

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

**Motor type:** SD100 IE3E **FS: 405TS - 2p - 100 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]					LRC	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			4/4	3/4	2/4	4/4	3/4	2/4			
460	$\Delta$	60	100.00	75.00	3,600	108.00	80.60	55.00	19.00	725.0	94.1	94.7	94.6	92.0	92.0	90.0	147.0	120	200	
Frame Type: 405TS		Type of constr.: ( A ) Foot mounted - End shield				Ins. Cl.: Standard Class F Insulation		Motor Prot.: (A) Without Protection			NEMA Des.: B		S.F.: 1.15							
Mtr. WT: 1,149						Temp. Rise Cl.: B		Amb. Temp.: + 40 to -20 °C @1000 m			kVA: G		IP 55							

## Mechanical data

Sound level (SPL / SWL) at 60 Hz	80.0 dB(A) / 91.0 dB(A)		Thickener	Polyurea					
Octave Band Center Frequencies Hertz			Safe Stall Time Hot	25 s					
	250	500	1000	2000	4000	8000	Hz	Safe Stall Time Cold	45 s
SPL@3	67.0	72.0	74.0	74.0	72.0	61.0	dB(A)	Frame material	cast iron
Moment of inertia	12.7 Lb-ft <sup>2</sup>		Color, paint shade	Standard Paint - RAL7030					
Ext Load Inertia Capability:	92.0 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	Method of cooling	TEFC				
Bearing_Type	Ball Bearing		Ball Bearing	Direction of rotation	Bidirectional				
AFBMA:	80BC03JP30		80BC03JP30	Fan Material	Polypropylen ESD				
<b>Grease</b>			VFD	CT: 4:1 VT: 20:1					
Capacity	7.5 oz		7.5 oz	Space heaters	without				
Grease Type:	Exxon Mobile EM		Brake:	without					


## Terminal box

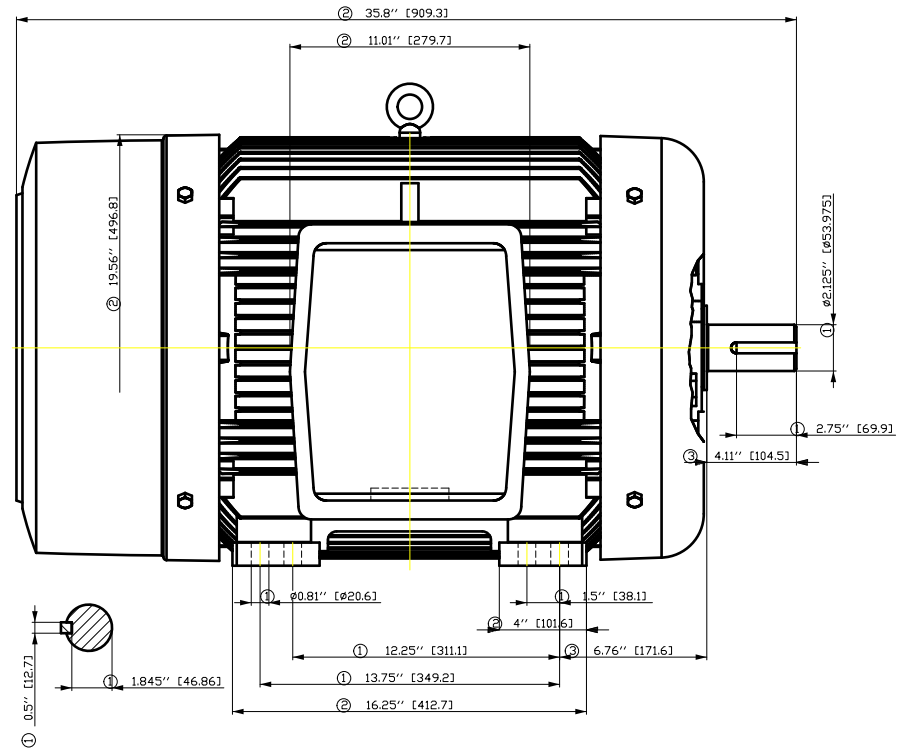
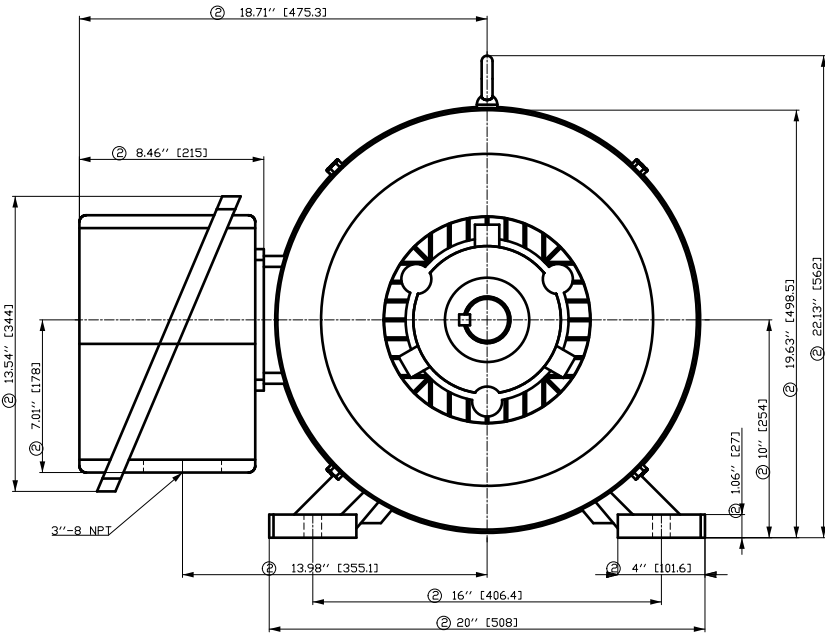
Lead Wire Connection	3 LEAD - DELTA				Terminal box position	(3) F-1, Standard Floor Mount, T. Box LHS
Voltage	L1	L1	L1	Connected together	Material of terminal box	Cast Iron
----	----	----	----	----	Cable entry	3" NPT
----	T1	T2	T3	----		

### Notes:

I<sub>L</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>L</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. DI MC LVM	technical reference	created by DT Configurator	approved by	<i>Technical data are subject to change! There may be discrepancies between software and hardware versions</i>	
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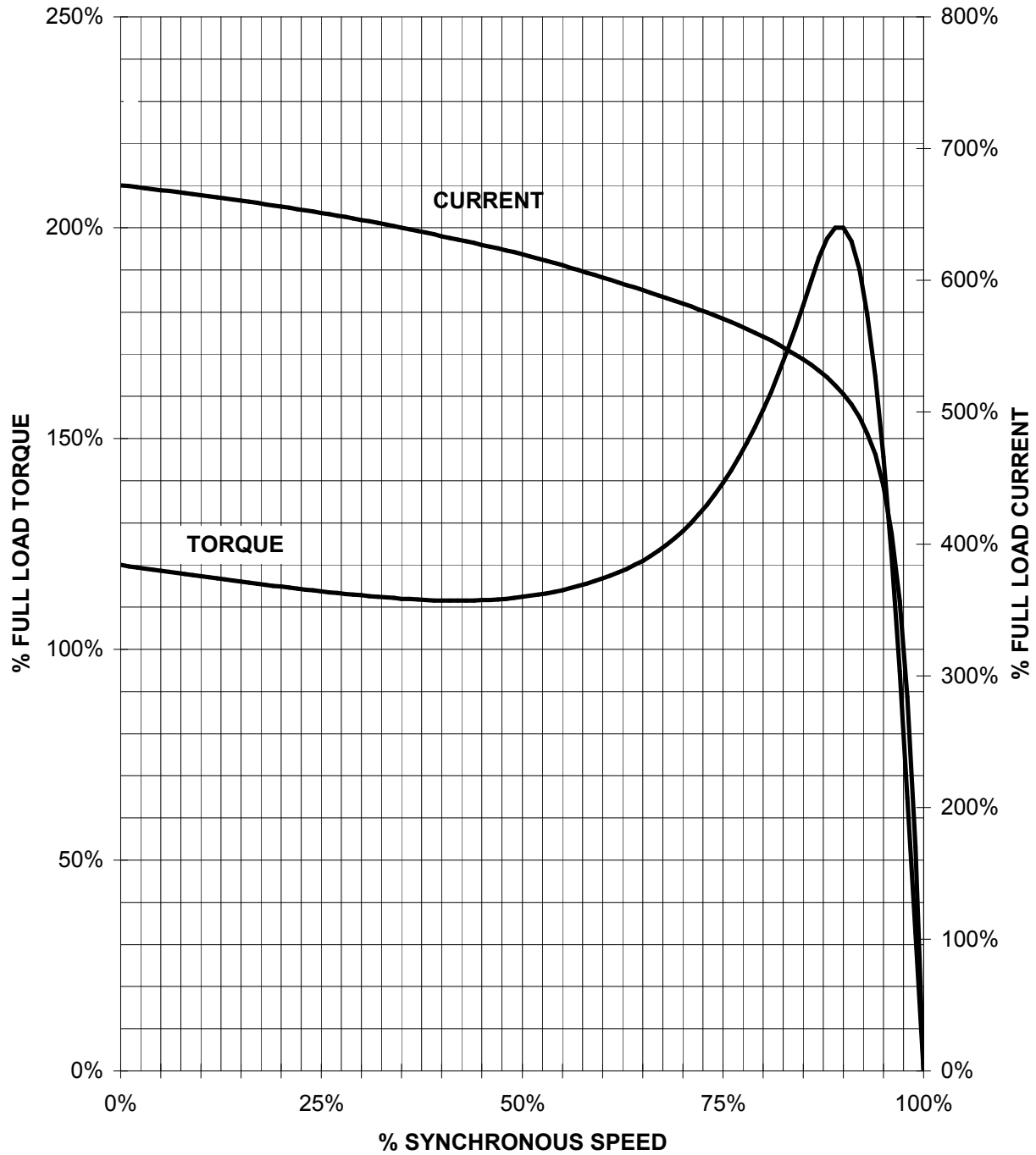
- ① Tolerances according to NEMA std.
- ② All these dimensions corresponding to assemblies and castings shall have a tolerance as per DIN standard 1686-GTB 19.
- ③ Not according to NEMA std.

Tolerance	Surface	Material	Weight	Scale
F50G GF8 ÖVE F300H E	Author Creator Approval Department Change Order	ÖV T a : ^ & @ } *	E	{ {
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				Sheet F of F

# SIEMENS INDUSTRY, INC.

HP 100 VOLTS < 600V RPM 3600 TYPE SD100 IEEE841  
HZ 60 PHASE 3 FRAME 405TS NEMA B

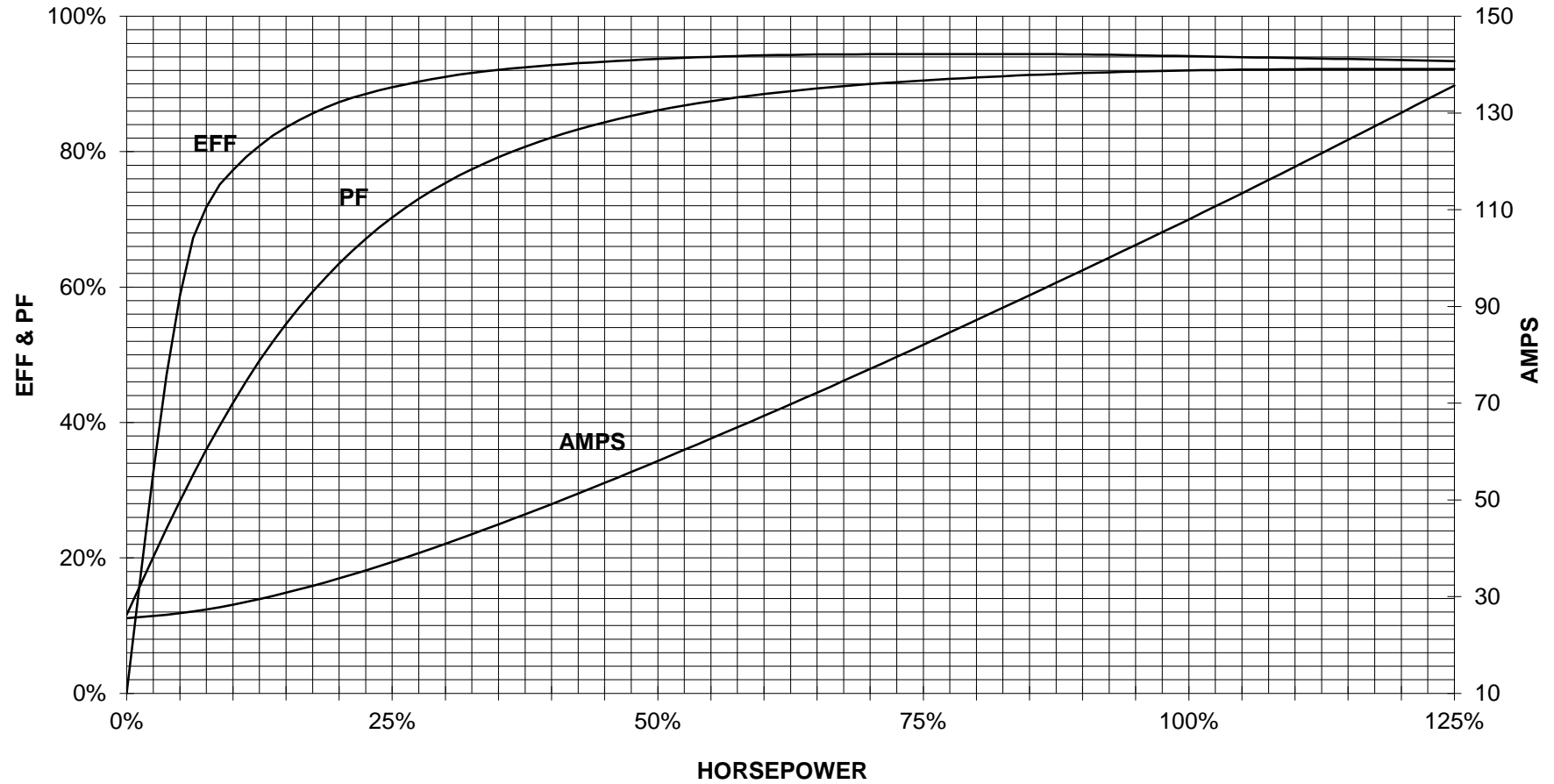
## TORQUE & CURRENT VS. SPEED



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

100 HP 3600 RPM 405TS FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

**SIEMENS INDUSTRY, INC.**  
**PERFORMANCE CURVE**  
**SD100 IEEE841**



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


PERFORMANCE BASED ON DESIGN CALCULATIONS. SUBJECT TO CHANGE WITHOUT NOTICE.

REV. 1

Main terminal diagram



3 LEAD DELTA			
LINES			CONN.
L1	L2	L3	
T1	T2	T3	Δ

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