

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

**Motor type:** SD100 IEEE **FS: 405T - 4p - 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	1,800	113.00	85.10	61.10	30.00	725.0	95.4	96.0	95.8	87.0	86.0	80.0	295.0	180	200	
Frame Type: 405T		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: 1,154						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	67.0 dB(A) / 79.0 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	35 s
SPL@3	66.0	76.0	73.0	70.0	65.0	51.0	dB(A)	Frame material	cast iron
Moment of inertia	23.4 Lb-ft <sup>2</sup>							Color, paint shade	Standard Paint - RAL7030
Ext Load Inertia Capability:	441.0 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

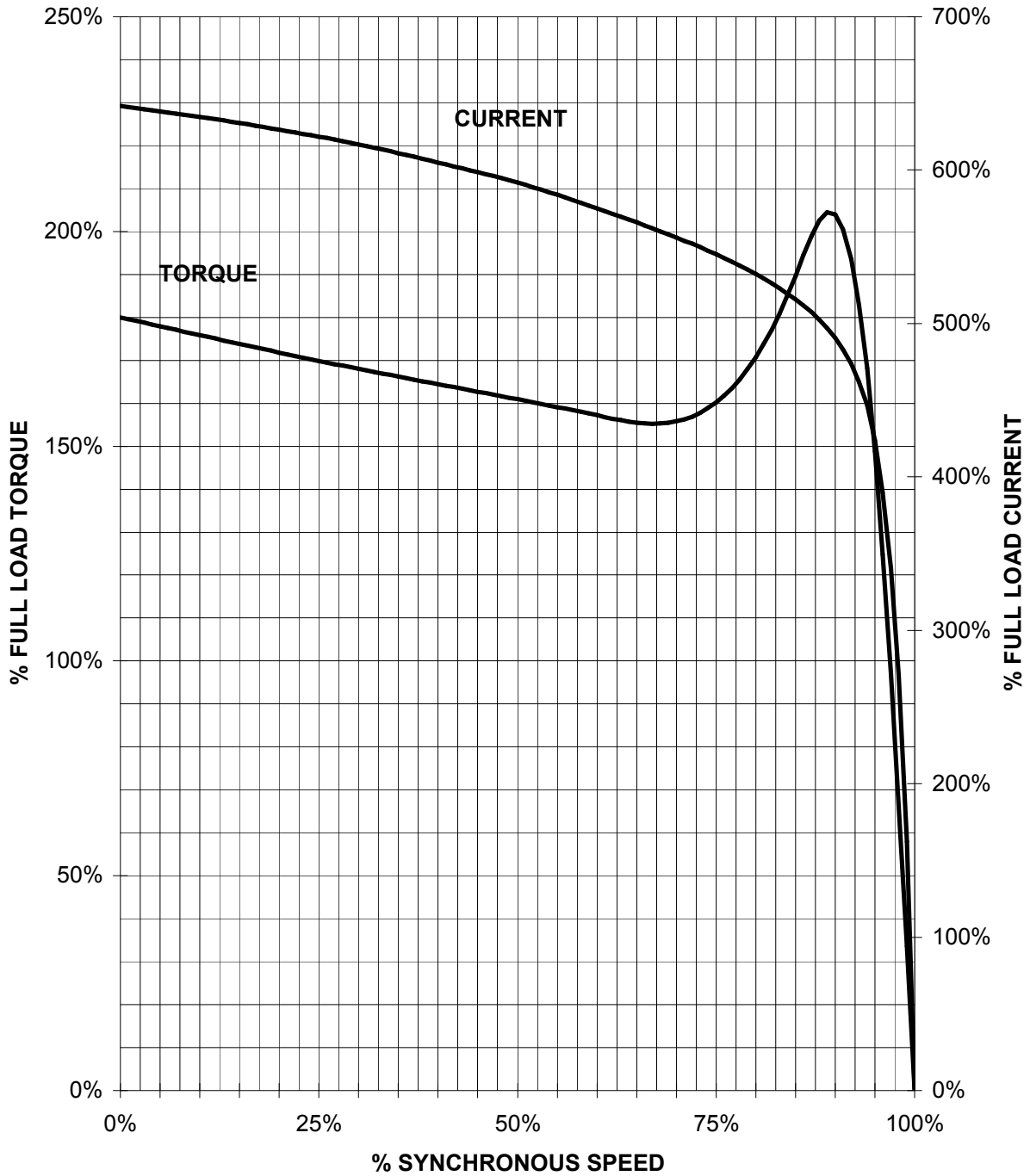
responsible dep. DI MC LVM	technical reference	created by DT Configurator	approved by	<i>Technical data are subject to change! There may be discrepancies between datasheet and motor nameplate</i>			
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# SIEMENS INDUSTRY INC.

HP 100 VOLTS < 600V RPM 1800 TYPE SD100 IEEE841  
HZ 60 PHASE 3 FRAME 405T NEMA B

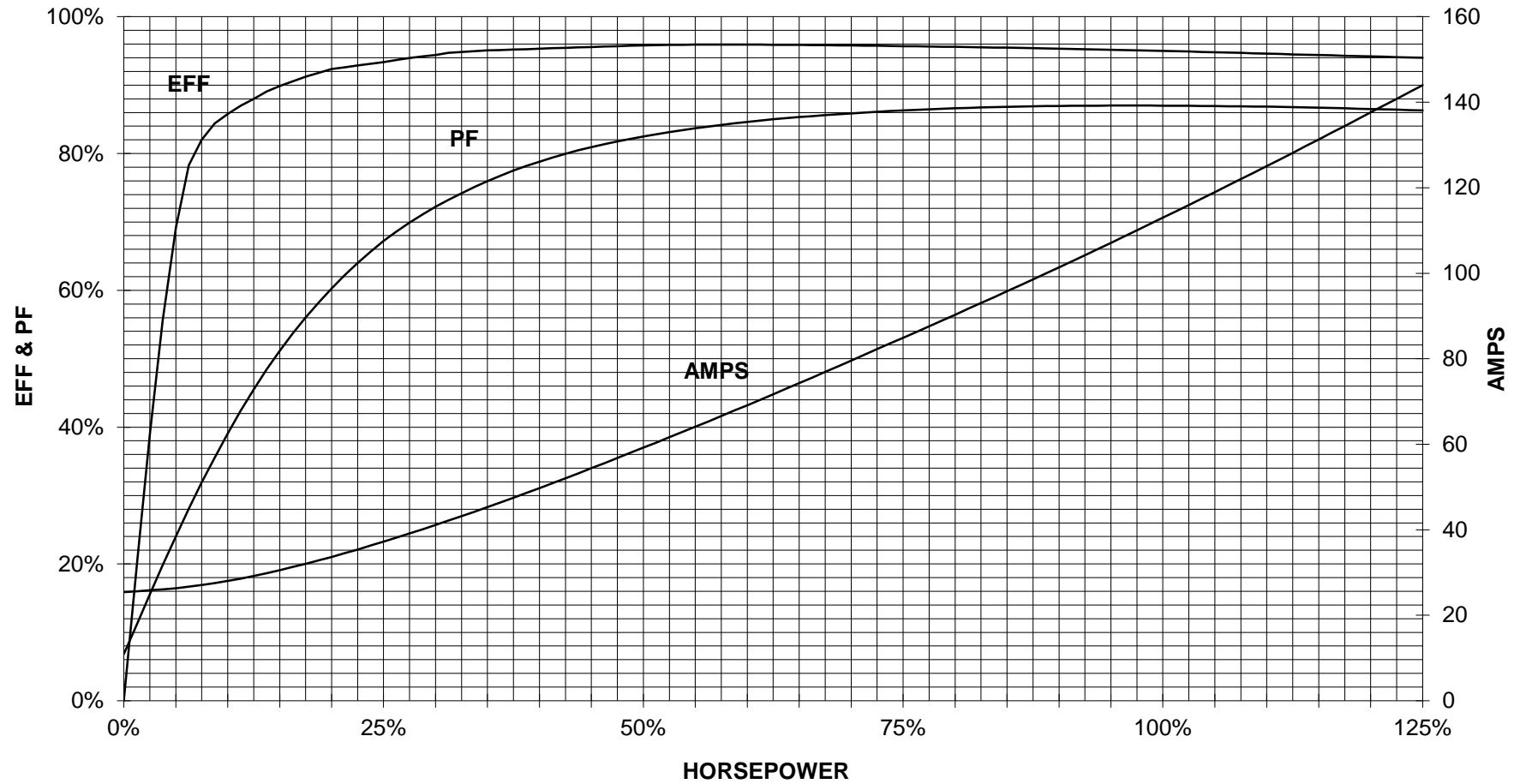
## TORQUE & CURRENT VS. SPEED



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

100 HP 1800 RPM 405T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

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

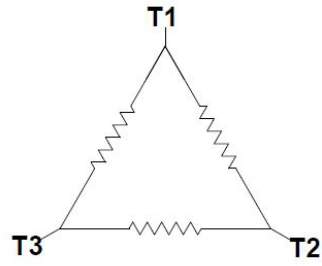


CUSTOMER \_\_\_\_\_ ORDER # \_\_\_\_\_ PO # \_\_\_\_\_


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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