

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

Motor type: **SD100** FS: **256T - 4p - 20 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]	Δ/Y	f [Hz]	P [HP]	P [kW]	n [rpm]	I Load [Amps]					LRC	Nom. Eff Load [%]			Pwr. Factor Load [%]			Torque [lb-ft]	T _A /T _N LRT [%]	T _k /T _N BDT [%]
						4/4	3/4	1/2	0	4/4		3/4	2/4	4/4	3/4	2/4				
460	Y	60	20.00	15.00	1,800	25.00	19.80	15.40	10.50	145.0	93.0	93.4	93.1	80.5	75.9	65.3	60.0	183	240	
230	YY	60	20.00	15.00	1,800	50.00	39.62	30.80	21.00	290.0	93.0	93.4	93.1	80.5	75.9	65.3	60.0	183	240	
400	Y	50	15.00		1,475	21.30	18.60	15.50	12.60	168.5	91.5	91.3	90.3	81.4	70.2	56.8	53.4	299	348	
200	YY	50	15.00		1,475	42.60	37.20	31.00	25.20	337.0	91.5	91.3	90.3	81.4	70.2	56.8	53.4	299	348	

Frame Type: 256T	Type of constr.: (G) Round body - C-Face	Ins. Cl.: Standard Class F Insulation	Motor Prot.: (A) Without Protection	NEMA Des.: B	S.F.: 1.15
Mtr. WT: 319		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	61.0 dB(A) / 73.0 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	33 s
SPL@3	47.0	53.0	59.0	56.0	47.0	38.0	dB(A)	Frame material	cast iron
Moment of inertia	2.1 Lb-ft ²							Color, paint shade	Standard Paint - RAL7030
Ext Load Inertia Capability:	99.0 Lb ft ²							Coating (paint finish)	Standard Alkyed + Epoxy (C2)
Bearings									
Bearing DE NDE	6309 Z C3 S0			6309 Z C3 S0			Method of cooling	TEFC	
Bearing_Type	Ball Bearing			Ball Bearing			Direction of rotation	Bidirectional	
AFBMA:	45BC03JP30			45BC03JP30			Fan Material	Polypropylen ESD	
Grease									
Capacity	0.5 oz			0.5 oz			VFD	CT: 20:1 VT: 20:1	
Grease Type:	Exxon Mobile EM							Space heaters	without
							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	1.25" NPT
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9		

Notes:

I_L/I_N = locked rotor current / current nominal
M_L/M_N = locked rotor torque / torque nominal
M_d/M_N = break down torque / nominal torque

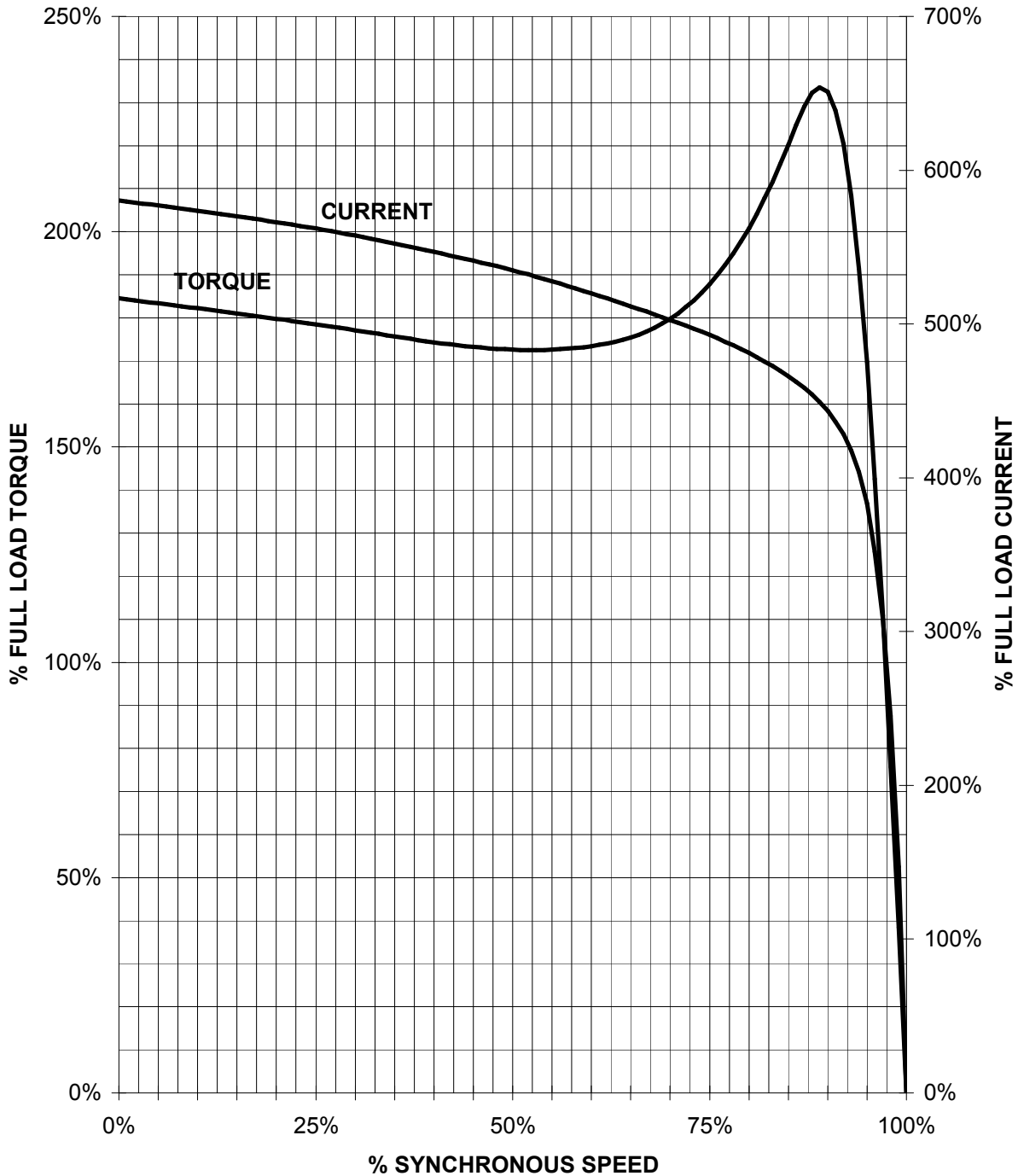
3) Value is valid only for DOL operation with motor design IC411
2) at rated power / at full load

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>	
	document type datasheet	document status released	customer		
	title 1LE2321-2BB21-4GA3	document number	rev. 01	creation date 2022-04-08 19:51	language en
© Siemens AG 2022				Page 1/1	

SIEMENS INDUSTRY, INC.

HP 20 VOLTS < 600V RPM 1800 TYPE SD100
HZ 60 PHASE 3 FRAME 256T NEMA B

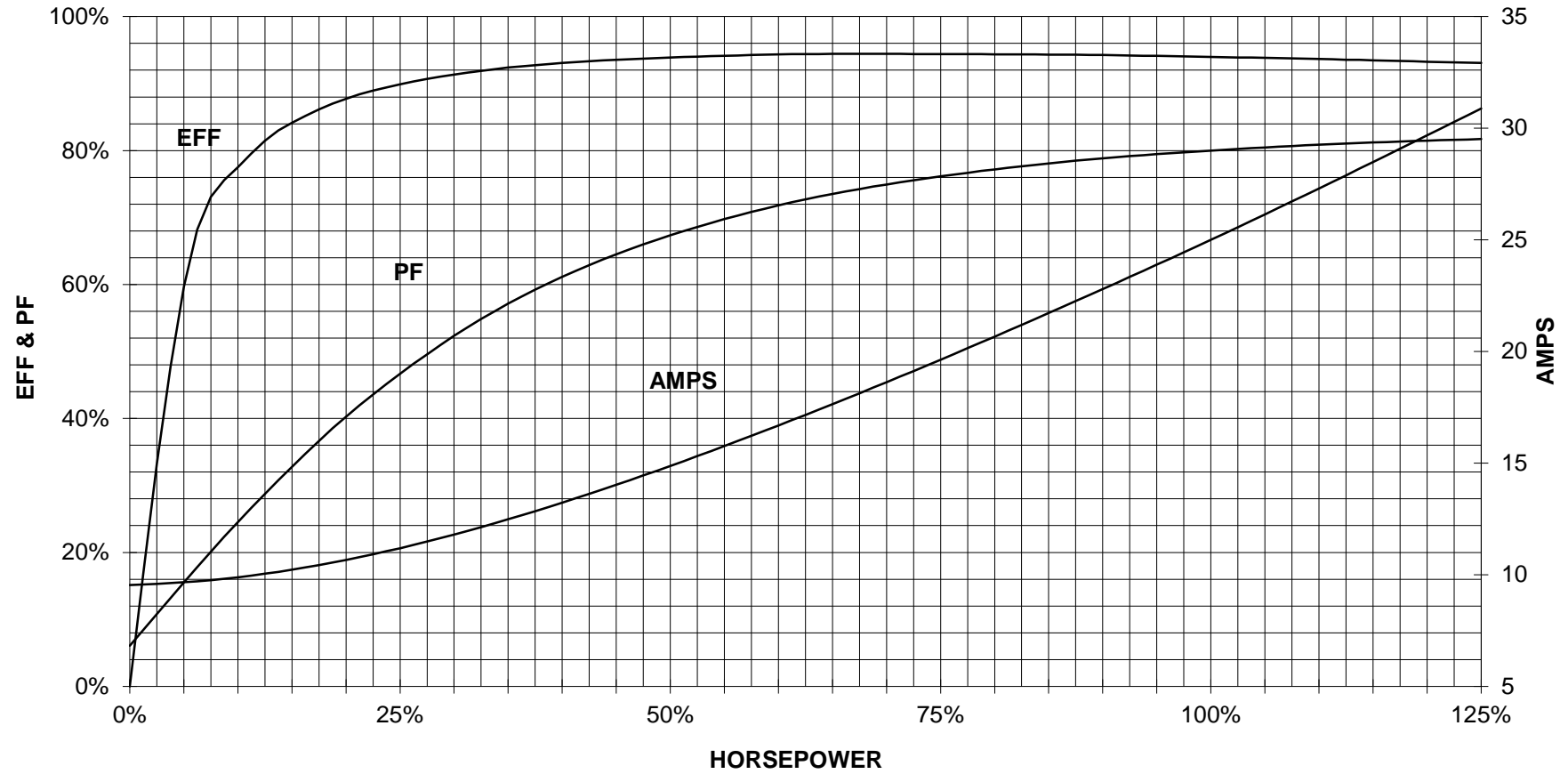
TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____

20 HP 1800 RPM 256T 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
SIEMENS	document type Wiring Diagram	document status free		customer
	title 1LE2321-2BB21-4GA3	document number		
© Siemens AG 2019	rev. 01	creation date 12/03/2019	language en	Page 1/1