

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

Motor type: **SD100** FS: **143T - 4p - 1 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				
575	Y	60	1.00	0.75	1,800	1.10	0.90	0.80	0.60	10.4	85.5	85.4	83.4	78.2	71.5	58.4	3.0	300	383	
Frame Type: 143T		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: 72						Temp. Rise Cl.: B		Amb. Temp.: + 40 to -20 °C @1000 m			kVA: M		IP 55							

## Mechanical data

Sound level (SPL / SWL) at 60 Hz	50.0 dB(A) / 62.0 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	26 s			
SPL@3			37.0	40.0	49.0	45.0	37.0	31.0	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:	58.0 Lb ft <sup>2</sup>		Coating (paint finish)	Standard Alkyed + Epoxy (C2)							
<b>Bearings</b>			<b>Ventilation Type</b>								
Bearing DE   NDE	6205 Z C3 S0		6205 Z C3 S0	Method of cooling	TEFC						
Bearing_Type	Ball Bearing		Ball Bearing	Direction of rotation	Bidirectional						
AFBMA:	25BC02JP30		25BC02JP30	Fan Material	Polypropylen ESD						
<b>Grease</b>			VFD	CT: 20:1 VT: 20:1							
Capacity	0.1 oz		0.1 oz	Space heaters	without						
Grease Type:	Exxon Mobile EM		Brake:	without							


## Terminal box

Lead Wire Connection		3 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
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----	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

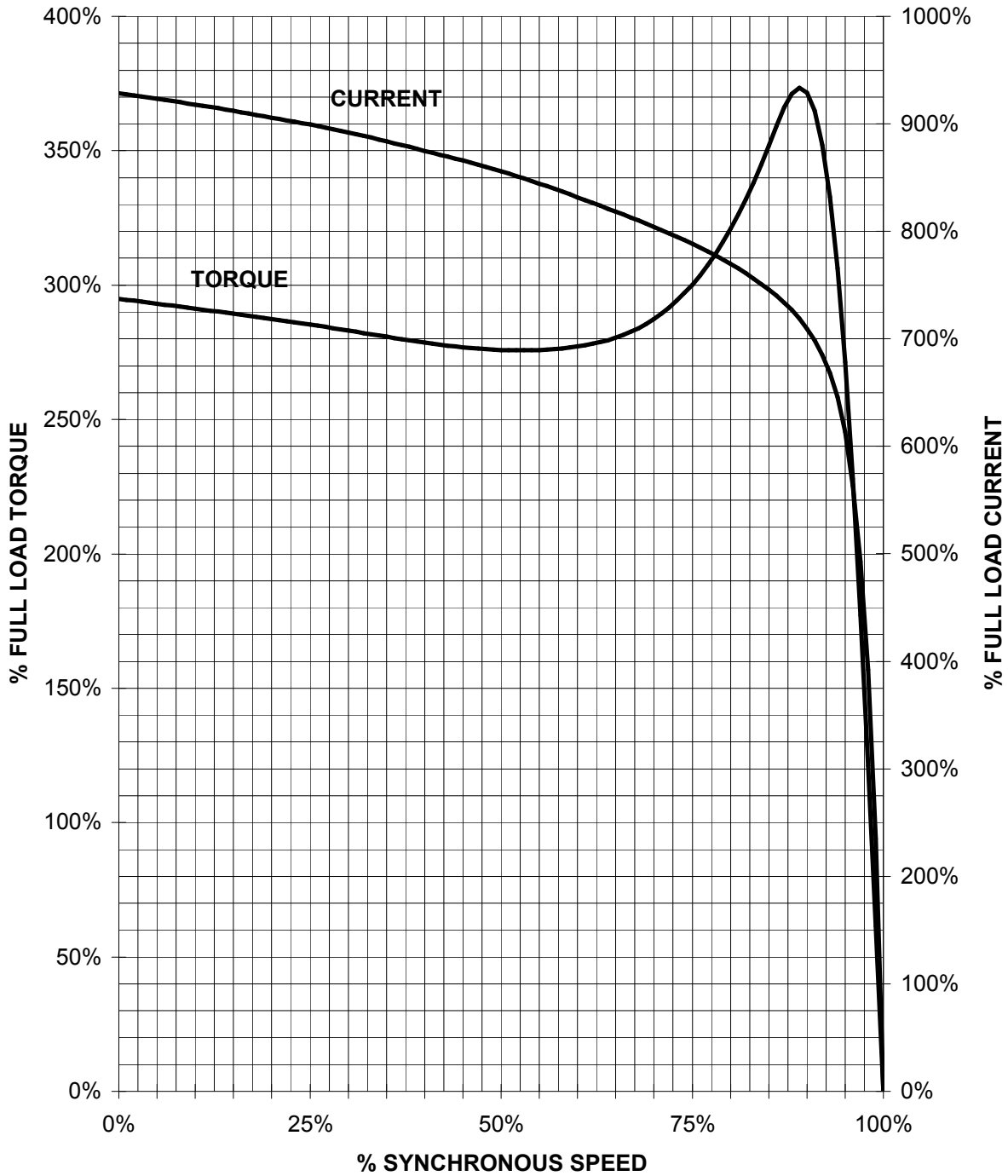
responsible dep. DI MC LVM	technical reference	created by DT Configurator	approved by	<i>Technical data are subject to change! There may be discrepancies between software and hardware versions</i>	
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HP 1 VOLTS < 600V RPM 1800 TYPE SD100  
HZ 60 PHASE 3 FRAME 143T NEMA B

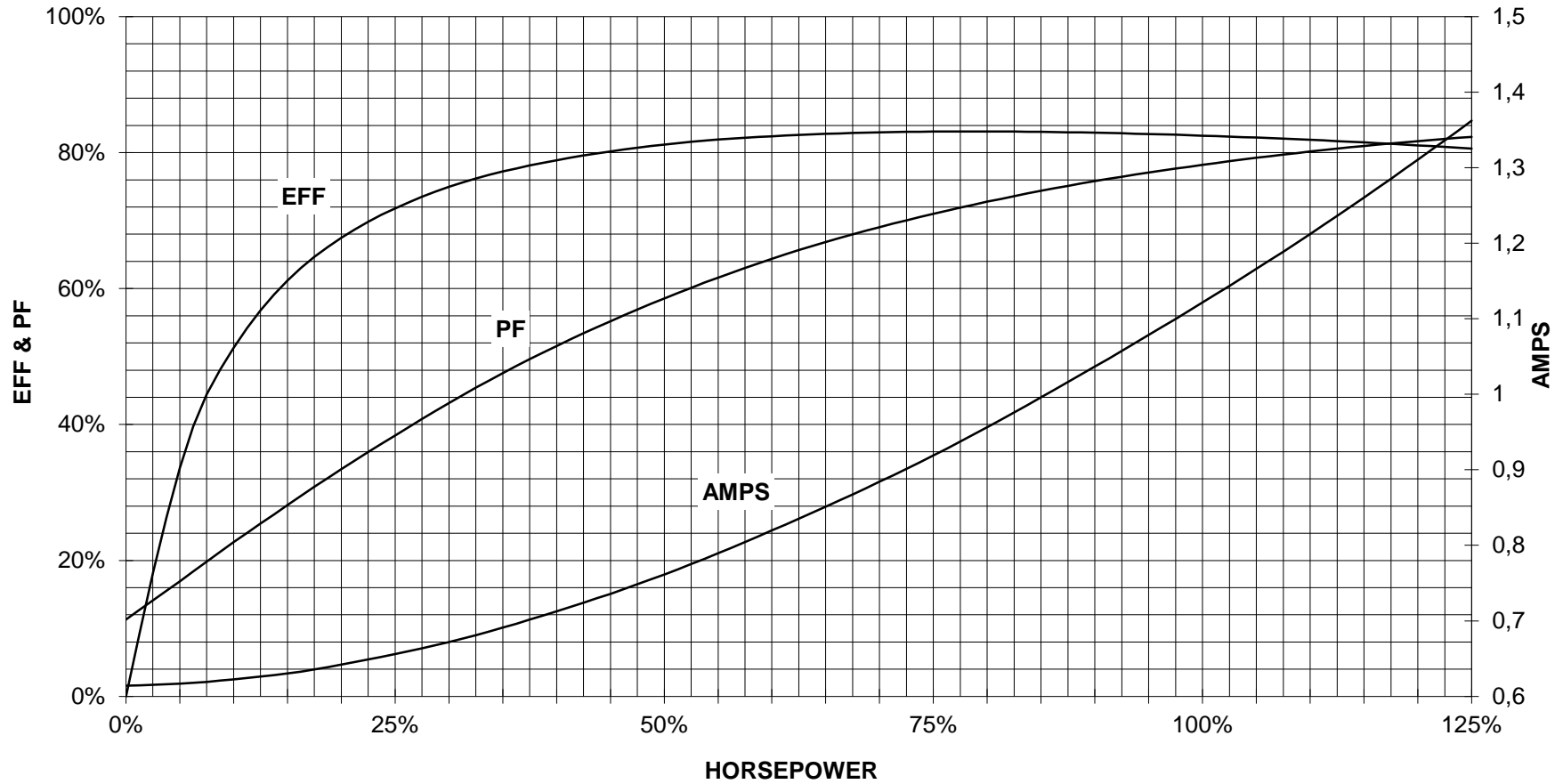
## TORQUE & CURRENT VS. SPEED



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

1 HP 1800 RPM 143T FRAME 575 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



3 LEAD WYE			
LINES			CONN.
L1	L2	L3	
T1	T2	T3	

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