

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

Motor type: **GP100** FS: **254T - 6p - 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  |      |                |                                        |                                        |
| 575   | Y          | 60     | 7.50   | 5.50   | 1,200   | 8.00          | 6.60 | 5.30 | 4.00 | 50.4 | 91.0 | 91.5              | 91.1 | 77.2 | 70.2                 | 58.4 | 33.0 | 167            | 261                                    |                                        |

**without**

|                  |                                                |                                       |                                     |              |            |
|------------------|------------------------------------------------|---------------------------------------|-------------------------------------|--------------|------------|
| Frame Type: 254T | 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: 249     |                                                | Temp. Rise Cl.: B                     | Amb. Temp.: + 40 to -20 °C @1000 m  | kVA: H       | IP 55      |

## Mechanical data

|                                      |                          |      |      |               |      |      |                       |                         |                              |
|--------------------------------------|--------------------------|------|------|---------------|------|------|-----------------------|-------------------------|------------------------------|
| Sound level (SPL / SWL) at 60 Hz     | 55.0 dB(A) / 67.0 dB(A)  |      |      |               |      |      |                       | Thickener               | Polyurea                     |
| Octave Band Center Frequencies Hertz |                          |      |      |               |      |      |                       | Safe Stall Time Hot     | 26 s                         |
|                                      | 250                      | 500  | 1000 | 2000          | 4000 | 8000 | Hz                    | Safe Stall Time Cold    | 45 s                         |
| SPL@3                                | 40.0                     | 42.0 | 51.0 | 46.0          | 51.0 | 28.0 | dB(A)                 | Frame material          | cast iron                    |
| Moment of inertia                    | 1.5 Lb-ft <sup>2</sup>   |      |      |               |      |      |                       | Color, paint shade      | Standard Paint - RAL7030     |
| Ext Load Inertia Capability:         | 104.0 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

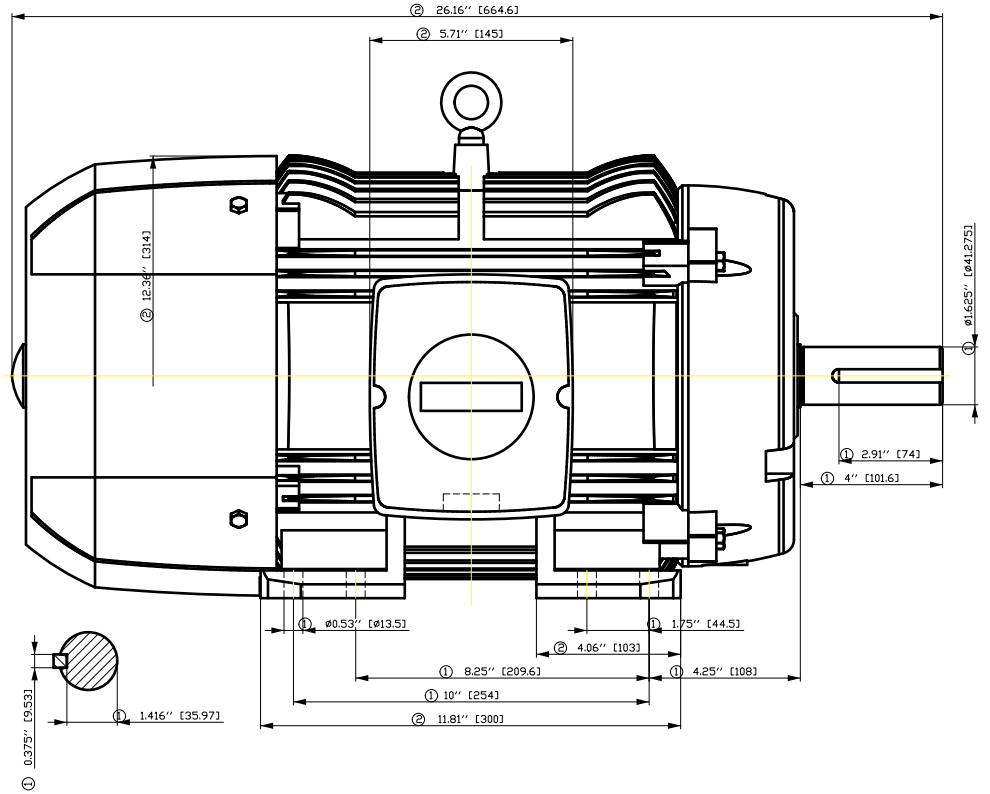
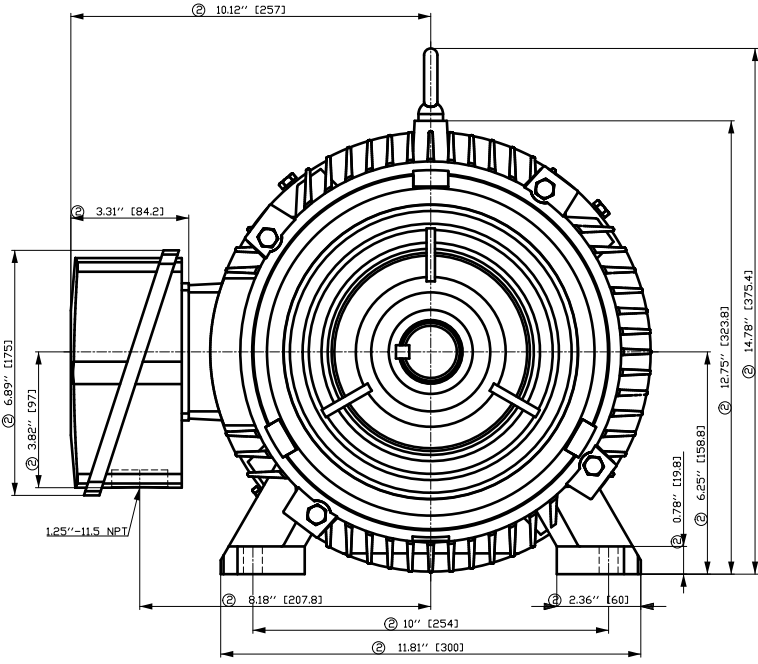
|                      |              |      |      |                    |                          |                                           |
|----------------------|--------------|------|------|--------------------|--------------------------|-------------------------------------------|
| Lead Wire Connection | 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 | Aluminium                                 |
| ----                 | ----         | ---- | ---- | ----               | Cable entry              | 1.25" NPT                                 |
| ----                 | T1           | T2   | T3   | ----               |                          |                                           |

### 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>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.<br>DI MC LVM                                                      | technical reference         | created by<br>DT Configurator     | approved by    | <b>Technical data are subject to change! There may be discrepancies between software and hardware versions</b> |  |  |  |
|  | document type<br>datasheet  | document status<br>released       |                | customer                                                                                                       |  |  |  |
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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.

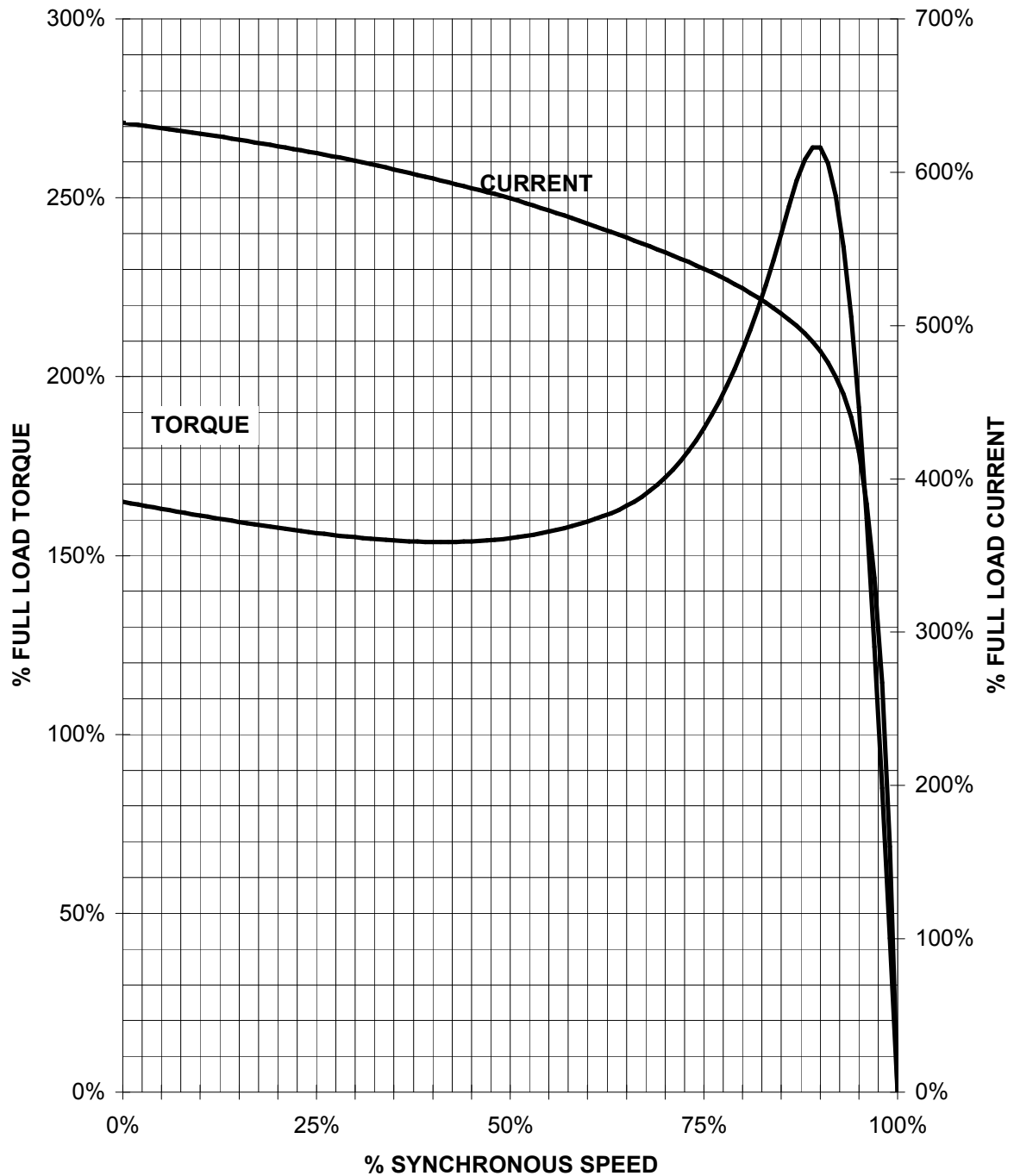
③ Not according to NEMA std.

| Tolerance            | Surface                                                     | Material           | Weight       | Scale        |
|----------------------|-------------------------------------------------------------|--------------------|--------------|--------------|
| F50GGFE00FFH0EH<br>E | Author<br>Creator<br>Approval<br>Department<br>Change Order | ÖVS<br>Tæ: ^æ@ } * | E            | { {          |
| SIEMENS              | Doc. State                                                  | Item No            | Doc Type     |              |
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|                      | Project No                                                  | E                  | Ref No       | E            |
| © Siemens AG 2018    | RS                                                          | 2nd Language       | 1st Language | Sheet F of F |

# SIEMENS INDUSTRY, INC.

HP 7,5 VOLTS < 600V RPM 1200 TYPE GP100  
HZ 60 PHASE 3 FRAME 254T NEMA B

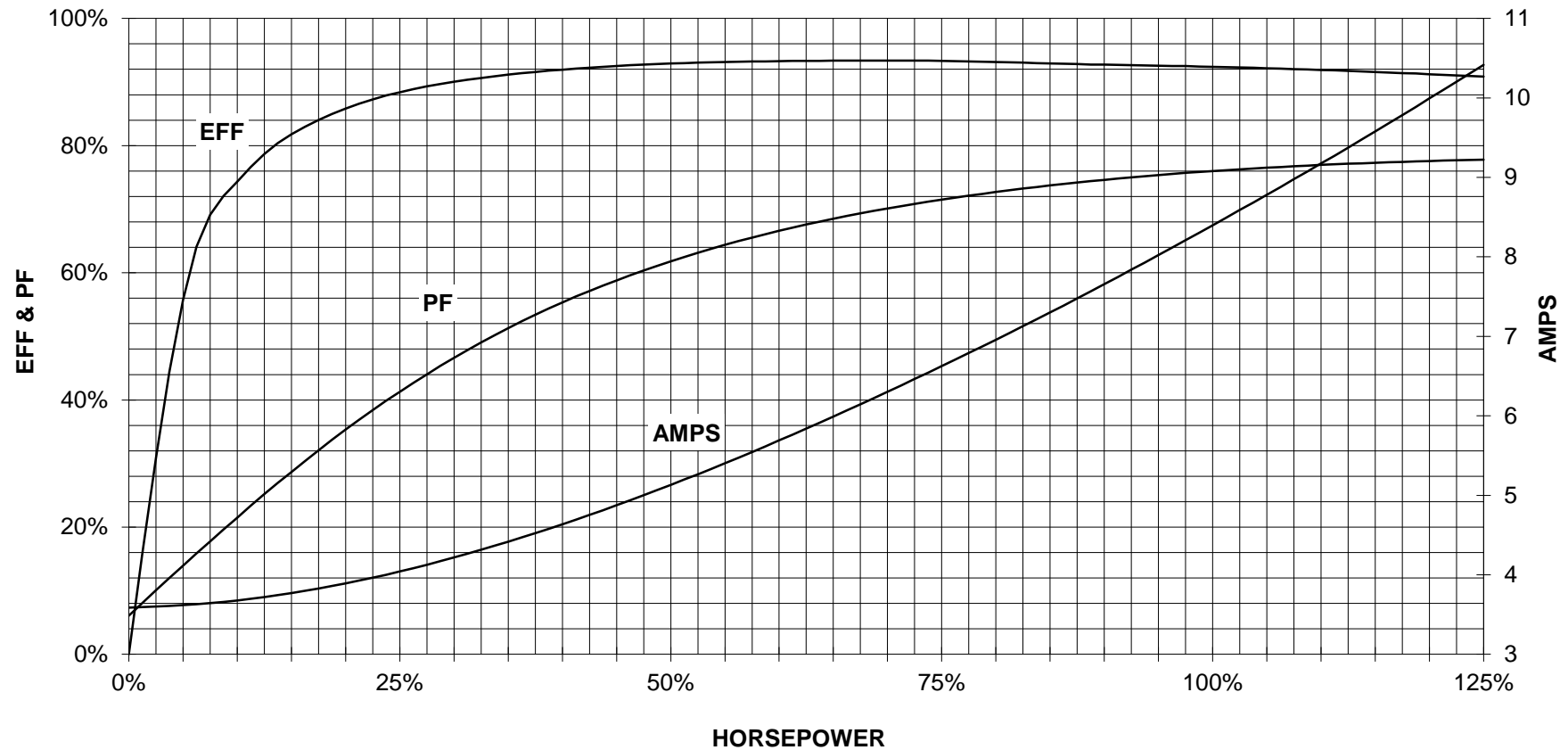
## TORQUE & CURRENT VS. SPEED



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

7.5 HP 1200 RPM 254T FRAME 575 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



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

responsible dep.  
DI MC LVM

technical reference

created by

approved by

Project

**SIEMENS**

document type  
Wiring Diagram

title  
1LE2221-2BC11-3AA3

document status  
free

document number

customer