

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

Motor type: **SD100** FS: **365T - 6p - 50 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 Class II, Division 2 Gr. F or G

| 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   | 50.00  | 37.00  | 1,200   | 49.60                                 | 39.20 | 29.70                               | 19.20 | 290.4 | 94.1         | 94.3              | 94.0       | 80.0 | 76.0                 | 67.0 | 222.0 | 190            | 220                                    |  |
| Frame Type: 365T |              | 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: 883     |              |  |        |        |         | 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     | 60.0 dB(A) / 71.0 dB(A)  |      | Thickener               | Polyurea                     |      |      |       |                      |           |
| Octave Band Center Frequencies Hertz |                          |      | Safe Stall Time Hot     | 29 s                         |      |      |       |                      |           |
|                                      | 250                      | 500  | 1000                    | 2000                         | 4000 | 8000 | Hz    | Safe Stall Time Cold | 55 s      |
| SPL@3                                | 48.0                     | 53.0 | 54.0                    | 53.0                         | 52.0 | 50.0 | dB(A) | Frame material       | cast iron |
| Moment of inertia                    | 16.2 Lb-ft <sup>2</sup>  |      | Color, paint shade      | Standard Paint - RAL7030     |      |      |       |                      |           |
| Ext Load Inertia Capability:         | 620.0 Lb ft <sup>2</sup> |      | Coating (paint finish)  | Standard Alkyed + Epoxy (C2) |      |      |       |                      |           |
| <b>Bearings</b>                      |                          |      | <b>Ventilation Type</b> |                              |      |      |       |                      |           |
| Bearing DE   NDE                     | 6314 Z C3 S0             |      | 6314 Z C3 S0            |                              |      |      |       |                      |           |
| Bearing_Type                         | Ball Bearing             |      | Ball Bearing            |                              |      |      |       |                      |           |
| AFBMA:                               | 70BC03JP30               |      | 70BC03JP30              |                              |      |      |       |                      |           |
| <b>Grease</b>                        |                          |      | Method of cooling       |                              |      |      |       |                      |           |
| Capacity                             | 7.5 oz                   |      | 7.5 oz                  |                              |      |      |       |                      |           |
| Grease Type:                         | Exxon Mobile EM          |      | VFD                     |                              |      |      |       |                      |           |
|                                      |                          |      | Space heaters           |                              |      |      |       |                      |           |
|                                      |                          |      | Brake:                  |                              |      |      |       |                      |           |


## Terminal box

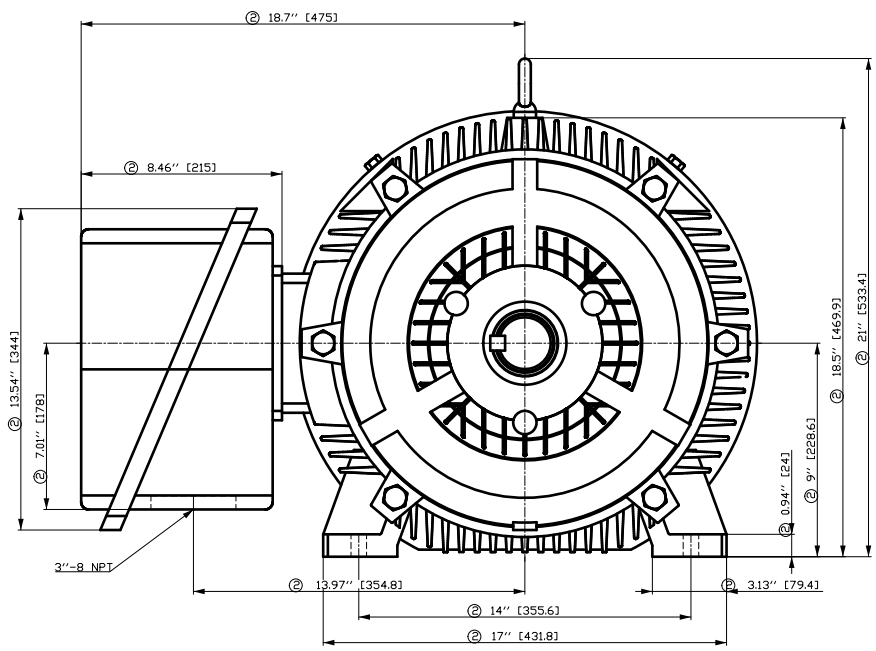
|                      |      |                |      |                    |                          |   |
|----------------------|------|----------------|------|--------------------|--------------------------|---|
| Lead Wire Connection |      | 3 LEAD - DELTA |      |                    | Terminal 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              | 3" NPT                                    |
| ----                 | T1   | T2             | T3   | ----               |                          |   |

### Notes:

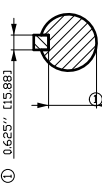
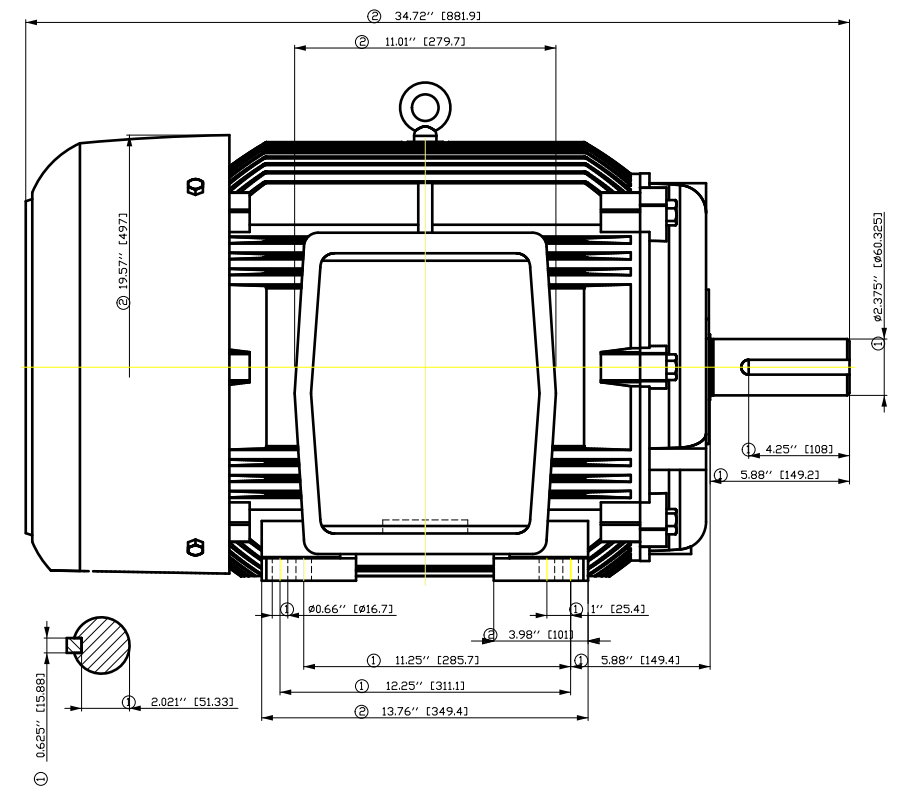
I<sub>L</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>L</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
M<sub>B</sub>/M<sub>N</sub> = break down torque / nominal torque

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 datasheet and motor nameplate</i> |  |
|  | document type<br>datasheet  | document status<br>released       |                | customer  |  |
|  | title<br>1LE2321-3CC21-3AA3 | document number                   |                |   |  |
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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.

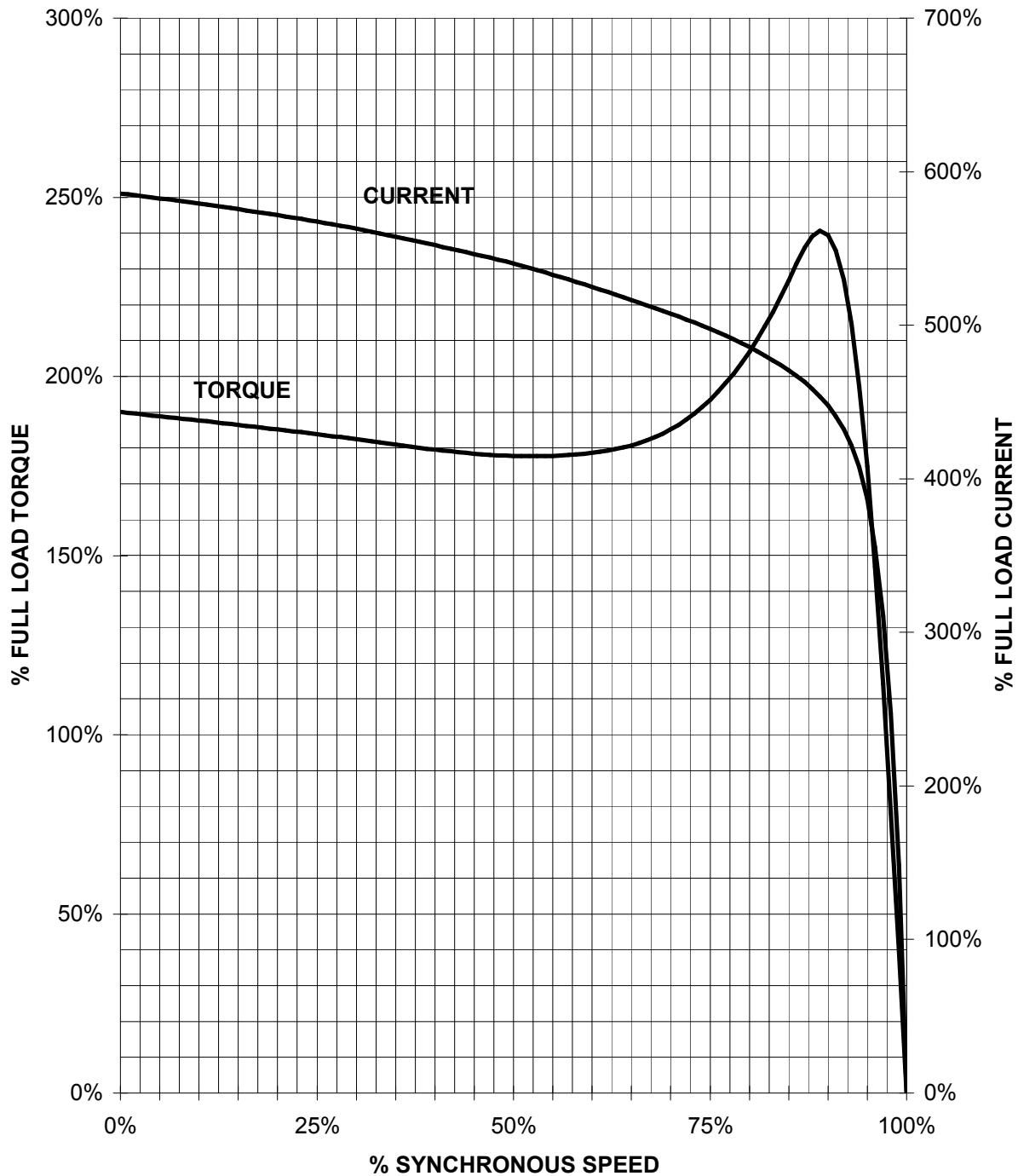


| Tolerance           | Surface      | Material         | Weight   | Scale        |     |
|---------------------|--------------|------------------|----------|--------------|-----|
| F50G-GF-E-O0GF-E-EH | Author       | ÖS<br>Tæ: ^æ@`)* | E        |              |     |
| E                   | Creator      |                  |          |              | ÖVS |
|                     | Approval     |                  |          |              |     |
|                     | Department   |                  |          |              |     |
|                     | Change Order | MLFB             | Doc Type | /            |     |
|                     | Doc. State   | I 00GG           | Item No  | Paper Size   |     |
|                     | Revision     | Index            | RS       | 1st Language |     |
|                     |              |                  |          | 2nd Language |     |
| © Siemens AG        | 2018         | Project No       | E        | Ref No       |     |
|                     |              |                  | E        | Sheet        |     |
|                     |              |                  |          | F of F       |     |

# SIEMENS INDUSTRY, INC.

HP 50    VOLTS < 600V    RPM 1200    TYPE SD100  
HZ 60    PHASE 3    FRAME 365T    NEMA B

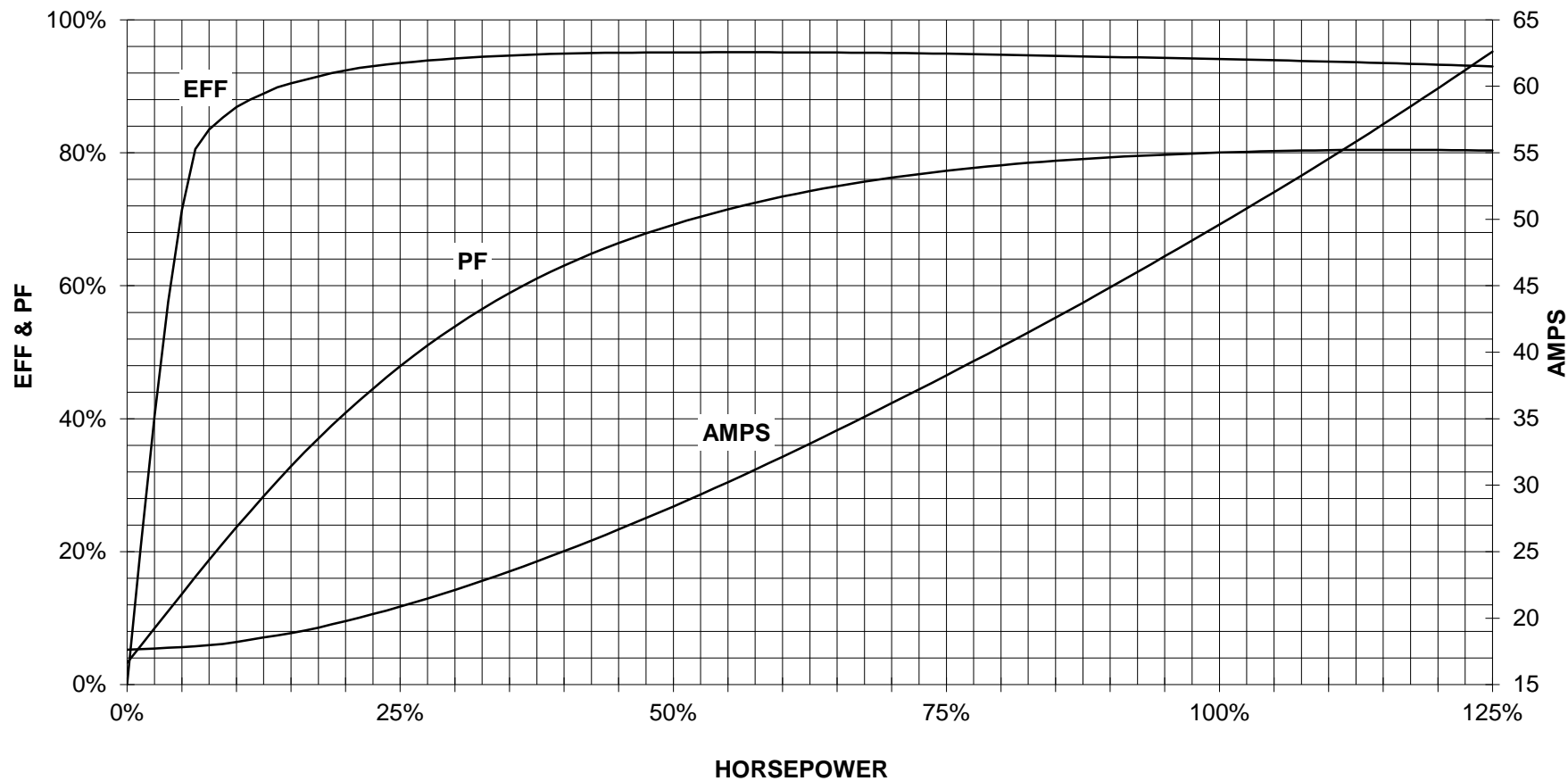
## TORQUE & CURRENT VS. SPEED



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

50 HP 1200 RPM 365T FRAME 575 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



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

|                               |                                 |                         |                             |                |
|-------------------------------|---------------------------------|-------------------------|-----------------------------|----------------|
| 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>1LE2321-3CC21-3AA3     | document number         |                             |                |
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