

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

Motor type: **SD200 NEMA Premium Next Generation**

FS: 5,013 - 4p - 700 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 T2D

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	700.00	522.20	1,790	830	590.10	414.80	305.00	5395.0	96.7	97.2	97.3	81.7	85.7	81.2	2056.3	230	250
Frame Type: 5,013		Type of constr.: (A) Foot Mounted Horizontal (IMB3)				Ins. Cl.: Standard Class H Insulation		Motor Prot.: K: Stator RTD's, 2 Per Phase			NEMA Des.: -/-		S.F.: 1.15						
Mtr. WT: 5,592						Temp. Rise Cl.: B		Amb. Temp.: + 40 to °C @1000 m			kVA: G		IP 55						


**Mechanical data**

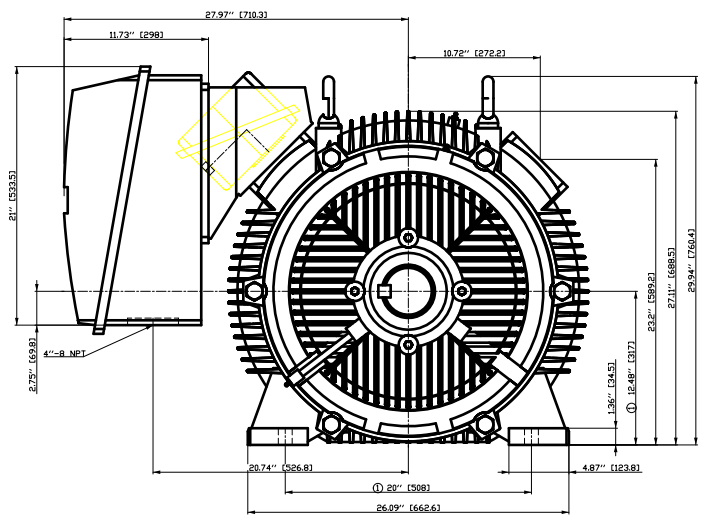
Sound level (SPL / SWL) at 60 Hz	85.0 dB(A) / 98.0 dB(A)	Thickener	Polyurea						
Octave Band Center Frequencies Hertz		Safe Stall Time Hot	18 s						
250	500	1000	2000	4000	8000	Hz	Safe Stall Time Cold	22 s	
SPL@3	80.0	78.0	75.0	71.0	66.0	63.0	dB(A)	Frame material	Cast iron
Moment of inertia	217.0 Lb-ft <sup>2</sup>		Color, paint shade	RAL 7030					
Ext Load Inertia Capability:	2514.0 Lb ft <sup>2</sup>		Coating (paint finish)	Standard Alkyed + Epoxy (C2)					
<b>Bearings</b>			<b>Ventilation Type</b>						
Bearing DE   NDE	6322 Z C3 S0		6322 Z C3 S0		Method of cooling	TEFC			
Bearing_Type	Ball Bearing		Ball Bearing		Direction of rotation	Bi-Directional			
AFBMA:	110BC03JP3		110BC03JP3		Fan Material	Polypropylene ESD			
<b>Grease</b>			VFD			CT: 4:1 VT: 20:1			
Capacity	17 oz		17 oz		Space heaters	without			
Grease Type:	Exxon Mobil EM		Brake:		-/-				

**Terminal box**

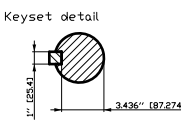
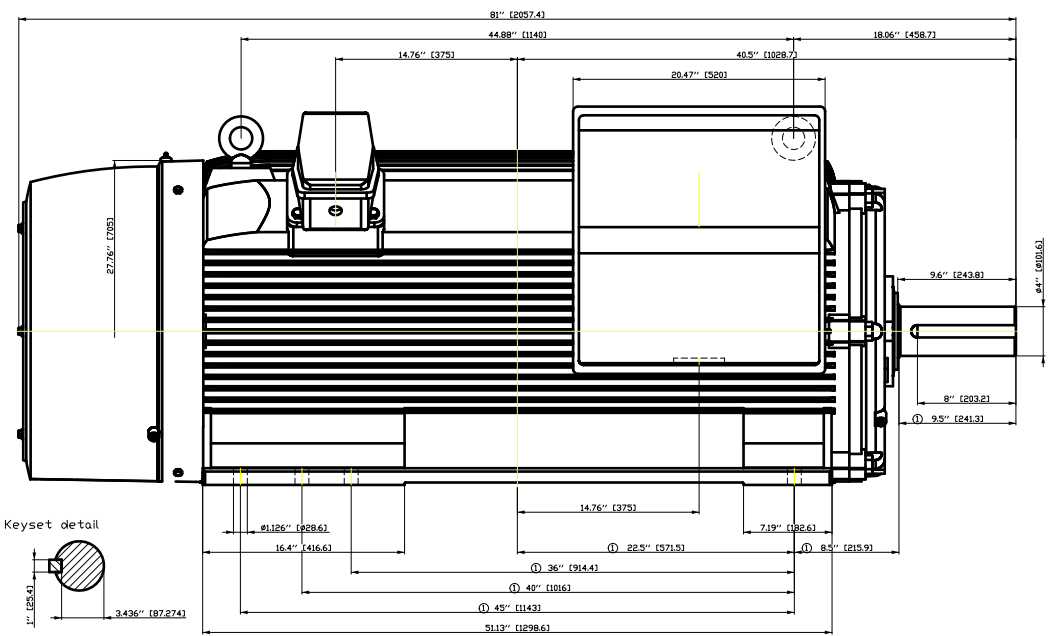
Lead Wire Connection	12 TERMINAL - Connection DELTA				Terminal box position	(1) LHS Mount - View From DE (F-1) - DE or Center of Motor	
Voltage	L1	L1	L1	Connected together	Material of terminal box	Cast Iron	
----	----	----	----	---	Cable entry	(1) 5" NPT	
RUN	T12-T7-T6-T1	T10-T8-T4-T2	T11-T9-T5-T13	----	Δ Δ		

<p><b>Notes:</b></p> <p>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</p>		<p>3) Value is valid only for DOL operation with motor design IC411  2) at rated power / at full load</p>	
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responsible dep.	technical reference	created by	approved by	<i>Technical data are subject to change! There may be discrepancies between software and customer interface</i>			
DI MC LVM		DT Configurator		document type	document status	customer	
	document title		document number				
	1LE6321-5BB71-2AK1						
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① Tolerances according to NEMA std.  
 All dimensions corresponding to assemblies and castings shall have a tolerance as per ISD 8062-3 DCTG 12.

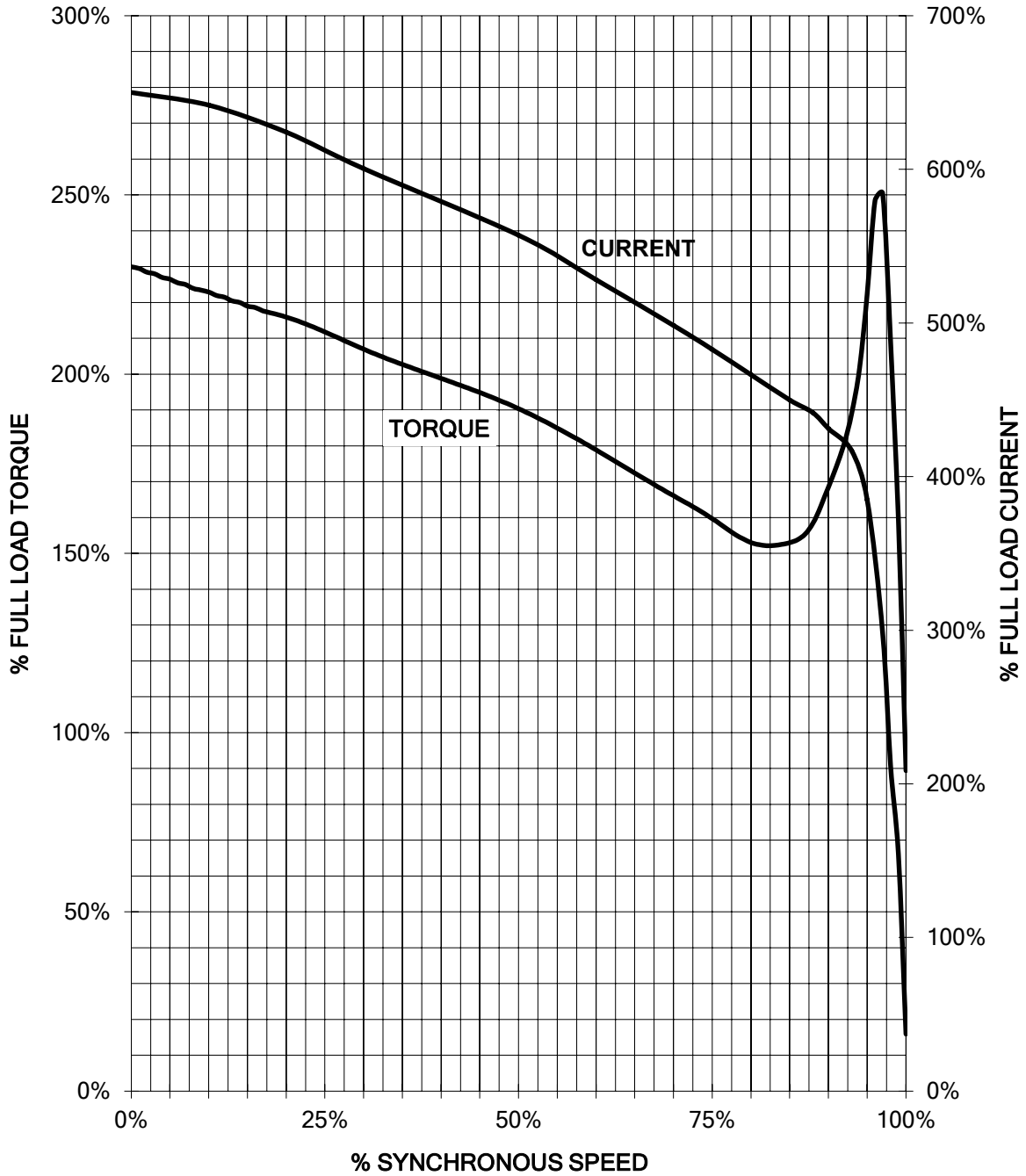


Tolerance	Surface	Material	Weight	Scale
F501 HGF E OOI FEGOSF E	Author Creator Approval Department Change Order	ÖVS T aè : ^æ@` } *	E	{ {
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	Revision	Index RS	Doc No	1st Language ^ } 2nd Language à ^
	Project No	E	Ref No	Sheet F of F

# SIEMENS INDUSTRY, INC.

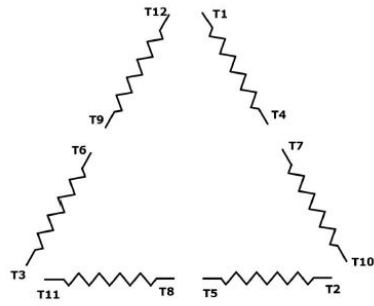
HP 700 VOLTS 460 RPM 1790 TYPE SD200  
HZ 60 PHASE 3 FRAME 5013 NEMA \_\_\_\_\_

## TORQUE & CURRENT VS. SPEED



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

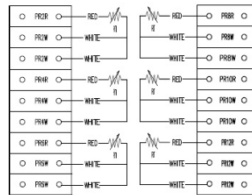
### Main terminal diagram



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

### Motor protection

#### 3 WIRE STATOR RTDs



responsible dep. DI MC LVM	technical reference	created by	approved by	Project
<b>SIEMENS</b>	document type Wiring Diagram	document status free		customer
	title 1LE6321-5BB71-2AK1	document number		
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