotor A	36.8 A
RPM	1800	Pull Up T	140 %	Break Down T	285 %

