

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

Motor type: **SD100 IEEE** FS: **324T - 6p - 25 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              | $\Delta$   | 60   | 25.00  | 18.50  | 1,200   | 26.40                                 | 20.90 | 16.30                               | 11.20 | 146.4 | 93.0         | 93.2              | 92.7       | 76.0 | 72.0                 | 62.0 | 111.0 | 170            | 241                                    |  |
| Frame Type: 324T |            | 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: 623     |            |  |        |        |         | 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     | 63.0 dB(A) / 73.0 dB(A)  |      | Thickener               | Polyurea                     |                  |      |       |                      |           |
| Octave Band Center Frequencies Hertz |                          |      | Safe Stall Time Hot     | 28 s                         |                  |      |       |                      |           |
|                                      | 250                      | 500  | 1000                    | 2000                         | 4000             | 8000 | Hz    | Safe Stall Time Cold | 54 s      |
| SPL@3                                | 51.0                     | 57.0 | 58.0                    | 56.0                         | 51.0             | 50.0 | dB(A) | Frame material       | cast iron |
| Moment of inertia                    | 9.3 Lb-ft <sup>2</sup>   |      | Color, paint shade      | Standard Paint - RAL7030     |                  |      |       |                      |           |
| Ext Load Inertia Capability:         | 324.0 Lb ft <sup>2</sup> |      | Coating (paint finish)  | Standard Alkyed + Epoxy (C2) |                  |      |       |                      |           |
| <b>Bearings</b>                      |                          |      | <b>Ventilation Type</b> |                              |                  |      |       |                      |           |
| Bearing DE   NDE                     | 6312 Z C3 S0             |      | 6312 Z C3 S0            | Method of cooling            | TEFC             |      |       |                      |           |
| Bearing_Type                         | Ball Bearing             |      | Ball Bearing            | Direction of rotation        | Bidirectional    |      |       |                      |           |
| AFBMA:                               | 60BC03JP30               |      | 60BC03JP30              | Fan Material                 | Polypropylen ESD |      |       |                      |           |
| <b>Grease</b>                        |                          |      | VFD                     | CT: 4:1 VT: 20:1             |                  |      |       |                      |           |
| Capacity                             | 5.5 oz                   |      | 5.5 oz                  | Space heaters                | without          |      |       |                      |           |
| Grease Type:                         | Exxon Mobile EM          |      | Brake:                  | without                      |                  |      |       |                      |           |


## Terminal box

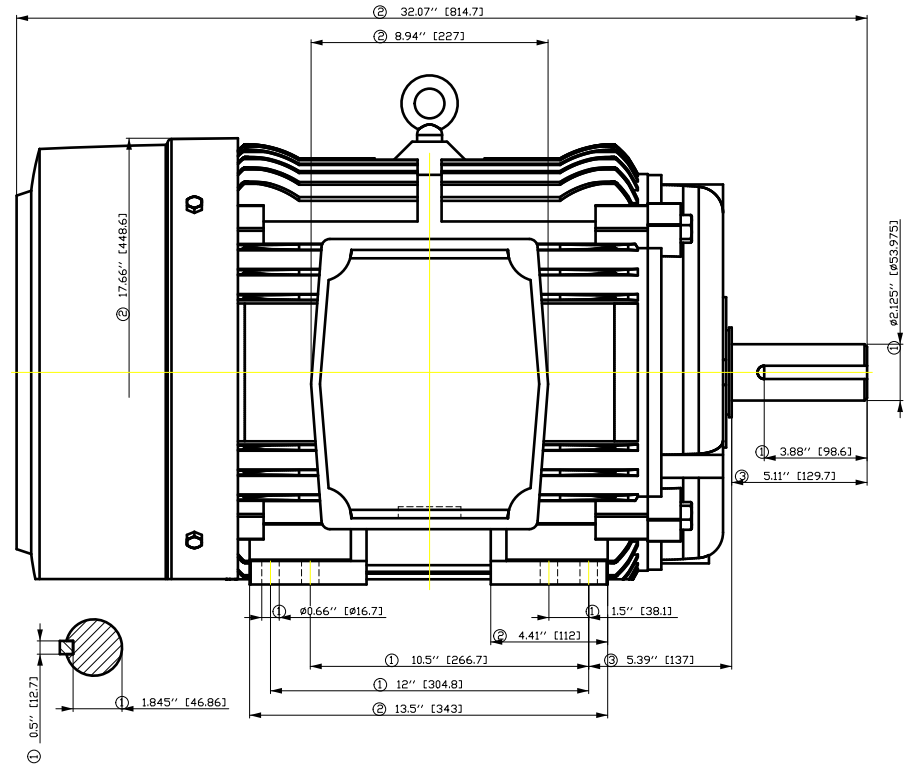
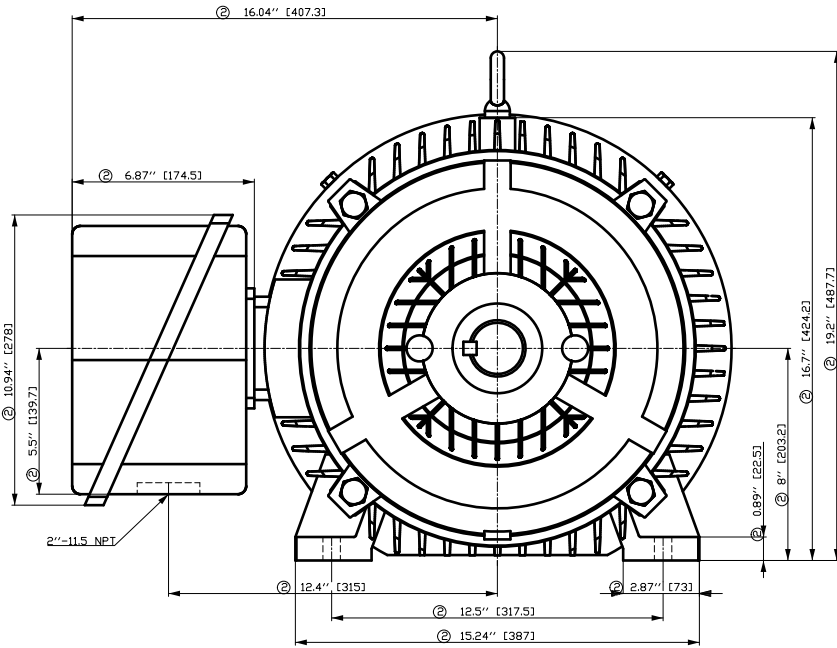
|                      |      |                |      |                    |                          |   |
|----------------------|------|----------------|------|--------------------|--------------------------|---|
| Lead Wire Connection |      | 3 LEAD - DELTA |      |                    | Terminal box position    | (3) F-1, Standard Floor Mount, T. Box LHS |
| Voltage              | L1   | L1             | L1   | Connected together | Material of terminal box | Cast Iron                                 |
| ----                 | ---- | ----           | ---- | ----               | Cable entry              | 2" NPT                                    |
| ----                 | 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.<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 our website and our data sheets.</i> |  |
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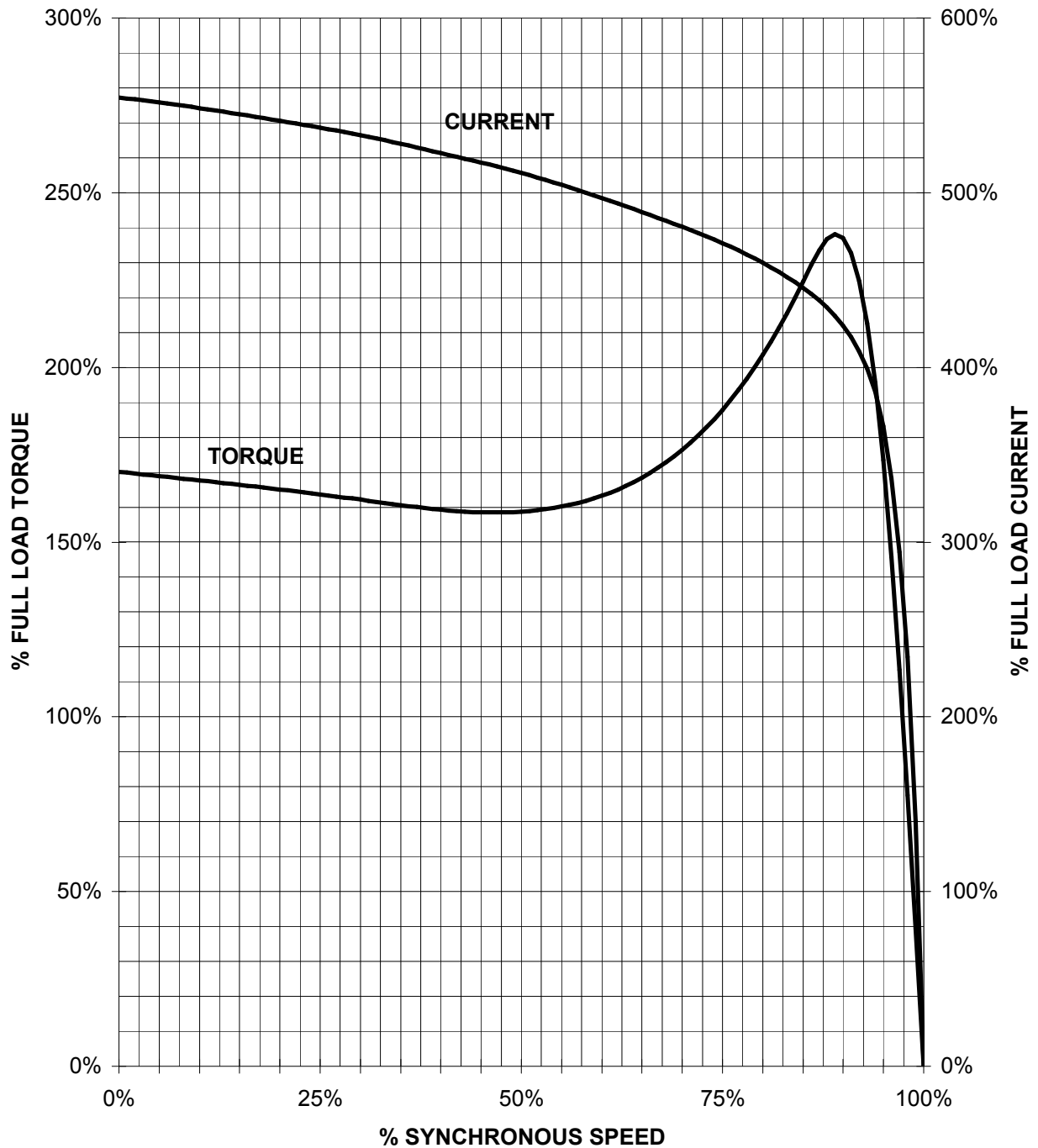
- ① Tolerances according to NEMA std.
- ② All these dimensions corresponding to assemblies and castings shall have a tolerance as per DIN standard 1686-GTB 19.
- ③ Not according to NEMA std.

| Tolerance             | Surface   | Material            | Weight                 | Scale      |
|-----------------------|---|---------------------|------------------------|------------|
| F50G GF-00FF-00H<br>E | Author<br>Creator<br>Approval<br>Department<br>Change Order | ÖS<br>T a : ^ @ } * | E                      | { {        |
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|                       |   |                     |                        | F of F     |

# SIEMENS INDUSTRY, INC.

HP 25 VOLTS < 600V RPM 1200 TYPE SD100 IEEE841  
HZ 60 PHASE 3 FRAME 324T NEMA B

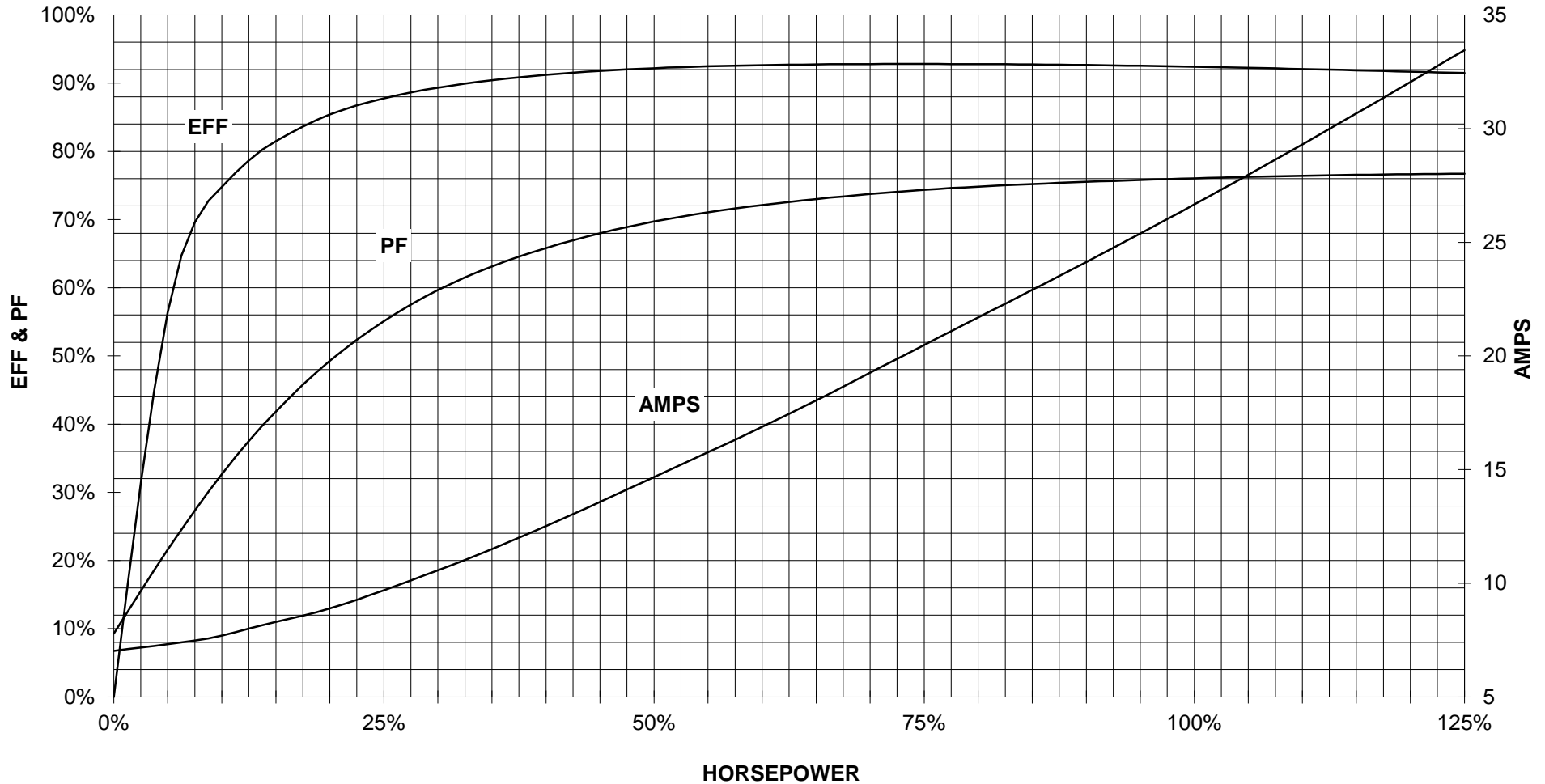
## TORQUE & CURRENT VS. SPEED



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

25 HP 1200 RPM 324T FRAME 575 VOLTS 3 PHASE NEMA DESIGN B

**SIEMENS INDUSTRY, INC.**  
**PERFORMANCE CURVE**  
**SD100 IEEE841**



CUSTOMER \_\_\_\_\_ ORDER # \_\_\_\_\_ PO # \_\_\_\_\_

PERFORMANCE BASED ON DESIGN CALCULATIONS. SUBJECT TO CHANGE WITHOUT NOTICE.

REV. 1

Main terminal diagram



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

responsible dep.  
DI MC LVM

technical reference

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Wiring Diagram

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