

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

Motor type: **SD100** FS: **184T - 2p - 5 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	Y	60	5.00	4.00	3,600	6.00	4.60	3.40	2.00	46.0	88.5	89.1	88.2	88.2	85.9	78.1	7.5	173	427	
230	YY	60	5.00	4.00	3,600	12.00	9.18	6.80	4.00	92.0	88.5	89.1	88.2	88.2	85.9	78.1	7.5	173	427	
400	Y	50	3.00		2,945	4.31	3.51	2.83	2.10	45.0	85.9	85.6	83.9	82.7	76.3	64.4	5.3	318	590	
200	YY	50	3.00		2,945	8.62	7.02	5.66	4.20	90.0	85.9	85.6	83.9	82.7	76.3	64.4	5.3	318	590	

Frame Type: 184T	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: 129		Temp. Rise Cl.: B	Amb. Temp.: + 40 to -20 °C @1000 m	kVA: J	IP 55

## Mechanical data

Sound level (SPL / SWL) at 60 Hz	69.0 dB(A) / 81.0 dB(A)							Thickener	Polyurea
Octave Band Center Frequencies Hertz								Safe Stall Time Hot	15 s
	250	500	1000	2000	4000	8000	Hz	Safe Stall Time Cold	29 s
SPL@3	49.0	61.0	66.0	64.0	60.0	50.0	dB(A)	Frame material	cast iron
Moment of inertia	0.2 Lb-ft <sup>2</sup>							Color, paint shade	Standard Paint - RAL7030
Ext Load Inertia Capability:	57.0 Lb ft <sup>2</sup>							Coating (paint finish)	Standard Alkyed + Epoxy (C2)
<b>Bearings</b>								<b>Ventilation Type</b>	
Bearing DE   NDE	6206 Z C3 S0			6206 Z C3 S0				Method of cooling	TEFC
Bearing_Type	Ball Bearing			Ball Bearing				Direction of rotation	Bidirectional
AFBMA:	30BC02JP30			30BC02JP30				Fan Material	Polypropylen ESD
<b>Grease</b>								VFD	CT: 4:1 VT: 20:1
Capacity	0.2 oz			0.2 oz				Space heaters	without
Grease Type:	Exxon Mobile EM							Brake:	without


## Terminal box

Lead Wire Connection					9 LEAD - WYE	Terminal box position	(3) F-1, Standard Floor Mount, T. Box LHS
Voltage	L1	L1	L1	Connected together		Material of terminal box	Cast Iron
LOW	T1 T7	T2 T8	T3 T9	T4 T5 T6		Cable entry	.75" NPT
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9			

## 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>d</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

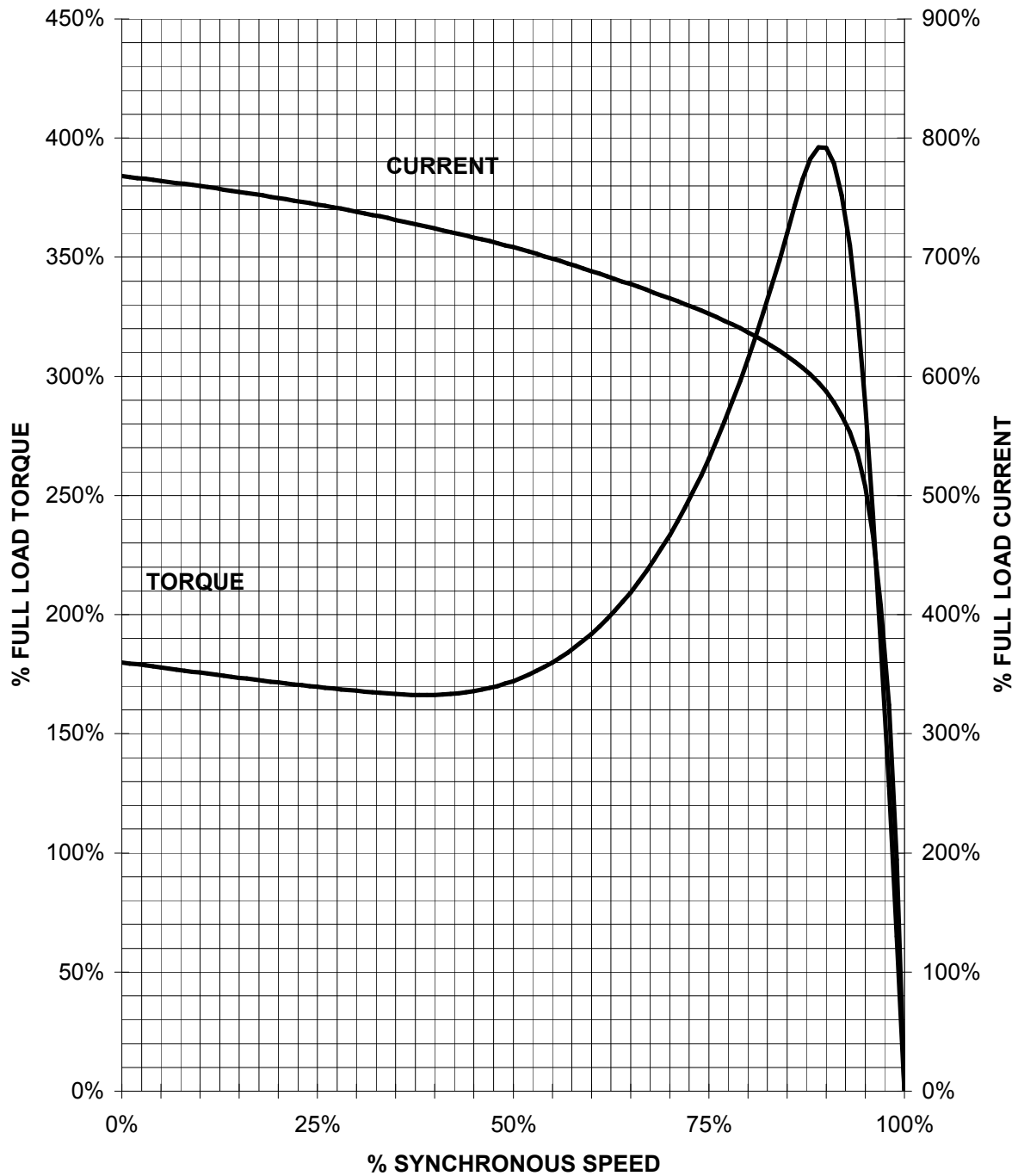
responsible dep. DI MC LVM	technical reference	created by DT Configurator	approved by	<i>Technical data are subject to change! There may be discrepancies between our website and our data sheets.</i>			
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# SIEMENS INDUSTRY, INC.

HP 5 VOLTS < 600V RPM 3600 TYPE SD100  
HZ 60 PHASE 3 FRAME 184T NEMA B

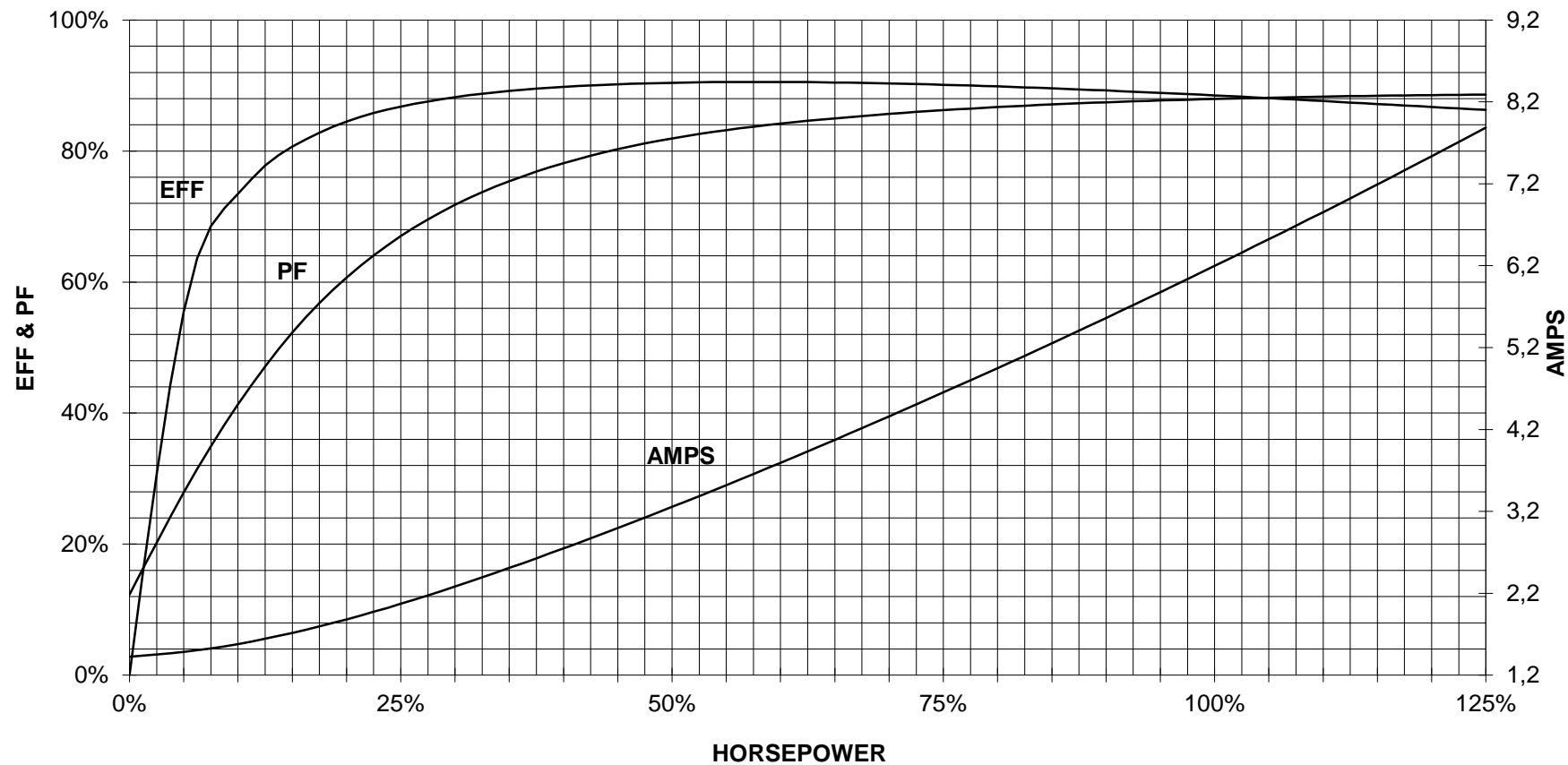
## TORQUE & CURRENT VS. SPEED



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

5 HP 3600 RPM 184T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

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



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

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

REV. 1

Main terminal diagram



9 LEAD WYE						
Volts	LINES			CONNECTED TOGETHER	CONN.	
	L1	L2	L3			
LOW	T1 T7	T2 T6	T3 T9	T4 T5 T6	YY	
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9	Y	

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