

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

Motor type: **GP100** FS: 256T - 2p - 20 hp -

Client order no.	Item-No.	Offer no.
Order no.	Consignment no.	Project
Remarks		

## Electrical data

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	20.00	15.00	3,600	22.50	16.80	11.80	5.20	145.0	91.0	91.6	92.1	91.5	91.3	86.2	30.0	183	230	
230	YY	60	20.00	15.00	3,600	45.00	33.59	23.59	10.40	290.0	91.0	91.6	92.1	91.5	91.3	86.2	30.0	183	230	
400	Y	50	15.00		2,935	18.90	14.40	10.30	5.00	133.3	91.2	91.9	91.7	92.1	90.0	84.2	26.9	225	330	
200	YY	50	15.00		2,935	37.80	28.80	20.60	10.00	266.6	91.2	91.9	91.7	92.1	90.0	84.2	26.9	225	330	

**without**

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: 313		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	20 s
	250	500	1000	2000	4000	8000	Hz	Safe Stall Time Cold	45 s
SPL@3	54.0	56.0	63.0	62.0	60.0	48.0	dB(A)	Frame material	cast iron
Moment of inertia	1.4 Lb-ft <sup>2</sup>							Color, paint shade	Standard Paint - RAL7030
Ext Load Inertia Capability:	21.0 Lb ft <sup>2</sup>							Coating (paint finish)	Standard Alkyed + Epoxy (C2)
<b>Bearings</b>								<b>Ventilation Type</b>	
Bearing DE   NDE	6209 ZZ C3 S0			6209 ZZ C3 S0				Method of cooling	TEFC
Bearing_Type	Ball Bearing			Ball Bearing				Direction of rotation	Bidirectional
AFBMA:	45BC02JPP30			45BC02JPP30				Fan Material	Polypropylen
<b>Grease</b>								VFD	CT: 4:1 VT: 20:1
Capacity	0.5 oz			0.5 oz				Space heaters	without
Grease Type:	Exxon Mobile EM							Brake:	without


## Terminal box

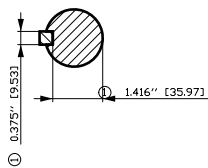
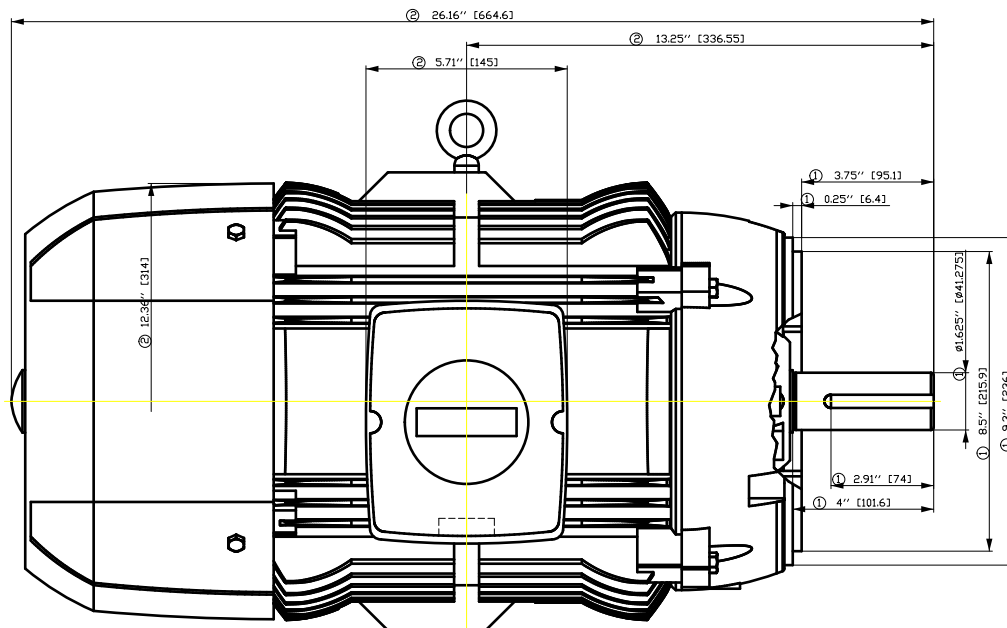
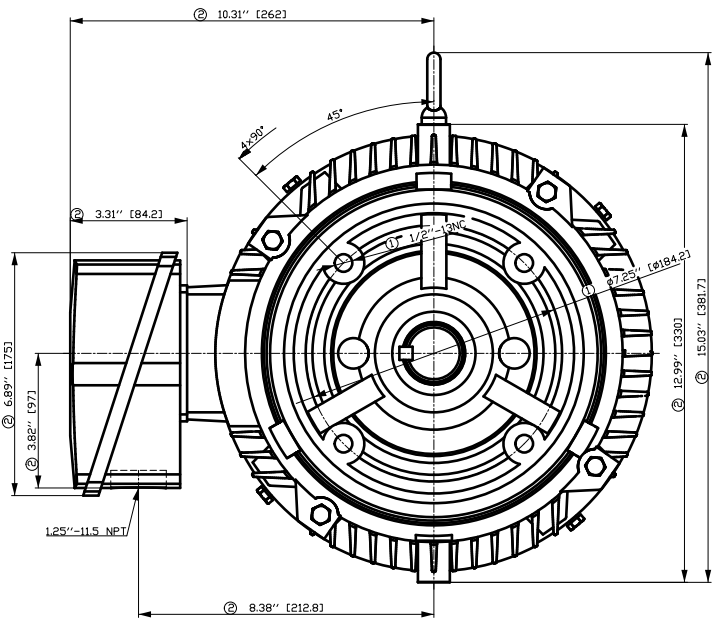
Lead Wire Connection	9 LEAD - WYE				Terminal box position	(3) F-1, Standard Floor Mount, T. Box LHS
Voltage	L1	L1	L1	Connected together	Material of terminal box	Aluminium
LOW	T1 T7	T2 T8	T3 T9	T4 T5 T6	Cable entry	1.25" NPT
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9		

### Notes:

I<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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- 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	
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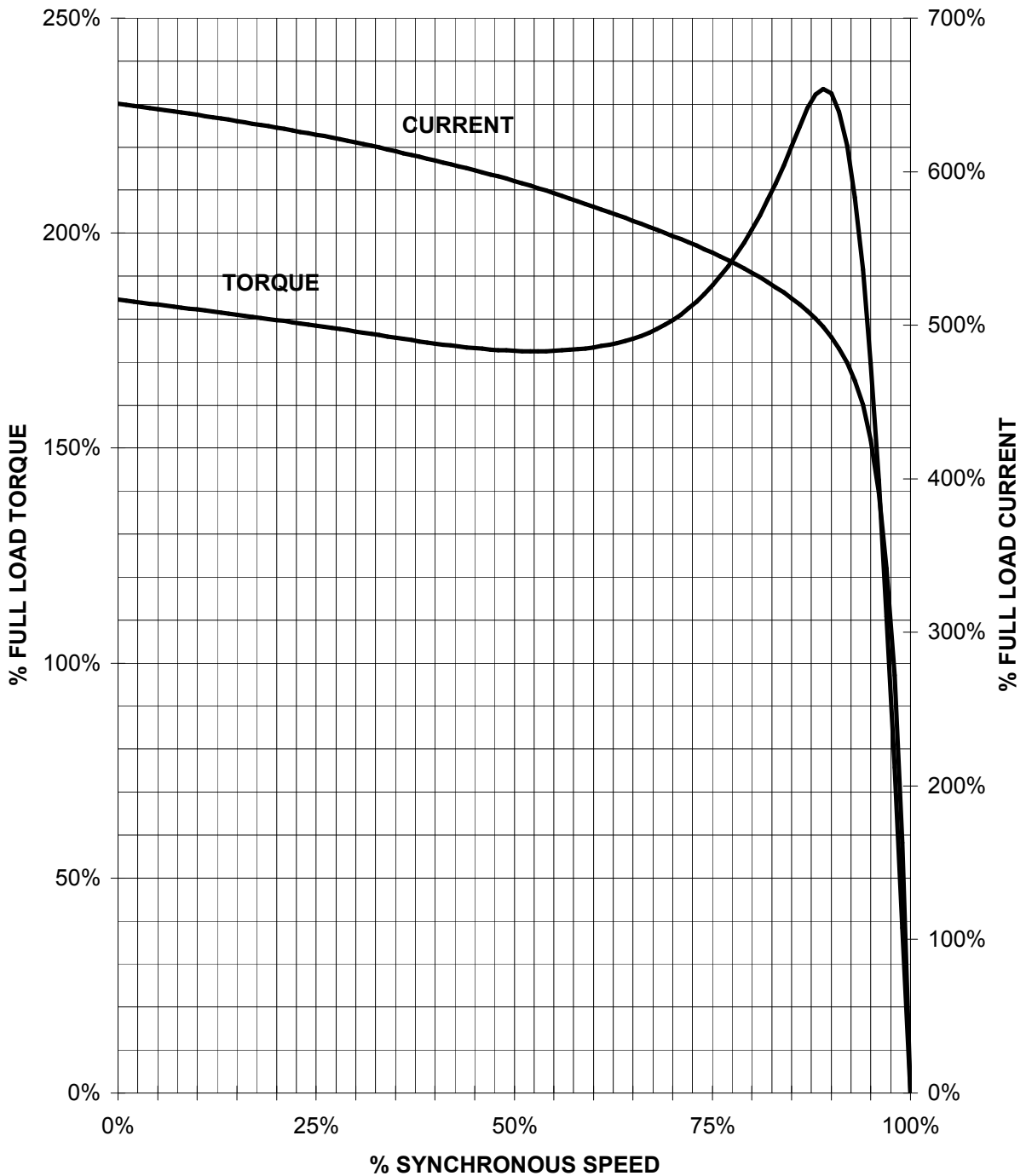
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01) 2) 3) 4) 5) 6) 7) 8) 9) 10) 11) 12) 13) 14) 15) 16) 17) 18) 19) 20) 21) 22) 23) 24) 25) 26) 27) 28) 29) 30) 31) 32) 33) 34) 35) 36) 37) 38) 39) 40) 41) 42) 43) 44) 45) 46) 47) 48) 49) 50) 51) 52) 53) 54) 55) 56) 57) 58) 59) 60) 61) 62) 63) 64) 65) 66) 67) 68) 69) 70) 71) 72) 73) 74) 75) 76) 77) 78) 79) 80) 81) 82) 83) 84) 85) 86) 87) 88) 89) 90) 91) 92) 93) 94) 95) 96) 97) 98) 99) 100)

# SIEMENS INDUSTRY, INC.

HP 20 VOLTS < 600V RPM 3600 TYPE GP100  
HZ 60 PHASE 3 FRAME 256T NEMA B

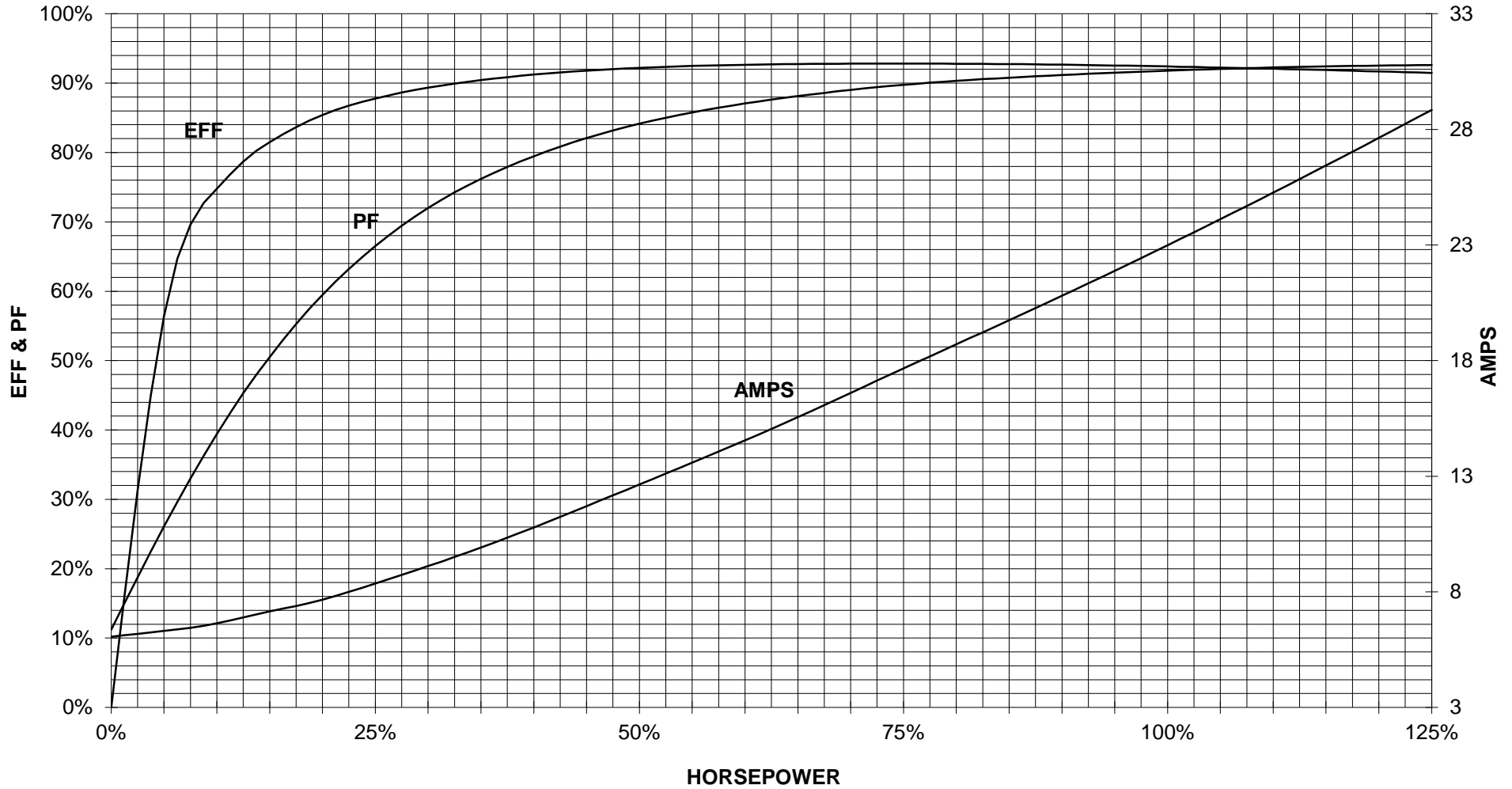
## TORQUE & CURRENT VS. SPEED



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

20 HP 3600 RPM 256T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

**SIEMENS INDUSTRY, INC.**  
**PERFORMANCE CURVE**  
**GP100**



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<br>T7 | T2<br>T6 | T3<br>T9 | T4 T5 T6           | YY    |  |
| HIGH       | T1       | T2       | T3       | T4 T7-T5 T8-T6 T9  | Y     |  |

|                               |                                 |                             |                |             |
|-------------------------------|---------------------------------|-----------------------------|----------------|-------------|
| responsible dep.<br>DI MC LVM | technical reference             | created by                  | approved by    | Project     |
| <b>SIEMENS</b>                | document type<br>Wiring Diagram | document status<br>free     |                | customer    |
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