

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

Motor type: **SD100** FS: **182T - 6p - 1.5 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] | Δ/Y | f [Hz] | P [HP] | P [kW] | n [rpm] | I Load [Amps] | | | | | LRC | Nom. Eff Load [%] | | | Pwr. Factor Load [%] | | | Torque [lb-ft] | T _A /T _N LRT [%] | T _k /T _N BDT [%] |
|-------|------------|--------|--------|--------|---------|---------------|------|------|------|------|------|-------------------|------|------|----------------------|------|-----|----------------|--|--|
| | | | | | | 4/4 | 3/4 | 1/2 | 0 | 4/4 | | 3/4 | 2/4 | 4/4 | 3/4 | 2/4 | | | | |
| 460 | Y | 60 | 1.50 | 1.00 | 1,200 | 2.40 | 2.10 | 1.70 | 1.40 | 15.0 | 87.5 | 87.6 | 85.3 | 66.9 | 58.4 | 48.4 | 6.8 | 206 | 331 | |
| 230 | YY | 60 | 1.50 | 1.00 | 1,200 | 4.80 | 4.12 | 3.40 | 2.80 | 30.0 | 87.5 | 87.6 | 85.3 | 66.9 | 58.4 | 48.4 | 6.8 | 206 | 331 | |
| 400 | Y | 50 | 1.00 | | 976 | 2.16 | 1.91 | 1.72 | 1.50 | 14.4 | 78.9 | 77.9 | 74.9 | 57.6 | 49.4 | 38.2 | 5.4 | 299 | 518 | |
| 200 | YY | 50 | 1.00 | | 976 | 4.32 | 3.82 | 3.44 | 3.00 | 28.7 | 78.9 | 77.9 | 74.9 | 57.6 | 49.4 | 38.2 | 5.4 | 299 | 518 | |

| | | | | | |
|------------------|--|---------------------------------------|-------------------------------------|--------------|------------|
| Frame Type: 182T | 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: 121 | | Temp. Rise Cl.: B | Amb. Temp.: + 40 to -20 °C @1000 m | kVA: J | IP 55 |

Mechanical data

| | | | | | | | | | |
|--------------------------------------|-------------------------|------|------|--------------|------|------|-------|-------------------------|------------------------------|
| Sound level (SPL / SWL) at 60 Hz | 54.0 dB(A) / 63.0 dB(A) | | | | | | | Thickener | Polyurea |
| Octave Band Center Frequencies Hertz | | | | | | | | Safe Stall Time Hot | 34 s |
| | 250 | 500 | 1000 | 2000 | 4000 | 8000 | Hz | Safe Stall Time Cold | 46 s |
| SPL@3 | 36.0 | 46.0 | 52.0 | 47.0 | 41.0 | 31.0 | dB(A) | Frame material | cast iron |
| Moment of inertia | 0.2 Lb-ft ² | | | | | | | Color, paint shade | Standard Paint - RAL7030 |
| Ext Load Inertia Capability: | 23.0 Lb ft ² | | | | | | | Coating (paint finish) | Standard Alkyed + Epoxy (C2) |
| Bearings | | | | | | | | Ventilation Type | |
| Bearing DE NDE | 6206 Z C3 S0 | | | 6206 Z C3 S0 | | | | Method of cooling | TEFC |
| Bearing_Type | Ball Bearing | | | Ball Bearing | | | | Direction of rotation | Bidirectional |
| AFBMA: | 30BC02JP30 | | | 30BC02JP30 | | | | Fan Material | Polypropylen ESD |
| Grease | | | | | | | | VFD | CT: 4:1 VT: 20:1 |
| Capacity | 0.2 oz | | | 0.2 oz | | | | Space heaters | without |
| Grease Type: | Exxon Mobile EM | | | | | | | Brake: | without |


Terminal box

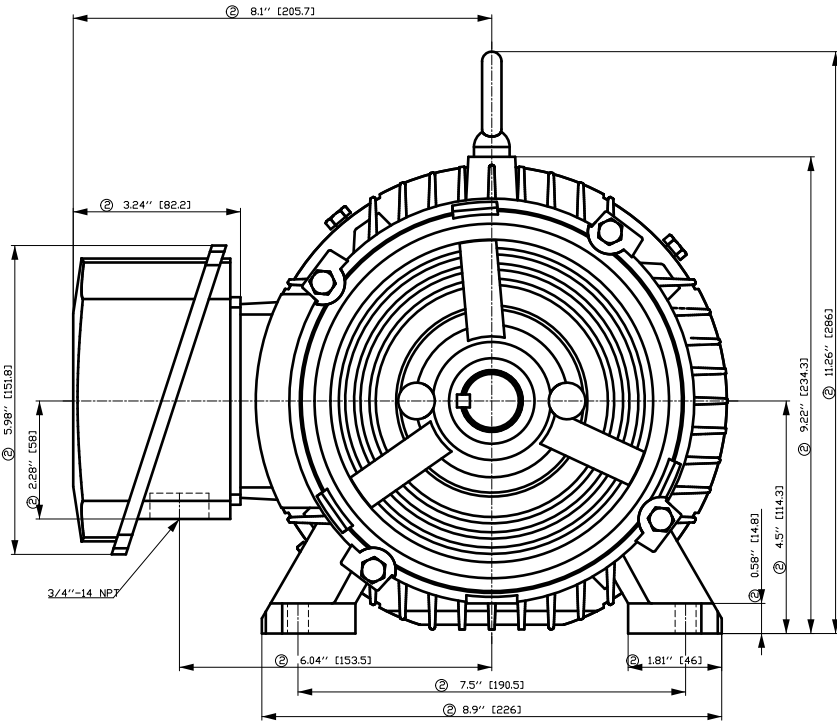
| | | | | | | |
|----------------------|--------------|-------|-------|--------------------|--------------------------|---|
| Lead Wire Connection | 9 LEAD - WYE | | | | Terminal box position | (3) F-1, Standard Floor Mount, T. Box LHS |
| Voltage | L1 | L1 | L1 | Connected together | Material of terminal box | Cast Iron |
| LOW | T1 T7 | T2 T8 | T3 T9 | T4 T5 T6 | Cable entry | .75" NPT |
| HIGH | T1 | T2 | T3 | T4 T7-T5 T8-T6 T9 | | |

Notes:

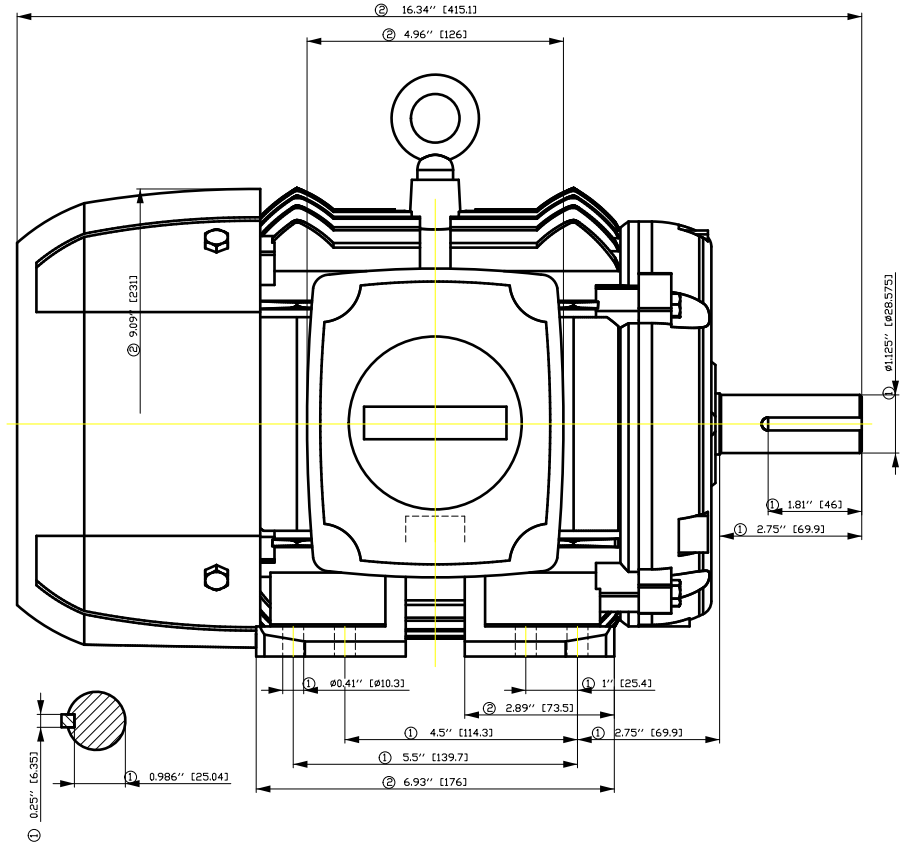
I_L/I_N = locked rotor current / current nominal
M_L/M_N = locked rotor torque / torque nominal
M_b/M_N = break down torque / nominal torque

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 software and hardware versions</i> | |
|  | document type datasheet | document status released | customer | | |
| | title 1LE2321-1CC11-4AA3 | document number | | | |
| © Siemens AG 2022 | rev. 01 | creation date 2022-04-08 17:19 | language en | Page 1/1 | |



- 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.

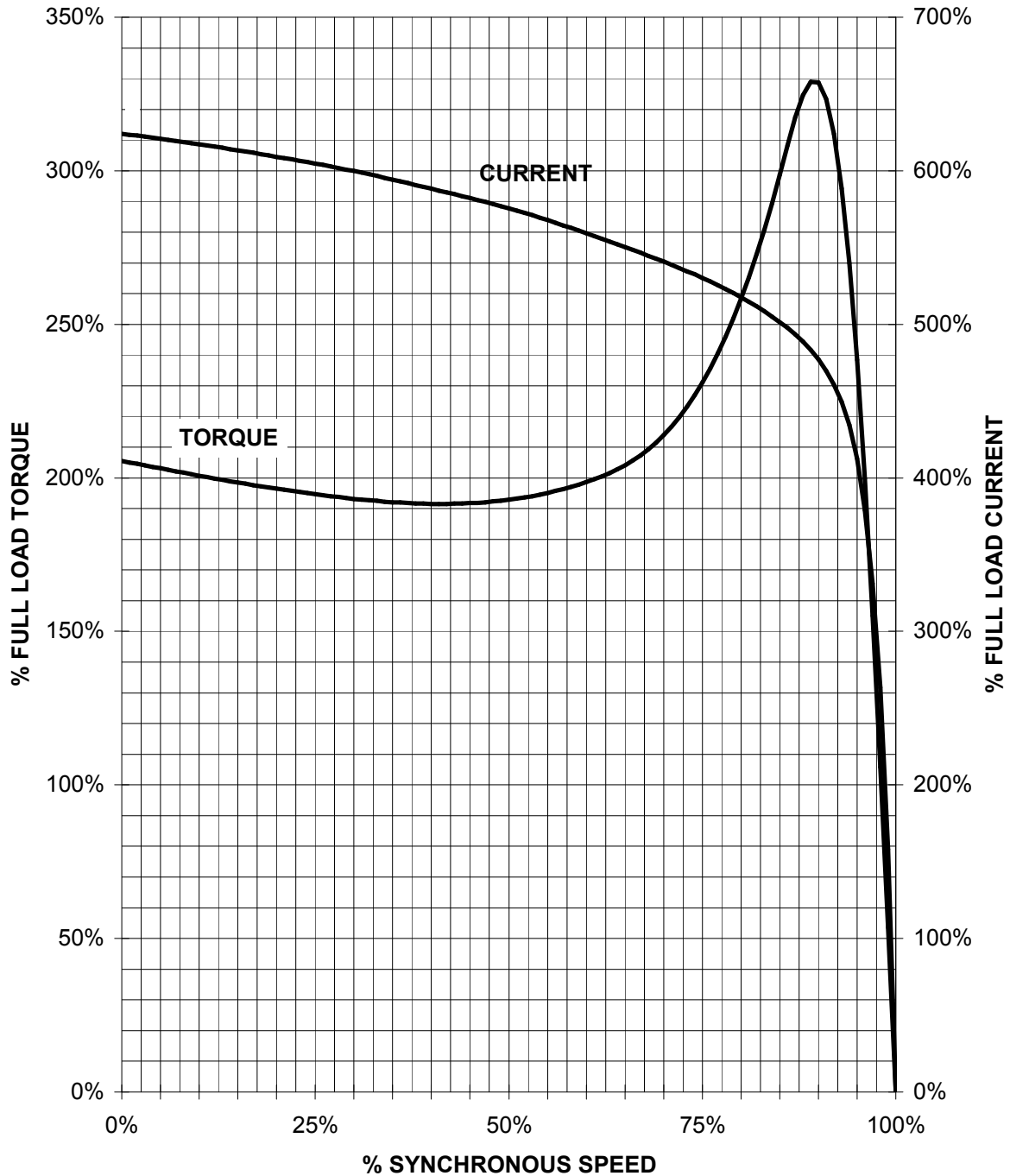


| Tolerance | Surface | Material | Weight | Scale |
|---------------------|--------------|----------|----------|--------------|
| F50G-HF-E-00FFB 0EH | Author | ÖS | E | |
| E | Creator | | | |
| | Approval | | | |
| | Department | | | |
| | Change Order | MFB | Doc Type | / |
| | Doc. State | I 00G | 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 1.5 VOLTS < 600V RPM 1200 TYPE SD100
HZ 60 PHASE 3 FRAME 182T NEMA B

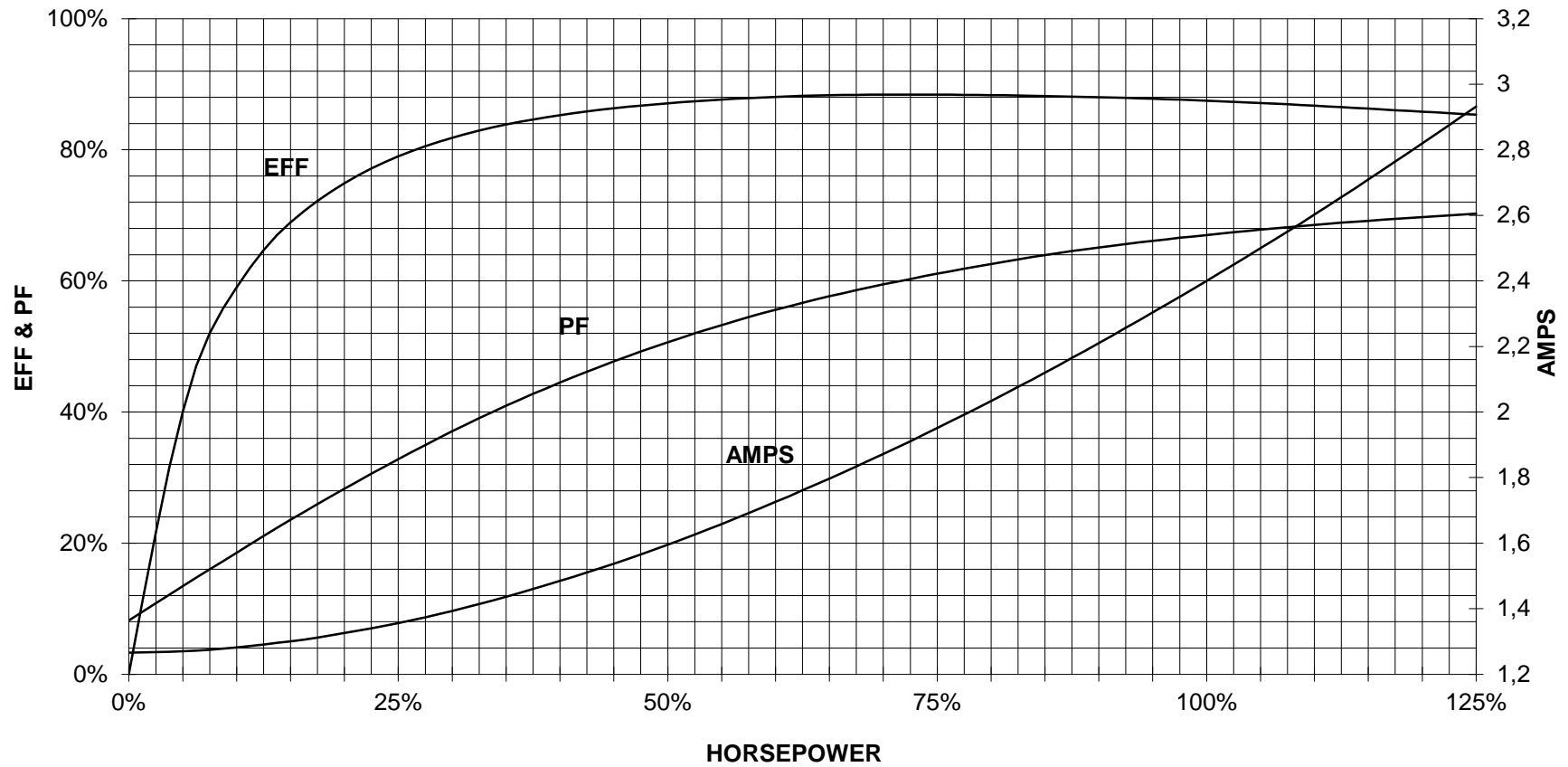
TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____

1.5 HP 1200 RPM 182T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

SIEMENS INDUSTRY, INC.
PERFORMANCE CURVE
SD100

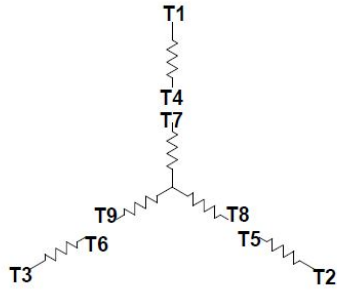


CUSTOMER _____ ORDER # _____ PO # _____

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

REV. 1

Main terminal diagram



| 9 LEAD WYE | | | | | | |
|------------|----------|----------|----------|--------------------|-------|--|
| Volts | LINES | | | CONNECTED TOGETHER | CONN. | |
| | L1 | L2 | L3 | | | |
| LOW | T1 T7 | T2 T6 | T3 T9 | T4 T5 T6 | YY | |
| HIGH | T1 | T2 | T3 | T4 T7-T5 T8-T6 T9 | Y | |

| | | | | |
|-------------------------------|---------------------------------|-----------------------------|----------------|-------------|
| responsible dep. DI MC LVM | technical reference | created by | approved by | Project |
| SIEMENS | document type Wiring Diagram | document status free | | customer |
| | title 1LE2321-1CC11-4AA3 | document number | | |
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