

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

Totally Enclosed Fan Cooled (TEFC)



MLFB-Ordering data: 1LE2221-2AC11-4EA3

Motor type: GP100 - NEMA Premium Efficiency

Client order no.:

Order no.:

Offer no.:

Remarks:

Item no.:

Consignment no.:

Project:

| U<br>[V] | Δ / Y | f<br>[Hz] | P<br>[HP] | P<br>[kW] | n<br>[rpm] | I Load [Amps] |      |      |      |      |  | Nom. Eff Load [%] |      |      | Pwr. Factor Load [%] |      |      | Torque | T <sub>A</sub> /T <sub>N</sub> | T <sub>k</sub> /T <sub>N</sub> |         |
|----------|-------|-----------|-----------|-----------|------------|---------------|------|------|------|------|--|-------------------|------|------|----------------------|------|------|--------|--------------------------------|--------------------------------|---------|
|          |       |           |           |           |            | 4/4           | 3/4  | 1/2  | 0    | LRC  |  | 4/4               | 3/4  | 1/2  |                      | 4/4  | 3/4  | 1/2    | [lb-ft]                        | LRT [%]                        | BDT [%] |
| 460      | Y     | 60        | 3.00      | 2.00      | 1,175      | 4.30          | 3.60 | 3.10 | 2.50 | 32.0 |  | 89.5              | 89.3 | 87.8 |                      | 73.0 | 65.4 | 52.1   | 13.4                           | 265                            | 470     |
| 230      | YY    | 60        | 3.00      | 2.00      | 1,175      | 8.60          | 7.21 | 6.14 | 5.00 | 64.0 |  | 89.5              | 89.3 | 87.8 |                      | 73.0 | 65.4 | 52.1   | 13.4                           | 265                            | 470     |
|          |       |           |           |           |            |               |      |      |      |      |  |                   |      |      |                      |      |      |        |                                |                                |         |

|                  |                                                     |                   |                                     |              |            |
|------------------|-----------------------------------------------------|-------------------|-------------------------------------|--------------|------------|
| Frame Type 213TC | Type of constr.: ( E ) Foot mounted - C-Face        | Ins. Cl.: F       | Motor Prot.: (A) Without Protection | NEMA Des.: B | S.F.: 1.15 |
| Mtr WT: 155 lbs  | Mounting: (3) F-1, Standard Floor Mount, T. Box LHS | Temp. Rise Cl.: B | Amb. Temp.: +40 to -20 °C @1000 m   | kVA: K       | IP55       |

## Mechanical data

### WK2

|                              |      |                    |
|------------------------------|------|--------------------|
| Rotor Moment of Inertia:     | 1    | Lb-ft <sup>2</sup> |
| Ext Load Inertia Capability: | 44.0 | Lb-ft <sup>2</sup> |
| <b>Safe Stall Time</b>       |      |                    |
| Hot:                         | 23.0 | s                  |
| Cold:                        | 35.0 | s                  |

### Typical Noise Data

|                  |      |       |
|------------------|------|-------|
| A-weighted Sound |      |       |
| Sound Pressure:  | 71.0 | dB(A) |
| Sound Power:     | 64.0 | dB(A) |

### Octave Band Center Frequencies Hertz

|            | 250  | 500  | 1000 | 2000 | 4000 | 8000 | Hz    |
|------------|------|------|------|------|------|------|-------|
| SPL@3 feet | 42.0 | 52.0 | 64.0 | 54.0 | 47.0 | 34.0 | 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:         | cast iron      |
| 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           | YY |              |  |
| 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

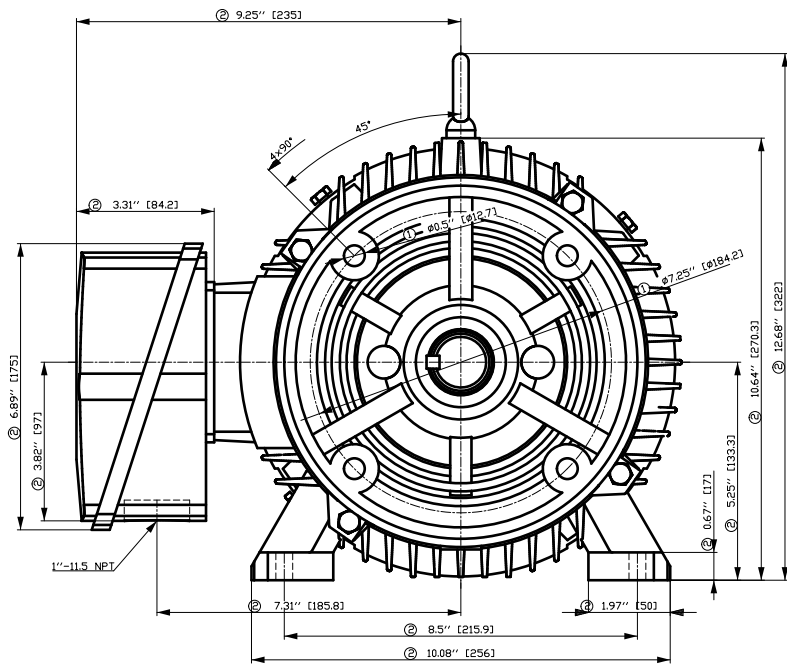
|                       |         |          |
|-----------------------|---------|----------|
| VFD Operation:        | CT: 4:1 | VT: 20:1 |
| Area: classification: | without |          |

### Notes

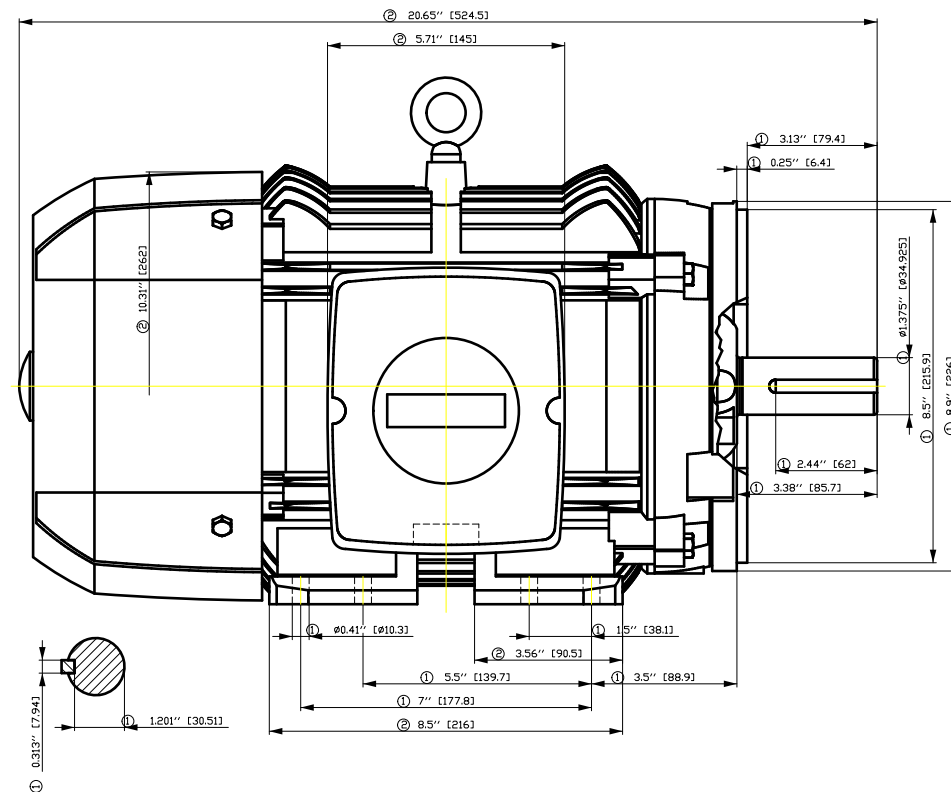
$I_L/I_N$  = locked rotor current / current nominal  $T_k/T_N$  = break down torque / nominal torque  
 $T_A/T_N$  = locked rotor torque / torque nominal <sup>1)</sup> Value is valid only for DOL operation with motor design IC411

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

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- 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.

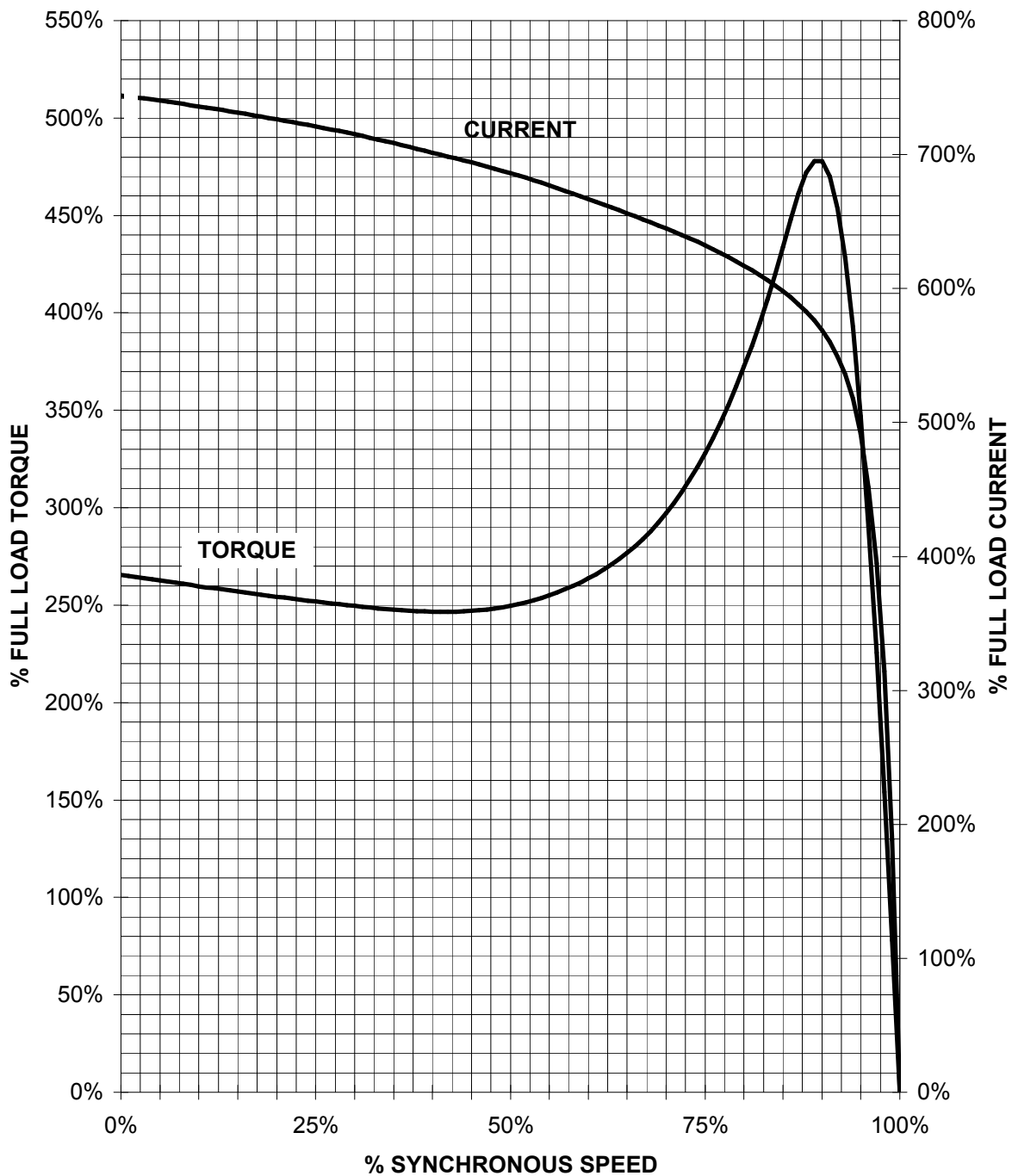


| Tolerance                    | Surface                                                     | Material                            | Weight  | Scale                              |
|------------------------------|-------------------------------------------------------------|-------------------------------------|---------|------------------------------------|
| 1LE2221-2AC11-4EA3           | Author<br>Creator<br>Approval<br>Department<br>Change Order | Dimensional drawing<br>Maßzeichnung |         |                                    |
| SIEMENS<br>© Siemens AG 2018 | Doc. State                                                  | 9/17/20                             | Item No | Paper Size A3                      |
|                              | Revision                                                    | Index RS                            | Doc No  | 1st Language en<br>2nd Language de |
|                              | Project No                                                  | -                                   | Ref No  | -                                  |
|                              |                                                             |                                     |         | Sheet 1 of 1                       |

SIEMENS INDUSTRY, INC.

HP 3 VOLTS < 600V RPM 1200 TYPE GP100  
HZ 60 PHASE 3 FRAME 213T NEMA B

TORQUE & CURRENT VS. SPEED

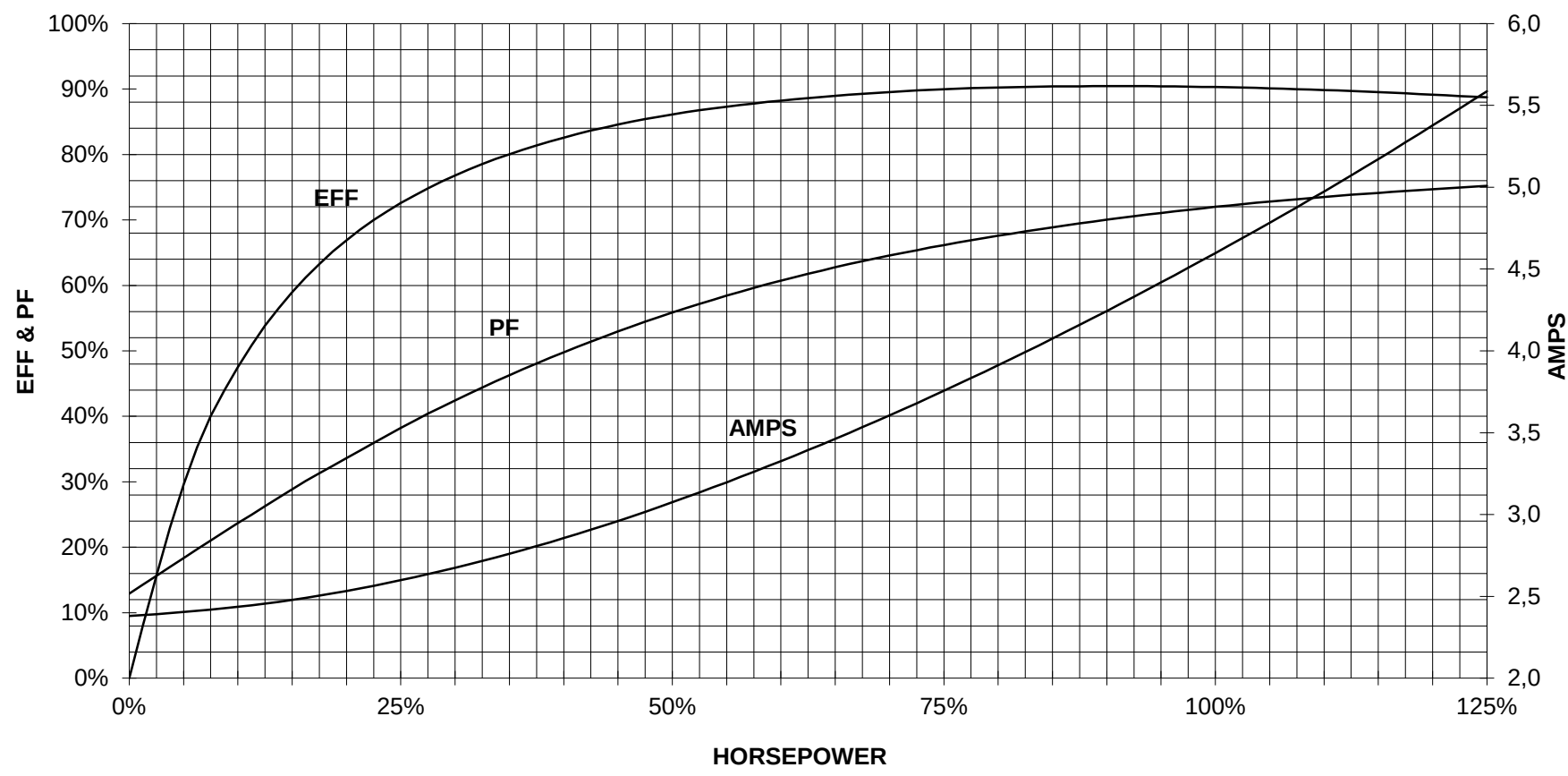


CUSTOMER: \_\_\_\_\_ ORDER#: \_\_\_\_\_

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

3 HP    1200 RPM    213T FRAME    460 VOLTS    3 PHASE    NEMA DESIGN B

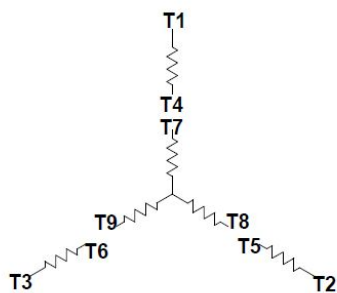
SIEMENS INDUSTRY, INC.  
PERFORMANCE CURVE  
GP100



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

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

Main terminal diagram



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

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document type

Wiring Diagram

title

1LE2221-2AC11-4EA3

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