

Technical Documentation

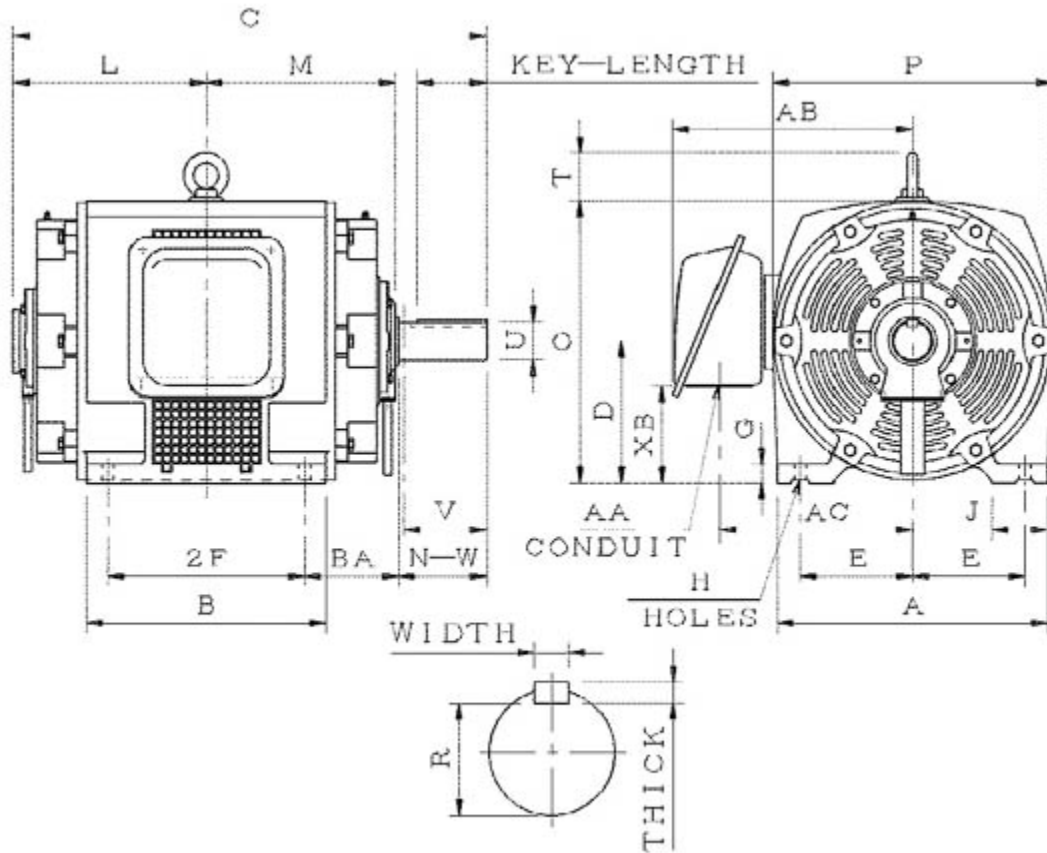
# **SDP1002**

## **Optim ODP | ASHH**

Date: December 1, 2016

**Dimensional Drawing**

Catalogue	Model	HP	Pole	kW	Rating	Voltage	Hz	RPM
SDP1002	ASHH	100	2	75	Continuous	230 / 460 V	60	3600



ASHH-SMP-4

Frame Size	Mounting					A	B	C	CD	D	
	E	2F	2F2	H	BA						
365TS	7	12.25		0.66	5.88	16.93	14.95	27.82		9	
G	J	K	L	M	O	P	T	Key			Keyseat
1.3	3.55		12.07	11.8	17.95	17.5	2.8	Width	Thick	Length	R
								0.5	0.5	2.03	1.591
Terminal Housing				Aux Box		C/D Flange					
AA	AB	AC	XB	AE	AX	BB	AH	AK	BD	AJ	BF
3.62	14.9	12.09	6.17								
Shaft Extension			Bearings		Approx. Weight Lbs	SPL dBA/3ft	Ins. Class	S.F.	Drive Method	Dimensions	
N-W	U	V	DE	NDE							
3.75	1.875	3.65	6313C3	6213C3	730	83	F	1.15	Direct Coupling	Inches	

### Technical Data Sheet

Motor Type: ASHH

Catalogue No: SDP1002

#### Nameplate Information

HP	Pole	RPM	Frame	Voltage	Hz	Phase
100	2	3555	365TS	230 / 460	60	3
Enclosure	Ins. Class	Service Factor	Time Rating	NEMA Design	Rated Amb.	Rated Altitude
ODP	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.					
94.1	93.0	94.5	94.5	90.5	88.0	84.0
Torque				Current (A)		
Full Load (lb-ft)	Locked Rotor (% FLT)	Pull Up (% FLT)	Break Down (% FLT)	No Load	Full Load	Locked Rotor
147.70	160	150	280	53.0 / 26.5	219.9 / 110.0	1450 / 725
NEMA KVA Code	Inertia (WR <sup>2</sup> )			Safe Stall Time (s)		Noise Level Sound Press. dB(A)
	Rotor (lb-ft <sup>2</sup> )	NEMA Load (lb-ft <sup>2</sup> )	Max. Allowable (lb-ft <sup>2</sup> )	Cold	Hot	
G	7.044	92	126	17	12	83

#### 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
6313C3	6213C3	730

#### Hazardous Locations Information

N/A	
Temp Code (Sinewave / VFD)	/

**Connection Diagram**

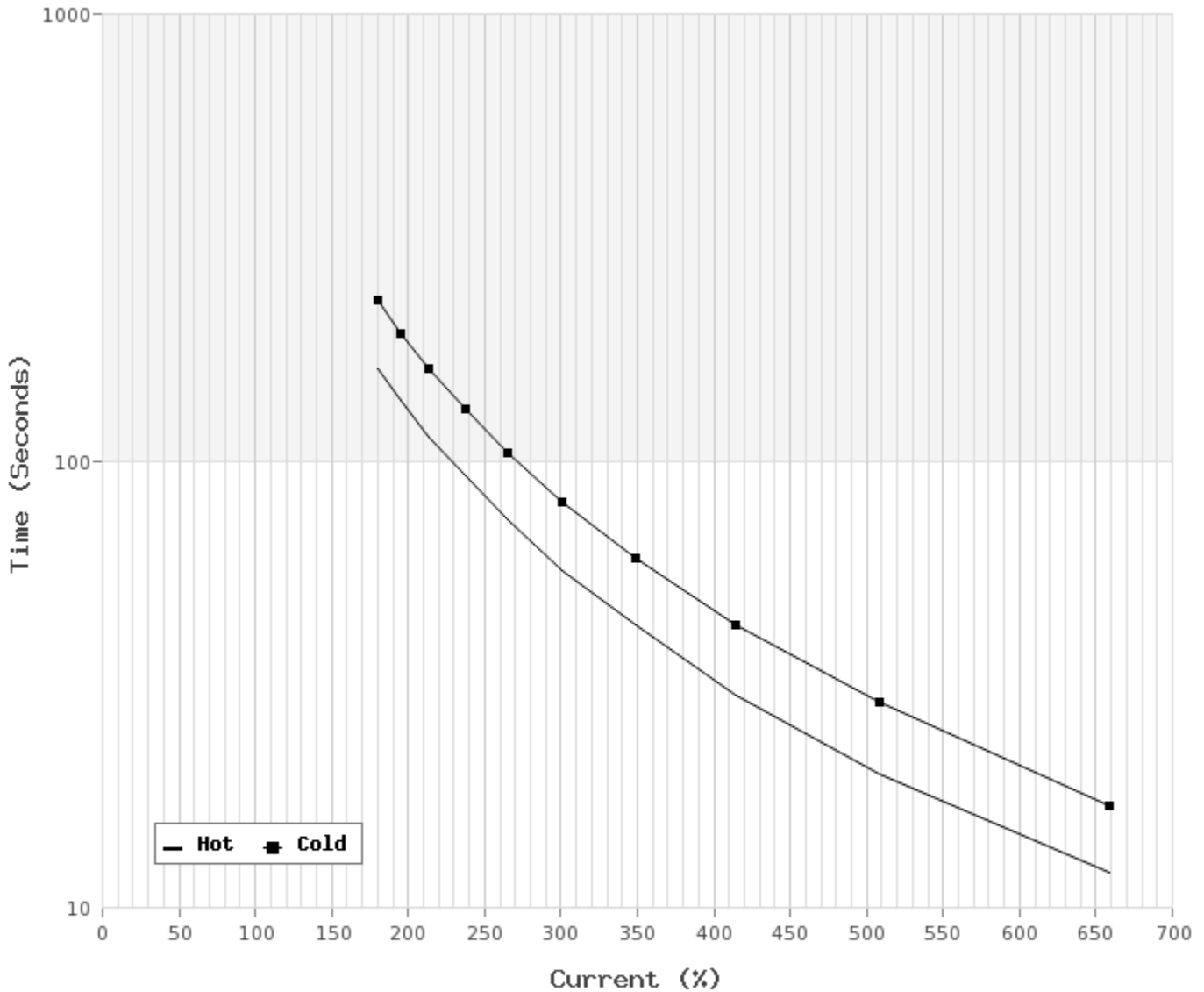


12 LEAD DUAL VOLTAGE WYE/DELTA						
VOLTAGE	CONNECTION		L1	L2	L3	JOIN
HIGH	START	WYE	1	2	3	4&7,5&8,6&9 10&11&12
	RUN	DELTA	1,12	2,10	3,11	4&7,5&8,6&9
LOW	START	2 WYE	1,7	2,8	3,9	4&5&6 10&11&12
	RUN	2 DELTA	1,6,7 12	2,4,8 10	3,5,9 11	

WD\_12YD

### Thermal Limit Curves

Motor Type: ASHH		Catalogue No: SDP1002		Family: Optim ODP	
HP	100	Safe Stall Time		Full Load A	219.9 / 110.0 A
Voltage	230 / 460V 60Hz	Hot	12 s	Locked Rotor A	659 / 659 %
RPM	3600	Cold	17 s	Locked Rotor A	1,450.0 / 725 A



**T-N and I-N Curves**

Motor Type: ASHH		Catalogue No: SDP1002		Family: Optim ODP	
HP	100	Full Load T	147.70 lb-ft	Full Load A	219.9 / 110.0 A
Voltage	230 / 460V 60Hz	Locked Rotor T	160 %	Locked Rotor A	1,450.0 / 725.0 A
RPM	3600	Pull Up T	150 %	Break Down T	280 %

