

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

Motor type: **GP100** FS: 256T - 8p - 7.5 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     | 7.50   | 5.50   | 900     | 13.00         | 10.90 | 9.20  | 7.90  | 50.0  | 87.5 | 88.0              | 87.0 | 62.0 | 55.0                 | 44.0 | 45.0 | 164            | 200                                    |                                        |
| 230   | YY         | 60     | 7.50   | 5.50   | 900     | 26.00         | 21.76 | 18.35 | 15.80 | 100.0 | 87.5 | 88.0              | 87.0 | 62.0 | 55.0                 | 44.0 | 45.0 | 164            | 200                                    |                                        |

**without**

|                  |                                                |                                       |                                     |              |            |
|------------------|------------------------------------------------|---------------------------------------|-------------------------------------|--------------|------------|
| Frame Type: 256T | 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: 250     |                                                | 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) / 77.0 dB(A)  |      | Thickener               | Polyurea                     |               |      |       |                      |           |
| Octave Band Center Frequencies Hertz |                          |      | Safe Stall Time Hot     | 50 s                         |               |      |       |                      |           |
|                                      | 250                      | 500  | 1000                    | 2000                         | 4000          | 8000 | Hz    | Safe Stall Time Cold | 100 s     |
| SPL@3                                | 50.0                     | 64.0 | 61.0                    | 57.0                         | 46.0          | 39.0 | dB(A) | Frame material       | cast iron |
| Moment of inertia                    | 1.8 Lb-ft <sup>2</sup>   |      | Color, paint shade      | Standard Paint - RAL7030     |               |      |       |                      |           |
| Ext Load Inertia Capability:         | 208.0 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

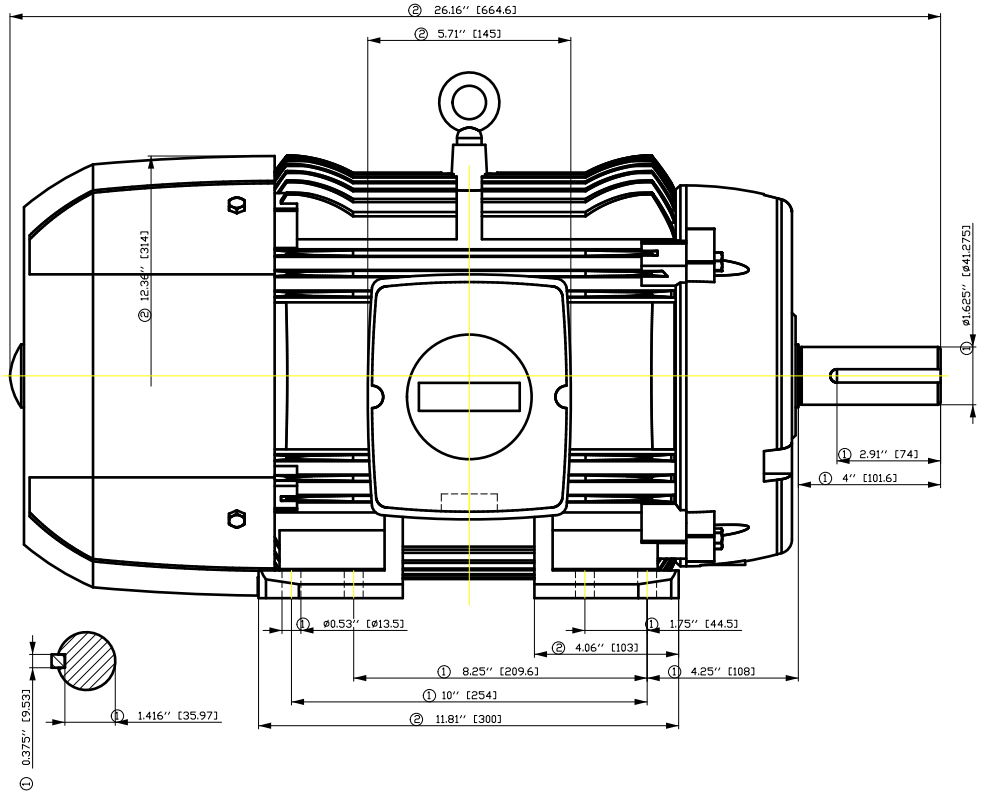
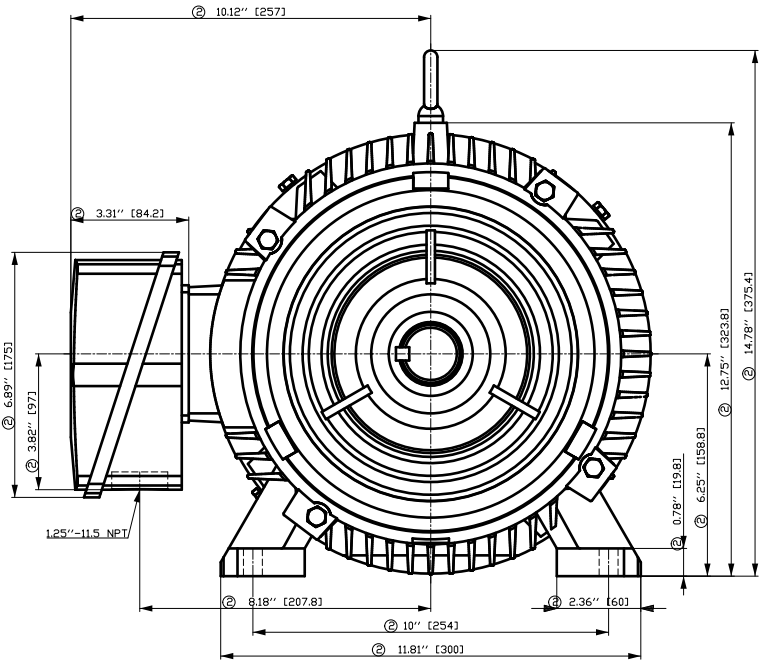
|                      |              |       |       |                    |                          |                                           |
|----------------------|--------------|-------|-------|--------------------|--------------------------|-------------------------------------------|
| Lead 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>r</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>r</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.<br>DI MC LVM                                                      | technical reference         | created by<br>DT Configurator | approved by | <i>Technical data are subject to change! There may be discrepancies between software and hardware versions</i> |                |
|  | document type<br>datasheet  | document status<br>released   | customer    |                                                                                                                |                |
|                                                                                    | title<br>1LE2221-2BD21-4AA3 | document number               | rev.<br>01  | creation date<br>2022-04-08 19:22                                                                              | language<br>en |
| © Siemens AG 2022                                                                  |                             |                               |             |                                                                                                                |                |



- 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.

刀线为  
用转换为  
英寸单位  
的公制数  
值

凡在图样中  
标注的尺寸  
均以毫米为  
单位。如未  
注明公差  
时，应符合  
GB 1804-2000  
中规定的  
公差等级  
和公差带。  
线性尺寸  
的公差等级  
在图样中  
一律按  
未注公差  
处理。

凡在图样中  
标注的尺寸  
均以毫米为  
单位。如未  
注明公差  
时，应符合  
GB 1804-2000  
中规定的  
公差等级  
和公差带。  
线性尺寸  
的公差等级  
在图样中  
一律按  
未注公差  
处理。

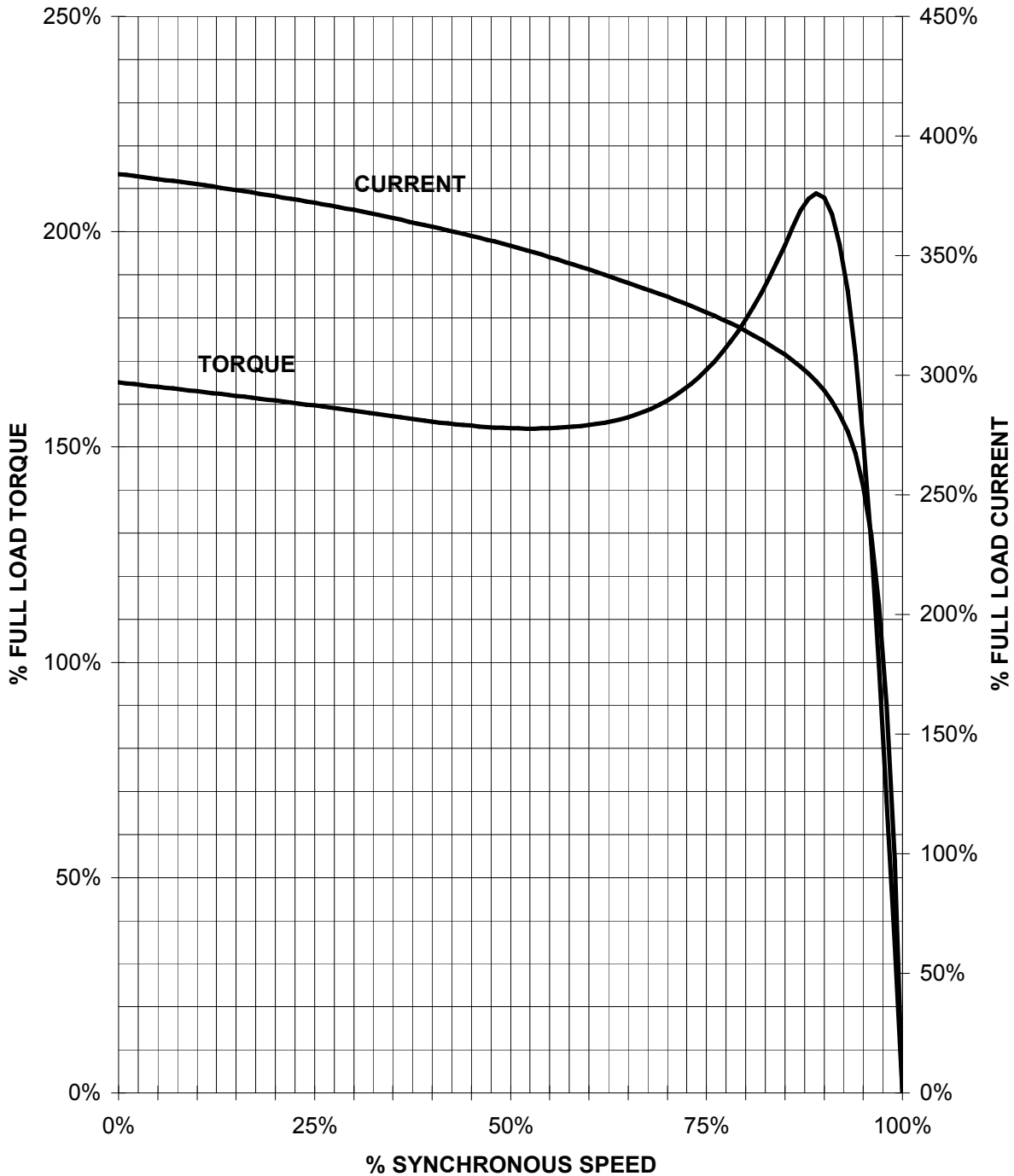
凡在图样中  
标注的尺寸  
均以毫米为  
单位。如未  
注明公差  
时，应符合  
GB 1804-2000  
中规定的  
公差等级  
和公差带。  
线性尺寸  
的公差等级  
在图样中  
一律按  
未注公差  
处理。

|                        |                                                             |                                |                                                        |               |
|------------------------|-------------------------------------------------------------|--------------------------------|--------------------------------------------------------|---------------|
| Tolerance              | Surface                                                     | Material                       | Weight<br>É                                            | Scale<br>1:1  |
| F5ÖGGFÉZÖÖGFÉ ÖEH<br>É | Author<br>Creator<br>Approval<br>Department<br>Change Order | Öä ^}•q)æ/æ q*<br>T æ : ^æ@`)* |                                                        |               |
|                        | Doc. State<br>Revision                                      | MLFB<br>Item No<br>Doc No      | Doc Type<br>Paper Size<br>1st Language<br>2nd Language | CH<br>A<br>à^ |
| © Siemens AG 2018      | Index<br>Project No<br>É                                    | RS<br>Ref No<br>É              | Sheet<br>F of F                                        |               |

# SIEMENS INDUSTRY, INC.

HP 7.5 VOLTS < 600V RPM 900 TYPE GP100  
HZ 60 PHASE 3 FRAME 256T NEMA B

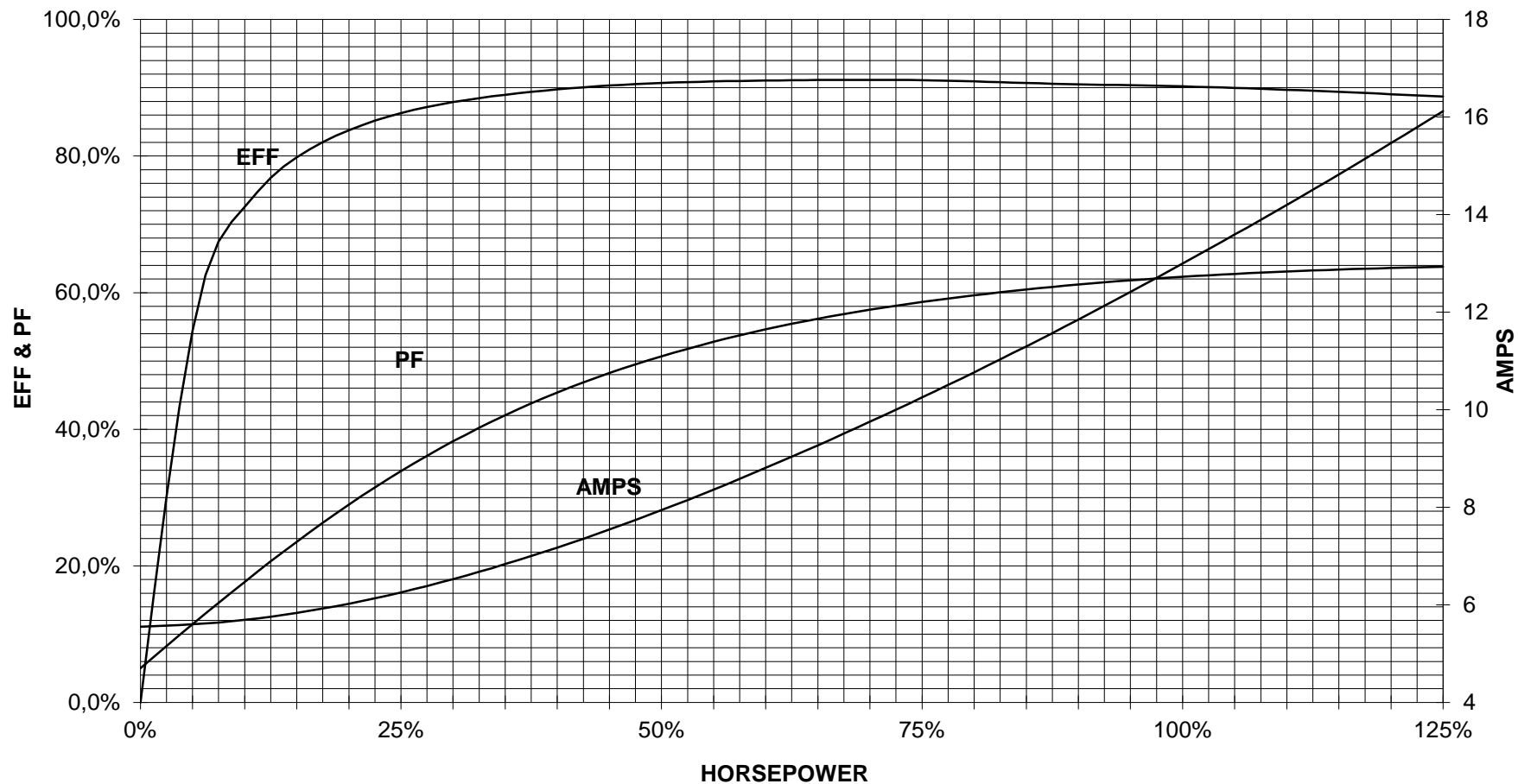
## TORQUE & CURRENT VS. SPEED



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

7.5 HP 900 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    |
|                               | title<br>1LE2221-2BD21-4AA3     | document number             |                |             |
| © Siemens AG 2019             | rev.<br>01                      | creation date<br>12/03/2019 | language<br>en | Page<br>1/1 |