

Technical Documentation

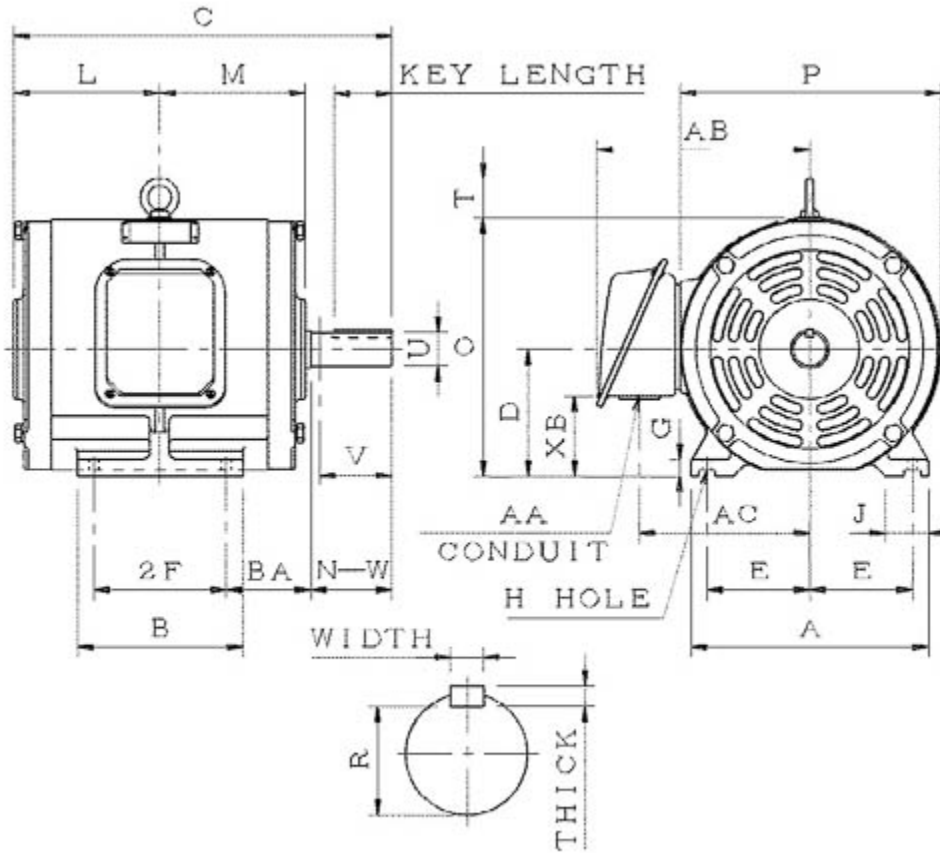
SDP7/52

Optim ODP | ASHH

Date: December 1, 2016

Dimensional Drawing

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
SDP7/52	ASHH	7.5	2	5.6	Continuous	230 / 460 V	60	3600



ASHH-SMP-2

Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
184T	3.75	5.5		0.41	2.75	8.8	6.9	13.75		4.5	
G	J	K	L	M	O	P	T	Key			Keyseat
0.65	1.75		5.5	5.35	9.25	9.37	1.3	Width	Thick	Length	R
								0.25	0.25	1.78	0.986
Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
1.1	7.45	6.05	3.3								
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
2.75	1.125	2.7	6306ZZ	6306ZZ	106	64	F	1.15	Direct Coupling / Belt Drive	Inches	

Technical Data Sheet

Motor Type: ASHH

Catalogue No: SDP7/52

Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
7.5	2	3465	184T	230 / 460	60	3
Enclosure	Ins. Class	Service Factor	Time Rating	NEMA Design	Rated Amb.	Rated Altitude
ODP	F	1.15	Continuous	C	-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.					
88.5	86.5	90.2	90.2	91.5	89.0	82.5
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
11.36	300	250	310	4.9 / 2.5	17.3 / 8.7	127 / 64
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	
H	0.250	8.3	12	17	12	64

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
6306ZZ	6306ZZ	106

Hazardous Locations Information

N/A	
Temp Code (Sinewave / VFD)	/

Connection Diagram

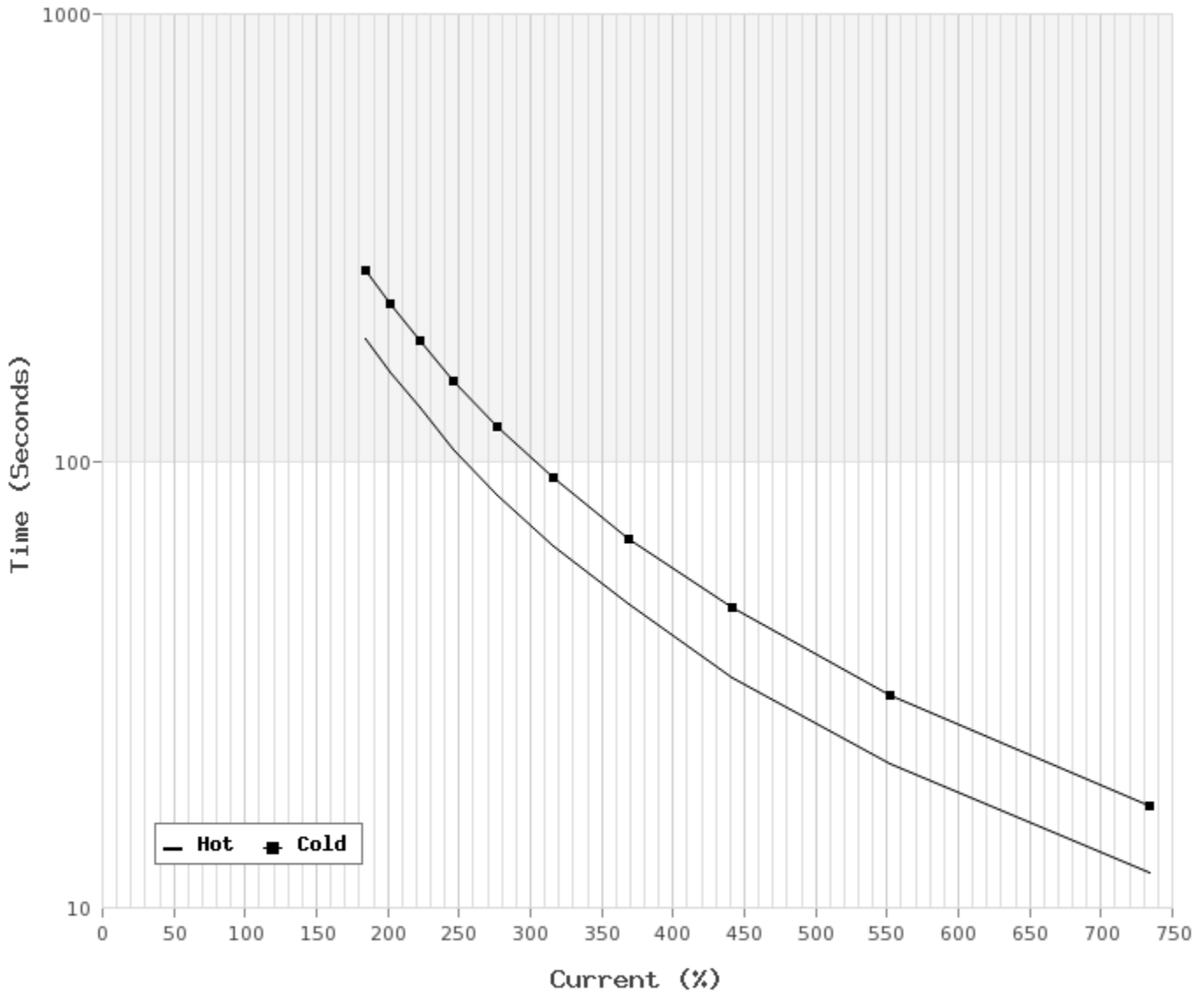


12 LEAD DUAL VOLTAGE WYE/DELTA						
VOLTAGE	CONNECTION		L1	L2	L3	JOIN
HIGH	START	WYE	1	2	3	4&7,5&8,6&9 10&11&12
	RUN	DELTA	1,12	2,10	3,11	4&7,5&8,6&9
LOW	START	2 WYE	1,7	2,8	3,9	4&5&6 10&11&12
	RUN	2 DELTA	1,6,7 12	2,4,8 10	3,5,9 11	

WD_12YD

Thermal Limit Curves

Motor Type: ASHH		Catalogue No: SDP7/52		Family: Optim ODP	
HP	7.5	Safe Stall Time		Full Load A	17.3 / 8.7 A
Voltage	230 / 460V 60Hz	Hot	12 s	Locked Rotor A	734 / 740 %
RPM	3600	Cold	17 s	Locked Rotor A	127.0 / 64 A



T-N and I-N Curves

Motor Type: ASHH		Catalogue No: SDP7/52		Family: Optim ODP	
HP	7.5	Full Load T	11.36 lb-ft	Full Load A	17.3 / 8.7 A
Voltage	230 / 460V 60Hz	Locked Rotor T	300 %	Locked Rotor A	127.0 / 64.0 A
RPM	3600	Pull Up T	250 %	Break Down T	310 %

