

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

Totally Enclosed Fan Cooled (TEFC)



MLFB-Ordering data: 1LE2121-2AB11-4EA3

Motor type: GP100A - 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        | 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      | YY    | 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 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: 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-ft <sup>2</sup> |
| Ext Load Inertia Capability: | 39.0 | Lb-ft <sup>2</sup> |
| <b>Safe Stall Time</b>       |      |                    |
| 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

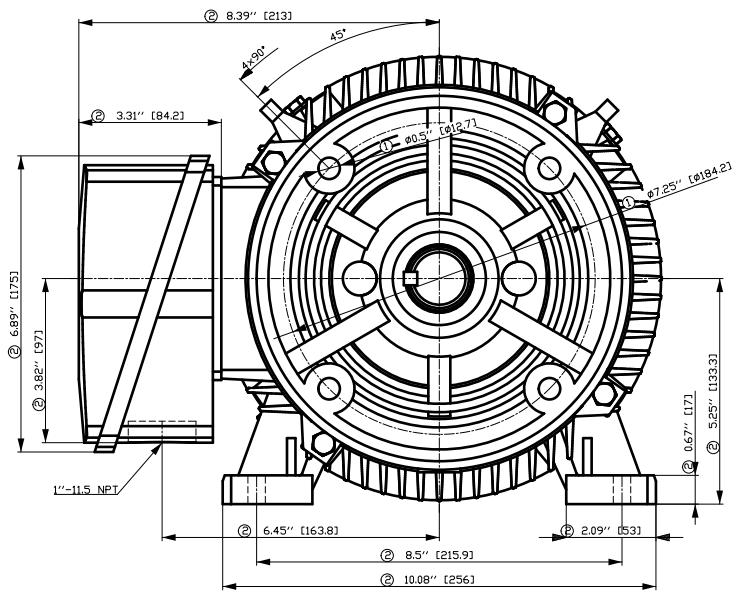
|                       |         |          |
|-----------------------|---------|----------|
| VFD Operation:        | CT: 4:1 | VT: 20:1 |
| Area: classification: | without |          |

### Notes

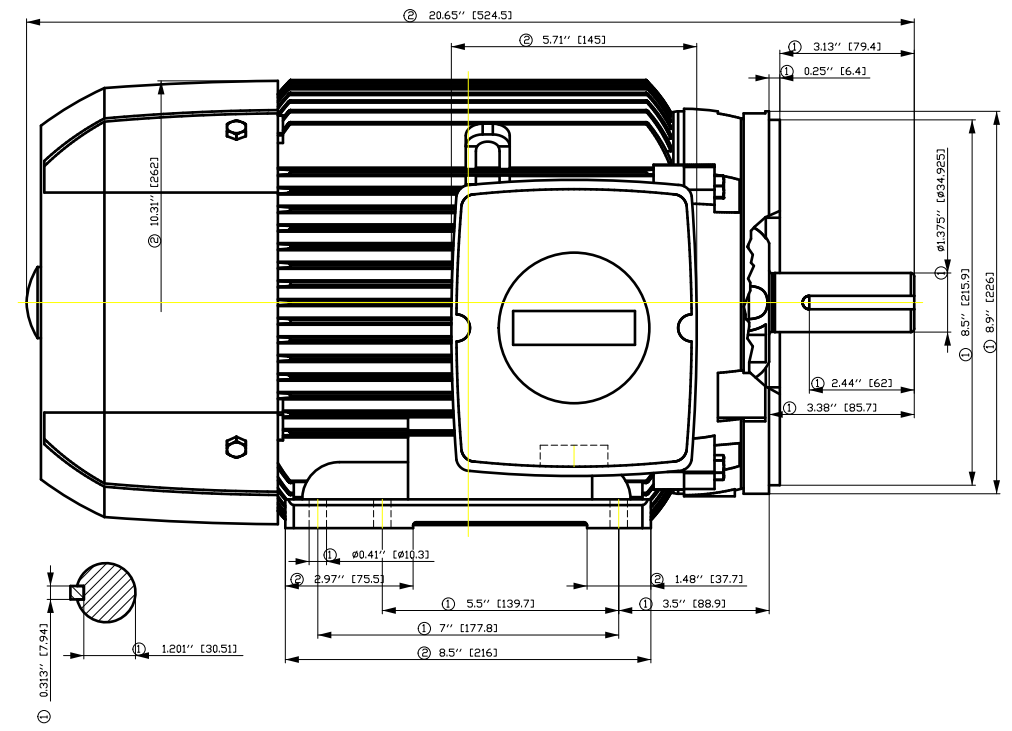
$I_L/I_N$  = locked rotor current / current nominal  $T_k/T_N$  = break down torque / nominal torque  
 $T_A/T_N$  = locked rotor torque / torque nominal <sup>1)</sup> Value is valid only for DOL operation with motor design IC411

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.

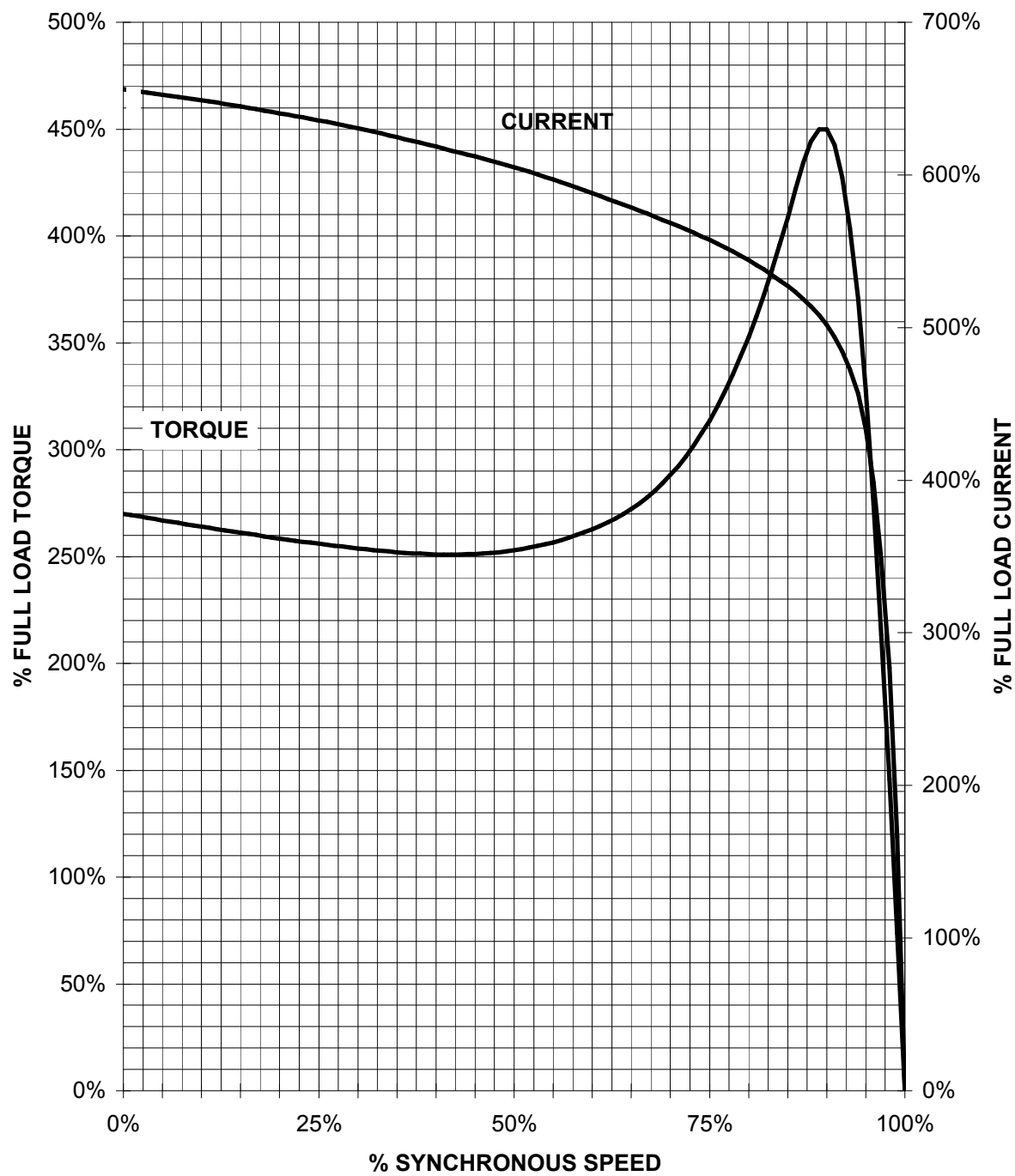


|                    |              |                                     |              |                 |
|--------------------|--------------|-------------------------------------|--------------|-----------------|
| Tolerance          | Surface      | Material                            | Weight       | Scale           |
| 1LE2121-2AB11-4EA3 | Author       | Dimensional drawing<br>Maßzeichnung |              |                 |
| -                  | Creator      |                                     |              |                 |
|                    | Approval     |                                     |              |                 |
|                    | Department   |                                     |              |                 |
|                    | Change Order | MLFB                                | Doc Type     |                 |
|                    | Doc. State   | 9/17/20                             | Item No      | Paper Size A3   |
|                    | Revision     | Index RS                            | Doc No       | 1st Language en |
|                    |              |                                     |              | 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

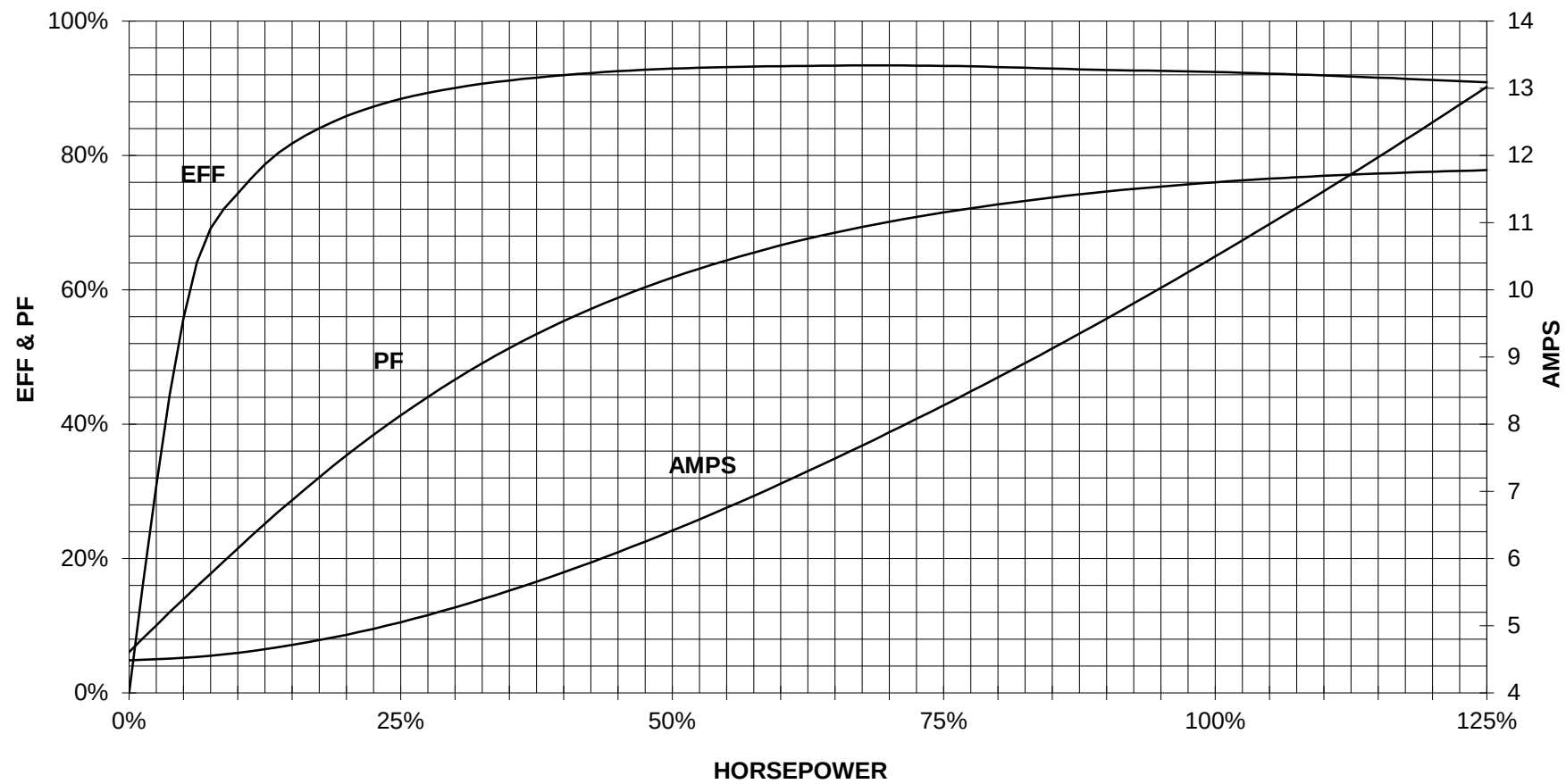


CUSTOMER: \_\_\_\_\_ ORDER#: \_\_\_\_\_

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

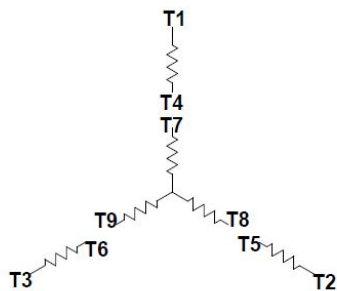
SIEMENS INDUSTRY, INC.  
PERFORMANCE CURVE  
GP100A NP



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

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

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     |  |

responsible dep.  
DI MC LVM

technical reference

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