

# Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS

Motor type: **DP200 HPS - Definite Purpose motor - NEMA Premium Efficiency**

FS: **5010S - 2p - 450 hp -**

Client order no.	Item-No.	Offer no.
Order no.	Consignment no.	Project
Remarks		

**Electrical data** Class I Division 2 Gr. A, B, C or D T3

U [V]	$\Delta/Y$	f [Hz]	P [HP]	P [kW]	n [rpm]	I Load [Amps]					Nom. Eff Load [%]			Pwr. Factor Load [%]			Torque [lb-ft]	T <sub>A</sub> /T <sub>N</sub> LRT [%]	T <sub>k</sub> /T <sub>N</sub> BDT [%]
						4/4	3/4	1/2	0	LRC	4/4	3/4	2/4	4/4	3/4	2/4			
460	$\Delta \Delta$	60	450.00	335.70	3,585	480	365.90	257.90	100.00	3250.0	96.5	96.4	96.0	90.8	89.6	85.1	659.3	190	230
Frame Type: 5010S		Type of constr.: (A) Foot Mounted Horizontal (IMB3)				Ins. Cl.: Standard Class H Insulation		Motor Prot.: A: No Winding Protection			NEMA Des.: B		S.F.: 1.15						
Mtr. WT: 4,357						Temp. Rise Cl.: B		Amb. Temp.: + 40 to °C @1000 m			kVA: G		IP 55						

**Mechanical data**

Sound level (SPL / SWL) at 60 Hz	82.0 dB(A) / 95.0 dB(A)		Thickener	Polyurea					
Octave Band Center Frequencies Hertz			Safe Stall Time Hot	23 s					
	250	500	1000	2000	4000	8000	Hz	Safe Stall Time Cold	28 s
SPL@3	79.0	74.0	73.0	72.0	72.0	67.0	dB(A)	Frame material	Cast iron
Moment of inertia	106.0 Lb-ft <sup>2</sup>		Color, paint shade	RAL 7030					
Ext Load Inertia Capability:	349.0 Lb ft <sup>2</sup>		Coating (paint finish)	Standard Alkyed + Epoxy (C2)					
<b>Bearings</b>			<b>Ventilation Type</b>						
Bearing DE   NDE	6316 Z C3 S0		6316 Z C3 S0 insulated						
Bearing_Type	Ball Bearing		Ball Bearing						
AFBMA:	80BC03JP3		80BC03JP3						
<b>Grease</b>			Method of cooling						
Capacity	9 oz		9 oz						
Grease Type:	Exxon Mobil EM		Direction of rotation						
			Bi-Directional						
			Fan Material						
			Polypropylene ESD						
			VFD						
			CT: 4:1 VT: 20:1						
			Space heaters						
			without						
			Brake:						
			-/-						

**Terminal box**

Lead Wire Connection	12 TERMINAL - Connection DELTA				Terminal box position	(1) LHS Mount - View From DE (F-1) - DE or Center of Motor
Voltage	L1	L1	L1	Connected together	Material of terminal box	Cast Iron
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RUN	T12-T7-T6-T1	T10-T8-T4-T2	T11-T9-T5-T13	---		

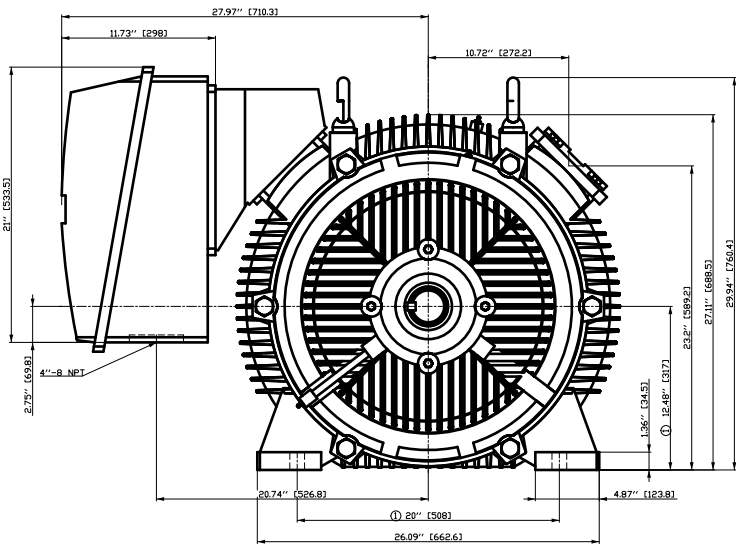


**Notes:**

I<sub>r</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>r</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
M<sub>b</sub>/M<sub>N</sub> = break down torque / nominal torque

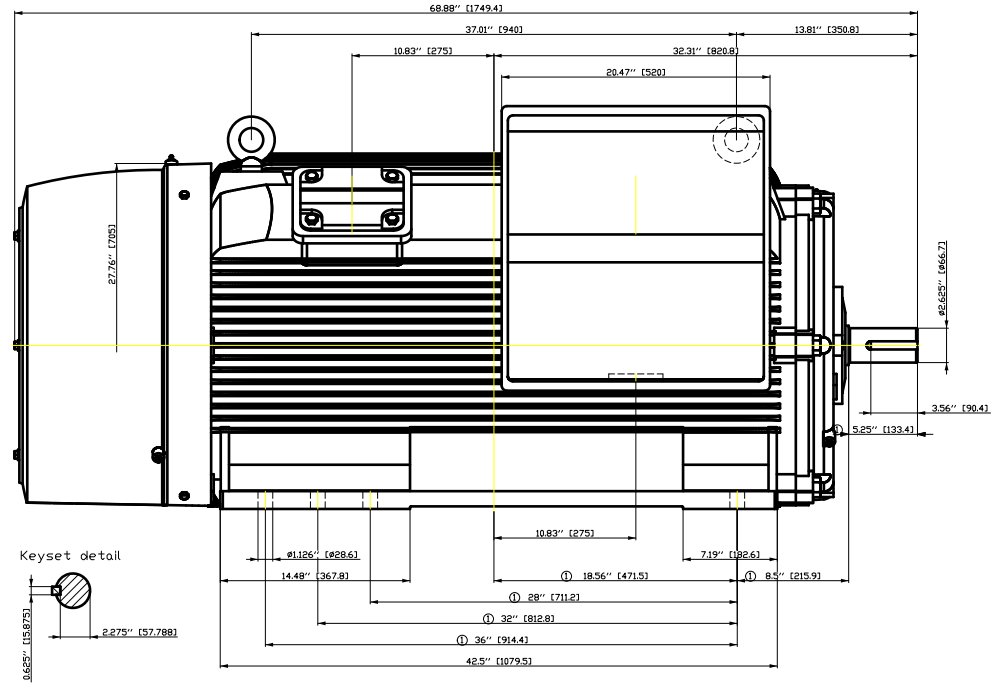
3) Value is valid only for DOL operation with motor design IC411  
2) at rated power / at full load

responsible dep.	technical reference	created by	approved by	<i>Technical data are subject to change! There may be discrepancies between software and hardware versions</i>	
DI MC LVM		DT Configurator			
	document type	document status		customer	
	datasheet	released			
	title	document number			
	1PC6521-5EA21-2AA1				
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	01	2022-04-08 01:05	en	1/1	



① Tolerances according to NEMA std.

All dimensions corresponding to assemblies and castings shall have a tolerance as per ISO 8062-3 DCTG 12.



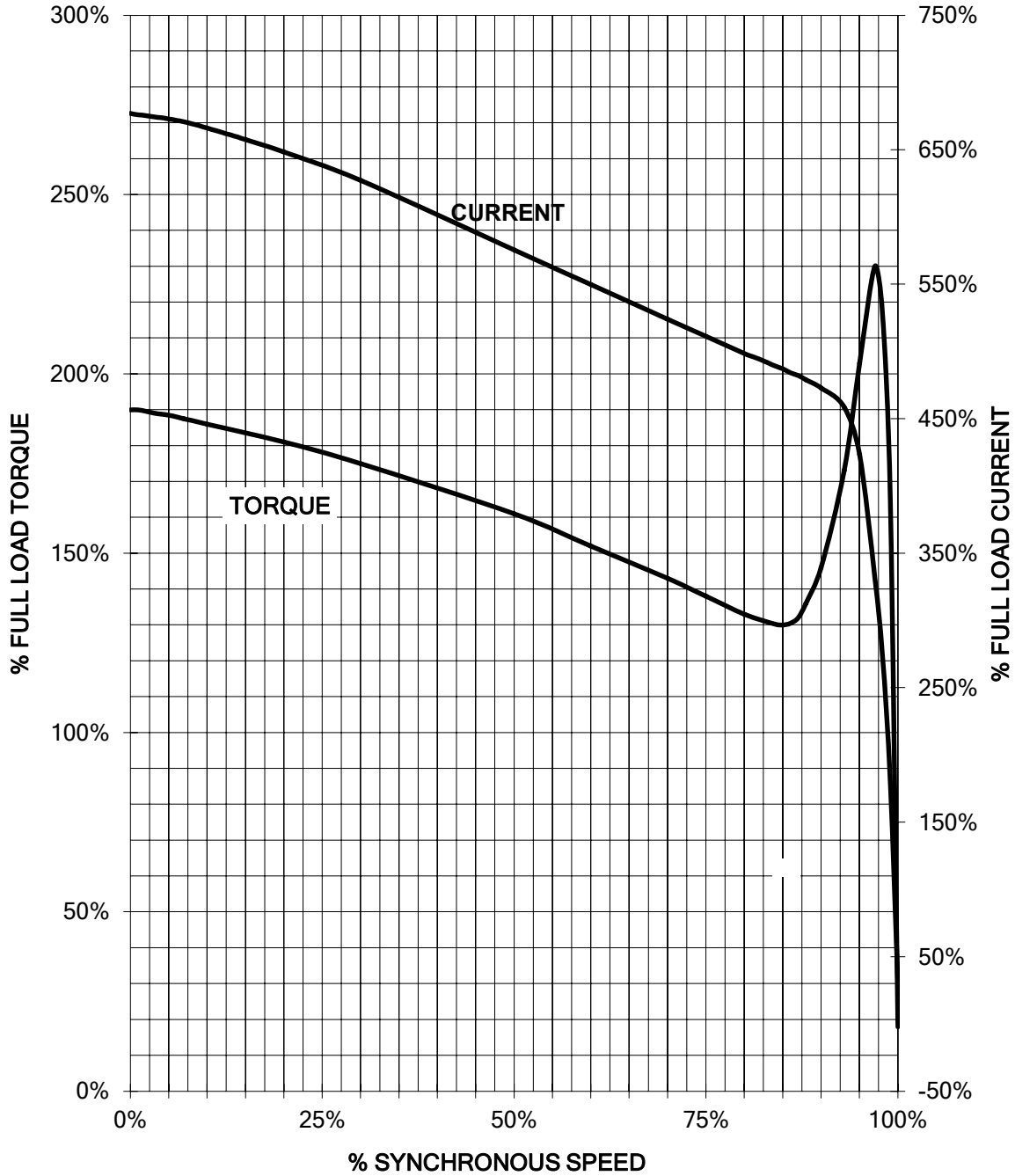
Keyset detail

Tolerance	Surface	Material	Weight	Scale
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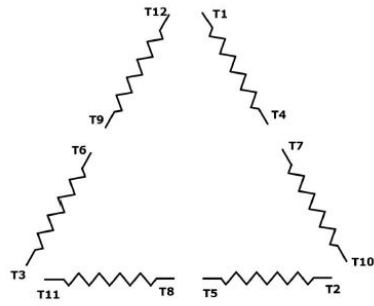
HP 450 VOLTS 460 RPM 3585 TYPE SD200  
HZ 60 PHASE 3 FRAME 5010S NEMA B

## TORQUE & CURRENT VS. SPEED



Unrestricted CUSTOMER: \_\_\_\_\_ ORDER#: \_\_\_\_\_

Main terminal diagram



12 LEAD DELTA		
LINES	CONNECT TOGETHER	CONN.
L1	T12 - T7 - T6 - T1	ΔΔ
L2	T10 - T8 - T4 - T2	
L2	T11 - T9 - T5 - T3	

responsible dep. DI MC LVM	technical reference	created by	approved by	Project
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