SIEMENS

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

Totally Enclosed Fan Cooled (TEFC)

**MLFB-Ordering data:** **1LE2121-2AB11-4AA3**

**Motor type:** **GP100A - NEMA Premium Efficiency**

Client order no.:
Order no.:
Offer no.:
Remarks:

Item no.:
Consignment no.:
Project:

| U [V] | Δ / Y | f [Hz] | P [HP] | P [kW] | n [rpm] | I Load [Amps] 4/4 | 3/4 | 1/2 | 0 | LRC | Nom. Eff Load [%] 4/4 | 3/4 | 1/2 | Pwr. Factor Load [%] 4/4 | 3/4 | 1/2 | Torque [lb-ft] | $T_A/T_N$ LRT [%] | $T_k/T_N$ BDT [%] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 460 | Y | 60 | 7.50 | 5.50 | 1,765 | 9.70 | 7.90 | 6.40 | 5.00 | 63.0 | 91.7 | 91.7 | 90.7 | 78.9 | 72.3 | 60.5 | 22.0 | 273 | 455 |
| 230 | Y Y | 60 | 7.50 | 5.50 | 1,765 | 19.40 | 15.89 | 12.80 | 10.00 | 126.0 | 91.7 | 91.7 | 90.7 | 78.9 | 72.3 | 60.5 | 22.0 | 273 | 455 |
| | | | | | | | | | | | | | | | | | | | |

| | | | | |
|---|---|---|---|---|
| Frame Type 213T | Type of constr.: ( A ) Foot mounted - End shield | Ins. Cl.: F | Motor Prot.: (A) Without Protection | NEMA Des.: B | S.F.: 1.15 |
| Mtr WT: 144 lbs | Mounting: (3) F-1, Standard Floor Mount, T. Box LHS | Temp. Rise Cl.: B | Amb. Temp.: +40 to -20 °C @1000 m | kVA: H | IP55 |

## Mechanical data

**WK2**

| | | |
|---|---|---|
| Rotor Moment of Inertia: | 1 | Lb-ft² |
| Ext Load Inertia Capability: | 39.0 | Lb-ft² |

**Safe Stall Time**

| | | |
|---|---|---|
| Hot: | 25.0 | s |
| Cold: | 42.0 | s |

**Typical Noise Data**

A-weighted Sound

| | | |
|---|---|---|
| Sound Pressure: | 69.0 | dB(A) |
| Sound Power: | 57.0 | dB(A) |

Octave Band Center Frequencies Hertz

| | 250 | 500 | 1000 | 2000 | 4000 | 8000 | Hz |
|---|---|---|---|---|---|---|---|
| SPL@3 feet | 37.0 | 44.0 | 54.0 | 53.0 | 44.0 | 35.0 | dB(A) |

**Bearings**

| | DE | NDE |
|---|---|---|
| Bearing size: | 6208 ZZ C3 S0 | 6208 ZZ C3 S0 |
| Bearing Type: | Ball Bearing | Ball Bearing |
| AFBMA: | 40BC02JPP30 | 40BC02JPP30 |

**Grease**

| | | |
|---|---|---|
| Capacity: | 0.30 oz | 0.30 oz |
| Type: | Exxon Mobile EM | |
| Thickener: | Polyurea | |

**Frame**

| | |
|---|---|
| Frame material: | aluminum |
| Coating (paint finish): | Standard Paint |
| Color, paint shade: | RAL 7030 |

**Terminal box**

| | |
|---|---|
| Terminal box position: | (3) F-1, Standard Floor Mount, T. Box LHS |

**Lead Wire Connection**

Description: 9 LEAD - WYE

| Voltage | L1 | L2 | L3 | Connected together | |
|---|---|---|---|---|---|
| LOW | T1 T7 | T2 T8 | T3 T9 | T4 T5 T6 | Y Y |
| HIGH | T1 | T2 | T3 | T4 T7-T5 T8-T6 T9 | Y |

**Ventilation Type**

| | |
|---|---|
| Type of Cooling: | TEFC |
| Fan Material: | Polypropylen |
| Fan Rotation: | Bidirectional |

**Additional information**

VFD Operation: CT: 4:1 VT: 20:1

Area: classification: without

**Notes**

$I_A/I_N$ = locked rotor current / current nominal
$T_A/T_N$ = locked rotor torque / torque nominal
$T_k/T_N$ = break down torque / nominal torque
[1)] Value is valid only for DOL operation with motor design IC411

Technical data are subject to change! There may be discrepancies between calculated and rating plate values.

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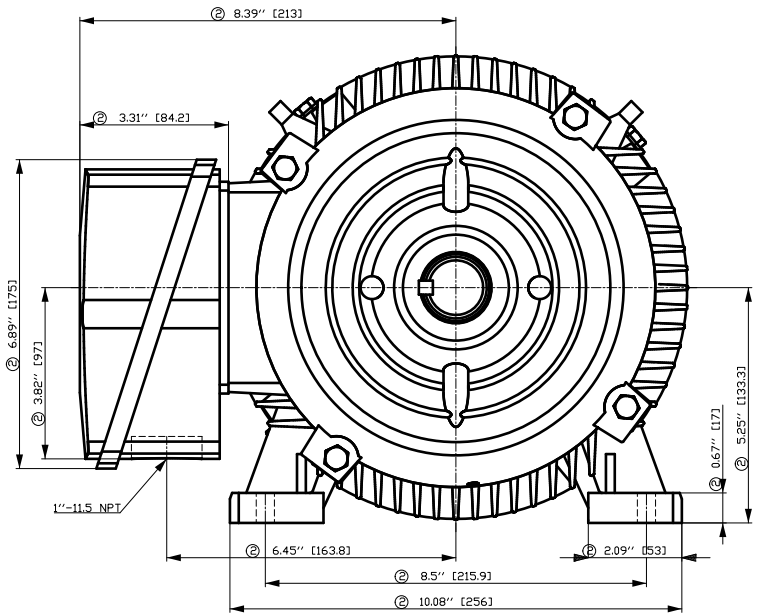
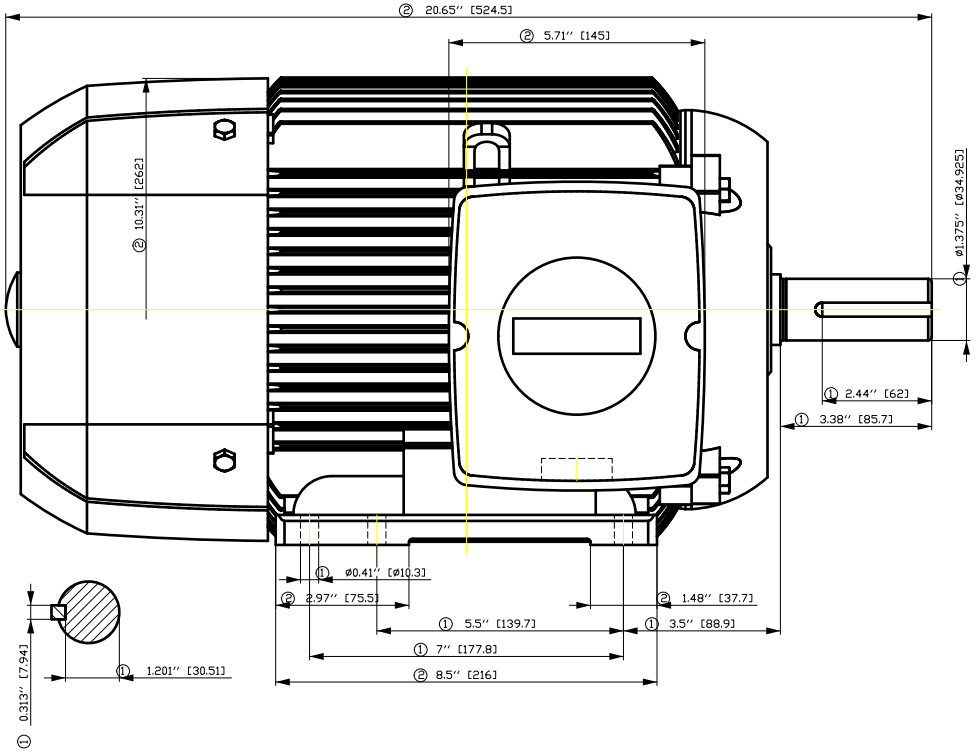
2020-09-17 01:23




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.

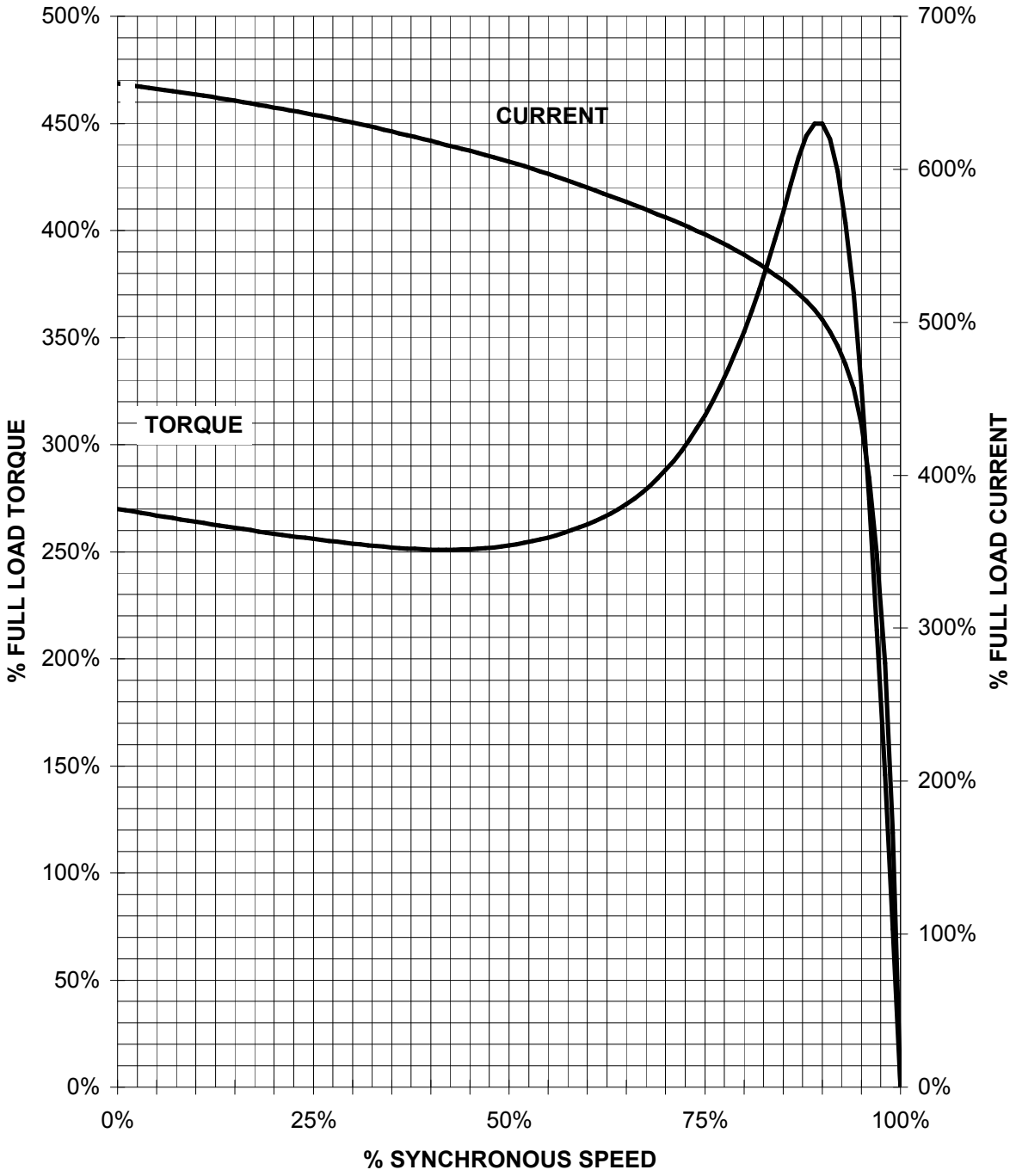
③ Not according to NEMA std.

| | | | | |
|---|---|---|---|---|
| Tolerance | Surface | Material | Weight: - | Scale: mm |
| 1LE2121-2AB11-4AA3<br>- | Author<br>Creator: DTK<br>Approval<br>Department<br>Change Order | Dimensional drawing<br>MaÇzeichnung | MLFB | Doc Type |
| SIEMENS | Doc State: 9/17/20<br>Revision Index RS | | Item No | Paper Size: A3 |
| | | | Doc No | 1st Language: en<br>2nd Language: de |
| © Siemens AG 2018 | Project No - | | Ref No - | Sheet: 1 of 1 |

# SIEMENS INDUSTRY, INC.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| HP | 7,5 | VOLTS | < 600V | RPM | 1800 | TYPE | GP100A |
| HZ | 60 | PHASE | 3 | FRAME | 213T | NEMA | B |

## TORQUE & CURRENT VS. SPEED

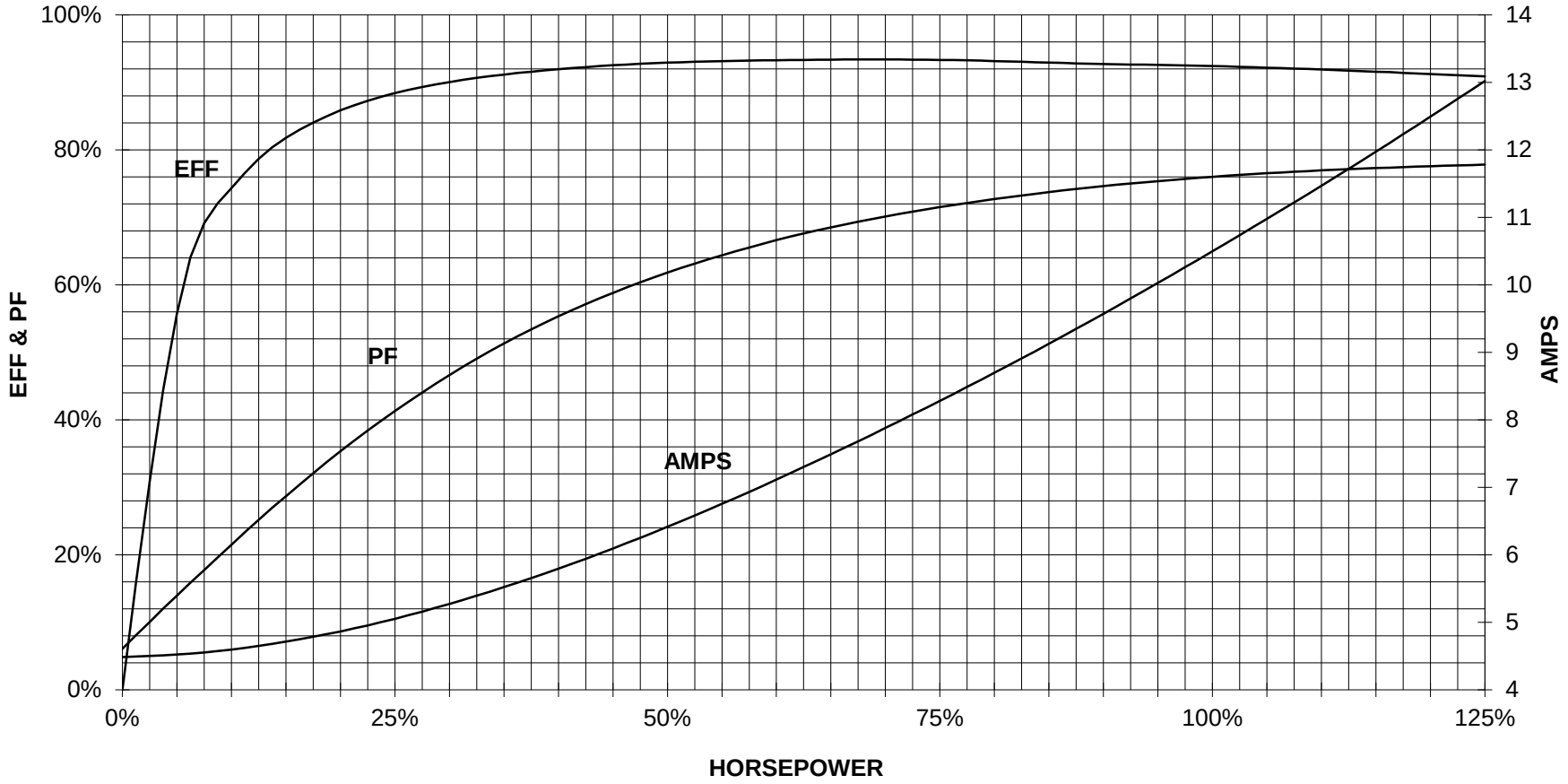



CUSTOMER: _____ ORDER#: _____

PERFORMANCE BASED ON DESIGN CALCULATIONS. SUBJECT TO CHANGE WITHOUT NOTICE.
REV. 1

7.5 HP 1800 RPM 213 FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

## SIEMENS INDUSTRY, INC.
### PERFORMANCE CURVE
### GP100A NP

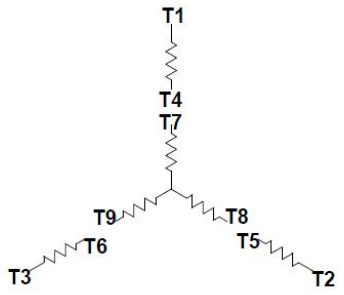



CUSTOMER_____ ORDER #_____ PO #_____

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 | Y Y |
| HIGH | T1 | T2 | T3 | T4 T7-T5 T8-T6 T9 | Y |

| | | | | | |
|---|---|---|---|---|---|
| responsible dep.<br>DI MC LVM | technical reference | created by | approved by | project | |
| SIEMENS | document type<br>Wiring Diagram | | document status<br>free | customer | |
| | title<br>1LE2121-2AB11-4AA3 | | document number | | |
|  | | | rev.<br>01 | creation date<br>12/03/2019 | language<br>en / Page<br>1/1 |